Victorian population health survey 2012

Selected survey findings

VICTORIA
State Government

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Preface

The Victorian Population Health Survey is an important component of the population health surveillance capacity of Victoria's Department of Health and Human Services. The department initiated the surveillance program in 1998, and the first survey of adult Victorians was conducted in 2001.

The Victorian Population Health Survey is based on core question modules that are critical to informing decisions about public health policies and programs. The findings from the survey fill a significant information gap by providing analysed data that is needed to ensure that public health programs remain relevant and responsive to current and emerging health issues.

Data from the Victorian Population Health Survey is used extensively across the government and non-government sectors of Victoria. The survey provides quality data for a range of indicators of public health importance at state and local government area levels and is used to: provide evidence to inform decisions about local priorities for municipal public health and wellbeing plans; inform planning in non-government health organisations; inform planning, reporting and decision making in the department; and measure trends over time for key health indicators such as diabetes, smoking prevalence and overweight and obesity.

The value of the survey data is increasing over time as it becomes possible to comment on trends for selected survey estimates. As our population ages, the number of people with a chronic disease is expected to rise, greatly affecting the health and wellbeing of the population. The survey findings give us important insights into the determinants of chronic disease and how we might better target public health interventions.

The annual survey series is an ongoing source of quality information on the health of Victorians and these latest findings from the Victorian Population Health Survey 2012 will underpin our public health efforts, especially in controlling chronic disease.

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1. Introduction




1. Introduction

1.1 Summary of findings

The following is a summary of results from the Victorian Population Health Survey 2012, not adjusted for age.

Smoking

Overall, 15.6 per cent of people aged 18 years or older were current smokers. This proportion was significantly *higher* in men (18.6 per cent) than women (12.7 per cent).

Alcohol intake

Based on the National Health and Medical Research Council (NHMRC 2009) alcohol consumption guidelines, 41.2 per cent of people consumed enough alcohol on at least one occasion each year to put them at increased risk of alcohol-related injury. The proportion was significantly *higher* in men (54.2 per cent) than women (28.7 per cent).

Overall, 60.2 per cent of people consumed alcohol that put them at an increased lifetime risk of harm from alcohol-related disease or injury. The prevalence of increased risk was significantly higher in men (71.9 per cent) compared with women (49.2 per cent) overall, and was significantly *higher* in every age group except 18–24 years age group.

Vegetable intake

Overall, 6.7 per cent of people met the recommended minimum daily intake for vegetables of four or more serves for those aged 18 years or younger (NHMRC 2003b) and five or more serves for those aged 19 years or older (NHMRC 2003a). The proportion meeting the guidelines was significantly *higher* in women (9.1 per cent) compared with men (4.2 per cent).

Fruit intake

The proportion of people who consumed the recommended two or more serves of fruit daily was 45.4 per cent, among all people, and was significantly *higher* in women (51.0 per cent) compared with men (39.6 per cent) (NHMRC 2003a).

Consumption of potato-based snacks

Overall, 4.7 per cent of people reported consuming potato-based snacks more than three times a week, the proportion being significantly *higher* in men (6.2 per cent) compared with women (3.3 per cent).

Consumption of 'take-away' meals or snacks

The proportion of people who consumed 'take-away' meals or snacks more than three times each week was 1.6 per cent; the proportion was similar in men and women.

Sugar-sweetened soft drink consumption

Overall, 12.9 per cent of people reported consuming sugar-sweetened soft drinks every day. The proportion who reported consuming these drinks daily was significantly *higher* in men (18.1 per cent) compared with women (7.9 per cent).

Physical activity

The proportion of people undertaking adequate physical activity (measured in both sufficient time and sessions) to meet the national guidelines was 61.5 per cent. The proportion was similar in men (62.6 per cent) and women (60.5 per cent).

Body weight

The proportion of people categorised as overweight according to their body mass index (BMI) was 34.8 per cent; the proportion was significantly *higher* in men (43.1 per cent) compared with women (26.9 per cent). The proportion of people categorised as obese according to their BMI was 18.0 per cent; the proportion was not significantly different in men (18.5 per cent) compared with women (17.4 per cent).

Psychological distress

The proportion of people with high or very high levels of psychological distress, as determined by the Kessler 10 scale, was 10.7 per cent; the proportion was similar in men (9.1 per cent) and women (12.2 per cent).

Hypertension

Overall, the prevalence of hypertension was 25.8 per cent and was not significantly different in men (25.6 per cent) and women (25.9 per cent).

Health checks and screening

Overall, 81.6 per cent of people reported having had their blood pressure checked, 62.1 per cent reported having had a blood cholesterol test and 57.6 per cent reported having had a blood glucose test in the past two years.

Self-reported dental health

Overall, 44.4 per cent of people rated their dental health as 'excellent' or 'very good', while 30.5 per cent rated their dental health as 'good'. A further 19.5 per cent rated it as 'fair' or 'poor'. The proportion of people who reported having no natural teeth was 5.3 per cent.

Self-reported health

Overall, 48.4 per cent of people reported their health status as being 'excellent' or 'very good', 36.0 per cent reported their health status as 'good', while 15.3 per cent reported their health status as 'fair' or 'poor'. There were no significant differences between the sexes.

Asthma

Overall, 11.2 per cent of people had experienced symptoms of asthma or taken treatment for asthma in the preceding 12 months. The prevalence of current asthma was similar in women (11.9 per cent) compared with men (10.5 per cent).

Diabetes

Overall, 0.6 per cent of people reported having been diagnosed with type 1 diabetes; there was no significant difference in prevalence between the sexes. In contrast, the overall prevalence of type 2 diabetes was 5.4 per cent, with the prevalence significantly *higher* in men (6.5 per cent) compared with women (4.3 per cent).

Mental health

Overall, 11.6 per cent of people had sought professional help for a mental health problem in the year prior to the survey. The proportion was significantly *higher* among women (14.4 per cent) compared with men (8.6 per cent). Of those seeking help, 68.0 per cent reported seeking help from a general practitioner, 39.5 per cent obtained help from a private counselling service or psychologist and 18.5 per cent reported seeking help from a private psychiatrist.

Social capital

Overall, 23.6 per cent of people reported helping out a local group by volunteering; this proportion was not significantly different between the sexes. In contrast, 64.5 per cent of people rarely or never volunteered.

Overall, 55.0 per cent of people had attended a local community event; this proportion was similar in women (55.3 per cent) and men (54.7 per cent).

Most people could get help from friends, family or neighbours when needed.

Most people (89.4 per cent) reported having someone outside their household who could provide care in the event of an emergency. By contrast, 8.3 per cent of people reported that they would not be able to get such care in an emergency. There was no difference between the sexes.

Overall, 4.1 per cent of people were receiving help from a volunteer-based organisation; this proportion was similar in men and women.

Almost half (49.4 per cent) of the people surveyed thought multiculturalism 'made life in their area better', and a further 27.9 per cent thought it 'sometimes made life in their area better'.

Overall, 9.0 per cent of people reported having attended a support group meeting in the previous two years. The proportion of women who had attended a support group meeting (11.2 per cent) was significantly *higher* compared with the proportion of men (6.7 per cent).

More than half of all people (54.0 per cent) definitely felt valued by society. A further 29.6 per cent only sometimes felt they were valued by society, while 11.5 per cent did not feel valued by society.

Overall, 38.8 per cent of people believed there were 'definitely' opportunities to have a real say on issues that were important to them. However, 22.9 per cent believed that they did not, or did not often, have such opportunities; this proportion was significantly *higher* in men (25.9 per cent) than women (20.0 per cent).

The majority of people (59.4 per cent) felt safe walking alone down their street after dark. However, there was a substantial difference between the sexes, with 75.7 per cent of men compared with 43.8 per cent of women reporting feeling safe.

Overall, 39.5 per cent of people agreed that most people could be trusted; this was significantly *higher* in men (42.7 per cent) than women (36.5 per cent).

Food security

Overall, 3.4 per cent of people reported that they had run out of food in the previous 12 months and had been unable to afford to buy more. This proportion was similar in men (3.1 per cent) and women (3.7 per cent).

1.2 About the survey

The Victorian Population Health Survey is an important component of the Department of Health and Human Services' population health surveillance work. The annual survey series is an ongoing source of quality information on the health of adult Victorians.

The Victorian Population Health Survey has been conducted each year since 2001 and is based on a sample of 7,500 people aged 18 years or older who are randomly selected from households from each of the eight departmental regions. In 2008, and again in 2011–12, the sample size for the survey was expanded to include Victoria's 79 local government areas (LGAs).

The aim of the survey is to provide quality, timely indicators of population health that directly apply to evidence-based policy development and strategic planning across the department and the wider community. The survey is based on core question modules to report on trends over time and to inform decisions about public health priorities. The survey findings fill a gap in population health data and provide information to ensure that public health programs remain relevant and responsive to current and emerging health issues.

The impact of the use of data from the Victorian Population Health Survey is extensive across the government and non-government sectors of Victoria. The survey provides quality data for a range of indicators of public health importance at the state and departmental region levels.

1.3 About the data

- The sample size for the Victorian Population Health Survey was 7,533 respondents in 2012.
- Estimates have been age-standardised in tables for time-series and departmental region-related data to eliminate the effect that differences in age structure may have on estimates.
- When data is presented by age group, the estimate for the state ('Total') is *not* age adjusted and is the crude prevalence (expressed as a percentage).
- Footnotes to the tables and figures indicate the statistical significance of differences between estimates. The significance has been determined by comparing 95 per cent confidence intervals and testing the significance of the slope of the trend over time using ordinary least squares regression.
- The reliability of estimates has been determined using relative standard errors (standard error/estimate × 100), and the tables and figures indicate the reliability of estimates.

1.4 How to interpret a table

- Time trends tables: Estimates are presented for each year in which the survey was run where exactly the same question has been asked each time. Where a question about a health topic has changed over time, the period reported reflects the period from where the question change occurred. Ordinary least squares regression was used to test the trend over time.
- Other tables: Individual estimates have been compared with the corresponding total estimate. For example (see ample table on following page), where subgroups of the population are presented (estimates for males and females), estimates have been compared with the total Victorian estimate (labelled 'Total') for that subpopulation (all adult Victorian males, all adult Victorian females). The statistical significance of differences in estimates has been determined by comparing the 95 per cent confidence intervals of the estimates.
- When the confidence interval for an estimate does *not* overlap with the confidence interval of the corresponding estimate for the total population (or subpopulation), then the font colour of estimate in question is changed to **red** if the estimate is higher, or **blue** if the estimate is lower compared with the estimate for the total population (or subpopulation).

In the table opposite:

- the estimate of 'current smokers', among women and people residing in Eastern Metropolitan Region, was significantly ***lower*** compared with the estimate in all Victorian women and people, respectively
- the estimate of 'current smokers', among people residing in Gippsland Region, was significantly ***higher*** compared with the estimate in all Victorian people
- the estimate of 'ex-smokers', among men and people residing in Hume Region, was significantly ***higher*** compared with the estimate in all Victorian men and people, respectively
- the estimate of 'non-smokers', among men, women and people residing in Eastern Metropolitan Region, was significantly ***higher*** compared with the estimate in all Victorian men, women and people, respectively
- the estimate of 'non-smokers', among women and people residing in Gippsland Region, was significantly ***lower*** compared with the estimate in all Victorian women and people, respectively.

Sample table: Smoking status, by Department of Health and Human Services region, Victoria, 2012

	Current smoker			Ex-smoker			Non-smoker		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Metropolitan males									
Eastern Metropolitan	**12.3**	8.8	16.9	**24.1**	19.3	29.6	**63.2**	57.1	69.0
North & West Metropolitan	**20.7**	16.2	26.1	**29.5**	25.2	34.1	**49.6**	44.1	55.1
Southern Metropolitan	**19.4**	14.6	25.2	**26.9**	23.0	31.3	**52.6**	46.5	58.6
Total	**18.4**	15.6	21.6	**27.3**	24.6	30.1	**53.7**	50.1	57.3
Rural males									
Barwon-South Western	**20.2**	13.7	28.7	**23.7**	19.9	27.9	**56.1**	47.8	64.0
Gippsland	**24.8**	18.9	31.9	**30.8**	25.6	36.5	**44.1**	37.1	51.2
Grampians	**14.9**	10.0	21.7	**33.4**	27.3	40.2	**51.3**	44.3	58.2
Hume	**13.4**	8.3	20.9	**39.4**	33.4	45.8	**47.2**	40.4	54.1
Loddon Mallee	**19.8**	14.1	27.1	**34.0**	27.5	41.3	**45.4**	38.1	52.9
Total	**18.6**	15.7	22.0	**31.4**	28.2	34.8	**49.6**	46.0	53.3
All males									
Total	**18.5**	**16.1**	**21.0**	**28.2**	**26.0**	**30.4**	**52.9**	**50.0**	**55.8**
Metropolitan females									
Eastern Metropolitan	**7.3**	5.0	10.4	**19.0**	15.7	22.7	**73.6**	69.2	77.6
North & West Metropolitan	**13.3**	10.4	16.9	**20.1**	16.6	24.1	**66.3**	61.7	70.6
Southern Metropolitan	**14.6**	10.8	19.5	**25.0**	20.6	30.0	**58.0**	53.0	62.9
Total	**12.3**	10.3	14.5	**21.6**	19.3	24.2	**65.2**	62.2	68.0
Rural females									
Barwon-South Western	**12.9**	9.8	16.8	**19.4**	16.3	23.1	**67.3**	62.7	71.6
Gippsland	**16.7**	12.8	21.4	**27.0**	22.1	32.7	**55.8**	49.8	61.7
Grampians	**13.0**	9.4	17.7	**21.3**	17.2	26.1	**64.6**	59.1	69.8
Hume	**16.8**	12.5	22.1	**24.3**	20.3	28.9	**58.6**	52.9	64.1
Loddon Mallee	**11.5**	8.8	14.9	**25.5**	21.8	29.5	**62.7**	58.3	66.9
Total	**14.0**	12.3	15.9	**23.4**	21.6	25.4	**62.1**	59.8	64.4
All females									
Total	**12.7**	**11.1**	**14.5**	**22.1**	**20.2**	**24.1**	**64.4**	**62.0**	**66.7**
Metropolitan people									
Eastern Metropolitan	**9.9**	7.7	12.6	**21.4**	18.4	24.7	**68.5**	64.7	72.1
North & West Metropolitan	**17.1**	14.3	20.4	**24.7**	21.9	27.8	**58.0**	54.3	61.6
Southern Metropolitan	**17.0**	13.8	20.8	**25.7**	22.5	29.1	**55.5**	51.1	59.8
Total	**15.3**	13.6	17.3	**24.2**	22.4	26.1	**59.7**	57.4	62.0
Rural people									
Barwon-South Western	**16.1**	12.5	20.5	**21.1**	18.6	23.8	**62.6**	58.0	66.9
Gippsland	**21.1**	17.2	25.6	**28.6**	25.1	32.5	**49.9**	45.1	54.7
Grampians	**14.0**	10.8	18.0	**26.9**	23.1	31.1	**58.4**	53.8	62.8
Hume	**15.0**	11.6	19.4	**32.2**	27.6	37.2	**52.6**	47.6	57.5
Loddon Mallee	**15.6**	12.3	19.6	**29.6**	25.8	33.8	**54.2**	49.7	58.7
Total	**16.3**	14.6	18.2	**27.3**	25.3	29.3	**56.1**	53.8	58.3
All people									
Total	**15.6**	**14.1**	**17.1**	**24.9**	**23.4**	**26.4**	**58.9**	**57.0**	**60.7**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

2. Methods




2. Methods

2.1 Background

Population health surveys based on computer-assisted telephone interviews (CATI) are used to collect key population health surveillance data because collection procedures are acceptable to respondents, adequate sample sizes can be recruited and they provide high-quality data (especially through greater supervision of interviewers, computer data entry and question sequencing). Further, they allow for data collection that is timely, cost-effective (especially in rural and metropolitan areas) and adaptable to changing and emerging information needs. CATI surveys also fill strategic information gaps – that is, they can be used to gather information not available from other sources – and provide data for further analysis and interpretation.

2.2 Method

The Victorian Population Health Survey 2012 followed a method developed over several years to collect relevant, timely and valid health information for policy, planning and decision making. The survey team administered CATI on a representative sample of people aged 18 years or older who resided in private dwellings in Victoria. The department's Human Research Ethics Committee approved the survey methods and questionnaire content.

The department outsourced the fieldwork data collection to a market research organisation, which department staff supervised. All data were self-reported and stored directly in the CATI system.

2.3 Stratification

The target sample size for the statewide Victorian Population Health Survey is 7,500, with a distribution across departmental regions. The sample is split (40 per cent metropolitan and 60 per cent regional), with the target interviews by region within the metropolitan/regional strata set in approximate proportion to population.

2.3.1 Sampling frame

An 'exchange-based' approach to RDD was used for the Victorian Population Health Survey in 2012.

The starting point of the exchange-based approach is the 'number ranges' identified in the Australian Communications and Media Authority (ACMA) Numbering Plan. The sample generation process involves:

- the generation of 10 random numbers per number range on an 'as required' basis
- the 'testing' of numbers to assign a 'working' or 'disconnected' status via a SS7 signal link, to build up a pool of 'working' numbers that is representative of the actual distribution of working landline numbers across all number ranges
- random selection of numbers from the pool of working numbers at any given point in time.

The commercial provider claims that the frame is refreshed on a 12-monthly basis, whereby previously 'disconnected' numbers are re-tested and those numbers that are found to be working (as a result of re-testing) are added to the pool of working numbers. The advantages of this exchange-based approach to RDD sample generation, particularly over less robust and less transparent list-based approaches, include:

- improved coverage in areas where new phone number ranges have been activated
- improved coverage in growth corridors, peri-urban areas and central business district developments
- each bank of phone numbers is represented in the frame in proportion to the current population of working landline numbers
- high connection rates and therefore greater fieldwork efficiency.

Following on from the landline RDD frame optimisation process, the sample for the 2012 Victorian Population Health Survey was drawn from the expanded pool of working numbers used for the 2011–12 survey.

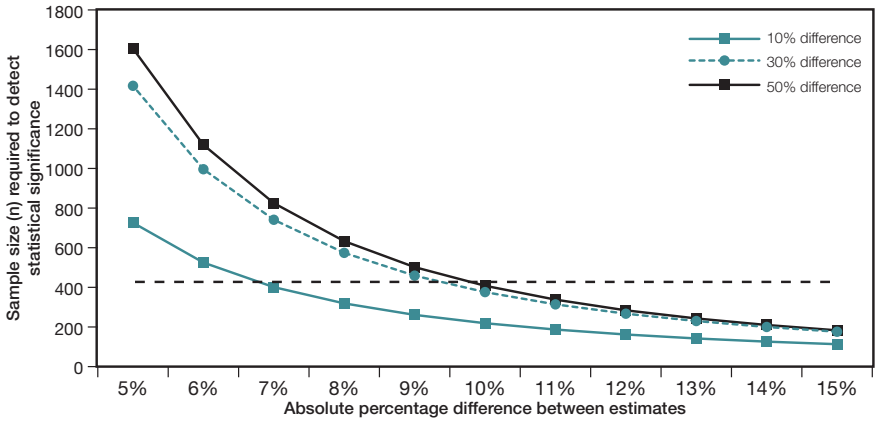
2.3.2 Sample generation

RDD was used to generate a sample of telephone numbers that formed the household sample for CATI. All residential households with landline telephone connections were considered 'in-scope' for the survey. The RDD sampling frame resulted in certain population groups being excluded. These included people who were homeless or itinerant, people in hospitals, the frail, the aged and people with disabilities living in institutions.

The RDD product used assigns a 'best estimate' of postcode to each number at the number generation and testing stage, based on information available about the geographic area serviced by each individual telephone exchange.

A master mapping of postcode and locality to LGA (and hence to departmental region) is maintained for accurate allocation of interviews to the correct LGA. The same mapping was used to define the selection parameters within the RDD sample generation tool, with numbers randomly selected within each LGA as defined by postcode. The sample was selected at the LGA level for the 2012 Victorian Population Health Survey using sample yield information by LGA from the 2011–12 survey.

Figure 2.1: Estimated sample size to detect statistically significant differences for prevalence at 10, 30 and 50 per cent



Dotted black line indicates the sample size per LGA employed in the 2008 and 2011-12 surveys.

2.4 Statistically detectable difference between two estimates

Figure 2.1 shows the estimated sample size required to detect a statistically significant difference of five to 15 per cent between two estimates. The two estimates could be, for example, two different geographic areas or the same estimate across two different points in time. Figure 2.1 also shows that the sample size required for any given absolute difference between two estimates varies according to the prevalence of the estimate. In general, larger sample sizes are needed to detect differences between estimates, with a prevalence of 50 per cent compared with estimates that have a prevalence that is *higher* (for example, 70 per cent) or *lower* (for example, 10 per cent) than 50 per cent.

The Victorian Population Health Survey, with a sample size of approximately 7,500 (statewide surveys) or 34,000 (LGA-level surveys), is powered to be able to detect very small differences of two per cent or more from year to year. This has enabled the time-series analyses that can be found throughout the report.

Dotted black line indicates the sample size per LGA employed in the 2008 and 2011–12 LGA-level surveys.

2.5 Data collection

Almost two-thirds of all completed interviews were achieved within the first three calls. This proportion is consistent with national experience on similar surveys.

2.5.1 Call routine

The algorithm used spread call attempts over different times of day and days of the week, with up to six calls to establish contact with the household and a further nine calls to achieve an interview with the selected person in the household (15 calls in total).

Interviewing across all departmental regions was progressed equitably over the entire fieldwork period, with a view to spreading any bias resulting from seasonal or environmental factors (rather than, for example, completing all metropolitan interviewing in the first half of the fieldwork period, then all regional interviewing in the second half).

2.5.2 Interviewing in languages other than English

Interviews were conducted in nine community languages specified by the department. As for previous surveys in the series, the department provided translated survey questionnaires in Italian, Greek, Mandarin, Cantonese, Vietnamese, Arabic, Turkish, Serbian and Croatian.

2.5.3 Fieldwork period

The average interview length was 20.3 minutes, and interviewing was conducted between 12 September and 9 December 2012.

2.5.4 1800 number operation

The department operated a survey hotline number during business hours throughout the data collection period to help establish survey bona fides and address sample member queries about the survey or survey process.

2.6 Participation

The overall response rate was 68.7 per cent. As for previous surveys in the series, the response rate was higher in regional locations (70.5 per cent) relative to metropolitan locations (66.3 per cent). There was some variation in response rate by departmental region, ranging from 72.8 per cent in Hume to 65.3 per cent in North & West Metropolitan and Southern Metropolitan regions.

2.7 Weighting

The survey data was weighted to reflect the following:

2.7.1 The probability of selecting the respondent within the household

Although a single respondent was randomly selected from within a household, the size of any household can vary upwards from one person. To account for this variation, each respondent was treated as representing the whole household, so his or her weight factor included a multiplier of the number of people in the household. Further, a household may have more than one telephone line (that is, landlines used primarily for contact with the household), which would increase that household's probability of selection over those households with only one telephone line. To ensure the probability of contacting any household was the same, the project team divided the weight factor by the number of telephone lines connected to the household.

The formula for the selection weight (*sw*) component:

$$sw = nah/npl$$

where:

nah = the number of people aged 18 years or older in the household

npl = the number of telephone lines in the household.

2.7.2 The age/sex/geographic distribution of the population

The project team applied a population benchmark (*pbmark*) component to ensure the adjusted sample distribution matched the population distribution for the combined cross-cells of age group and sex by departmental regions, based on the 2011 estimated resident population of Victoria. The categories used for each of the variables were:

- *age group:* 18–24, 25–34, 35–44, 45–54, 55–64 and 65 years or older
- *sex*: male, female
- *geography*: eight departmental regions.

The *pbmark* component was calculated by dividing the population of each cross-cell by the sum of the selection weight components for all the respondents in the sample within that cross-cell. For each cross-cell, the formula for this component was:

$$pbmark_i = N_i/\sum sw_{ij}$$

where:

i = the *i* th cross-cell

j = the *j* th person in the cross-cell

N_i = the population of the i th cross-cell

$\sum sw_{ij}$ = the sum of selection weights for all respondents (1 to *j*) in the *i* th cross-cell.

2.7.3 Calculating the person weight to be applied

The project team assigned respondent records a weight factor (*pwt*) by multiplying the selection weight (*sw*) value by the population benchmark value (*pbmark*):

$$pwt_{ij} = sw_{ij} * pbmark_i$$

where:

i = the i th cross-cell

j = the j th person in the cross-cell.

2.8 Statistical analysis

The survey data was analysed using the Stata statistical software package (Version 12.1, StatCorp LP, College Station Texas).

2.8.1 Crude prevalence

Crude prevalence is an estimate of a proportion of a population that experiences a specific event over a specified period of time. It is calculated by dividing the number of events recorded for a given period by the number of people in the population during that period. Crude prevalence (expressed as a percentage) is presented in the report in cases where estimates are broken down by age group. Crude prevalence is useful for service planning purposes.

2.8.2 Age standardisation

In making comparisons of estimates over time, crude prevalence can be difficult to interpret because the age distribution of the population changes over time. If one does *not* take into account changes in the age distribution or any observed increases or decreases in the prevalence of an indicator of interest may just reflect changes in the age distribution. For example, the risk

of heart disease increases with age; an increase in the crude rate of heart disease over time could be due to (a) more people developing heart disease due to a change in the prevalence of a predisposing factor or (b) an increase in the proportion of older people. There is no way to distinguish between the two possible explanations. However, if we take into account (adjust for) the changing age distribution and still see an increase in the prevalence of heart disease, we can rule out explanation (b). To adjust for age, we calculate an *age-standardised/adjusted prevalence* (described below). Only age-standardised prevalence is reported for time-series data in this report. Similarly, age-standardised prevalence is reported when making comparisons between different geographic areas. This is particularly pertinent for departmental regions of Victoria because rural regions tend to have populations characterised by larger proportions of older people compared with metropolitan regions.

Age-standardised prevalence, also known as age-adjusted prevalence, was calculated using the direct method of standardisation. The direct age-standardised prevalence that is presented in this report is based on the weighted sum of age-specific prevalence applied to a standard population – the 2011 estimated resident population (ERP) of Victoria. Five-year age groups were used to calculate the age-specific rates for data at the state and departmental region levels.

2.8.3 Standard error

The standard error is a measure of the variation in an estimate produced by sampling a population. The standard error can be used to calculate confidence intervals (CI) and the relative standard error (RSE), providing the likely range of the true value of an estimate and an indication of the reliability of the estimate, respectively.

2.8.4 Confidence interval (95 per cent)

A confidence interval gives an estimated range of values that is likely to include an unknown population parameter (prevalence in this case), the estimated range being calculated from a given sample. If independent samples are taken repeatedly from the same population, and a confidence interval calculated for each sample, then a certain percentage (confidence level) of the intervals will include the unknown population parameter. Confidence intervals are usually calculated so that this percentage is 95 per cent; however, 90 per cent, 99 per cent, 99.9 per cent or whatever confidence intervals for the unknown parameter can be computed.

95% confidence interval =
point estimate
± (standard error × 1.96)

The width of the confidence interval gives us some idea about how uncertain we are about the unknown parameter. A very wide interval may indicate that more data should be collected before anything very definite can be said about the parameter.

Confidence intervals are more informative than the simple results of hypothesis tests (where we decide 'reject H0' or 'don't reject H0'), since they provide a range of plausible values for the unknown parameter.

Confidence limits are the lower and upper boundaries/values of a confidence interval, that is, the values that define the range of a confidence interval. The upper and lower bounds of a 95 per cent confidence interval are the 95 per cent confidence limits. These limits may be taken for other confidence levels, for example, 90 per cent, 99 per cent or 99.9 per cent.

2.8.5 Statistical significance

Only statistically significant trends and patterns are reported for the survey. Statistical significance provides an indication of how likely a result is due to chance. With the exception of trends over time (see below), statistically significant differences between estimates were deemed to exist where the 95 per cent confidence intervals for prevalence estimates (expressed as a percentage) did not overlap.

The term 'significance' is used to denote statistical significance. It is not used to describe clinical significance, the relative importance of a particular finding or the actual magnitude of difference between two estimates.

2.8.6 Relative standard error

The RSE provides an indication of the reliability of an estimate. Estimates with an RSE less than 25 per cent are generally regarded as 'reliable' for general use. Prevalence estimates presented in tables and graphs in this report have a RSE less than 25 per cent unless otherwise stated. Prevalence estimates that have an RSE between 25 and 50 per cent have been marked with an asterisk (*) and should be interpreted with caution. For the purposes of this report, a prevalence estimate with an RSE over 50 per cent is not considered reliable and has not been presented. A double asterisk (**) has been included in tables and graphs where a prevalence estimate would

otherwise appear, indicating the corresponding RSE was greater than 50 per cent.

Relative standard error (%) = standard error/point estimate × 100

2.8.7 Testing for a trend over time

Ordinary least squares linear regression of the logarithms of the age-standardised rates was used to test for a trend over time. Regression analysis to determine trends over time has the advantage of taking into consideration all the time points rather than considering each time point separately. It calculates a line that best fits the data and the slope of the line is the average annual change over the period of time.

The 95 per cent confidence interval for the standard error of the slope is used to determine whether any observed increase or decrease over time is statistically significant at the $p < 0.05$ level. This is ascertained if the 95 per cent confidence interval for the regression coefficient does not include the value 0.

Only data that was collected in an identical manner was included in the time-series analyses. Therefore some time-series analyses go back to 2003, while others to 2005. This is because additional response options were included in 2005 for many of the survey questions.

2.9 Profile of survey respondents

There was a substantial decrease in the proportion of people aged 44 years or younger who were interviewed in 2012 (relative to 2010), as well as a decrease in the proportion of respondents who were 'separated', lived in group households or were short-term residents (length of tenure less than five years). These changes are likely to be most strongly linked to changes in coverage offered by the landline sample frame.

Table 2.1 shows estimates obtained from the survey; the survey data indicate the following:

- Females were more likely than males to participate in the survey.
- People aged 18–34 years were less likely to participate in the survey.
- People aged 45 years or older were more likely to participate in the survey.

Table 2.1: Profile of respondents in the Victorian Population Health Survey, 2012

Item		Per cent
Gender	Male	39.6
	Female	60.4
Age group	18–24 years	3.4
	25–34 years	5.7
	35–44 years	14
	45–54 years	19.3
	55–64 years	21.9
	65+ years	35.7
Marital status	Married	58.8
	Widowed	13
	Divorced	7.9
	Separated	3
	Never married	10.5
	Other	6
Country of birth	Australia	77.7
Labour force status	Employed	50.7
	Unemployed	2.3
	Not in the labour force	46.7
Length of tenure	1 year or less	1.5
	> 1 up to 5 years	13.5
	> 5 up to 10 years	16.7
	> 10 years	68.1
Household type	Couple only	33.7
	Couple with dependent children	24.6
	Couple with non-dependent children	6.9
	One parent family with dependent children	3.9
	One parent family with non-dependent children	3.2
	Group household, or	3.7
	One person household	21.9

3. Modifiable health risk factors




3. Modifiable health risk factors

3.1 Introduction

Modifiable health risk factors are those that could be altered through changes in lifestyle and/or treatment. Some of these risk factors, such as smoking, excess consumption of alcohol, physical inactivity and unhealthy diet, are often referred to as 'lifestyle risk factors'. Much of the work done in health promotion attempts to change lifestyle choices and behaviours, where there is considerable scope for health gain.

In quantifying the relative contribution of various modifiable risk factors, Begg et al. determined that 14 selected risk factors accounted for 32.2 per cent of the total burden of death, disease and injury (Begg et al. 2008). Table 3.1 summarises the 14 risk factors and their relative contributions.

In contrast, 67.8 per cent of the total burden of disease is not accounted for by known modifiable risk factors. It is here that the underlying social determinants of health make their contribution to death, disease and injury.

This section presents information on modifiable risk factors that influence health including smoking, alcohol consumption, fruit and vegetable intake, water intake, consumption of sugar-sweetened beverages, physical activity, overweight and obesity, psychological distress and hypertension.

Table 3.1: Health loss attributable to 14 selected risk factors, by all causes, Australia, 2003

Risk factor	Per cent
Tobacco use	7.8
High blood pressure	7.6
High body mass	7.5
Physical activity	6.6
High blood cholesterol	6.2
Alcohol consumption	2.3
Low consumption of fruit and vegetables	2.1
Illicit drug use	2.0
Occupational exposures and hazards	2.0
Intimate partner violence	1.1
Child sexual abuse	0.9
Urban air pollution	0.7
Unsafe sex	0.6
Osteoporosis	0.2
Total attributable health loss	**32.2**

Source: Begg et. al. 2008

3.2 Smoking

Introduction

There are several different ways of classifying smoking status, depending on the question being asked. The Victorian Population Health Survey defines smokers as 'daily' or 'occasional' and combines the two to report on 'current smokers'. A person is categorised as an 'ex-smoker' if he/she smoked at least 100 cigarettes or a similar amount of tobacco in their lifetime. By contrast, the Cancer Council Victoria defines smokers as 'regular smokers' if they smoke daily or at least weekly and 'irregular smokers' if they smoke less than weekly (Alexander, Hayes & Durkin 2012). They define 'former smokers' in the same way as the Victorian Population Health Survey defines 'ex-smokers'. The Australian Bureau of Statistics (ABS) reports on both 'daily' and 'current smokers', defined as 'daily' or 'weekly' or 'other' (ABS 2012; 2013).

Smoking status in Victoria

Table 3.2 shows the smoking status in Victoria, by age group and sex, with 'Total' not adjusted for age.

Overall, 18.6 per cent of men, 12.7 per cent of women and 15.6 per cent of people reported that they were current smokers. The prevalence of smoking was significantly *higher* in men compared with women.

Men, women and people aged 65 years or older had a significantly *lower* prevalence of current smoking compared with all Victorian men, women and people, respectively. In contrast, the prevalence of current smokers among women and people aged 45–54 years was significantly *higher* compared with all Victorian women and people, respectively.

Table 3.2: Smoking status, by age group and sex, Victoria, 2012

	Current smoker			Ex-smoker			Non-smoker		
	%	95% CI		%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL		LL	UL
Males									
18–24	25.3	17.6	35.1	3.5*	1.4	8.2	71.2	61.4	79.4
25–34	21.5	14.4	30.8	20.4	14.0	28.9	58.1	48.2	67.3
35–44	21.2	16.8	26.6	20.5	16.1	25.7	57.9	51.8	63.7
45–54	21.7	17.3	26.8	29.1	24.3	34.4	48.7	43.2	54.3
55–64	14.0	11.2	17.4	42.5	37.7	47.4	43.0	38.3	47.9
65+	7.7	5.8	10.2	48.7	44.9	52.5	42.2	38.5	46.1
Total	**18.6**	**16.3**	**21.2**	**27.5**	**25.3**	**29.9**	**53.4**	**50.4**	**56.3**
Females									
18–24	8.3*	4.2	15.7	**	**	**	87.5	78.5	93.0
25–34	16.5	11.3	23.5	21.9	15.8	29.5	60.2	52.0	67.9
35–44	14.1	11.0	17.9	23.3	19.5	27.5	62.6	57.8	67.2
45–54	18.5	15.4	22.0	29.8	26.0	33.8	51.3	47.0	55.5
55–64	11.6	9.3	14.3	27.1	23.7	30.8	60.7	56.7	64.6
65+	6.1	4.7	7.9	24.6	22.0	27.3	67.5	64.5	70.5
Total	**12.7**	**11.1**	**14.4**	**22.6**	**20.7**	**24.6**	**64.0**	**61.6**	**66.3**
People									
18–24	17.0	12.2	23.1	3.8*	1.8	7.9	79.2	72.6	84.5
25–34	19.0	14.4	24.7	21.2	16.5	26.7	59.1	52.7	65.2
35–44	17.6	14.8	20.8	21.9	18.9	25.2	60.3	56.4	64.0
45–54	20.0	17.3	23.1	29.4	26.4	32.7	50.0	46.6	53.5
55–64	12.8	11.0	14.9	34.6	31.7	37.7	52.1	48.9	55.2
65+	6.8	5.6	8.3	35.5	33.2	37.9	56.1	53.6	58.5
Total	**15.6**	**14.2**	**17.1**	**25.0**	**23.5**	**26.5**	**58.8**	**56.9**	**60.6**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Some people who smoke only do so occasionally. The Victorian Population Health Survey combines daily and occasional smoking to report on 'current' smoking. However, Table 3.3 shows the prevalence of daily compared with occasional smoking, by age group and sex, with 'Total' not adjusted for age. The data show that the majority of current smoking was in fact 'daily' rather than 'occasional' smoking.

Table 3.3: Frequency of current smoking behaviour, by age group and sex, Victoria, 2012

Age group (years)	Daily			Occasional			Ex-smoker			Non-smoker		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Males												
18–24	17.5	11.1	26.6	7.8*	3.8	15.3	3.5*	1.4	8.2	71.2	61.4	79.4
25–34	19.0	12.3	28.4	2.5*	1.0	6.2	20.4	14.0	28.9	58.1	48.2	67.3
35–44	16.5	12.6	21.4	4.7*	2.7	8.1	20.5	16.1	25.7	57.9	51.8	63.7
45–54	17.1	13.2	22.0	4.6*	2.6	7.8	29.1	24.3	34.4	48.7	43.2	54.3
55–64	11.9	9.3	15.0	2.2*	1.2	3.9	42.5	37.7	47.4	43.0	38.3	47.9
65+	6.3	4.5	8.7	1.4*	0.8	2.5	48.7	44.9	52.5	42.2	38.5	46.1
Total	**14.9**	**12.8**	**17.3**	**3.7**	**2.8**	**5.0**	**27.5**	**25.3**	**29.9**	**53.4**	**50.4**	**56.3**
Females												
18–24	6.2*	2.8	13.4	**	**	**	**	**	**	87.5	78.5	93.0
25–34	12.4	7.8	19.0	4.1*	1.9	8.5	21.9	15.8	29.5	60.2	52.0	67.9
35–44	11.3	8.5	14.9	2.8*	1.6	4.9	23.3	19.5	27.5	62.6	57.8	67.2
45–54	15.3	12.5	18.6	3.2	1.9	5.2	29.8	26.0	33.8	51.3	47.0	55.5
55–64	10.1	8.0	12.6	1.5*	0.8	2.9	27.1	23.7	30.8	60.7	56.7	64.6
65+	4.9	3.7	6.5	1.2*	0.6	2.4	24.6	22.0	27.3	67.5	64.5	70.5
Total	**10.2**	**8.8**	**11.7**	**2.5**	**1.8**	**3.4**	**22.6**	**20.7**	**24.6**	**64.0**	**61.6**	**66.3**
People												
18–24	12.0	8.0	17.6	5.0*	2.7	9.1	3.8*	1.8	7.9	79.2	72.6	84.5
25–34	15.7	11.4	21.3	3.3*	1.8	5.8	21.2	16.5	26.7	59.1	52.7	65.2
35–44	13.9	11.4	16.8	3.7	2.5	5.6	21.9	18.9	25.2	60.3	56.4	64.0
45–54	16.2	13.7	19.0	3.9	2.6	5.6	29.4	26.4	32.7	50.0	46.6	53.5
55–64	11.0	9.3	12.9	1.8	1.2	2.8	34.6	31.7	37.7	52.1	48.9	55.2
65+	5.5	4.4	6.9	1.3	0.8	2.0	35.5	33.2	37.9	56.1	53.6	58.5
Total	**12.5**	**11.2**	**13.9**	**3.1**	**2.5**	**3.9**	**25.0**	**23.5**	**26.5**	**58.8**	**56.9**	**60.6**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

The trend of the age-adjusted prevalence of smoking over time is presented in Table 3.4 and Figure 3.1.

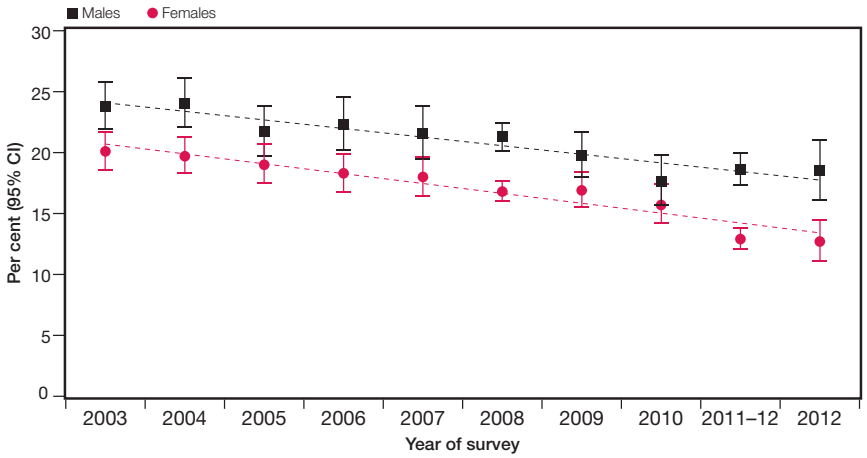
The prevalence of current smoking in Victoria continued to decline in both men and women. Between 2003 and 2012, the prevalence of current smoking declined annually by 4.0 per cent (95% CI: 3.4, 4.8 per cent) per year, with an absolute reduction of 6.3 percentage points during the past decade. The annual decline in the prevalence of smoking among women was 5.1 per cent (95% CI: 3.6, 6.5 per cent), while the annual decline in men was 3.3 per cent (95% CI: 2.3, 4.3 per cent).

Table 3.4: Prevalence of current smokers from 2003 to 2012, by sex, Victoria

	Males			Females			Persons		
		95% CI			95% CI			95% CI	
Year	%	LL	UL	%	LL	UL	%	LL	UL
2003	**23.8**	21.9	25.8	**20.1**	18.6	21.7	**21.9**	20.7	23.2
2004	**24.0**	22.1	26.1	**19.7**	18.3	21.3	**21.9**	20.7	23.2
2005	**21.7**	19.7	23.8	**19.0**	17.5	20.7	**20.4**	19.1	21.7
2006	**22.3**	20.2	24.6	**18.3**	16.8	19.9	**20.4**	19.0	21.7
2007	**21.6**	19.5	23.8	**18.0**	16.4	19.6	**19.8**	18.4	21.1
2008	**21.3**	20.1	22.4	**16.8**	16.0	17.7	**19.0**	18.3	19.7
2009	**19.8**	18.0	21.7	**16.9**	15.5	18.4	**18.3**	17.2	19.5
2010	**17.6**	15.7	19.8	**15.7**	14.2	17.4	**16.7**	15.4	18.0
2011–12	**18.6**	17.3	20.0	**12.9**	12.1	13.8	**15.8**	15.0	16.7
2012	**18.5**	**16.1**	**21.0**	**12.7**	**11.1**	**14.5**	**15.6**	**14.1**	**17.1**

LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Data are age-standardised to the 2011 Victorian population.
Ordinary least squares regression was used to test for trends over time.
Statistically significant decline in the prevalence of current smokers in both males and females

Figure 3.1: Prevalence of current smokers from 2003 to 2012, by sex, Victoria



LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Data were age-standardised to the 2011 Victorian population.
Ordinary least squares linear regression was used to test for trends over time.

Table 3.5 shows the age-adjusted smoking status by departmental region and sex.

There were no statistically significant differences in the prevalence of current smoking among men across departmental regions or between rural and metropolitan regions of Victoria. By contrast, women and people who lived in Eastern Metropolitan Region had a significantly *lower* prevalence of current smokers compared with all Victorian women and people, respectively. Overall, the prevalence of current smoking was significantly *higher* in people resident in Gippsland compared with the prevalence in all Victorian people.

The prevalence of non-smoking men, women and people was significantly *higher* in residents of Eastern Metropolitan Region compared with the prevalence in all Victorian men, women and people, respectively. In contrast, there was a significantly *lower* prevalence of non-smoking women and people residing in Gippsland Region compared with the prevalence in all Victorian women and people respectively.

Table 3.6 reports current smoking behaviour, by frequency, departmental region and sex, adjusted for age. There was a significantly *lower* prevalence of 'daily' smoking in women and people residing in Eastern Metropolitan Region compared with all Victorian women and people, respectively.

Table 3.5: Smoking status, by Department of Health and Human Services region and sex, Victoria, 2012

	Current smoker			Ex-smoker			Non-smoker		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Metropolitan males									
Eastern Metropolitan	**12.3**	8.8	16.9	**24.1**	19.3	29.6	63.2	57.1	69.0
North & West Metropolitan	**20.7**	16.2	26.1	**29.5**	25.2	34.1	**49.6**	44.1	55.1
Southern Metropolitan	**19.4**	14.6	25.2	**26.9**	23.0	31.3	**52.6**	46.5	58.6
Total	**18.4**	15.6	21.6	**27.3**	24.6	30.1	**53.7**	50.1	57.3
Rural males									
Barwon-South Western	**20.2**	13.7	28.7	**23.7**	19.9	27.9	**56.1**	47.8	64.0
Gippsland	**24.8**	18.9	31.9	**30.8**	25.6	36.5	**44.1**	37.1	51.2
Grampians	**14.9**	10.0	21.7	**33.4**	27.3	40.2	**51.3**	44.3	58.2
Hume	**13.4**	8.3	20.9	39.4	33.4	45.8	**47.2**	40.4	54.1
Loddon Mallee	**19.8**	14.1	27.1	**34.0**	27.5	41.3	**45.4**	38.1	52.9
Total	**18.6**	15.7	22.0	**31.4**	28.2	34.8	**49.6**	46.0	53.3
All males									
Total	**18.5**	**16.1**	**21.0**	**28.2**	**26.0**	**30.4**	**52.9**	**50.0**	**55.8**
Metropolitan females									
Eastern Metropolitan	7.3	5.0	10.4	**19.0**	15.7	22.7	73.6	69.2	77.6
North & West Metropolitan	**13.3**	10.4	16.9	**20.1**	16.6	24.1	**66.3**	61.7	70.6
Southern Metropolitan	**14.6**	10.8	19.5	**25.0**	20.6	30.0	**58.0**	53.0	62.9
Total	**12.3**	10.3	14.5	**21.6**	19.3	24.2	**65.2**	62.2	68.0
Rural females									
Barwon-South Western	**12.9**	9.8	16.8	**19.4**	16.3	23.1	**67.3**	62.7	71.6
Gippsland	**16.7**	12.8	21.4	**27.0**	22.1	32.7	55.8	49.8	61.7
Grampians	**13.0**	9.4	17.7	**21.3**	17.2	26.1	**64.6**	59.1	69.8
Hume	**16.8**	12.5	22.1	**24.3**	20.3	28.9	**58.6**	52.9	64.1
Loddon Mallee	**11.5**	8.8	14.9	**25.5**	21.8	29.5	**62.7**	58.3	66.9
Total	**14.0**	12.3	15.9	**23.4**	21.6	25.4	**62.1**	59.8	64.4
All females									
Total	**12.7**	**11.1**	**14.5**	**22.1**	**20.2**	**24.1**	**64.4**	**62.0**	**66.7**
Metropolitan people									
Eastern Metropolitan	9.9	7.7	12.6	**21.4**	18.4	24.7	68.5	64.7	72.1
North & West Metropolitan	**17.1**	14.3	20.4	**24.7**	21.9	27.8	**58.0**	54.3	61.6
Southern Metropolitan	**17.0**	13.8	20.8	**25.7**	22.5	29.1	**55.5**	51.1	59.8
Total	**15.3**	13.6	17.3	**24.2**	22.4	26.1	**59.7**	57.4	62.0
Rural people									
Barwon-South Western	**16.1**	12.5	20.5	**21.1**	18.6	23.8	**62.6**	58.0	66.9
Gippsland	21.1	17.2	25.6	**28.6**	25.1	32.5	49.9	45.1	54.7
Grampians	**14.0**	10.8	18.0	**26.9**	23.1	31.1	**58.4**	53.8	62.8
Hume	**15.0**	11.6	19.4	32.2	27.6	37.2	**52.6**	47.6	57.5
Loddon Mallee	**15.6**	12.3	19.6	**29.6**	25.8	33.8	**54.2**	49.7	58.7
Total	**16.3**	14.6	18.2	**27.3**	25.3	29.3	**56.1**	53.8	58.3
All people									
Total	**15.6**	**14.1**	**17.1**	**24.9**	**23.4**	**26.4**	**58.9**	**57.0**	**60.7**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 3.6: Frequency of current smoking behaviour, by Department of Health and Human Services region and sex, Victoria, 2012

	Daily			Occasional			Ex-smoker			Non-smoker		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males												
Eastern Metropolitan	**10.4**	7.2	14.9	**1.9***	0.8	4.1	**24.1**	19.3	29.6	**63.2**	57.1	69.0
North & West Metropolitan	**17.1**	12.9	22.4	**3.6***	2.1	6.1	**29.5**	25.2	34.1	**49.6**	44.1	55.1
Southern Metropolitan	**13.9**	9.7	19.4	**5.5***	3.3	9.1	**26.9**	23.0	31.3	**52.6**	46.5	58.6
Total	**14.6**	12.0	17.7	**3.8**	2.7	5.3	**27.3**	24.6	30.1	**53.7**	50.1	57.3
Rural males												
Barwon-South Western	**15.6**	10.0	23.6	**	**	**	**23.7**	19.9	27.9	**56.1**	47.8	64.0
Gippsland	**19.5**	14.0	26.5	**5.3***	2.7	10.2	**30.8**	25.6	36.5	**44.1**	37.1	51.2
Grampians	**13.5**	8.7	20.3	**	**	**	**33.4**	27.3	40.2	**51.3**	44.3	58.2
Hume	**11.6***	6.9	18.7	**	**	**	**39.4**	33.4	45.8	**47.2**	40.4	54.1
Loddon Mallee	**15.1**	10.5	21.3	**4.7***	2.0	10.6	**34.0**	27.5	41.3	**45.4**	38.1	52.9
Total	**15.2**	12.6	18.2	**3.4**	2.1	5.4	**31.4**	28.2	34.8	**49.6**	46.0	53.3
All males												
Total	**14.8**	**12.7**	**17.2**	**3.7**	**2.7**	**4.9**	**28.2**	**26.0**	**30.4**	**52.9**	**50.0**	**55.8**
Metropolitan females												
Eastern Metropolitan	**4.6**	3.0	6.8	**2.7***	1.3	5.5	**19.0**	15.7	22.7	**73.6**	69.2	77.6
North & West Metropolitan	**11.1**	8.4	14.4	**2.3***	1.3	4.0	**20.1**	16.6	24.1	**66.3**	61.7	70.6
Southern Metropolitan	**11.5**	8.1	16.0	**3.1***	1.4	6.4	**25.0**	20.6	30.0	**58.0**	53.0	62.9
Total	**9.6**	7.8	11.6	**2.7**	1.8	4.0	**21.6**	19.3	24.2	**65.2**	62.2	68.0
Rural females												
Barwon-South Western	**10.7**	7.9	14.3	**2.2***	1.0	4.6	**19.4**	16.3	23.1	**67.3**	62.7	71.6
Gippsland	**11.8**	9.1	15.2	**4.8***	2.5	9.1	**27.0**	22.1	32.7	**55.8**	49.8	61.7
Grampians	**11.8**	8.3	16.6	**1.1***	0.6	2.4	**21.3**	17.2	26.1	**64.6**	59.1	69.8
Hume	**13.5**	9.7	18.5	**3.3***	1.6	6.5	**24.3**	20.3	28.9	**58.6**	52.9	64.1
Loddon Mallee	**9.9**	7.4	13.2	**1.6***	0.8	3.4	**25.5**	21.8	29.5	**62.7**	58.3	66.9
Total	**11.5**	10.0	13.3	**2.4**	1.7	3.4	**23.4**	21.6	25.4	**62.1**	59.8	64.4
All females												
Total	**10.1**	**8.6**	**11.7**	**2.6**	**1.9**	**3.6**	**22.1**	**20.2**	**24.1**	**64.4**	**62.0**	**66.7**
Metropolitan people												
Eastern Metropolitan	**7.6**	5.7	10.1	**2.3***	1.3	3.8	**21.4**	18.4	24.7	**68.5**	64.7	72.1
North & West Metropolitan	**14.2**	11.5	17.3	**2.9**	2.0	4.4	**24.7**	21.9	27.8	**58.0**	54.3	61.6
Southern Metropolitan	**12.6**	9.8	16.0	**4.4**	2.8	6.8	**25.7**	22.5	29.1	**55.5**	51.1	59.8
Total	**12.1**	10.5	13.9	**3.2**	2.5	4.2	**24.2**	22.4	26.1	**59.7**	57.4	62.0
Rural people												
Barwon-South Western	**13.1**	9.9	17.0	**3.0***	1.4	6.3	**21.1**	18.6	23.8	**62.6**	58.0	66.9
Gippsland	**16.1**	12.6	20.4	**5.0**	3.1	8.0	**28.6**	25.1	32.5	**49.9**	45.1	54.7
Grampians	**12.7**	9.6	16.7	**1.3***	0.7	2.5	**26.9**	23.1	31.1	**58.4**	53.8	62.8
Hume	**12.5**	9.4	16.5	**2.5***	1.3	5.0	**32.2**	27.6	37.2	**52.6**	47.6	57.5
Loddon Mallee	**12.6**	9.7	16.1	**3.1***	1.6	5.8	**29.6**	25.8	33.8	**54.2**	49.7	58.7
Total	**13.4**	11.8	15.1	**2.9**	2.2	4.0	**27.3**	25.3	29.3	**56.1**	53.8	58.3
All people												
Total	**12.4**	**11.1**	**13.9**	**3.1**	**2.5**	**3.9**	**24.9**	**23.4**	**26.4**	**58.9**	**57.0**	**60.7**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 3.7 shows the age-adjusted prevalence of smoking in males and females, by selected socioeconomic determinants, modifiable risk factors and health status.

When compared with the proportion in all Victorian men and women, a significantly *higher* prevalence of current smoking was reported among men and women with the following characteristics:

- secondary school education
- total annual household income of less than $40,000
- very high level of psychological distress
- underweight
- fair or poor health
- diagnosed with anxiety or depression.

When compared with the proportion in all Victorian women, a significantly *higher* prevalence of current smoking was reported among women with the following characteristics:

- primary or no education
- unemployed
- moderate or high level of psychological distress
- diagnosed with diabetes
- diagnosed with anxiety or depression.

Table 3.7 (revised): Proportion of current smokers, by selected socioeconomic determinants, modifiable risk factors, health status and sex, Victoria, 2012

	Current smoker					
	Males			Females		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Victoria	**18.5**	16.1	21.0	**12.7**	11.1	14.5
Country of birth						
Australia	**18.4**	15.7	21.3	**13.2**	11.3	15.3
Overseas	**18.3**	14.2	23.4	**10.6**	8.1	13.9
Language spoken at home						
English only	**18.4**	15.8	21.3	**12.1**	10.4	14.0
Language other than English	**19.6**	15.4	24.7	**13.4**	10.2	17.5
Metro-Rural regions						
Rural	**18.6**	15.7	22.0	**14.0**	12.3	15.9
Metropolitan	**18.4**	15.6	21.6	**12.3**	10.3	14.5
Level of education						
None or Primary	**11.7**	9.2	14.7	**38.6**	34.1	43.2
Secondary	**25.9**	21.1	31.3	**20.3**	17.3	23.8
TAFE or Tertiary	**16.5**	13.5	19.9	**10.0**	8.2	12.1
Employment status (<65 years)						
Employed	**21.3**	18.1	24.9	**13.6**	11.1	16.5
Unemployed	**24.6**	15.4	36.8	**26.7**	16.5	40.1
Not in labour force	**28.9**	20.3	39.4	**15.7**	12.3	19.7
Total annual household income ($)						
<40,000	**34.6**	26.3	43.9	**24.1**	19.4	29.6
40,000 to <100,000	**18.6**	15.0	22.7	**13.4**	10.7	16.8
100,000, or more	**13.6**	10.3	17.8	**6.0**	4.2	8.5
Psychological distress (K10 score)[a]						
Low (K10 score <16)	**15.8**	13.0	19.1	**8.2**	6.8	9.9
Moderate (K10 score 16 to 21)	**18.9**	14.7	23.9	**19.8**	15.7	24.5
High (K10 score 22 to 29)	**27.7**	20.0	36.9	**20.2**	14.6	27.3
Very high (K10 score ≥30)	**49.2**	39.2	59.3	**25.5**	19.2	33.2
Physical activity level[b]						
Sedentary	**31.6**	23.2	41.2	**18.2***	10.5	29.7
Insufficient	**17.2**	13.0	22.4	**13.5**	10.4	17.3
Sufficient	**17.4**	14.8	20.4	**12.1**	10.2	14.4
Compliance with fruit & vegetable consumption guidelines[c]						
Both	**4.8***	1.8	12.2	**11.0**	6.8	17.5
Vegetable only[d]	**15.7***	8.8	26.4	**11.2***	6.7	18.0
Fruit only[d]	**12.1**	9.0	16.0	**9.2**	7.2	11.8
Neither	**22.7**	19.5	26.2	**16.5**	14.1	19.1
Long term risk of alcohol related harm (2009)[e]						
Abstainer	**10.7**	7.2	15.7	**9.5**	7.2	12.4
At low risk	**15.2**	12.9	17.8	**13.2**	11.2	15.4
At increased risk	**41.2**	34.2	48.5	**25.1**	19.4	31.7
Self-reported health						
Excellent/Very Good	**11.3**	8.8	14.4	**9.9**	7.9	12.3
Good	**21.7**	17.7	26.3	**13.2**	10.8	16.1
Fair/Poor	**35.5**	29.2	42.3	**22.7**	16.7	30.1
BMI category[f]						
Underweight	**33.7**	26.9	41.3	**23.1**	15.5	33.0
Normal	**18.6**	14.9	22.9	**12.2**	10.2	14.7
Overweight	**18.3**	14.7	22.6	**10.8**	7.8	14.8
Obese	**21.9**	15.8	29.5	**17.8**	12.0	25.5
Diabetes						
No diabetes	**18.3**	16.0	20.9	**12.4**	10.8	14.1
Diabetes	**20.2**	13.2	29.5	**23.7**	16.3	33.0
Depression						
Yes	**27.3**	21.5	34.0	**18.1**	14.7	22.0
No	**16.9**	14.3	19.8	**10.4**	8.8	12.4

a Based on the Kessler 10 scale for psychological distress.
b Based on DoHA (1999) guidelines.
c Based on NHMRC (2003) guidelines.
d Includes those meeting both guidelines.
e NHMRC (2009) guidelines.
f Based on body mass Index (BMI).

Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Data were age-standardised to the 2011 Victorian population.

LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.

* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.

** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.

When compared with the proportion in all Victorian men, a significantly *lower* prevalence of current smoking was reported among men with the following characteristics:

- primary or no education
- complied with both fruit and vegetable or fruit consumption guidelines
- abstained from alcohol consumption
- excellent, or very good, self-reported health.

When compared with the proportion in all Victorian women, a significantly *lower* prevalence of current smoking was reported among women with the following characteristics:

- total annual household income of $100,000 or more
- low level of psychological distress.

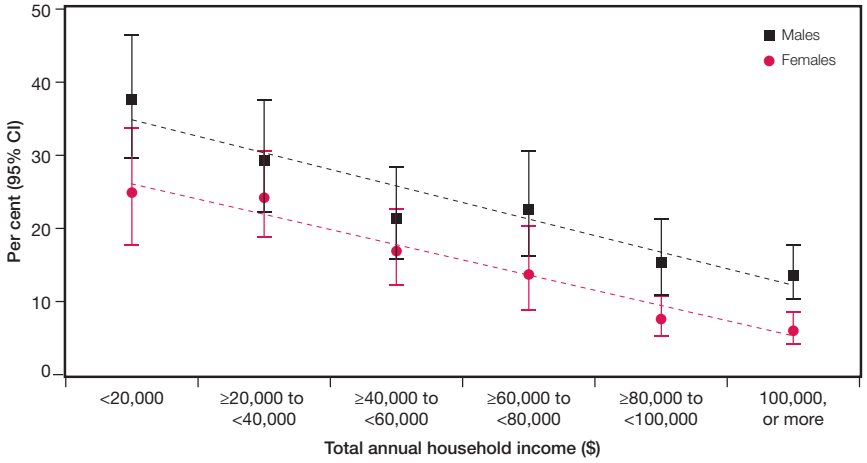
Table 3.8 and Figure 3.2 shows the relationship between socioeconomic status (SES) and the age-adjusted prevalence of smoking status using total annual household income as a measure of SES. The proportion of those currently smoking *decreased* with increasing total annual household income in men, women and people. In contrast, the proportion of those who were non-smoking *increased* significantly with increasing income in men, women and people.

Table 3.8: Smoking status, by total annual household income group and sex, Victoria, 2012

Total annual household income ($)	Current smoker			Ex-smoker			Non-smoker		
	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL
Males									
<20,000	37.7	29.7	46.5	21.1	14.1	30.4	40.7	31.1	51.0
≥20,000 to <40,000	29.3	22.2	37.5	33.1	28.4	38.2	37.4	30.2	45.2
≥40,000 to <60,000	21.4	15.8	28.4	31.1	24.9	38.1	47.2	39.3	55.3
≥60,000 to <80,000	22.6	16.2	30.6	25.9	20.9	31.7	51.5	43.9	59.0
≥80,000 to <100,000	15.4	10.9	21.3	35.8	29.0	43.1	48.7	41.7	55.8
100,000, or more	13.6	10.3	17.8	22.0	18.5	26.0	61.9	56.8	66.7
Do not know/Refused to answer	18.8	13.6	25.4	24.3	19.1	30.3	54.9	47.5	62.2
Total	18.5	16.1	21.0	28.2	26.0	30.4	52.9	50.0	55.8
Females									
<20,000	24.9	17.8	33.7	20.5	15.0	27.4	54.5	45.7	63.0
≥20,000 to <40,000	24.2	18.8	30.6	20.5	16.2	25.6	55.0	48.7	61.1
≥40,000 to <60,000	16.9	12.3	22.7	23.2	18.5	28.7	57.6	51.3	63.6
≥60,000 to <80,000	13.7	8.9	20.4	23.8	18.8	29.7	62.3	55.2	69.0
≥80,000 to <100,000	7.6	5.3	10.8	22.7	17.4	29.0	63.8	57.6	69.5
100,000, or more	6.0	4.2	8.5	26.4	22.2	31.1	62.4	57.7	67.0
Do not know/Refused to answer	10.0	7.3	13.7	16.0	12.1	20.9	72.9	67.5	77.8
Total	12.7	11.1	14.5	22.1	20.2	24.1	64.4	62.0	66.7
Persons									
<20,000	29.7	23.7	36.5	21.1	15.6	28.0	48.9	41.7	56.2
≥20,000 to <40,000	26.9	22.1	32.2	25.6	21.1	30.6	47.2	41.6	52.9
≥40,000 to <60,000	19.3	15.2	24.3	26.6	22.7	31.0	52.5	47.2	57.8
≥60,000 to <80,000	17.3	13.1	22.5	27.8	23.5	32.6	54.8	49.1	60.4
≥80,000 to <100,000	11.9	8.9	15.7	33.7	28.7	39.1	54.3	48.8	59.7
100,000, or more	10.9	8.5	13.7	24.0	20.9	27.4	62.7	58.8	66.5
Do not know/Refused to answer	13.2	10.4	16.6	19.1	15.8	22.9	66.3	61.8	70.5
Total	15.6	14.1	17.1	24.9	23.4	26.4	58.9	57.0	60.7

LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Data were age-standardised to the 2011 Victorian population.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not r eported here.

Figure 3.2: Prevalence (%) of current smoking, by total annual household income, Victoria, 2012



Data were age-standardised to the 2011 Victorian population.
95% CI = 95 per cent confidence interval.

3.3 Alcohol consumption

Revised May 2016

Regular, excessive consumption of alcohol over time places people at increased risk of chronic ill health and premature death, and episodes of heavy drinking may place the drinker (and others) at risk of injury or death. The consequences of heavy, regular use of alcohol may include cirrhosis of the liver, cognitive impairment, heart and blood disorders, ulcers, cancers and damage to the pancreas.

3.3.1 2009 National Health and Medical Research Council guidelines

Research since the previous edition of the National Health and Medical Research Council (NHMRC) guidelines in 2001 has reinforced earlier evidence on the risks of alcohol-related harm, including a range of chronic diseases and accidents and injury. In 2009 the NHMRC released the *Australian guidelines to reduce health risks from drinking alcohol*, replacing the previous guidelines issued in 2001. The new NHMRC (2009) guidelines take a new approach to developing population-health guidance that:

- goes beyond looking at the immediate risk of injury and the cumulative risk of chronic disease, to estimating the overall risk of alcohol-related harm over a lifetime
- provides advice on lowering the risk of alcohol-related harm, using the level of one death for every 100 people as a guide to acceptable risk in the context of present-day Australian society
- provides universal guidance applicable to healthy adults 18 years of age or older (guidelines 1 and 2) and guidance specific to children and young people (guideline 3) and to pregnant and breastfeeding women (guideline 4).

The guidelines focus on reducing health risks from drinking. Only guidelines 1 and 2, listed below (Table 3.9), apply to respondents of the Victorian Population Health Survey, as the survey is administered to adults aged 18 years and over. Guideline 1 refers to life-time or lifetime harm, as lifetime risk of harm from drinking alcohol increases with the amount consumed. Guideline 2 refers to immediate harm, or harm in the short-term, as on a single occasion of drinking the risk of alcohol-related injury increases with the amount consumed.

Table 3.9: National Health and Medical Research Council (NHMRC) guidelines to reduce health risks from drinking alcohol

NHMRC (2009) guidelines	
Guideline 1: Reducing the risk of alcohol-related harm over a lifetime	For healthy men and women, drinking no more than **two** standard drinks on any day reduces the lifetime risk of harm from alcohol-related disease or injury.
Guideline 2: Reducing the risk of injury on a single occasion of drinking	For healthy men and women, drinking no more than **four** standard drinks on a single occasion reduces the risk of alcohol-related injury arising from that occasion.

3.3.2 Risk of alcohol-related injury on a single occasion

Risk of alcohol-related injury on a single occasion refers to the acute effects of excess alcohol consumption that can result in death or injury due to road traffic accidents, falls, drowning, assault, suicide and acute alcohol toxicity. The risk of alcohol-related injury increases with the amount of alcohol consumed on a single occasion.

Table 3.10 shows the proportion of the adult Victorian population at risk of alcohol-related injury on a single occasion based on the NHMRC (2009) guidelines, by risk category, age group and sex, with 'Total' not adjusted for age.

The prevalence of an increased risk of alcohol–related injury on a single occasion was significantly higher in men, women and people aged 18–24 years compared with all Victorian men, women and people, respectively.

In contrast, the prevalence of an increased risk of alcohol–related injury on a single occasion was significantly lower in men; women and people aged 55 years or older compared with all Victorian men, women and people, respectively.

Table 3.10 (revised): Proportion (%) of the adult population at risk of alcohol-related injury on a single occasion,[a] by age group and sex, Victoria, 2012

	Abstainer			Low risk			At increased risk:either yearly or monthly or weekly		
	%	95% CI		%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL		LL	UL
Males									
18–24	**9.8***	4.9	18.5	**10.3***	5.7	17.8	**79.9**	70.4	86.9
25–34	**17.9**	11.4	27.1	**27.7**	19.5	37.8	**52.7**	42.7	62.5
35–44	**12.1**	8.4	17.0	**25.6**	20.6	31.2	**60.9**	54.8	66.8
45–54	**10.2**	7.4	13.9	**31.8**	26.7	37.4	**56.6**	51.0	62.1
55–64	**11.1**	8.5	14.3	**40.5**	35.7	45.4	**45.9**	41.2	50.7
65+	**17.9**	15.1	21.1	**47.5**	43.7	51.3	**32.4**	29.0	36.0
Total	**13.4**	**11.4**	**15.7**	**30.8**	**28.2**	**33.5**	**54.2**	**51.3**	**57.1**
Females									
18–24	**15.7***	8.6	27.1	**23.5**	15.7	33.7	**58.2**	47.1	68.6
25–34	**28.5**	21.6	36.6	**38.4**	30.9	46.5	**33.0**	26.0	40.8
35–44	**20.5**	16.6	25.1	**45.6**	40.8	50.5	**33.3**	29.0	38.0
45–54	**19.0**	15.8	22.8	**49.3**	45.1	53.6	**30.7**	27.0	34.6
55–64	**24.4**	20.9	28.2	**56.5**	52.4	60.6	**18.0**	15.1	21.3
65+	**36.8**	33.8	39.9	**54.2**	51.0	57.4	**7.6**	6.0	9.7
Total	**24.8**	**22.7**	**27.1**	**45.4**	**43.0**	**47.9**	**28.7**	**26.4**	**31.2**
People									
18–24	**12.7**	8.1	19.5	**16.8**	12.0	22.9	**69.3**	61.9	75.9
25–34	**23.2**	18.2	29.1	**33.1**	27.3	39.4	**42.9**	36.7	49.3
35–44	**16.4**	13.6	19.6	**35.8**	32.2	39.5	**46.9**	43.0	50.8
45–54	**14.7**	12.4	17.3	**40.7**	37.3	44.2	**43.4**	40.0	46.9
55–64	**17.9**	15.6	20.4	**48.7**	45.5	51.8	**31.7**	28.8	34.6
65+	**28.2**	26.1	30.5	**51.1**	48.7	53.6	**18.9**	17.0	20.9
Total	**19.2**	**17.7**	**20.8**	**38.3**	**36.5**	**40.1**	**41.2**	**39.3**	**43.1**

a NHMRC (2009) guidelines

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria

LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.

* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.

Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 3.11 shows the proportion of adults at risk of alcohol-related injury on a single occasion, by risk category, departmental region and sex. It has been adjusted for age. There was a significantly higher proportion of people at increased risk of alcohol-related injury on a single occasion who lived in rural regions compared with their metropolitan counterparts, and also with all Victorian people.

A significantly *higher* proportion of men and people was at increased risk of alcohol-related injury on a single occasion who lived in rural regions, with the exception of Grampians Region and women residing in rural regions as a whole, when compared with all Victorian men, people and women, respectively.

Table 3.11 (revised): Proportion (%) of the adult population at risk of alcohol-related injury on a single occasion,[a] by risk category, Department of Health and Human Services region and sex, Victoria, 2012

	Abstainer			Low risk			At increased risk:either yearly or monthly or weekly		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Metropolitan males									
Eastern Metropolitan	**11.1**	7.9	15.3	**39.4**	33.2	45.9	**48.3**	41.9	54.7
North & West Metropolitan	**15.6**	12.2	19.8	**34.7**	30.1	39.6	**47.5**	42.3	52.6
Southern Metropolitan	**14.5**	10.0	20.5	**28.5**	23.7	33.7	**55.3**	48.6	61.7
Total	**14.0**	11.7	16.7	**33.7**	30.7	36.9	**50.4**	46.9	53.8
Rural males									
Barwon-South Western	**9.8**	7.1	13.4	**20.0**	16.3	24.3	**69.3**	64.6	73.7
Gippsland	**8.8**	6.4	12.1	**26.4**	21.6	31.7	**63.6**	58.2	68.7
Grampians	**8.6**	6.0	12.1	**30.8**	24.2	38.2	**59.2**	51.6	66.3
Hume	**10.7**	8.1	14.2	**16.8**	13.8	20.4	**71.2**	67.2	74.8
Loddon Mallee	**11.9**	8.2	17.0	**20.0**	16.6	23.7	**67.9**	62.5	72.9
Total	**10.0**	8.6	11.8	**22.1**	**20.0**	**24.3**	**66.9**	64.4	69.3
All males									
Total	**13.2**	**11.4**	**15.4**	**30.8**	**28.4**	**33.3**	**54.3**	**51.5**	**57.0**
Metropolitan females									
Eastern Metropolitan	**19.3**	15.4	23.8	**49.5**	44.7	54.2	**29.7**	25.2	34.6
North & West Metropolitan	**30.6**	26.1	35.6	**43.5**	38.6	48.4	**25.3**	20.9	30.1
Southern Metropolitan	**26.2**	21.4	31.6	**44.6**	39.3	50.1	**28.1**	23.1	33.8
Total	**26.2**	23.4	29.2	**45.4**	42.4	48.5	**27.4**	24.5	30.4
Rural females									
Barwon-South Western	**22.9**	18.6	27.9	**42.3**	37.3	47.4	**33.8**	28.9	39.1
Gippsland	**16.6**	13.4	20.4	**50.5**	44.2	56.8	**31.8**	25.9	38.3
Grampians	**18.3**	14.8	22.3	**45.3**	40.1	50.7	**35.6**	30.7	40.9
Hume	**18.3**	14.6	22.7	**46.8**	40.6	53.1	**34.3**	28.3	40.9
Loddon Mallee	**22.1**	18.4	26.2	**41.4**	36.4	46.6	**35.3**	30.4	40.5
Total	**19.9**	18.1	21.8	**45.1**	42.3	47.9	**34.1**	31.4	36.8
All females									
Total	**24.7**	**22.4**	**27.1**	**45.4**	**43.0**	**47.9**	**28.9**	**26.6**	**31.3**
Metropolitan people									
Eastern Metropolitan	**15.2**	12.6	18.2	**44.7**	40.6	48.9	**38.6**	34.5	43.0
North & West Metropolitan	**23.2**	20.2	26.4	**39.0**	35.6	42.5	**36.3**	32.8	40.0
Southern Metropolitan	**20.6**	17.1	24.7	**36.8**	33.0	40.6	**41.2**	36.8	45.7
Total	**20.3**	18.4	22.3	**39.7**	37.5	41.9	**38.6**	36.2	41.0
Rural people									
Barwon-South Western	**16.3**	13.5	19.5	**32.1**	28.2	36.3	**50.8**	46.2	55.4
Gippsland	**12.8**	10.7	15.2	**38.0**	33.3	42.8	**48.1**	43.4	52.9
Grampians	**13.7**	11.4	16.3	**37.9**	33.5	42.5	**47.3**	42.7	52.0
Hume	**14.4**	11.8	17.5	**31.7**	27.8	35.8	**52.9**	48.2	57.6
Loddon Mallee	**17.0**	14.4	20.1	**30.5**	27.2	34.0	**51.7**	47.8	55.7
Total	**15.0**	13.8	16.3	**33.6**	31.7	35.6	**50.4**	48.3	52.6
All people									
Total	**19.1**	**17.6**	**20.7**	**38.2**	**36.4**	**39.9**	**41.4**	**39.5**	**43.3**

a NHMRC (2009) guidelines

Data were age-standardised to the 2011 Victorian population.

LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.

Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

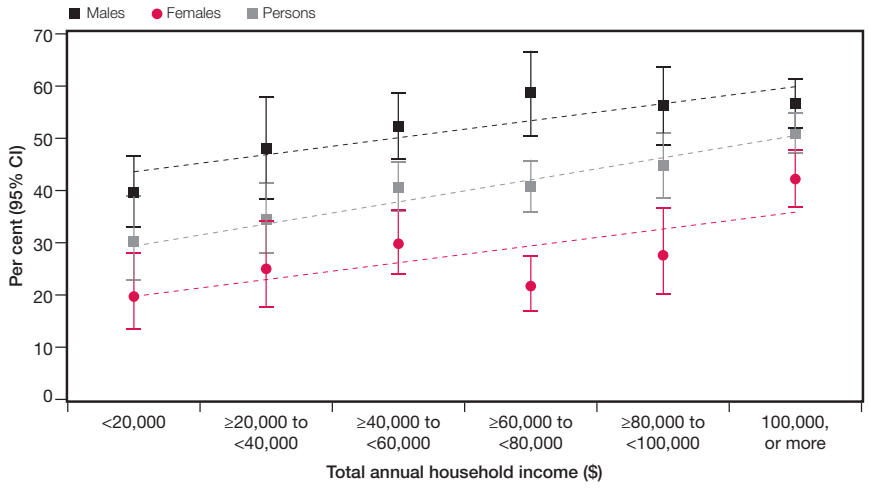
Table 3.12 and Figure 3.3 show the relationship between SES and the age-adjusted prevalence of increased risk of alcohol-related injury on a single occasion, using total annual household income as a measure of SES. The prevalence of risk of alcohol-related injury on a single occasion from alcohol consumption significantly *increased* with increasing total annual household income in men and people, however, not in women.

Table 3.12 (revised): Risk of alcohol-related injury on a single occasion,[a] by total annual household income group and sex, Victoria, 2012

	Abstainer			Low risk			At increased risk: either yearly or monthly or weekly		
Total annual household income ($)	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL
Males									
<20,000	**22.3**	17.2	28.4	**33.9**	28.0	40.4	**39.7**	33.1	46.6
≥20,000 to <40,000	**17.3**	11.2	25.6	**32.1**	24.6	40.6	**48.1**	38.3	58.0
≥40,000 to <60,000	**15.1**	10.1	21.8	**31.5**	26.3	37.2	**52.3**	46.0	58.6
≥60,000 to <80,000	**9.6**	5.9	15.4	**30.5**	23.4	38.6	**58.7**	50.4	66.6
≥80,000 to <100,000	**9.6**	6.3	14.4	**32.4**	26.1	39.4	**56.3**	48.7	63.6
100,000, or more	**9.2**	6.5	12.9	**32.9**	28.7	37.3	**56.6**	51.9	61.3
DK/refused	**14.8**	10.5	20.3	**33.2**	27.2	39.8	**46.8**	39.4	54.3
Total	**13.2**	**11.4**	**15.4**	**30.8**	**28.4**	**33.3**	**54.3**	**51.5**	**57.0**
Females									
<20,000	**40.1**	31.4	49.5	**38.6**	29.6	48.5	**19.7**	13.4	28.0
≥20,000 to <40,000	**31.2**	25.2	37.8	**43.5**	34.9	52.4	**25.0**	17.7	34.1
≥40,000 to <60,000	**20.4**	16.0	25.7	**48.9**	42.7	55.3	**29.8**	24.0	36.3
≥60,000 to <80,000	**20.9**	16.4	26.3	**57.1**	50.6	63.4	**21.7**	16.9	27.5
≥80,000 to <100,000	**19.6**	12.3	29.8	**46.1**	38.4	53.9	**27.6**	20.1	36.7
100,000, or more	**9.9**	7.2	13.3	**42.8**	37.4	48.4	**42.2**	36.9	47.8
DK/refused	**30.4**	25.1	36.2	**43.4**	38.1	48.8	**23.9**	19.4	29.1
Total	**24.7**	**22.4**	**27.1**	**45.4**	**43.0**	**47.9**	**28.9**	**26.6**	**31.3**
Persons									
<20,000	**31.6**	25.0	38.9	**35.4**	27.7	44.0	**30.3**	22.8	39.0
≥20,000 to <40,000	**27.0**	20.9	34.2	**37.4**	31.4	43.7	**34.4**	28.1	41.4
≥40,000 to <60,000	**18.3**	14.6	22.8	**40.2**	35.8	44.8	**40.6**	36.0	45.5
≥60,000 to <80,000	**13.4**	10.3	17.2	**45.0**	40.1	50.0	**40.7**	35.8	45.7
≥80,000 to <100,000	**13.0**	8.5	19.4	**40.7**	34.9	46.8	**44.7**	38.5	51.0
100,000, or more	**10.1**	7.8	12.8	**37.8**	34.1	41.7	**50.9**	47.1	54.8
DK/refused	**24.5**	20.7	28.8	**39.1**	35.0	43.3	**32.8**	28.7	37.3
Total	**19.1**	**17.6**	**20.7**	**38.2**	**36.4**	**39.9**	**41.4**	**39.5**	**43.3**

a NHMRC (2009) guidelines.
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Figure 3.3: Proportion (%) of the adult population at increased risk of alcohol-related injury at least weekly,[a] by total annual household income group and sex, Victoria, 2012



a NHMRC (2009) guidelines.
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confi dence interval.

3.3.3 Lifetime risk of alcohol-related harm

Alcohol-related harm in the lifetime attempts to measure the risk associated with developing an illness such as cirrhosis of the liver, dementia, other cognitive problems, various cancers and alcohol dependence.

Table 3.13 shows prevalence of alcohol-related harm in the lifetime based on the NHMRC (2009) guidelines, by age group and sex, with 'Total' not adjusted for age.

The prevalence of increased risk was significantly *higher* in men compared with women in every age group except 18–24 years age group. A significantly higher proportion of women and adults 18–24 years of age were at 'increased risk' of alcohol-related harm in the lifetime compared with all Victorian women and adults.

Table 3.13 (revised): Proportion (%) of the adult population with lifetime risk of alcohol-related harm,[a] by risk category, age group and sex, Victoria, 2012

Age group (years)	Abstainer / no longer drinks alcohol			Reduced risk			Frequency of exceeding 2 standard drinks per day											
							Weekly			Monthly			Yearly			Total increased lifetime risk[a]		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL		LL	UL		LL	UL
Males																		
18–24	**9.8***	4.9	18.5	**6.0***	2.7	12.8	47.5	37.6	57.5	**16.7**	10.8	24.9	**18.5**	12.0	27.5	**82.7**	73.4	89.2
25–34	**17.9**	11.4	27.1	**10.3***	5.8	17.7	**27.0**	19.4	36.3	**18.9**	12.2	28.0	**24.2**	16.5	34.1	**70.1**	60.2	78.5
35–44	**12.1**	8.4	17.0	**9.9**	6.9	14.2	**33.3**	28.0	39.1	**15.9**	12.2	20.5	**26.9**	21.5	33.1	**76.1**	70.4	81.0
45–54	**10.2**	7.4	13.9	**12.3**	8.9	16.8	**38.5**	33.3	44.1	**15.4**	12.0	19.5	**22.2**	17.9	27.2	**76.1**	71.0	80.6
55–64	**11.1**	8.5	14.3	**13.6**	10.6	17.4	**30.6**	26.3	35.2	**17.6**	14.2	21.6	**24.6**	20.5	29.1	**72.7**	68.2	76.8
65+	**17.9**	15.1	21.1	22.8	19.8	26.2	22.1	19.2	25.3	11.0	8.7	13.7	**23.9**	20.7	27.4	57.0	53.2	60.8
Total	**13.4**	**11.4**	**15.7**	**12.6**	**10.9**	**14.5**	**32.7**	**30.0**	**35.5**	**15.9**	**13.9**	**18.2**	**23.6**	**21.1**	**26.3**	**72.2**	**69.5**	**74.7**
Females																		
18–24	**15.7***	8.6	27.1	8.7*	4.1	17.5	24.8	16.6	35.4	27.4	18.9	37.9	**20.2**	13.4	29.3	72.4	60.9	81.6
25–34	**28.5**	21.6	36.6	**19.8**	14.1	27.0	**6.9***	4.0	11.4	**13.3**	8.9	19.6	**31.0**	24.0	38.9	**51.2**	43.1	59.2
35–44	**20.5**	16.6	25.1	**27.3**	23.0	31.9	**13.1**	10.2	16.6	**12.0**	9.2	15.5	**26.0**	22.2	30.3	**51.1**	46.2	56.0
45–54	**19.0**	15.8	22.8	**24.5**	21.1	28.2	**15.3**	12.6	18.4	**15.8**	12.9	19.3	**23.6**	20.3	27.4	**54.7**	50.5	58.9
55–64	**24.4**	20.9	28.2	**29.2**	25.6	33.1	**12.8**	10.2	15.8	**12.6**	10.2	15.4	**19.9**	16.9	23.2	**45.2**	41.1	49.3
65+	36.8	33.8	39.9	33.2	30.3	36.2	5.6	4.2	7.5	5.7	4.4	7.2	16.8	14.6	19.4	28.1	25.3	31.1
Total	**24.8**	**22.7**	**27.1**	**24.5**	**22.6**	**26.5**	**12.3**	**10.7**	**14.1**	**13.7**	**12.0**	**15.6**	**23.1**	**21.1**	**25.3**	**49.1**	**46.6**	**51.6**
People																		
18–24	**12.7**	8.1	19.5	7.3*	4.2	12.4	36.4	29.6	43.8	21.9	16.6	28.4	**19.4**	14.4	25.5	77.7	70.4	83.6
25–34	**23.2**	18.2	29.1	**15.0**	11.1	19.9	**17.0**	12.8	22.3	**16.1**	11.9	21.5	**27.6**	22.2	33.7	**60.7**	54.3	66.7
35–44	**16.4**	13.6	19.6	**18.7**	15.9	21.9	**23.0**	19.9	26.4	**13.9**	11.5	16.7	**26.4**	23.1	30.1	**63.4**	59.6	67.1
45–54	14.7	12.4	17.3	**18.5**	16.0	21.3	**26.7**	23.7	30.0	**15.6**	13.3	18.2	**22.9**	20.1	26.0	**65.3**	61.9	68.5
55–64	**17.9**	15.6	20.4	**21.6**	19.1	24.3	**21.5**	19.0	24.2	**15.0**	12.9	17.4	**22.2**	19.6	24.9	**58.7**	55.5	61.8
65+	28.2	26.1	30.5	28.5	26.4	30.7	13.1	11.5	14.9	8.1	6.8	9.6	**20.0**	18.1	22.1	41.2	38.8	43.7
Total	**19.2**	**17.7**	**20.8**	**18.7**	**17.4**	**20.1**	**22.3**	**20.7**	**23.9**	**14.8**	**13.4**	**16.2**	**23.4**	**21.8**	**25.0**	**60.4**	**58.5**	**62.2**

a NHMRC (2009) guidelines.
Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above / below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 3.14 shows the prevalence of alcohol-related harm in the lifetime, by departmental region and sex. There was significantly higher proportion of men and adults at increased lifetime risk of alcohol-related harm who lived in Hume Region and Loddon Mallee Region compared with all Victorian men and adults respectively. A significantly higher proportion of men and adults who lived in the rural regions were at increased lifetime risk of alcohol-related harm compared with all Victorian men and adults respectively.

Table 3.14 (revised): Proportion (%) of the adult population with lifetime risk of alcohol-related harm,[a] by Department of Health and Human Services region and sex, Victoria, 2012

	Abstainer / no longer drinks alcohol			Reduced risk			Frequency of exceeding 2 standard drinks per day									Total increased lifetime risk[a]		
							Weekly			Monthly			Yearly					
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males																		
Eastern Metropolitan	**11.1**	7.9	15.3	**19.5**	14.9	25.1	**25.7**	20.4	31.9	**16.3**	11.6	22.4	**25.8**	20.4	32.0	**67.8**	61.8	73.2
North & West Metropolitan	**15.6**	12.2	19.8	**11.9**	9.0	15.7	**30.3**	25.4	35.7	**12.8**	9.7	16.6	**27.0**	22.6	32.0	**70.1**	64.8	74.9
Southern Metropolitan	**14.5**	10.0	20.5	**12.5**	9.1	17.0	**35.7**	29.7	42.2	**16.6**	11.4	23.4	**18.7**	14.4	23.8	**70.9**	64.3	76.8
Total	**14.0**	11.7	16.7	**13.8**	11.7	16.3	**31.3**	28.0	34.8	**14.6**	12.1	17.6	**24.1**	21.2	27.2	**70.0**	66.7	73.2
Rural males																		
Barwon-South Western	**9.8**	7.1	13.4	**10.6**	7.6	14.6	**36.1**	27.8	45.3	**23.3**	16.0	32.5	**19.5**	14.4	25.9	**78.9**	74.3	82.9
Gippsland	**8.8**	6.4	12.1	**13.0**	9.4	17.6	**35.9**	29.7	42.6	**18.5**	13.4	25.1	**21.1**	16.1	27.2	**75.5**	70.2	80.2
Grampians	**8.6**	6.0	12.1	**15.8**	10.9	22.4	**38.4**	31.3	46.1	**17.6**	13.3	22.9	**18.1**	13.2	24.3	**74.1**	67.4	79.9
Hume	**10.7**	8.1	14.2	**6.5**	4.7	9.1	**40.1**	30.7	50.2	**19.8**	12.9	29.2	**21.3**	15.6	28.4	**81.2**	77.4	84.5
Loddon Mallee	**11.9**	8.2	17.0	**7.5**	5.3	10.5	**42.2**	34.8	49.9	**20.1**	14.1	27.7	**17.8**	13.2	23.6	**80.0**	74.7	84.5
Total	**10.0**	8.6	11.8	**10.3**	8.8	12.2	**38.2**	34.5	42.0	**20.3**	17.0	24.0	**19.8**	17.0	23.0	**78.3**	76.0	80.5
All males																		
Total	**13.2**	**11.4**	**15.4**	**12.9**	**11.3**	**14.8**	**33.0**	**30.3**	**35.8**	**15.9**	**13.7**	**18.3**	**23.0**	**20.7**	**25.5**	**71.9**	**69.2**	**74.3**
Metropolitan females																		
Eastern Metropolitan	**19.3**	15.4	23.8	**26.4**	22.3	31.0	**15.6**	12.0	20.0	**16.0**	11.9	21.1	**20.9**	16.6	26.0	**52.5**	47.2	57.8
North & West Metropolitan	**30.6**	26.1	35.6	**25.8**	21.5	30.5	**9.6**	7.1	12.9	**11.3**	8.3	15.2	**21.9**	18.0	26.3	**42.8**	37.9	47.8
Southern Metropolitan	**26.2**	21.4	31.6	**21.1**	17.9	24.8	**13.2**	9.6	17.9	**15.1**	11.4	19.8	**22.5**	18.0	27.6	**50.8**	45.2	56.4
Total	**26.2**	23.4	29.2	**24.5**	22.0	27.2	**12.2**	10.2	14.5	**13.6**	11.5	16.1	**22.1**	19.5	24.8	**47.9**	44.7	51.1
Rural females																		
Barwon-South Western	**22.9**	18.6	27.9	**23.0**	18.8	27.8	**13.8**	10.3	18.3	**12.0**	8.6	16.6	**26.7**	21.7	32.3	**52.5**	46.8	58.1
Gippsland	**16.6**	13.4	20.4	**28.5**	22.1	35.8	**12.3**	9.2	16.3	**14.1**	9.5	20.4	**25.0**	18.6	32.8	**51.5**	44.2	58.7
Grampians	**18.3**	14.8	22.3	**25.8**	21.3	30.8	**12.1**	8.7	16.7	**17.8**	13.5	23.2	**24.3**	19.5	29.8	**54.2**	49.0	59.3
Hume	**18.3**	14.6	22.7	**22.4**	18.2	27.2	**15.4**	11.4	20.4	**7.8**	5.9	10.4	**34.1**	30.2	38.3	**57.3**	52.0	62.4
Loddon Mallee	**22.1**	18.4	26.2	**23.5**	19.8	27.6	**12.0**	8.5	16.6	**18.3**	14.2	23.2	**22.4**	18.3	27.1	**52.7**	47.9	57.5
Total	**19.9**	18.1	21.8	**24.6**	22.3	27.0	**13.1**	11.4	15.1	**13.9**	12.0	16.1	**26.4**	23.9	29.2	**53.5**	50.8	56.1
All females																		
Total	**24.7**	**22.4**	**27.1**	**24.6**	**22.6**	**26.7**	**12.4**	**10.8**	**14.2**	**13.7**	**12.0**	**15.7**	**23.1**	**21.0**	**25.3**	**49.2**	**46.7**	**51.8**
Metropolitan people																		
Eastern Metropolitan	**15.2**	12.6	18.2	**23.1**	19.9	26.7	**20.5**	17.1	24.3	**16.1**	12.8	20.0	**23.3**	19.8	27.3	**59.9**	55.9	63.8
North & West Metropolitan	**23.2**	20.2	26.4	**19.0**	16.3	22.0	**19.9**	16.9	23.4	**12.1**	9.8	14.7	**24.2**	21.2	27.5	**56.2**	52.5	59.9
Southern Metropolitan	**20.6**	17.1	24.7	**17.0**	14.5	19.8	**24.1**	20.5	28.0	**15.6**	12.3	19.7	**20.8**	17.5	24.5	**60.5**	56.1	64.7
Total	**20.3**	18.4	22.3	**19.3**	17.6	21.1	**21.5**	19.5	23.7	**14.1**	12.4	16.0	**23.0**	21.1	25.1	**58.6**	56.3	61.0
Rural people																		
Barwon-South Western	**16.3**	13.5	19.5	**17.4**	14.4	20.8	**24.3**	19.7	29.6	**17.2**	13.2	22.1	**23.7**	19.7	28.3	**65.3**	61.1	69.3
Gippsland	**12.8**	10.7	15.2	**20.5**	16.7	24.9	**23.7**	19.8	28.1	**16.5**	12.9	21.0	**23.4**	19.1	28.4	**63.7**	59.1	68.0
Grampians	**13.7**	11.4	16.3	**20.8**	17.3	24.9	**24.7**	20.5	29.4	**17.9**	14.5	22.0	**21.2**	17.7	25.3	**63.8**	59.5	68.0
Hume	**14.4**	11.8	17.5	**14.4**	11.9	17.4	**28.0**	22.5	34.2	**14.2**	9.6	20.5	**27.1**	22.8	32.0	**69.4**	65.1	73.4
Loddon Mallee	**17.0**	14.4	20.1	**15.3**	13.0	18.0	**27.0**	22.7	31.9	**19.2**	15.3	23.7	**20.3**	16.9	24.1	**66.5**	62.7	70.0
Total	**15.0**	13.8	16.3	**17.6**	16.1	19.1	**25.6**	23.5	27.9	**17.1**	15.1	19.3	**23.1**	21.1	25.1	**65.8**	63.9	67.7
All people																		
Total	**19.1**	**17.6**	**20.7**	**18.9**	**17.5**	**20.3**	**22.5**	**20.8**	**24.2**	**14.8**	**13.3**	**16.3**	**23.0**	**21.4**	**24.7**	**60.2**	**58.4**	**62.1**

a NHMRC (2009) guidelines.
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above / below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 3.15 shows the age-adjusted prevalence of lifetime risk of alcohol-related harm, by sex and selected socioeconomic determinants, modifiable risk factors and health status.

When compared with the proportion in all Victorian men, there was a significantly *higher* prevalence of increased lifetime risk of alcohol-related harm in men with who lived in rural regions.

When compared with the proportion in all Victorian women, there was a significantly *higher* prevalence of increased lifetime risk of alcohol-related harm in women with the following characteristics:

- spoke English at home
- employed
- total annual household income of $100,000 or more.

Table 3.15: (revised): Lifetime risk of alcohol-related harm,[a] by selected socioeconomic determinants, modifiable risk factors and health status, Victoria, 2012

	At increased lifetime risk of alcohol related harm[a]					
	Males			Females		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Victoria	**71.9**	**6 9.2**	**74.3**	**49.2**	**46.7**	**51.8**
Country of birth						
Australia	**76.2**	73.4	78.8	**54.5**	51.7	57.3
Overseas	**61.3**	54.7	67.6	**35.6**	30.2	41.4
Language spoken at home						
English only	**77.1**	74.3	79.6	**56.8**	54.1	59.4
Language other than English	**57.2**	51.1	63.2	**28.4**	23.8	33.5
Metro-Rural regions						
Rural	**78.3**	76.0	80.5	**53.5**	50.8	56.1
Metropolitan	**70.0**	66.7	73.2	**47.9**	44.7	51.1
Level of education						
None, some or Completed Primary	**29.7**	25.9	33.9	**20.6**	15.7	26.6
Some Secondary	**74.7**	70.2	78.8	**50.7**	44.9	56.6
Completed Secondary	**71.2**	62.7	78.4	**46.0**	39.8	52.3
TAFE	**75.4**	69.6	80.4	**53.3**	48.5	58.1
Tertiary	**70.1**	64.6	75.0	**50.1**	45.5	54.7
Employment status (<65 years)						
Employed	**77.5**	74.2	80.5	**60.1**	56.3	63.8
Unemployed	**74.5**	62.1	83.9	**44.2**	33.1	56.0
Not in labour force	**68.8**	62.5	74.6	**41.6**	36.6	46.7
Total annual household income ($)						
<40,000	**61.7**	52.4	70.3	**41.2**	34.9	47.7
40,000 to <100,000	**74.2**	69.8	78.1	**51.0**	46.6	55.4
100,000, or more	**75.8**	71.2	79.9	**61.8**	56.3	67.0
Psychological distress (K10 score)[b]						
Low (K10 score <16)	**72.5**	69.0	75.8	**48.0**	44.8	51.2
Moderate (K10 score 16 to 21)	**74.2**	69.4	78.5	**56.1**	51.4	60.6
High (K10 score 22 to 29)	**68.5**	58.9	76.7	**49.2**	41.6	56.8
Very high (K10 score ≥30)	**68.0**	59.6	75.4	**40.9**	31.7	50.7
Physical activity level[c]						
Sedentary	**68.2**	61.7	74.1	**39.5**	30.1	49.8
Insufficient	**66.3**	60.6	71.6	**44.9**	40.5	49.5
Sufficient	**75.2**	72.1	78.0	**54.6**	51.4	57.8
Compliance with fruit & vegetable consumption guidelines[d]						
Both	**76.2**	70.2	81.4	**52.2**	43.3	60.9
Vegetable only[e]	**76.9**	71.9	81.2	**54.6**	47.3	61.8
Fruit only[e]	**71.0**	66.7	75.0	**48.8**	45.0	52.5
Neither	**74.0**	70.9	76.9	**49.3**	45.8	52.9
Smoking status						
Current smoker	**77.4**	71.8	82.1	**53.0**	46.1	59.8
Ex-smoker	**78.7**	74.2	82.6	**56.5**	49.0	63.8
Non-smoker	**66.2**	62.4	69.8	**43.1**	40.1	46.2
Self-reported health						
Excellent / Very Good	**71.3**	67.3	75.0	**54.6**	51.1	58.1
Good	**75.5**	71.9	78.8	**46.1**	41.9	50.3
Fair / Poor	**67.5**	61.1	73.3	**39.2**	32.5	46.3
BMI category[f]						
Underweight	**51.6**	40.4	62.7	**37.2**	26.9	48.8
Normal	**69.8**	65.4	73.9	**50.1**	46.4	53.7
Overweight	**76.4**	72.5	79.9	**52.0**	47.3	56.8
Obese	**68.9**	62.1	75.0	**50.7**	45.5	55.9
Diabetes						
No diabetes	**72.5**	69.8	75.1	**50.0**	47.4	52.6
Diabetes	**52.5**	46.2	58.8	**28.9**	19.9	39.8
Depression						
Yes	**72.8**	66.8	78.0	**52.7**	47.6	57.8
No	**72.2**	69.3	74.9	**48.4**	45.4	51.3

a NHMRC (2009) guidelines.
b Based on the Kessler 10 scale for psychological distress.
c Based on DoHA (1999) guidelines.
d Based on NHMRC (2003) guidelines
e Includes those meeting both guidelines.
f Based on Body Mass Index (BMI).

Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Data were age-standardised to the 2011 Victorian population.

LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: **above**/**below** Victoria.

* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.

** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.

3.4 Fruit and vegetable consumption

Daily intake of fruit and vegetables is used as a proxy measure of the quality of a person's diet in Australia and internationally. New Australian dietary guidelines (NHMRC 2013) have been introduced in 2013 that alter some of the serving sizes and recommendations for fruit and vegetable consumption, based on sex and age. Analysis of the Victorian Population Health Survey 2012 data has been undertaken using the 2003 Australian guidelines (NHMRC 2003). Future surveys, however, will use the 2013 guidelines when analysing the survey data. Table 3.16 shows the differences between the two sets of guidelines.

The 2003 Australian guidelines recommend a minimum daily vegetable intake of four serves for people aged 12–18 years and five serves for those aged 19 years or older, where a serve is defined as half a cup of cooked vegetables or a cup of salad vegetables (NHMRC 2003a; 2003b).The recommended minimum daily fruit intake is three serves for people aged 12–18 years and two serves for those aged 19 years or older where a serve is defined as one medium piece, or two small pieces, of fruit, or one cup of diced pieces (NHMRC 2003a; 2003b).

Table 3.16: Australian dietary guidelines for vegetable and fruit consumption, by age group and sex, 2003[a] and 2013[b]

	2013			2003		
		Servrs/day			Serves/day	
	Age group (years)	Vegetables and legumes/ beans (75g/serve)	Fruit (150g/ serve)	Age group (years)	Vegetables and legumes/ beans (75g/serve)	Fruit (150g/ serve)
Boys	2–3	2.5	1			
	4–8	4.5	1.5	4–7	2	1
	9–11	5	2	8–11	3	1
	12–13	5.5	2	12–18	4	3
	14–18	5.5	2			
Men	19–50	6	2	19–60	5	2
	51–70	5.5	2	60+	5	2
	70+	5	2			
Girls	2–3	2.5	1			
	4–8	4.5	1.5	4–7	2	1
	9–11	5	2	8–11	3	1
	12–13	5	2	12–18	4	1
	14–18	5	2			
	Pregnant (up to 18)	5	2			
	Breastfeeding (up to 18)	5.5	2			
Women	19–50	5	2	19–60	5	2
	51–70	5	2	60+	5	2
	70+	5	2			
	Pregnant (19–50)	5	2	Pregnant (19–50)	5–84	
	Breastfeeding (19–50)	7.5	2	Breastfeeding (19–50)	7	5

a NHMRC 2003a; 2003b. Dietary guidelines for Australian adults and Dietary guidelines for children and adolescents in Australia. NHMRC, Canberra.
b NHMRC 2013. Dietary guidelines for Australian adults. NHMRC, Canberra.

3.4.1 Daily vegetable consumption

Table 3.17 shows daily vegetable consumption in serves per day, by age group and sex, but with 'Total' not adjusted for age.

The proportion who consumed 'one or less than one serve' of vegetables daily was 6.0 per cent among all Victorian people. The proportion who consumed 'none or less than one serve' of vegetables daily was similar across all age groups of men and all people. A significantly *higher* proportion of women aged 65 years or older and a significantly *lower* proportion of women aged 45–54 years consumed less than one serve of vegetable per day compared with all Victorian women.

The proportion who consumed 'five or more serves' of vegetables daily was 6.7 per cent among all Victorian people, but the proportion was significantly *higher* in women (9.1 per cent) compared with men (4.2 per cent). The proportion of men who consumed five or more serves of vegetables daily was similar across all age groups. A significantly *higher* proportion of women aged 55–64 years consumed five or more serves of vegetables daily compared with all Victorian women.

Table 3.17: Daily vegetable consumption (serves/day), by age group and sex, Victoria, 2012

Age groups (years)	0 or <1 serve/day			1 to 2 serves/day			3 to 4 serves/day			5 or more serves/day		
	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL
Males												
18–24	**7.0***	3.2	14.7	**67.8**	57.4	76.6	**20.6**	13.2	30.5	**4.1***	1.6	9.8
25–34	**7.1***	3.5	13.9	**62.6**	52.7	71.5	**24.3**	17.0	33.3	**4.3***	1.7	10.9
35–44	**9.5***	5.7	15.4	**64.3**	57.9	70.2	**21.7**	17.1	27.1	**3.1***	1.7	5.8
45–54	**5.0**	3.1	7.9	**64.8**	59.1	70.1	**25.1**	20.4	30.6	**4.1***	2.2	7.6
55–64	**5.6**	3.8	8.2	**63.4**	58.5	68.0	**24.0**	19.9	28.5	**4.3**	2.9	6.5
65+	**6.6**	4.9	9.0	**63.8**	60.1	67.4	**21.8**	18.9	25.0	**5.2**	3.7	7.2
Total	**6.9**	**5.4**	**8.7**	**64.3**	**61.4**	**67.1**	**23.0**	**20.6**	**25.6**	**4.2**	**3.1**	**5.5**
Females												
18–24	**6.8***	2.7	15.9	**72.2**	61.6	80.8	**15.9**	9.7	25.1	**5.0***	2.2	11.2
25–34	**5.3***	2.6	10.5	**53.8**	45.7	61.8	**33.4**	26.3	41.3	**6.2***	3.6	10.6
35–44	**3.6***	2.0	6.4	**51.4**	46.4	56.3	**35.9**	31.4	40.7	**8.3**	6.1	11.1
45–54	**2.5**	1.6	4.0	**49.3**	45.0	53.5	**36.4**	32.4	40.6	**10.5**	8.0	13.5
55–64	**4.3**	3.0	6.2	**43.7**	39.5	47.9	**37.7**	33.8	41.8	**13.5**	11.0	16.6
65+	**8.9**	7.0	11.1	**41.9**	38.8	45.1	**35.9**	32.9	39.0	**10.7**	9.0	12.8
Total	**5.2**	**4.2**	**6.6**	**51.0**	**48.5**	**53.5**	**33.4**	**31.2**	**35.6**	**9.1**	**8.0**	**10.4**
All people												
18–24	**6.9***	3.8	12.2	**69.9**	62.6	76.3	**18.3**	13.2	24.9	**4.5***	2.4	8.2
25–34	**6.2***	3.8	10.1	**58.3**	51.9	64.4	**28.8**	23.5	34.7	**5.3***	3.2	8.7
35–44	**6.5**	4.3	9.7	**57.8**	53.8	61.7	**28.8**	25.5	32.4	**5.7**	4.3	7.5
45–54	**3.7**	2.6	5.3	**56.8**	53.3	60.3	**30.9**	27.7	34.3	**7.4**	5.7	9.5
55–64	**5.0**	3.8	6.5	**53.3**	50.1	56.5	**31.0**	28.1	34.0	**9.0**	7.5	10.9
65+	**7.9**	6.5	9.4	**51.8**	49.3	54.3	**29.5**	27.4	31.8	**8.2**	7.0	9.6
Total	**6.0**	**5.1**	**7.1**	**57.5**	**55.6**	**59.4**	**28.3**	**26.6**	**30.0**	**6.7**	**5.9**	**7.6**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 3.18 shows daily vegetable consumption, in serves per day, by departmental region and sex, adjusted for age.

Compared with all Victorian men, women and people, the proportion who consumed less than one serve of vegetable daily was significantly *lower* in:

- men residing in Hume Region
- women residing in rural regions as a whole and in Grampians Region in particular
- people residing in rural regions as a whole and Barwon-South Western, Gippsland and Hume regions in particular.

The proportion of women who consumed five or more serves of vegetables daily was significantly *higher* among women residing in rural regions as a whole and Grampians, Hume and Loddon Mallee regions in particular. This was also observed for people residing in rural regions as a whole, and Loddon Mallee Region in particular, compared with all Victorian women and people, respectively. In contrast, the proportion who consumed 'five or more serves' of vegetables daily was significantly *lower* in women and people residing in North & West Metropolitan Region compared with all Victorian women and people, respectively.

Table 3.18: Daily vegetable consumption (serves/day), by Department of Health and Human Services region and sex, Victoria, 2012

	0 or <1 serves/day			1 to 2 serves/day			3 to 4 serves/day			5 or more serves/day		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males												
Eastern Metropolitan	**5.1***	2.9	9.0	**70.2**	64.6	75.4	**19.3**	14.9	24.5	**3.5**	2.1	5.7
North & West Metropolitan	**10.0**	7.2	13.8	**62.8**	57.5	67.9	**21.9**	17.5	27.1	**2.6***	1.3	5.4
Southern Metropolitan	**6.6**	4.1	10.5	**60.2**	53.2	66.8	**25.1**	19.4	31.8	**6.6***	3.8	11.4
Total	**7.6**	5.8	9.7	**63.8**	60.1	67.3	**22.4**	19.4	25.7	**4.2**	2.9	6.0
Rural males												
Barwon-South Western	**4.2***	2.5	6.9	**63.6**	54.9	71.4	**25.8**	18.7	34.5	**5.6***	2.6	11.7
Gippsland	**3.6***	2.1	6.1	**66.7**	60.2	72.6	**25.5**	20.0	31.9	**4.0***	1.8	8.8
Grampians	**6.1***	3.1	11.6	**56.9**	49.9	63.8	32.1	26.3	38.6	**4.2**	2.6	6.8
Hume	**2.2***	1.3	3.6	**65.0**	57.4	72.0	**28.9**	22.2	36.6	**2.7***	1.6	4.5
Loddon Mallee	**5.5***	2.9	10.1	**62.6**	55.3	69.4	**24.3**	18.4	31.4	**5.6***	3.0	10.3
Total	**4.2**	3.1	5.7	**63.8**	60.1	67.3	**26.4**	23.1	29.9	**4.6**	3.2	6.5
All males												
Total	**6.7**	**5.4**	**8.4**	**63.8**	**60.9**	**66.7**	**23.4**	**20.9**	**26.0**	**4.3**	**3.2**	**5.7**
Metropolitan females												
Eastern Metropolitan	**4.1**	2.7	6.2	**49.9**	44.7	55.1	**34.2**	29.2	39.6	**10.9**	8.0	14.8
North & West Metropolitan	**8.0**	5.5	11.7	**54.9**	49.8	59.9	**29.9**	25.6	34.6	5.1	3.6	7.1
Southern Metropolitan	**5.6***	3.3	9.4	**52.9**	47.5	58.3	**32.5**	28.1	37.2	**8.4**	5.9	11.8
Total	**6.3**	4.8	8.2	**53.2**	50.1	56.4	**31.6**	28.9	34.5	**7.6**	6.3	9.2
Rural females												
Barwon-South Western	**3.0***	1.8	5.0	**47.3**	41.8	52.8	**33.6**	29.0	38.6	**12.3**	8.9	16.7
Gippsland	**3.0**	1.9	4.8	**45.5**	39.2	51.9	**40.5**	34.2	47.3	**10.2**	7.4	13.8
Grampians	1.9*	1.2	3.2	**46.5**	40.5	52.6	**37.6**	31.8	43.8	13.6	10.7	17.2
Hume	**2.2***	1.0	4.7	**48.0**	41.9	54.2	**36.1**	30.2	42.3	13.4	10.2	17.3
Loddon Mallee	**2.6***	1.4	4.7	**48.4**	43.0	53.9	**33.9**	29.0	39.1	14.5	11.0	19.0
Total	2.6	2.0	3.4	**47.3**	44.6	50.1	**35.9**	33.4	38.6	12.8	11.2	14.6
All females												
Total	**5.4**	**4.2**	**6.9**	**51.8**	**49.2**	**54.3**	**32.6**	**30.5**	**34.9**	**9.0**	**7.8**	**10.2**
Metropolitan people												
Eastern Metropolitan	**4.6**	3.2	6.6	**59.8**	55.7	63.8	**26.9**	23.4	30.7	**7.3**	5.6	9.5
North & West Metropolitan	**8.9**	6.9	11.3	**58.6**	54.8	62.2	**26.3**	23.0	29.8	3.9	2.8	5.5
Southern Metropolitan	**6.3**	4.3	9.0	**56.3**	51.9	60.6	**29.0**	25.2	33.0	**7.4**	5.4	10.1
Total	**6.9**	5.7	8.3	**58.2**	55.8	60.6	**27.3**	25.2	29.5	**5.9**	4.9	7.1
Rural people												
Barwon-South Western	3.6	2.5	5.1	**55.2**	50.0	60.2	**29.7**	25.3	34.5	**9.3**	6.7	12.8
Gippsland	3.2	2.2	4.8	**56.9**	51.9	61.7	**32.5**	28.0	37.3	**6.8**	5.0	9.3
Grampians	**4.1***	2.4	7.0	**52.0**	47.3	56.7	34.4	30.1	39.0	**9.0**	7.2	11.2
Hume	2.2	1.4	3.4	**56.8**	51.4	62.0	**32.3**	27.4	37.6	**8.0**	6.1	10.3
Loddon Mallee	**4.0**	2.4	6.4	**55.5**	50.8	60.1	**29.3**	25.2	33.7	10.0	7.6	12.9
Total	3.4	2.8	4.2	**55.4**	53.0	57.7	**31.3**	29.2	33.5	8.7	7.6	10.0
All people												
Total	**6.1**	**5.1**	**7.2**	**57.5**	**55.5**	**59.4**	**28.3**	**26.6**	**30.0**	**6.7**	**5.8**	**7.6**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

3.4.2 Daily fruit consumption

Table 3.19 presents daily fruit consumption, in serves per day, by age group and sex, with 'Total' not adjusted for age.

The proportion of people who consumed less than one serve of fruit daily was 16.4 per cent; the proportion was significantly *higher* in men (19.1 per cent) compared with women (13.8 per cent).

The proportion who consumed two or more serves of fruit daily was 45.9 per cent among all people and was significantly *higher* in women (51.4 per cent) compared with men (40.1 per cent).

The proportion of people aged 65 years or older who consumed two or more serves of fruit daily was significantly *higher* compared with the proportion in all Victorian people.

Table 3.19: Daily fruit consumption (serves/day), by age group and sex, Victoria, 2012

	0 or <1 serve/day			1 serve/day			2 or more serves/day		
	%	95% CI		%	95% CI		%	95% CI	
Age groups (years)		LL	UL		LL	UL		LL	UL
Males									
18–24	**14.7**	9.1	22.8	**38.6**	29.4	48.8	**45.8**	36.0	55.9
25–34	**21.8**	14.7	31.1	**45.4**	35.7	55.4	**30.7**	22.6	40.3
35–44	**23.2**	18.5	28.6	**39.6**	33.7	45.9	**37.0**	31.3	43.0
45–54	**20.0**	16.1	24.6	**37.7**	32.5	43.2	**41.8**	36.4	47.3
55–64	**17.2**	14.1	20.8	**37.5**	33.0	42.3	**44.2**	39.3	49.1
65+	**15.6**	12.9	18.7	**39.0**	35.3	42.7	**44.8**	41.1	48.7
Total	**19.1**	**16.9**	**21.5**	**39.9**	**37.0**	**42.8**	**40.1**	**37.3**	**43.0**
Females									
18–24	**17.1***	10.0	27.6	**36.0**	26.3	46.9	**46.9**	36.4	57.8
25–34	**15.7**	10.8	22.2	**38.5**	30.8	46.8	**45.7**	37.9	53.8
35–44	**10.5**	7.9	13.9	**36.9**	32.3	41.7	**52.1**	47.3	57.0
45–54	**13.7**	11.1	16.8	**36.1**	32.1	40.3	**49.5**	45.3	53.8
55–64	**15.0**	12.4	18.2	**27.5**	24.1	31.2	**56.7**	52.6	60.7
65+	**12.3**	10.2	14.7	**29.9**	27.0	32.9	**56.9**	53.7	60.0
Total	**13.8**	**12.1**	**15.7**	**34.2**	**31.9**	**36.7**	**51.4**	**49.0**	**53.9**
All people									
18–24	**15.9**	11.1	22.1	**37.3**	30.5	44.7	**46.4**	39.1	53.8
25–34	**18.8**	14.2	24.3	**41.9**	35.7	48.5	**38.2**	32.3	44.4
35–44	**16.7**	14.0	19.9	**38.2**	34.5	42.2	**44.7**	40.9	48.6
45–54	**16.8**	14.4	19.5	**36.9**	33.6	40.3	**45.7**	42.3	49.2
55–64	**16.1**	14.0	18.4	**32.4**	29.5	35.4	**50.6**	47.4	53.7
65+	**13.8**	12.1	15.7	**34.0**	31.7	36.4	**51.4**	49.0	53.9
Total	**16.4**	**15.0**	**17.9**	**37.0**	**35.1**	**38.9**	**45.9**	**44.0**	**47.8**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not r eported here.

Table 3.20 shows daily fruit consumption in serves per day, by departmental region and sex, adjusted for age.

The proportion of people who consumed 'none or less than one serve' of fruit daily was similar in all regions among men, women and people.

The proportion of men, women and people who consumed two or more serves of fruit daily was not significantly different in any region compared with all Victorian men, women and people, respectively.

Table 3.20: Daily fruit consumption (serves/day), by Department of Health and Human Services region and sex, Victoria, 2012

	0 or <1 serves/day			1 serve/day			2 or more serves/day		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Metropolitan males									
Eastern Metropolitan	**21.6**	16.2	28.2	**37.9**	31.7	44.6	**39.2**	33.7	45.1
North & West Metropolitan	**16.9**	13.4	21.0	**40.1**	34.7	45.7	**41.6**	36.4	47.0
Southern Metropolitan	**14.8**	11.3	19.1	**42.1**	35.6	48.9	**43.1**	36.5	49.9
Total	**17.2**	14.7	20.0	**40.5**	36.9	44.2	**41.3**	37.8	44.8
Rural males									
Barwon-South Western	**23.4**	16.7	31.7	**36.1**	29.3	43.5	**38.9**	32.4	45.7
Gippsland	**23.4**	17.8	30.1	**41.8**	35.2	48.7	**34.6**	28.2	41.6
Grampians	**22.8**	17.1	29.9	**37.2**	30.2	44.8	**38.8**	31.6	46.7
Hume	**18.7**	12.9	26.3	**31.8**	26.8	37.2	**48.8**	41.4	56.3
Loddon Mallee	**20.6**	15.6	26.5	**45.4**	38.0	53.0	**33.1**	26.5	40.6
Total	**21.9**	18.9	25.2	**38.2**	34.7	41.9	**38.8**	35.0	42.7
All males									
Total	**18.5**	**16.4**	**20.8**	40.1	**37.2**	**43.1**	40.3	**37.5**	**43.2**
Metropolitan females									
Eastern Metropolitan	**13.1**	9.1	18.4	**30.3**	25.4	35.6	**56.4**	50.6	62.0
North & West Metropolitan	**13.3**	10.2	17.1	**33.5**	28.8	38.5	**52.6**	47.5	57.7
Southern Metropolitan	**16.5**	12.5	21.5	**38.0**	32.5	43.8	**45.0**	39.8	50.4
Total	**14.0**	11.8	16.5	**34.5**	31.4	37.7	**51.1**	47.8	54.3
Rural females									
Barwon-South Western	**12.0**	8.8	16.3	**35.5**	30.1	41.4	**51.5**	45.7	57.3
Gippsland	**16.3**	12.7	20.7	**30.1**	23.7	37.3	**53.0**	45.8	60.2
Grampians	**13.8**	10.5	18.1	**32.6**	27.1	38.7	**53.2**	47.2	59.2
Hume	**11.7**	8.2	16.5	**34.2**	28.4	40.6	**53.6**	47.1	60.0
Loddon Mallee	**12.5**	9.6	16.1	**33.6**	28.7	38.9	**53.3**	48.0	58.5
Total	**13.3**	11.6	15.2	**33.5**	30.9	36.3	**52.5**	49.7	55.4
All females									
Total	**13.8**	**12.0**	**15.8**	**34.3**	**31.8**	**36.8**	**51.4**	**48.8**	**54.0**
Metropolitan people									
Eastern Metropolitan	**17.2**	13.7	21.4	**34.0**	29.9	38.4	**48.0**	43.9	52.2
North & West Metropolitan	**15.0**	12.6	17.7	**36.8**	33.1	40.6	**47.2**	43.4	51.0
Southern Metropolitan	**15.7**	12.9	18.9	**40.2**	35.9	44.6	**43.9**	39.7	48.3
Total	**15.6**	13.9	17.4	**37.4**	35.0	39.8	**46.3**	43.9	48.7
Rural people									
Barwon-South Western	**17.7**	13.9	22.2	**35.3**	30.7	40.2	**45.6**	40.8	50.5
Gippsland	**20.4**	16.7	24.7	**36.2**	31.4	41.2	**43.0**	37.9	48.1
Grampians	**18.5**	15.1	22.6	**34.7**	30.2	39.5	**46.0**	41.2	50.9
Hume	**15.1**	11.6	19.4	**32.8**	28.5	37.3	**51.5**	46.4	56.6
Loddon Mallee	**16.4**	13.4	20.0	**39.3**	34.7	44.1	**43.5**	39.0	48.2
Total	**17.6**	15.8	19.5	**35.8**	33.6	38.1	**45.8**	43.4	48.2
All people									
Total	**16.1**	**14.7**	**17.6**	**37.1**	**35.2**	**39.1**	**46.0**	**44.1**	**47.9**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

3.4.3 Compliance with the 2003 Australian fruit and vegetable consumption guidelines

Table 3.21 shows the proportion of people who met the 2003 Australian guidelines for fruit and vegetable consumption, by age group and sex, with 'Total' not adjusted for age.

The proportion who met the guidelines for daily fruit and vegetable consumption was 4.3 per cent of all Victorian people. A significantly *higher* proportion of women met the guidelines (6.2 per cent) compared with men (2.4 per cent).

The proportion of people who met both guidelines was significantly higher among women aged 55–64 years compared with all Victorian women.

The proportion who met neither set of guidelines was 51.2 per cent in all Victorian people but was significantly *higher* among men (57.5 per cent) compared with women (45.2 per cent).

The proportion of women and people who did not meet either set of guidelines was significantly *lower* in those aged 55 years or older compared with all Victorian women and people, respectively.

Table 3.21: Meeting guidelines[a] for fruit and vegetable consumption, by age group and sex, Victoria, 2012

	Both both sets of guidelines			Met vegetable consumption guidelines			Met fruit consumption guidelines			Did not meet either set of guidelines		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
Age groups (years)		LL	UL		LL	UL		LL	UL		LL	UL
Males												
18–24	**	**	**	**5.0***	2.3	10.4	**41.6**	32.1	51.8	**55.9**	45.8	65.6
25–34	**	**	**	**4.3***	1.6	10.8	**30.7**	22.6	40.3	**64.7**	54.9	73.4
35–44	**2.1***	0.9	4.6	**3.1***	1.7	5.7	**37.0**	31.3	43.0	**61.0**	54.9	66.7
45–54	**2.9***	1.3	6.4	**4.0***	2.1	7.4	**41.8**	36.4	47.3	**56.7**	51.1	62.1
55–64	**2.5***	1.4	4.2	**4.2**	2.8	6.4	**44.2**	39.3	49.1	**52.2**	47.3	57.1
65+	**3.3**	2.2	5.0	**5.0**	3.6	7.0	**44.8**	41.1	48.7	**51.7**	47.9	55.5
Total	**2.4**	**1.7**	**3.4**	**4.2**	**3.2**	**5.6**	**39.6**	**36.8**	**42.4**	**57.5**	**54.5**	**60.3**
Females												
18–24	**3.5***	1.5	8.2	**6.1***	2.9	12.3	**43.7**	33.4	54.6	**54.4**	43.5	64.9
25–34	**3.3***	1.6	6.8	**6.0***	3.5	10.3	**45.7**	37.9	53.8	**50.5**	42.5	58.5
35–44	**5.9**	4.1	8.4	**8.0**	5.9	10.7	**52.1**	47.3	57.0	**45.3**	40.5	50.2
45–54	**6.9**	5.1	9.3	**10.2**	7.9	13.2	**49.5**	45.3	53.8	**46.2**	42.0	50.5
55–64	**9.5**	7.4	12.2	**13.3**	10.8	16.3	**56.7**	52.6	60.7	**38.6**	34.7	42.6
65+	**7.6**	6.2	9.3	**10.5**	8.8	12.6	**56.9**	53.7	60.0	**38.3**	35.2	41.5
Total	**6.2**	**5.3**	**7.2**	**9.0**	**7.9**	**10.3**	**51.0**	**48.6**	**53.5**	**45.2**	**42.8**	**47.7**
All people												
18–24	**2.6***	1.3	5.1	**5.5***	3.2	9.2	**42.7**	35.5	50.1	**55.2**	47.7	62.4
25–34	**2.6***	1.2	5.2	**5.2***	3.1	8.5	**38.2**	32.3	44.4	**57.7**	51.3	63.8
35–44	**4.0**	2.9	5.6	**5.6**	4.2	7.3	**44.7**	40.9	48.6	**53.0**	49.1	56.9
45–54	**4.9**	3.6	6.7	**7.2**	5.5	9.2	**45.7**	42.3	49.2	**51.4**	47.9	54.8
55–64	**6.1**	4.8	7.6	**8.9**	7.3	10.7	**50.6**	47.4	53.7	**45.2**	42.1	48.4
65+	**5.7**	4.7	6.8	**8.0**	6.9	9.4	**51.4**	49.0	53.9	**44.4**	41.9	46.8
Total	**4.3**	**3.7**	**5.0**	**6.7**	**5.9**	**7.6**	**45.4**	**43.5**	**47.3**	**51.2**	**49.3**	**53.1**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

The trend of the age-adjusted prevalence of compliance with the 2003 Australian guidelines for fruit and vegetable consumption over time is presented in Table 3.22 and Figure 3.4. Statistical analysis of the observed trends between 2003 and 2012 are summarised in Table 3.23.

Table 3.22: Compliance with fruit and vegetable consumption guidelines,[a] by sex, Victoria, 2003–2012

	Met both guidelines			Met neither guideline			Met vegetable guidelines[b]			Met fruit guidelines[b]		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Males												
2003	**5.7**	4.7	6.8	**52.3**	49.9	54.8	**9.7**	8.4	11.2	**43.2**	40.8	45.6
2004	**3.1**	2.3	4.0	**55.0**	52.6	57.4	**3.8**	3.0	4.8	**43.0**	40.6	45.4
2005	**4.3**	3.3	5.5	**55.4**	52.9	57.9	**6.3**	5.1	7.6	**42.2**	39.8	44.7
2006	**5.0**	3.9	6.5	**57.4**	54.9	59.8	**6.9**	5.7	8.5	**38.8**	36.4	41.3
2007	**3.1**	2.4	4.0	**56.6**	54.0	59.2	**5.4**	4.4	6.5	**38.5**	36.0	41.1
2008*	**3.2**	2.8	3.6	**54.7**	53.4	56.1	**5.1**	4.6	5.7	**41.7**	40.4	43.0
2009	**3.5**	2.7	4.4	**50.8**	48.5	53.1	**4.9**	4.1	5.9	**45.7**	43.4	48.0
2010	**3.5**	2.8	4.5	**51.7**	49.1	54.2	**5.3**	4.3	6.4	**45.1**	42.5	47.7
2011–12*	**3.2**	2.7	3.7	**56.9**	55.3	58.4	**4.5**	3.9	5.1	**40.0**	38.5	41.6
2012	**2.3**	**1.7**	**3.2**	**56.9**	**54.0**	**59.8**	**4.3**	**3.2**	**5.7**	**39.8**	**37.0**	**42.6**
Females												
2003	**10.5**	9.4	11.7	**39.1**	37.2	41.1	**13.6**	12.4	15.0	**57.6**	55.6	59.5
2004	**8.1**	7.1	9.2	**38.2**	36.3	40.0	**10.0**	9.0	11.2	**59.4**	57.5	61.3
2005	**9.9**	8.9	11.1	**39.7**	37.7	41.7	**12.8**	11.6	14.0	**57.3**	55.3	59.3
2006	**9.2**	8.2	10.4	**41.3**	39.3	43.3	**13.3**	12.1	14.7	**53.2**	51.2	55.2
2007	**7.5**	6.6	8.5	**44.4**	42.4	46.4	**10.2**	9.2	11.3	**51.7**	49.6	53.7
2008*	**8.0**	7.5	8.6	**41.9**	40.8	42.9	**10.7**	10.1	11.3	**54.1**	53.0	55.2
2009	**8.8**	7.8	9.9	**38.6**	36.7	40.4	**11.2**	10.1	12.4	**57.9**	56.0	59.8
2010	**7.2**	6.3	8.2	**41.6**	39.6	43.7	**10.0**	9.0	11.1	**54.4**	52.3	56.4
2011–12*	**7.0**	6.5	7.5	**45.5**	44.2	46.8	**9.7**	9.1	10.3	**50.5**	49.2	51.8
2012	**6.1**	**5.2**	**7.1**	**45.4**	**42.8**	**48.0**	**8.9**	**7.8**	**10.1**	**51.0**	**48.4**	**53.5**
Persons												
2003	**8.1**	7.4	8.9	**45.5**	43.9	47.0	**11.7**	10.8	12.7	**50.7**	49.1	52.2
2004	**5.7**	5.0	6.4	**46.3**	44.8	47.9	**7.0**	6.3	7.8	**51.5**	50.0	53.0
2005	**7.2**	6.5	8.1	**47.3**	45.7	48.9	**9.6**	8.8	10.5	**50.0**	48.4	51.6
2006	**7.1**	6.3	8.0	**49.1**	47.5	50.7	**10.1**	9.2	11.1	**46.2**	44.6	47.8
2007	**5.3**	4.8	6.0	**50.3**	48.7	52.0	**7.8**	7.1	8.6	**45.3**	43.7	46.9
2008*	**5.7**	5.3	6.0	**48.1**	47.3	49.0	**8.0**	7.6	8.4	**48.1**	47.2	48.9
2009	**6.2**	5.5	6.9	**44.4**	42.9	45.9	**8.1**	7.4	8.9	**52.1**	50.6	53.6
2010	**5.4**	4.8	6.1	**46.5**	44.9	48.2	**7.7**	7.0	8.5	**49.9**	48.2	51.5
2011–12*	**5.1**	4.8	5.5	**51.0**	50.0	52.0	**7.2**	6.8	7.6	**45.4**	44.4	46.4
2012	**4.2**	**3.7**	**4.9**	**51.0**	**49.0**	**53.0**	**6.6**	**5.8**	**7.5**	**45.5**	**43.6**	**47.4**

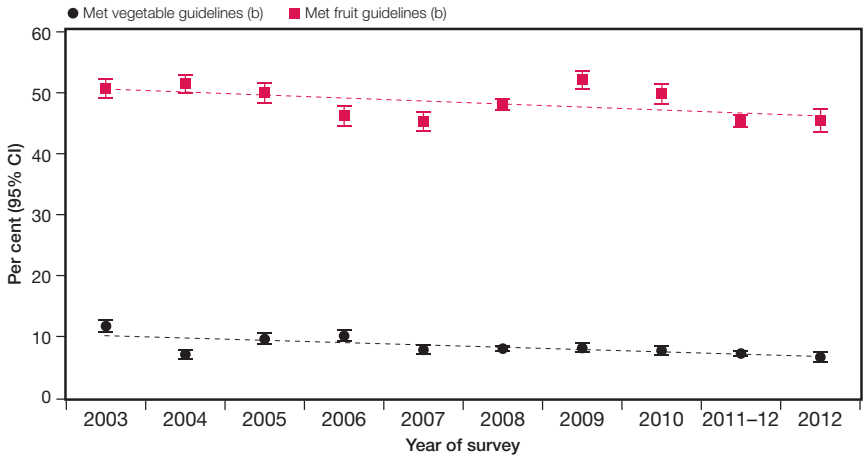
a Based on NHMRC (2003) guidelines.
b Includes those meeting both guidelines.
* LGA level survey with enlarged sample size
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

Table 3.23: Compliance with fruit and vegetable consumption guidelines,[a] statistical significance of trends,[b] by sex, Victoria, 2003–2012

Compliance with guidelines:	Observed trend
Both	Significant decline in males, females and all people
Neither	Significant increase in females, but not males or all people
Vegetable	Significant decline in females all people, but not males
Fruit	Significant decline in females, but not males or all people

a Based on NHMRC (2003) guidelines.
b Using OLS regression analysis

Figure 3.4: Compliance with fruit and vegetable consumption guidelines,[a,b] Victoria, 2003–2012



a Based on national guidelines (NHMRC 2003).
b Includes those meeting both guidelines.
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

Table 3.24 shows the proportion of people who met the 2003 Australian fruit and vegetable consumption guidelines, by departmental region and sex, adjusted for age.

The proportion who met both guidelines was similar across all regions in men but was significantly *higher* in women residing in rural regions as a whole and Grampians, Hume and Loddon Mallee regions in particular, compared with all Victorian women and people, respectively.

The proportion of people who met neither set of guidelines was similar across all regions among men, women and people compared with all Victorian men and people, respectively.

Table 3.24: Compliance with fruit and vegetable consumption guidelines,[a] by Department of Health and Human Services region and sex, Victoria, 2012

	Both both sets of guidelines			Met vegetable consumption guidelines			Met fruit consumption guidelines			Did not meet either set of guidelines		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males												
Eastern Metropolitan	**1.7***	0.8	3.5	**3.4**	2.1	5.5	**39.2**	33.7	45.1	**57.9**	52.1	63.6
North & West Metropolitan	**1.3***	0.7	2.5	**2.6***	1.2	5.4	**41.0**	35.8	46.4	**55.6**	50.2	60.9
Southern Metropolitan	**3.7***	2.0	6.9	**6.5***	3.7	11.2	**42.7**	36.2	49.5	**54.3**	47.3	61.1
Total	**2.2**	1.4	3.4	**4.1**	2.8	5.9	**40.9**	37.5	44.5	**55.9**	52.3	59.5
Rural males												
Barwon-South Western	**	**	**	**5.5***	2.6	11.6	**37.0**	30.5	44.0	**59.6**	52.7	66.1
Gippsland	**	**	**	**5.9***	3.1	10.9	**33.6**	27.2	40.6	**62.8**	55.9	69.3
Grampians	**2.9***	1.6	5.1	**4.2**	2.6	6.7	**37.0**	29.8	44.7	**60.0**	52.3	67.3
Hume	**1.4***	0.7	3.1	**3.9***	1.9	7.7	**47.6**	40.1	55.1	**48.4**	41.0	55.9
Loddon Mallee	**2.1***	1.1	3.8	**5.5***	2.9	10.2	**33.1**	26.5	40.6	**62.1**	54.4	69.2
Total	**2.8***	1.7	4.5	**5.1**	3.6	7.0	**37.6**	33.8	41.5	**58.7**	54.8	62.5
All males												
Total	**2.3**	**1.7**	**3.2**	**4.3**	**3.2**	**5.7**	**39.8**	**37.0**	**42.6**	**56.9**	**54.0**	**59.8**
Metropolitan females												
Eastern Metropolitan	**7.4**	4.9	11.0	**10.6**	7.7	14.5	**55.0**	49.3	60.6	**41.1**	35.5	46.9
North & West Metropolitan	**3.6**	2.4	5.4	**5.0**	3.6	7.0	**52.6**	47.5	57.7	**44.7**	39.7	49.8
Southern Metropolitan	**5.0**	3.3	7.4	**8.6**	6.1	12.1	**45.0**	39.8	50.4	**50.7**	45.3	56.2
Total	**5.0**	4.0	6.3	**7.6**	6.2	9.2	**50.7**	47.5	53.9	**45.8**	42.6	49.1
Rural females												
Barwon-South Western	**8.4**	5.9	11.8	**12.0**	8.8	16.2	**51.0**	45.2	56.8	**43.4**	37.6	49.3
Gippsland	**7.3**	5.0	10.7	**9.9**	7.2	13.4	**53.0**	45.8	60.2	**43.7**	36.7	51.1
Grampians	**9.8**	7.4	12.8	**13.3**	10.5	16.8	**52.1**	46.1	58.0	**43.8**	37.9	49.8
Hume	**10.5**	7.4	14.9	**14.0**	10.5	18.5	**52.1**	45.7	58.4	**43.9**	37.8	50.3
Loddon Mallee	**10.3**	7.3	14.4	**14.1**	10.7	18.5	**52.7**	47.4	58.0	**43.7**	38.3	49.1
Total	**9.1**	7.8	10.6	**12.6**	11.1	14.4	**51.8**	49.0	54.7	**43.9**	41.1	46.7
All females												
Total	**6.1**	**5.2**	**7.1**	**8.9**	**7.8**	**10.1**	**51.0**	**48.4**	**53.5**	**45.4**	**42.8**	**48.0**
Metropolitan people												
Eastern Metropolitan	**4.7**	3.3	6.6	**7.1**	5.4	9.2	**47.4**	43.2	51.6	**49.3**	45.1	53.5
North & West Metropolitan	**2.5**	1.7	3.5	**3.9**	2.7	5.5	**46.9**	43.2	50.7	**50.0**	46.2	53.7
Southern Metropolitan	**4.3**	3.0	6.1	**7.5**	5.5	10.1	**43.7**	39.5	48.1	**52.7**	48.3	57.1
Total	**3.6**	3.0	4.5	**5.9**	4.9	7.0	**45.9**	43.6	48.4	**50.7**	48.3	53.2
Rural people												
Barwon-South Western	**6.3**	4.1	9.4	**9.1**	6.6	12.6	**44.4**	39.6	49.3	**50.9**	45.9	55.8
Gippsland	**4.8**	3.2	7.2	**7.7**	5.6	10.6	**42.4**	37.4	47.6	**54.1**	49.0	59.2
Grampians	**6.3**	4.9	8.1	**8.8**	7.1	11.0	**44.5**	39.7	49.3	**51.9**	47.0	56.7
Hume	**5.9**	4.2	8.3	**9.0**	6.7	11.9	**50.2**	45.1	55.3	**45.8**	40.8	51.0
Loddon Mallee	**6.3**	4.6	8.5	**9.8**	7.5	12.7	**43.3**	38.7	47.9	**52.7**	48.0	57.4
Total	**6.0**	5.1	7.1	**8.9**	7.8	10.2	**44.8**	42.4	47.2	**51.2**	48.8	53.6
All people												
Total	**4.2**	**3.7**	**4.9**	**6.6**	**5.8**	**7.5**	**45.5**	**43.6**	**47.4**	**51.0**	**49.0**	**53.0**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 3.25 shows the proportion of men, women and people who met the Australian guidelines for fruit and vegetable consumption, by selected socioeconomic determinants, modifiable risk factors and health status, adjusted for age.

3.4.3.1 Met both guidelines

When compared with all Victorian men, there was a significantly *higher* proportion of men who complied with both guidelines with the following characteristic:

- primary or no education.

When compared with all Victorian men, there was a significantly *lower* proportion of men who complied with both guidelines with the following characteristics:

- total annual household income less than $40,000
- insufficient physical activity.

When compared with all Victorian women, there was a significantly *higher* proportion of women who complied with both guidelines with the following characteristic:

- resident in rural regions.

When compared with all Victorian women there was a significantly *lower* proportion of women who complied with both guidelines with the following characteristics:

- overseas born
- spoke a language other than English at home
- secondary education
- high level of psychological distress
- fair or poor self-reported health.

3.4.3.2 Met neither set of guidelines

When compared with the proportion in all Victorian men and women, there was a significantly *higher* proportion of men and women who did not comply with either set of guidelines with the following characteristic:

- current smoker.

When compared with the proportion in all Victorian men, there was a significantly *higher* proportion of men who did not comply with either set of guidelines with the following characteristic:

- underweight.

When compared with the proportion in all Victorian women, there was a significantly *higher* proportion of women who did not comply with either set of guidelines with the following characteristics:

- primary or no education
- total annual household income less than $40,000
- high or very high levels of psychological distress
- sedentary behaviour
- fair or poor self-reported health.

When compared with the proportion in all Victorian men, there was a significantly *lower* proportion of men who did not comply with either set of guidelines with the following characteristics:

- spoke a language other than English at home
- primary or no education
- diagnosed with diabetes.

When compared with the proportion in all Victorian women, there was a significantly *lower* proportion of women who did not comply with either set of guidelines with the following characteristics:

- total annual household income of $100,000 or more
- excellent or very good self-reported health status.

Table 3.25 (revised): Compliance with fruit and vegetable consumption guidelines[a],by selected socioeconomic determinants, modifiable risk factors and health status, Victoria, 2012

	Males						Females					
	Met both sets of guidelines			Did not meet either set of guidelines			Met both sets of guidelines			Did not meet either set of guidelines		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Victoria	2.3	1.7	3.2	56.9	54.0	59.8	6.1	5.2	7.1	45.4	42.8	48.0
Country of birth												
Australia	2.2	1.6	3.0	58.6	55.3	61.9	7.3	6.1	8.6	44.4	41.5	47.3
Overseas	2.5*	1.2	5.0	50.5	44.2	56.8	3.1	2.2	4.4	49.9	44.7	55.1
Language spoken at home												
English only	2.5	1.7	3.8	59.2	55.9	62.4	7.3	6.1	8.7	45.4	42.5	48.3
Language other than English	2.8*	1.1	5.1	47.1	40.6	53.6	2.4*	1.4	3.9	44.0	38.7	49.5
Metro-Rural regions												
Rural	2.8*	1.7	4.5	58.7	54.8	62.5	9.1	7.8	10.6	43.9	41.1	46.7
Metropolitan	2.2	1.4	3.4	55.9	52.3	59.5	5.0	4.0	6.3	45.8	42.6	49.1
Level of education												
None or Primary	9.0	8.8	9.3	18.3	14.5	22.8	**	**	**	53.4	48.7	58.2
Secondary	1.5	0.9	2.4	61.3	55.8	66.5	3.8	2.9	4.9	52.5	47.7	57.2
TAFE or Tertiary	2.3	1.6	3.4	55.4	51.6	59.2	8.1	6.7	9.7	40.3	36.9	43.8
Employment status (<65 years)												
Employed	2.4	1.5	3.8	59.5	55.7	63.3	6.4	4.9	8.2	45.5	41.7	49.4
Unemployed	**	**	**	57.4	49.3	65.1	**	**	**	42.8	30.2	56.4
Not in labour force	**	**	**	56.4	47.9	64.5	5.9	4.2	8.3	50.3	44.6	55.9
Total annual household income ($)												
<40,000	0.8*	0.5	1.5	67.2	58.4	74.9	7.1	4.8	10.4	56.4	50.4	62.1
40,000 to <100,000	2.4*	1.4	4.0	58.2	53.6	62.7	7.6	5.9	9.9	41.5	37.1	46.1
100,000, or more	2.9*	1.7	5.0	53.4	48.1	58.6	8.8	5.8	13.2	35.3	30.8	40.1
Psychological distress (K10 score)[c]												
Low (K10 score <16)	2.7	1.8	4.1	56.3	52.5	60.0	7.1	6.0	8.5	41.9	38.5	45.3
Moderate (K10 score 16 to 21)	2.0*	1.1	3.7	57.7	51.9	63.3	5.1	3.4	7.6	47.1	42.0	52.3
High (K10 score 22 to 29)	**	**	**	60.5	51.6	68.7	2.3*	1.1	5.0	55.8	48.0	63.2
Very high (K10 score ≥30)	0.0	.	.	65.2	53.5	75.4	5.4*	2.0	13.4	69.6	61.5	76.7
Physical activity level[d]												
Sedentary	5.0*	2.0	12.1	65.6	59.3	71.4	2.6*	1.1	6.3	60.7	50.5	70.1
Insufficient	0.9*	0.5	1.6	64.2	58.5	69.5	4.2	3.1	5.5	50.1	45.3	54.9
Sufficient	2.8	1.9	4.1	53.4	49.9	57.0	7.3	6.1	8.8	41.2	38.0	44.4
Smoking status												
Current smoker				69.9	63.9	75.3	3.6*	2.1	6.1	58.6	51.4	65.4
Ex-smoker	1.6*	1.0	2.8	53.2	45.5	60.7	5.3	4.1	6.7	50.0	44.1	55.9
Non-smoker	3.0	2.0	4.6	53.6	49.6	57.5	6.7	5.5	8.1	41.9	38.8	45.1
Lifetime risk of alcohol related harm (2009)[e]												
Abstainer / no longer drinks alcohol	1.4*	0.7	2.9	53.1	43.8	62.1	5.3	3.9	7.2	47.0	41.7	52.5
Reduced risk	1.0*	0.5	2.3	55.6	47.3	63.7	7.2	4.6	11.2	42.3	36.4	48.4
Increased risk	2.7	1.9	4.0	58.6	55.3	61.9	6.7	5.4	8.5	44.8	41.5	48.3
Self-reported health												
Excellent/Very Good	3.6	2.4	5.4	51.6	47.3	55.9	7.2	5.8	8.9	38.4	35.0	41.8
Good	1.1*	0.5	2.7	61.9	57.0	66.5	6.3	4.8	8.1	48.9	44.7	53.1
Fair/Poor	1.5*	0.8	3.0	64.7	58.6	70.3	1.8	1.2	2.8	63.2	57.3	68.7
BMI category[f]												
Underweight	**	**	**	68.4	60.2	75.5	7.9*	3.8	15.9	47.1	34.9	59.7
Normal	3.0	1.9	4.6	54.8	50.0	59.5	6.1	4.8	7.7	39.4	35.9	43.1
Overweight	1.7*	0.9	3.1	55.8	51.0	60.5	7.5	5.1	10.9	50.8	45.8	55.9
Obese	2.6*	1.3	4.9	63.8	56.9	70.1	4.9	3.6	6.5	49.7	42.6	56.8
Diabetes												
No diabetes	2.4	1.7	3.4	57.3	54.3	60.3	6.1	5.2	7.1	45.1	42.4	47.7
Diabetes	2.0*	0.7	5.2	39.1	32.7	45.8	12.3*	6.5	22.0	47.8	39.6	56.1
Depression												
Yes	1.6*	0.8	3.3	54.8	48.2	61.3	8.3	5.7	12.0	51.1	46.2	56.0
No	2.4	1.7	3.5	57.4	54.2	60.7	5.6	4.8	6.6	43.5	40.5	46.5

a Based on NHMRC (2003) guidelines. b Includes those meeting both guidelines. c Based on the Kessler 10 scale for psychological distress.
d Based on DoHA (1999) guidelines. e NHMRC (2009) guidelines f Based on Body Mass Index (BMI).
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.

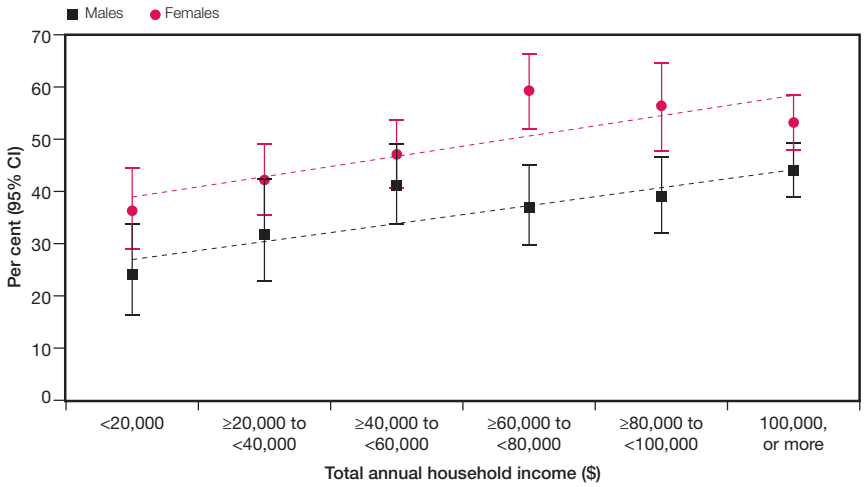
The relationship between SES and the age-adjusted prevalence of not meeting or meeting the 2003 Australian guidelines for fruit consumption, using total annual household income as a measure of SES, is reported in Table 3.26. The proportion of people who met fruit consumption guidelines significantly *increased*, with increasing total annual household income in both men and women (Figure 3.5).

Table 3.26: Compliance with fruit consumption guidelines,[a] by total annual household income group and sex, Victoria, 2012

	No			Yes		
	%	95% CI		%	95% CI	
Total annual household income ($)		LL	UL		LL	UL
Males						
<20,000	75.3	65.5	83.0	24.0	16.3	33.8
≥20,000 to <40,000	66.3	55.7	75.4	31.8	22.9	42.4
≥40,000 to <60,000	58.6	50.7	66.1	41.2	33.7	49.1
≥60,000 to <80,000	62.3	54.3	69.7	37.0	29.7	45.1
≥80,000 to <100,000	60.5	53.0	67.5	39.1	32.1	46.6
100,000, or more	56.0	50.8	61.1	44.0	38.9	49.2
Do not know/Refused to answer	53.8	47.7	59.7	42.4	35.4	49.8
Total	59.2	56.3	62.0	39.8	37.0	42.6
Females						
<20,000	63.1	55.0	70.6	36.3	28.9	44.4
≥20,000 to <40,000	57.4	50.4	64.1	42.2	35.5	49.1
≥40,000 to <60,000	52.6	46.0	59.1	47.1	40.6	53.7
≥60,000 to <80,000	40.4	33.4	47.8	59.3	51.9	66.3
≥80,000 to <100,000	37.8	29.8	46.5	56.4	47.8	64.6
100,000, or more	41.2	36.1	46.5	53.2	48.0	58.4
Do not know/Refused to answer	51.4	46.4	56.3	47.6	42.6	52.5
Total	48.5	45.9	51.1	51.0	48.4	53.5
Persons						
<20,000	66.6	58.8	73.6	32.7	25.8	40.6
≥20,000 to <40,000	60.3	53.6	66.7	38.7	32.4	45.4
≥40,000 to <60,000	55.6	50.2	60.8	44.2	38.9	49.5
≥60,000 to <80,000	50.2	44.6	55.9	49.3	43.6	55.0
≥80,000 to <100,000	50.0	43.8	56.2	49.7	43.5	55.9
100,000, or more	51.3	47.2	55.3	48.5	44.5	52.6
Do not know/Refused to answer	52.4	47.7	57.0	45.5	41.0	50.0
Total	53.7	51.8	55.6	45.5	43.6	47.4

a Based on NHMRC (2003) guidelines; includes those meeting both fruit and vegetable guidelines.
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Figure 3.5: Compliance (%) with fruit consumption guidelines,[a] by total annual household income group and sex, Victoria, 2012



a Based on NHMRC (2003) guidelines; includes those meeting both fruit and vegetable guidelines.
Data were age-standardised to the 2011 Victorian population.
95% CI = 95 per cent confidence interval.
Ordinary least squares linear regression was used to test for statistical significance

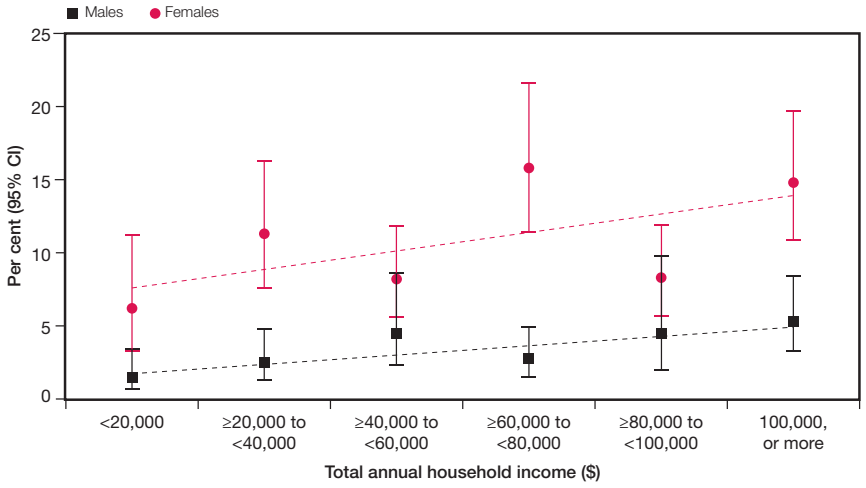
The relationship between SES and the age-adjusted prevalence of not meeting the 2003 Australian guidelines for vegetable consumption using total annual household income as a measure of SES is reported in Table 3.27. The proportion of people who met vegetable consumption guidelines significantly *increased*, with increasing total annual household income in men but not women (Figure 3.6).

Table 3.27: Compliance with vegetable consumption guidelines,[a] by total annual household income group and sex, Victoria, 2012

Total annual household income ($)	No			Yes		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Males						
<20,000	97.5	95.5	98.6	1.5*	0.7	3.4
≥20,000 to <40,000	96.0	93.1	97.7	2.5*	1.3	4.8
≥40,000 to <60,000	93.7	89.1	96.4	4.5*	2.3	8.6
≥60,000 to <80,000	96.8	94.5	98.1	2.8*	1.5	4.9
≥80,000 to <100,000	95.1	89.9	97.7	4.5*	2.0	9.8
100,000, or more	94.3	91.2	96.4	5.3	3.3	8.4
Do not know/Refused to answer	91.4	85.1	95.3	2.1*	1.1	4.1
Total	93.9	92.2	95.2	4.3	3.2	5.7
Females						
<20,000	90.7	82.7	95.2	6.2*	3.3	11.2
≥20,000 to <40,000	88.3	83.3	91.9	11.3	7.6	16.3
≥40,000 to <60,000	91.8	88.1	94.3	8.2	5.6	11.8
≥60,000 to <80,000	84.0	78.3	88.5	15.8	11.4	21.6
≥80,000 to <100,000	85.7	82.3	88.5	8.3	5.7	11.9
100,000, or more	79.3	74.5	83.4	14.8	10.9	19.7
Do not know/Refused to answer	91.8	89.2	93.8	5.6	3.9	8.0
Total	89.9	88.6	91.1	8.9	7.8	10.1
Persons						
<20,000	93.9	89.7	96.5	4.4*	2.4	7.9
≥20,000 to <40,000	91.2	88.3	93.5	7.9	5.7	10.8
≥40,000 to <60,000	92.9	90.1	94.9	6.3	4.4	9.0
≥60,000 to <80,000	89.7	86.3	92.3	10.1	7.4	13.4
≥80,000 to <100,000	93.7	90.9	95.7	5.9	3.9	8.7
100,000, or more	91.9	89.5	93.8	7.5	5.7	9.9
Do not know/Refused to answer	91.2	88.0	93.7	4.4	3.2	5.9
Total	91.9	90.8	92.8	6.6	5.8	7.5

a Based on NHMRC (2003) guidelines; includes those meeting both fruit and vegetable guidelines.
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Figure 3.6: Compliance (%) with vegetable consumption guidelines,[a] by total annual household income group and sex, Victoria, 2012



a Based on NHMRC (2003) guidelines; includes those meeting both fruit and vegetable guidelines.
Data were age-standardised to the 2011 Victorian population.
95% CI = 95 per cent confidence interval.
Ordinary least squares linear regression was used to test for statistical significance

3.5 Consumption of potato-based snacks and 'take-away' meals

3.5.1 Consumption of potato-based snacks

The frequency of consumption of potato-based snacks each week, by age group and sex, is presented in Table 3.28, with 'Total' not adjusted for age.

Overall, 8.8 per cent of people reported they never consumed potato-based snacks, the proportion being significantly *higher* in women (11.6 per cent) compared with men (5.8 per cent). A significantly *higher* proportion of men and people aged 55 years or older and women aged 65 years or older reported they never consumed potato-based snacks compared with the proportion in all Victorian men, people and women, respectively.

Overall, 4.7 per cent of people reported they consumed potato-based snacks more than three times a week, the proportion being significantly *higher* in men (6.2 per cent) compared with women (3.3 per cent). The proportion of men, women and people aged 18–24 years who consumed a potato-based snack more than three times per week was significantly *higher* compared with the proportion in all Victorian men, women and people, respectively. In contrast, the proportion of men, women and people aged 55 years or older who consumed a potato-based snack more than three times per week was significantly lower than the proportion in all Victorian men, women and people, respectively.

Table 3.28: Proportion (%) of population eating potato-based snacks each week, by frequency, age group and sex, Victoria, 2012

	Never			Frequency/week >0 & ≤1			Frequency/week >1 & ≤3			Frequency/week >3		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL		LL	UL		LL	UL
Males												
18–24	**	**	**	46.1	36.3	56.2	33.9	25.3	43.8	17.8	11.3	26.9
25–34	**	**	**	56.4	46.4	65.9	31.7	23.2	41.6	5.9*	2.9	11.7
35–44	2.7*	1.4	5.1	63.7	57.5	69.4	26.4	21.2	32.4	6.7	4.4	10.1
45–54	5.9	3.8	9.1	66.8	61.3	71.8	23.2	18.6	28.4	3.8	2.4	6.0
55–64	9.7	7.1	13.2	70.7	66.0	75.0	17.2	13.8	21.2	2.2*	1.2	4.1
65+	12.6	10.3	15.4	71.5	67.9	74.8	12.3	10.0	15.0	2.5	1.7	3.9
Total	5.8	4.8	7.0	62.7	59.8	65.6	24.2	21.6	27.0	6.2	4.8	7.9
Females												
18–24	**	**	**	59.4	48.4	69.5	27.5	19.1	37.9	11.0*	5.6	20.4
25–34	7.6*	4.0	13.7	70.9	62.9	77.9	19.8	13.9	27.3	1.7*	0.7	4.5
35–44	7.3	4.9	10.8	72.9	68.3	77.0	15.0	12.0	18.7	4.8	3.1	7.3
45–54	8.8	6.5	11.8	75.6	71.8	79.1	13.1	10.6	16.2	2.1*	1.2	3.5
55–64	15.2	12.5	18.3	75.7	72.2	78.9	7.4	5.7	9.6	1.2*	0.7	2.3
65+	25.3	22.7	28.2	65.3	62.2	68.3	6.8	5.2	8.9	0.9*	0.5	1.6
Total	11.6	10.2	13.0	70.3	67.9	72.6	14.5	12.6	16.5	3.3	2.4	4.5
People												
18–24	**	**	**	52.6	45.2	59.8	30.8	24.6	37.8	14.5	10.0	20.6
25–34	5.2*	3.0	9.0	63.6	57.2	69.7	25.7	20.4	31.9	3.8*	2.1	6.8
35–44	5.0	3.6	7.1	68.4	64.5	71.9	20.6	17.5	24.1	5.7	4.2	7.7
45–54	7.4	5.7	9.4	71.3	68.0	74.4	18.1	15.4	21.1	2.9	2.1	4.1
55–64	12.5	10.6	14.7	73.3	70.4	76.0	12.2	10.2	14.5	1.7	1.1	2.7
65+	19.6	17.7	21.6	68.1	65.8	70.4	9.3	7.9	10.9	1.6	1.1	2.3
Total	8.8	7.9	9.7	66.6	64.7	68.4	19.2	17.6	20.9	4.7	3.9	5.7

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

The frequency of consumption of potato-based snacks each week, by departmental region, is presented in Table 3.29, adjusted for age.

A significantly *lower* proportion of women and people residing in rural regions as a whole and Barwon-South Western and Hume regions in particular, reported they never consumed potato-based snacks compared with the proportion in all Victorian women and people, respectively.

There were no significant differences in the proportion of men, women or people who reported they consumed potato-based snacks more than three times a week in any departmental region compared with the proportion in all Victorian men, women or people, respectively.

Table 3.32: Proportion (%) of population eating potato-based snacks each week, by frequency, Department of Health and Human Services region and sex, Victoria, 2012

	Never			Frequency/week >0 & ≤1			Frequency/week >1 & ≤3			Frequency/week >3		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males												
Eastern Metropolitan	**7.7**	5.4	10.9	**60.8**	54.0	67.1	**23.7**	18.2	30.3	**6.0***	3.2	11.2
North & West Metropolitan	**6.8**	4.8	9.6	**64.5**	59.0	69.7	**20.5**	16.1	25.7	**6.4**	4.1	9.8
Southern Metropolitan	**5.9**	4.1	8.6	**64.0**	57.1	70.4	**25.0**	19.2	31.9	**4.3***	2.6	7.2
Total	**6.7**	5.4	8.2	**63.1**	59.4	66.6	**23.1**	19.9	26.5	**5.6**	4.1	7.7
Rural males												
Barwon-South Western	**3.5**	2.3	5.3	**58.3**	51.7	64.6	**28.3**	23.4	33.7	**9.6***	5.2	17.0
Gippsland	**4.5**	2.9	7.2	**64.0**	56.6	70.7	**24.6**	18.7	31.6	**6.4***	3.3	12.0
Grampians	**4.4***	2.6	7.5	**67.9**	60.1	74.9	**22.3**	16.1	30.1	**5.2***	3.0	8.8
Hume	**3.9**	2.5	5.9	**62.4**	52.3	71.6	**22.2**	14.9	31.7	**11.4***	6.3	19.8
Loddon Mallee	**4.1***	2.3	7.1	**51.8**	45.0	58.6	**39.8**	33.1	46.9	**4.2***	1.9	9.0
Total	**4.1**	3.3	5.1	**60.5**	56.6	64.2	**27.5**	24.1	31.3	**7.7**	5.6	10.6
All males												
Total	**6.0**	**5.0**	**7.1**	**62.5**	**59.5**	**65.4**	**24.1**	**21.6**	**26.9**	**6.1**	**4.8**	**7.7**
Metropolitan females												
Eastern Metropolitan	**13.4**	9.8	17.9	**68.6**	62.8	73.9	**16.0**	12.2	20.6	**1.5***	0.8	3.1
North & West Metropolitan	**13.4**	10.8	16.7	**70.0**	65.0	74.6	**12.0**	8.7	16.4	**3.7***	2.0	6.7
Southern Metropolitan	**10.6**	8.5	13.2	**69.0**	63.1	74.3	**15.7**	11.5	21.3	**4.4***	2.4	8.1
Total	**12.6**	10.9	14.5	**69.3**	66.1	72.3	**14.3**	11.9	17.2	**3.3**	2.2	4.9
Rural females												
Barwon-South Western	**5.7**	4.4	7.3	**70.3**	64.7	75.4	**19.2**	14.7	24.6	**4.5***	2.3	8.9
Gippsland	**10.5**	7.7	14.1	**74.7**	69.0	79.7	**11.5**	7.8	16.6	**3.0***	1.7	5.4
Grampians	**9.5**	7.1	12.7	**72.1**	66.3	77.3	**16.2**	11.8	21.9	**1.9***	1.0	3.4
Hume	**7.4**	5.7	9.5	**68.8**	62.5	74.5	**20.6**	15.5	26.9	**2.9***	1.4	6.0
Loddon Mallee	**9.1**	7.1	11.5	**70.2**	64.9	75.0	**16.2**	12.7	20.5	**4.5***	2.2	8.8
Total	**8.2**	7.2	9.3	**70.7**	68.1	73.3	**17.2**	15.0	19.6	**3.6**	2.6	5.2
All females												
Total	**11.4**	**10.1**	**12.9**	**69.8**	**67.3**	**72.2**	**15.0**	**13.0**	**17.2**	**3.4**	**2.5**	**4.7**
Metropolitan people												
Eastern Metropolitan	**10.7**	8.5	13.4	**64.7**	60.2	68.9	**19.7**	16.2	23.7	**3.8***	2.2	6.6
North & West Metropolitan	**10.2**	8.4	12.2	**67.2**	63.5	70.8	**16.2**	13.3	19.6	**5.0**	3.5	7.1
Southern Metropolitan	**8.5**	7.0	10.3	**66.5**	62.0	70.7	**20.4**	16.6	24.8	**4.2**	2.8	6.4
Total	**9.7**	8.7	11.0	**66.2**	63.7	68.5	**18.6**	16.6	20.8	**4.5**	3.5	5.7
Rural people												
Barwon-South Western	**4.7**	3.8	5.9	**64.2**	59.2	68.9	**23.3**	19.2	28.0	**7.4**	4.5	11.9
Gippsland	**7.7**	6.0	9.8	**69.0**	64.1	73.5	**18.2**	14.4	22.7	**4.8***	2.9	7.9
Grampians	**7.2**	5.5	9.3	**69.8**	65.0	74.2	**19.3**	15.4	24.0	**3.5**	2.3	5.4
Hume	**5.7**	4.6	7.1	**65.3**	59.2	70.9	**21.6**	16.7	27.4	**7.2***	4.3	11.8
Loddon Mallee	**6.6**	5.1	8.4	**61.3**	56.5	65.8	**27.8**	23.4	32.6	**4.3***	2.5	7.4
Total	**6.2**	5.6	6.9	**65.6**	63.2	67.9	**22.3**	20.2	24.6	**5.7**	4.4	7.3
All people												
Total	**8.8**	**8.0**	**9.7**	**66.1**	**64.2**	**68.0**	**19.5**	**17.8**	**21.3**	**4.7**	**3.9**	**5.7**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

The proportion of the population eating potato-based snacks each week, by frequency, selected socioeconomic determinants, modifiable risk factors, health status and sex, and adjusted for age, is presented in Table 3.30.

When compared with the proportion in all Victorian men, there was a significantly *higher* proportion of men who reported never consuming potato-based snacks with the following characteristics:

- complied with both vegetable and fruit consumption guidelines
- complied with vegetable consumption guidelines only.

When compared with the proportion in all Victorian women, there was a significantly *higher* proportion of women who reported never consuming potato-based snacks with the following characteristic:

- very high levels of psychological distress.

When compared with the proportion in all Victorian men and women, there was a significantly *higher* proportion of men and women who reported consuming potato-based snacks more than three times per week with the following characteristic:

- sedentary.

When compared with the proportion in all Victorian women, there was a significantly *higher* proportion of women who reported consuming potato-based snacks more than three times per week with the following characteristic:

- primary or no education.

Table 3.30 (revised): Proportion (%) of population eating potato-based snacks each week, by frequency, selected risk factors and sex, Victoria, 2012

	Males						Females					
	Never			Frequency/ week >3			Never			Frequency/ week >3		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Males	6.0	5.0	7.1	6.1	4.8	7.7	11.4	10.1	12.9	3.4	2.5	4.7
Country of birth												
Australia	5.5	4.4	6.8	7.0	5.4	9.1	10.5	8.9	12.3	3.3	2.4	4.6
Overseas	6.3	4.7	8.4	4.0*	2.2	7.2	13.7	11.4	16.4	4.8*	2.1	10.4
Language spoken at home												
English only	5.6	4.4	7.1	7.5	5.8	9.7	10.4	8.9	12.2	3.0	2.2	4.3
Language other than English	8.1	6.0	10.9	3.2*	1.5	6.5	15.4	12.7	18.7	4.9*	2.7	8.6
Metro-Rural regions												
Rural	4.1	3.3	5.1	7.7	5.6	10.6	8.2	7.2	9.3	3.6	2.6	5.2
Metropolitan	6.7	5.4	8.2	5.6	4.1	7.7	12.6	10.9	14.5	3.3	2.2	4.9
Level of education												
None or Primary	5.1*	2.7	9.4	0.0	.	.	10.2	7.0	14.8	13.0	13.0	13.0
Secondary	5.9	4.6	7.7	7.7	5.3	11.0	9.8	8.3	11.5	3.3*	2.0	5.4
TAFE or Tertiary	5.8	4.5	7.5	5.3	3.7	7.6	11.4	9.8	13.3	3.7	2.4	5.8
Employment status (<65 years)												
Employed	4.1	3.0	5.5	6.5	4.8	8.7	6.8	5.5	8.3	3.1	2.0	4.6
Unemployed	8.3*	3.9	16.7	6.2*	2.3	15.3	10.6*	5.2	20.4	3.5*	1.4	8.6
Not in labour force	8.0*	3.6	16.7	8.7*	4.2	17.2	10.7	7.5	15.1	5.6*	3.4	9.1
Total annual household income ($)												
<40,000	6.5	4.7	9.0	4.3*	2.3	8.1	9.7	7.8	12.2	3.7*	1.9	7.0
40,000 to <100,000	4.7	3.4	6.4	6.3	3.9	10.0	9.6	7.6	11.9	4.9	3.0	7.9
100,000, or more	4.7	3.0	7.2	5.2	3.2	8.2	8.4	6.3	11.1	2.1*	0.8	5.5
Psychological distress (K10 score)[a]												
Low (K10 score <16)	6.5	5.3	8.0	5.8	4.1	8.2	11.2	9.6	13.0	2.7	1.8	4.2
Moderate (K10 score 16 to 21)	4.7	2.9	7.5	5.0	3.2	7.6	7.9	6.4	9.8	4.5*	2.5	8.0
High (K10 score 22 to 29)	4.9*	2.9	8.0	11.2*	6.2	19.4	12.0	8.2	17.2	**	**	**
Very high (K10 score ≥30)	8.3*	3.3	19.1	**	**	**	23.5	16.1	33.0	8.1*	3.7	16.7
Physical activity level [b]												
Sedentary	5.5*	2.8	10.3	12.2	8.5	17.2	15.3	10.6	21.6	14.7	12.4	17.4
Insufficient	3.9	2.8	5.4	6.1	3.9	9.4	10.3	8.4	12.4	4.1*	2.2	7.6
Sufficient	7.2	5.8	9.0	5.8	4.3	7.8	11.2	9.5	13.2	2.6	1.8	3.7
Compliance with fruit & vegetable consumption guidelines [c]												
Both	13.1*	7.7	21.4	8.7*	3.4	20.4	9.6	6.4	14.1	**	**	**
Vegetable only [d]	12.7*	7.6	20.6	**	**	**	9.3	6.7	12.8	1.8*	0.8	4.0
Fruit only [d]	7.6	5.6	10.3	4.4	2.8	6.7	11.4	9.9	13.1	2.8*	1.5	5.2
Neither	4.6	3.7	5.9	7.3	5.4	9.7	11.3	9.3	13.8	4.2	2.9	6.0
Smoking status												
Current smoker	6.5	4.4	9.6	9.2	6.2	13.5	11.4	8.5	15.2	6.6*	3.3	12.7
Ex-smoker	8.9*	4.9	15.5	5.3*	2.2	12.0	7.1	5.8	8.6	2.0*	1.1	3.6
Non-smoker	5.5	4.2	7.2	5.5	3.9	7.8	13.2	11.3	15.3	3.0	2.0	4.4
Lifetime risk of alcohol related harm (2009) [f]												
Abstainer / no longer drinks alcohol	8.9	6.2	12.5	5.8*	3.0	10.9	14.8	12.3	17.8	4.9*	2.3	10.2
Reduced risk	7.8	5.2	11.6	**	**	**	11.6	9.4	14.4	2.7*	1.5	4.6
Increased risk	4.8	3.8	6.2	6.7	5.1	8.7	8.5	6.7	10.7	3.2	2.2	4.7
Self-reported health												
Excellent/Very Good	7.6	5.7	9.9	4.8	3.4	6.7	12.2	10.2	14.6	3.3	2.1	5.1
Good	3.9	2.9	5.3	6.9	4.6	10.2	9.9	8.0	12.0	2.9*	1.6	5.2
Fair/Poor	7.6	5.2	11.2	9.4*	5.4	15.6	12.3	9.3	16.3	5.8*	2.8	11.7
BMI category [g]												
Underweight	6.1*	2.5	14.0	**	**	**	16.3	10.9	23.6	5.6*	2.2	13.4
Normal	8.4	6.3	11.2	5.7	4.0	8.1	13.5	11.4	16.0	3.7	2.5	5.5
Overweight	4.7	3.7	6.1	4.5	3.1	6.6	9.2	7.4	11.3	1.3*	0.7	2.6
Obese	4.9	3.2	7.4	9.8*	5.3	17.3	7.8	6.0	10.0	2.6*	1.4	4.6
Diabetes												
No diabetes	5.7	4.7	6.9	6.1	4.8	7.7	11.4	10.0	12.9	3.4	2.5	4.7
Diabetes	6.7	4.7	9.4	3.1*	1.4	6.9	14.1	9.2	20.8	**	**	**
Depression												
Yes	6.6	4.3	9.8	6.5*	3.9	10.6	12.5	9.2	16.6	3.4	2.2	5.2
No	6.0	4.9	7.4	6.0	4.5	7.9	11.2	9.8	12.7	3.2	2.2	4.8

a Based on the Kessler 10 scale for psychological distress.
b Based on DoHA (1999) guidelines.
c Based on NHMRC (2003) guidelines.
d Includes those meeting both guidelines.
f NHMRC (2009) guidelines.
g Based on Body Mass Index (BMI).

Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Data were age-standardised to the 2011 Victorian population.

LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.

* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.

** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.

3.5.2 Eating 'take-away' meals or snacks

Table 3.31 shows the proportion (per cent) of the population who reported consuming 'take-away' meals or snacks each week, by frequency, age group and sex, with 'Total' not adjusted for age.

Overall, 17.7 per cent of people reported never consuming 'take-away' meals or snacks. The proportion of women who reported never consuming 'take-away' meals or snacks (21.1 per cent) was significantly *higher* compared with the proportion of men (14.1 per cent).

The proportion of men, women and people who reported never consuming 'take-away' meals or snacks was significantly lower in those aged 18–44 years and significantly *higher* in those aged 55 years or older compared with all Victorian men, women and people, respectively.

The proportion of people who consumed 'take-away' meals or snacks more than three times each week was 1.6 per cent. Overall, the proportion was similar in men and women. However, the proportion of women and people aged 18–24 years who consumed 'take-away' meals or snacks more than three times each week was significantly *higher* compared with the proportion in all Victorian women and people, respectively.

Table 3.31: Proportion (%) of population eating take-away meals/snacks per week, by frequency, age group and sex, Victoria, 2012

Age group (years)	Never			Frequency/week >0 & ≤1			Frequency/week >1 & ≤3			Frequency/week >3		
	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL
Males												
18–24	4.2*	1.8	9.8	67.8	57.8	76.4	22.5	15.2	31.9	5.3*	2.2	11.9
25–34	4.8*	2.1	10.4	71.5	61.1	80.0	19.6	12.1	30.0	4.2*	1.6	10.3
35–44	8.1	5.2	12.4	79.9	74.5	84.4	11.6	8.3	16.1	**	**	**
45–54	11.7	8.7	15.6	79.7	75.1	83.6	7.1	4.9	10.2	1.1*	0.5	2.5
55–64	19.8	16.2	23.8	76.4	72.1	80.2	3.1	1.9	5.0	**	**	**
65+	36.9	33.2	40.7	60.6	56.7	64.3	1.0*	0.5	1.9	1.0*	0.4	2.4
Total	**14.1**	**12.6**	**15.8**	**72.8**	**70.1**	**75.5**	**10.8**	**8.7**	**13.3**	**2.0***	**1.2**	**3.3**
Females												
18–24	6.4*	2.6	14.7	77.4	66.7	85.5	9.0*	4.3	17.8	6.0*	2.3	14.5
25–34	9.8*	5.7	16.2	82.7	74.9	88.4	7.5*	3.7	14.3	**	**	**
35–44	10.4	7.8	13.7	84.7	80.9	87.8	3.2*	1.9	5.3	1.4*	0.6	3.2
45–54	18.0	15.0	21.5	78.5	74.8	81.8	2.7*	1.6	4.5	0.5*	0.2	1.1
55–64	29.2	25.7	33.1	68.4	64.5	72.0	2.0*	1.2	3.4	0.2*	0.1	0.6
65+	48.0	44.8	51.2	50.7	47.5	53.9	**	**	**	**	**	**
Total	**21.1**	**19.5**	**22.9**	**73.4**	**71.3**	**75.4**	**3.9**	**2.8**	**5.4**	**1.2***	**0.6**	**2.1**
All people												
18–24	5.3*	2.8	9.8	72.5	65.4	78.7	15.8	11.2	22.0	5.6*	3.0	10.3
25–34	7.2	4.6	11.2	77.1	70.6	82.4	13.6	9.1	19.7	2.1*	0.8	5.3
35–44	9.3	7.2	11.8	82.3	79.1	85.1	7.3	5.5	9.7	0.9*	0.4	1.9
45–54	14.9	12.7	17.5	79.1	76.2	81.7	4.9	3.6	6.6	0.8*	0.4	1.5
55–64	24.6	22.0	27.4	72.3	69.4	75.0	2.5	1.8	3.6	0.4*	0.2	0.9
65+	43.0	40.6	45.4	55.2	52.7	57.6	0.7*	0.4	1.2	0.6*	0.3	1.2
Total	**17.7**	**16.6**	**19.0**	**73.1**	**71.4**	**74.8**	**7.2**	**6.0**	**8.7**	**1.6**	**1.1**	**2.3**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

The proportion (percentage) of the population who reported consuming 'take-away' meals or snacks each week, by frequency, sex and departmental region, adjusted for age, is presented in Table 3.32.

The proportion of men residing in rural regions as a whole and Grampians Region in particular, women resident in Hume Region and people resident in rural regions as a whole and Barwon-South Western, Grampians and Hume regions in particular who reported never consuming 'take-away' meals or snacks each week, was significantly *lower* compared with the proportion in all Victorian men, women and people, respectively.

Overall, the proportion who consumed 'take-away' meals or snacks more than three times each week was similar in men, women and people in all departmental regions compared with the proportion in all Victorian men, women and people, respectively.

Table 3.32: Proportion (%) of population eating take-away meals/snacks per week, by frequency, Department of Health and Human Services region and sex, Victoria, 2012

	Never			Frequency >0 & ≤1			Frequency >1 & ≤3			Frequency >3		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males												
Eastern Metropolitan	**13.5**	10.6	16.9	**74.4**	68.2	79.8	**10.7**	6.6	16.8	**1.5***	0.6	3.8
North & West Metropolitan	**18.2**	15.1	21.8	**68.3**	62.9	73.2	**10.9**	7.5	15.6	**2.6***	1.1	6.1
Southern Metropolitan	**16.6**	13.1	20.8	**69.8**	63.9	75.1	**11.5**	7.4	17.4	**	**	**
Total	**16.4**	14.5	18.5	**70.5**	67.1	73.8	**10.8**	8.3	14.0	**2.1***	1.1	3.7
Rural males												
Barwon-South Western	**10.1**	7.5	13.5	**75.8**	68.4	81.9	**12.2**	7.4	19.5	**1.7***	0.7	4.1
Gippsland	**10.4**	7.9	13.5	**71.4**	64.4	77.4	**15.6**	10.6	22.5	**2.5***	1.0	6.6
Grampians	**9.0**	6.3	12.7	**78.6**	72.8	83.3	**10.4**	6.5	16.2	**	**	**
Hume	**10.4**	8.0	13.5	**81.9**	75.9	86.7	**7.3***	3.7	13.7	**0.0**	.	.
Loddon Mallee	**13.1**	10.0	16.9	**72.2**	65.8	77.9	**12.5**	7.7	19.7	**	**	**
Total	**10.9**	9.5	12.5	**75.6**	72.2	78.8	**11.5**	8.9	14.8	**1.6***	0.8	2.9
All males												
Total	**14.8**	**13.3**	**16.5**	**71.9**	**69.1**	**74.6**	**11.0**	**8.9**	**13.6**	**2.0***	**1.2**	**3.3**
Metropolitan females												
Eastern Metropolitan	**22.7**	18.5	27.4	**70.9**	65.3	76.0	**4.5***	2.4	8.1	**	**	**
North & West Metropolitan	**22.6**	19.4	26.2	**74.1**	69.9	77.8	**2.3***	1.1	4.8	**	**	**
Southern Metropolitan	**20.3**	17.3	23.7	**70.4**	64.9	75.4	**7.1***	4.0	12.3	**	**	**
Total	**21.9**	19.9	24.1	**72.0**	69.1	74.7	**4.5**	2.9	6.8	**1.2***	0.6	2.6
Rural females												
Barwon-South Western	**17.3**	14.5	20.5	**77.9**	73.8	81.6	**3.0***	1.4	6.1	**	**	**
Gippsland	**19.7**	14.4	26.3	**77.9**	71.2	83.4	**1.7***	0.8	3.6	**	**	**
Grampians	**17.6**	14.5	21.1	**79.7**	75.9	83.1	**1.9***	0.9	3.9	**0.8***	0.3	2.0
Hume	**15.4**	12.9	18.4	**79.7**	75.1	83.6	**	**	**	**1.7***	0.8	3.7
Loddon Mallee	**17.9**	15.0	21.2	**76.7**	72.6	80.3	**4.5***	2.7	7.4	**	**	**
Total	**17.5**	15.8	19.2	**78.3**	76.3	80.3	**2.9**	2.0	4.1	**1.1***	0.6	1.9
All females												
Total	**20.7**	**19.1**	**22.4**	**73.5**	**71.2**	**75.7**	**4.1**	**2.9**	**5.9**	**1.2***	**0.6**	**2.3**
Metropolitan people												
Eastern Metropolitan	**18.2**	15.6	21.1	**72.5**	68.3	76.2	**7.7**	5.1	11.3	**1.2***	0.5	2.8
North & West Metropolitan	**20.4**	18.1	22.9	**71.2**	67.7	74.4	**6.6**	4.6	9.3	**1.7***	0.8	3.8
Southern Metropolitan	**18.6**	16.2	21.2	**70.0**	65.9	73.8	**9.2**	6.5	13.0	**1.8***	0.9	3.6
Total	**19.3**	17.9	20.8	**71.1**	68.8	73.3	**7.7**	6.1	9.6	**1.6**	1.0	2.6
Rural people												
Barwon-South Western	**13.9**	11.9	16.3	**77.1**	72.5	81.2	**7.0***	4.2	11.6	**1.8***	0.9	3.6
Gippsland	**15.0**	11.9	18.7	**74.2**	69.2	78.6	**9.0**	6.0	13.3	**	**	**
Grampians	**13.5**	11.3	16.0	**78.9**	75.0	82.4	**6.1**	3.8	9.8	**	**	**
Hume	**13.1**	11.3	15.2	**80.7**	76.9	83.9	**5.1***	2.9	8.8	**0.9***	0.4	1.9
Loddon Mallee	**15.6**	13.4	18.2	**74.2**	70.0	78.0	**8.6**	5.7	12.7	**	**	**
Total	**14.3**	13.2	15.5	**76.9**	74.9	78.8	**7.2**	5.7	9.0	**1.3**	0.9	2.1
All people												
Total	**17.9**	**16.8**	**19.1**	**72.6**	**70.7**	**74.3**	**7.6**	**6.3**	**9.2**	**1.6**	**1.1**	**2.4**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

The proportion (percentage) of people eating take-away meals or snacks each week, by frequency, selected socioeconomic determinants, modifiable risk factors, health status and sex, and adjusted for age, is presented in Table 3.33.

When compared with the proportion in all Victorian men, there was a significantly *higher* proportion of men who reported never consuming 'take-away' meals or snacks each week with the following characteristic:

- complying with vegetable consumption guidelines only.

When compared with the proportion in all Victorian men, there was a significantly *lower* proportion of men who reported never consuming 'take-away' meals or snacks with the following characteristics:

- resident in rural regions
- employed
- high levels of psychological distress.

When compared with the proportion in all Victorian women, there was a significantly *lower* proportion of women who reported never consuming 'take-away' meals or snacks with the following characteristics:

- employed
- unemployed
- ex-smoker
- obese.

When compared with the proportion in all Victorian men and women, there was a significantly *higher* proportion of men and women who reported consuming 'take-away' meals or snacks more than three times per week with the following characteristic:

- sedentary.

When compared with the proportion in all Victorian men, there was a significantly *higher* proportion of men who reported consuming 'take-away' meals or snacks more than three times per week with the following characteristic:

- very high levels of psychological distress.

When compared with the proportion in all Victorian women, there was a significantly *higher* proportion of women who reported consuming 'take-away' meals or snacks more than three times per week with the following characteristic:

- primary or no education.

When compared with the proportion in all Victorian women, there was a significantly *lower* proportion of women who reported consuming 'take-away' meals or snacks more than three times per week with the following characteristic:

- ex-smoker.

Table 3.33 (revised): Proportion (%) of population eating take-away meals/snacks per week, by frequency, selected risk factors and sex, Victoria, 2012

	Males						Females					
	Never			Frequency/week >3			Never			Frequency/week >3		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Victoria	**14.8**	13.3	16.5	**2.0***	1.2	3.3	**20.7**	19.1	22.4	**1.2***	0.6	2.3
Country of birth												
Australia	**13.1**	11.6	14.7	**2.5***	1.4	4.3	**19.3**	17.5	21.3	**1.1***	0.5	2.2
Overseas	**18.6**	14.8	23.1	**	**	**	**25.2**	21.2	29.7	**	**	**
Language spoken at home												
English only	**13.8**	12.2	15.5	**2.5***	1.5	4.4	**19.9**	18.0	21.9	**0.9***	0.4	1.8
Language other than English	**17.9**	14.5	21.8	**	**	**	**24.5**	21.1	28.2	**	**	**
Metro-Rural regions												
Rural	**10.9**	9.5	12.5	**1.6***	0.8	2.9	**17.5**	15.8	19.2	**1.1***	0.6	1.9
Metropolitan	**16.4**	14.5	18.5	**2.1***	1.1	3.7	**21.9**	19.9	24.1	**1.2***	0.6	2.6
Level of education												
None or Primary	**10.7**	7.2	15.7	**0.0**	.	.	**20.3**	16.8	24.4	**13.0**	13.0	13.0
Secondary	**13.7**	11.5	16.2	**4.6***	2.3	8.9	**17.4**	15.5	19.5	**2.1***	1.0	4.3
TAFE or Tertiary	**15.4**	13.4	17.8	**1.0***	0.4	2.7	**21.4**	19.5	23.4	**	**	**
Employment status (<65 years)												
Employed	**9.4**	7.6	11.6	**1.5***	0.8	2.9	**13.3**	11.4	15.5	**1.3***	0.6	2.9
Unemployed	**9.9***	5.9	16.4	**	**	**	**9.9***	5.1	18.1	**0.0**	.	.
Not in labour force	**13.9***	8.1	22.9	**	**	**	**17.6**	13.8	22.2	**	**	**
Total annual household income ($)												
<40,000	**13.8**	11.0	17.0	**	**	**	**17.5**	15.4	19.8	**	**	**
40,000 to <100,000	**13.5**	11.3	16.1	**2.3***	1.2	4.2	**19.0**	16.5	21.7	**1.8***	0.8	4.3
100,000, or more	**15.5**	12.6	18.9	**	**	**	**24.8**	21.1	29.0	**	**	**
Psychological distress (K10 score) [a]												
Low (K10 score <16)	**15.0**	13.2	17.0	**1.5***	0.7	3.0	**21.2**	19.2	23.4	**0.9***	0.4	1.9
Moderate (K10 score 16 to 21)	**15.1**	11.9	19.1	**1.8***	0.9	3.7	**18.6**	15.6	21.9	**	**	**
High (K10 score 22 to 29)	**9.1**	6.2	13.2	**	**	**	**17.4**	13.4	22.3	**	**	**
Very high (K10 score ≥30)	**20.5**	13.1	30.5	**10.4**	8.0	13.4	**18.6**	12.8	26.2	**	**	**
Physical activity level b												
Sedentary	**12.8**	9.2	17.5	**11.5**	7.3	17.7	**19.6**	14.9	25.4	**13.9**	11.5	16.7
Insufficient	**12.2**	9.6	15.3	**3.4***	1.4	8.2	**17.2**	14.8	19.9	**	**	**
Sufficient	**16.0**	14.0	18.2	**1.4***	0.8	2.4	**22.1**	19.9	24.4	**0.5***	0.2	1.2
Compliance with fruit & vegetable consumption guidelines [c]												
Both	**21.4**	14.9	29.9	**0.0**	.	.	**26.6**	21.0	33.0	**	**	**
Vegetable only [d]	**26.3**	17.9	37.0	**	**	**	**24.7**	20.2	29.9	**	**	**
Fruit only [d]	**17.0**	14.6	19.7	**0.8***	0.4	1.8	**23.3**	21.2	25.6	**	**	**
Neither	**12.4**	10.6	14.4	**2.8***	1.5	5.0	**17.7**	15.4	20.3	**1.4***	0.7	2.9
Smoking status												
Current smoker	**13.5**	10.7	16.8	**4.8***	2.3	9.8	**18.3**	14.7	22.4	**	**	**
Ex-smoker	**15.2**	12.2	18.7	**	**	**	**16.9**	15.0	19.0	**0.2***	0.1	0.5
Non-smoker	**14.9**	12.7	17.4	**0.9***	0.4	1.8	**22.5**	20.4	24.9	**1.2***	0.6	2.4
Lifetime risk of alcohol related harm (2009) [f]												
Abstainer / no longer drinks alcohol	**20.1**	14.8	26.7	**1.3***	0.5	3.4	**23.4**	19.8	27.4	**	**	**
Reduced risk	**13.8**	9.5	19.6	**1.0***	0.4	2.5	**21.6**	18.2	25.4	**0.3***	0.1	0.7
Increased risk	**13.6**	11.9	15.4	**2.0***	1.1	3.6	**18.8**	16.4	21.4	**1.0***	0.4	2.1
Self-reported health												
Excellent / Very Good	**16.3**	13.9	19.0	**1.3***	0.7	2.3	**22.8**	20.4	25.4	**	**	**
Good	**11.5**	9.6	13.8	**1.6***	0.8	3.5	**18.8**	16.4	21.4	**	**	**
Fair / Poor	**17.9**	13.9	22.8	**5.7***	2.2	13.8	**17.9**	14.8	21.4	**	**	**
BMI category [g]												
Underweight	**21.1**	14.7	29.3	**0.0**	.	.	**21.4**	14.1	31.1	**	**	**
Normal	**18.5**	15.3	22.2	**1.7***	0.9	3.3	**24.1**	21.5	26.9	**	**	**
Overweight	**13.2**	11.4	15.2	**1.2***	0.5	3.1	**18.4**	16.3	20.8	**0.5***	0.2	1.2
Obese	**13.0**	9.4	17.6	**3.8***	1.5	9.5	**13.1**	11.2	15.2	**	**	**
Diabetes												
No diabetes	**14.8**	13.3	16.5	**2.0***	1.2	3.3	**20.7**	19.0	22.4	**1.2***	0.6	2.3
Diabetes	**12.1**	9.4	15.4	**	**	**	**19.2**	14.1	25.5	**	**	**
Depression												
Yes	**12.6**	10.3	15.4	**1.1***	0.5	2.4	**20.2**	16.6	24.4	**	**	**
No	**15.3**	13.5	17.2	**2.1***	1.2	3.8	**20.7**	19.0	22.5	**1.2***	0.6	2.5

a Based on the Kessler 10 scale for psychological distress.
b Based on DoHA (1999) guidelines.
c Based on NHMRC (2003) guidelines.
d Includes those meeting both guidelines.
f NHMRC (2009) guidelines.
g Based on Body Mass Index (BMI).

Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.

3.6 Consumption of soft drinks

3.6.1 Consumption of sugar-sweetened and artificially sweetened (diet) soft drinks

Introduction

In 2011–12 questions were included for the first time to measure the consumption of sugar-sweetened soft drinks in Victoria. The term 'sugar-sweetened soft drinks' refers to any beverage with added sugar, and includes carbonated drinks, flavoured mineral water, cordial, sports drinks and energy drinks. Ready-to-drink alcoholic beverages were also included as sugar-sweetened beverages as they are mixed with other flavours such as fruit juice or soft drink. All clear, non-flavoured mineral water and soda water were excluded.

The weight of epidemiologic evidence shows that consumption of sugar-sweetened soft drinks has significantly contributed to the obesity epidemic (Malik, Schulze & Hu 2006; Vartanian, Schwartz & Brownell 2007; Woodward-Lopez, Kao & Ritchis 2011). In a meta-analysis of 30 studies, 10–12 cross-sectional studies, five of five longitudinal studies, and four of four lifetime experimental studies showed this positive association (Malik et al. 2006). Another meta-analysis of 88 studies showed a clear association between the intake of sugar-sweetened drinks and increased energy intake leading to weight gain (Chen et al. 2009; Ebbeling et al. 2006; Vartanian et al. 2007).

Survey participants were asked how often they consumed cordial, soft drinks, flavoured mineral water, energy drinks or sports drinks. Table 3.34 shows the prevalence of daily consumption of sugar-sweetened soft drink, by age group and sex, with 'Total' not adjusted for age.

Overall, 12.9 per cent of Victorian people reported consuming sugar-sweetened drinks on a daily basis. The proportion who reported consuming these drinks daily was significantly *higher* in men (18.1 per cent) than women (7.9 per cent).

Table 3.34: Proportion (%) of daily consumers of sugar-sweetened soft drinks, by age group and sex, Victoria, 2012

	Not daily consumers			Daily consumers		
	%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL
Males						
18–24	**67.4**	57.2	76.1	**20.5**	13.7	29.6
25–34	**68.4**	58.8	76.7	**25.1**	17.5	34.5
35–44	**62.7**	56.4	68.5	**24.1**	18.9	30.2
45–54	**69.6**	64.2	74.5	**16.2**	12.3	21.0
55–64	**70.8**	66.3	75.0	**11.5**	8.8	15.1
65+	**69.9**	66.3	73.3	**9.1**	7.2	11.4
Total	**68.0**	**65.2**	**70.7**	**18.1**	**15.8**	**20.7**
Females						
18–24	**73.4**	62.9	81.7	**11.5***	6.3	20.1
25–34	**78.7**	72.0	84.1	**8.6**	5.4	13.5
35–44	**69.9**	65.2	74.2	**10.2**	7.6	13.5
45–54	**71.6**	67.6	75.2	**8.2**	6.3	10.5
55–64	**75.1**	71.2	78.6	**4.6**	3.4	6.2
65+	**78.8**	76.2	81.3	**5.1**	3.8	6.7
Total	**74.7**	**72.6**	**76.7**	**7.9**	**6.7**	**9.3**
People						
18–24	**70.3**	63.1	76.6	**16.1**	11.5	22.1
25–34	**73.5**	67.7	78.6	**16.9**	12.6	22.3
35–44	**66.3**	62.4	70.0	**17.0**	14.0	20.5
45–54	**70.6**	67.3	73.7	**12.1**	9.9	14.7
55–64	**73.0**	70.1	75.8	**8.0**	6.4	9.9
65+	**74.8**	72.6	76.9	**6.9**	5.7	8.2
Total	**71.4**	**69.7**	**73.1**	**12.9**	**11.6**	**14.4**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

The proportion who drank these soft drinks daily was significantly *lower* in men aged 55 years or older, women aged 55–64 years and people aged 55 years or older compared with all Victorian men, women and people, respectively.

Table 3.35 shows the prevalence of daily consumption of sugar-sweetened soft drinks, by departmental region and sex, adjusted for age.

The prevalence of daily consumption of sugar-sweetened soft drinks was significantly *higher* in men residing in rural regions as a whole, and Hume Region in particular, and also in people residing in Hume Region compared with the prevalence among all Victorian men and people, respectively.

Table 3.35: Proportion (%) of daily consumers of sugar-sweetened soft drinks, by Department of Health and Human Services region, Victoria, 2012

	Not daily consumers			Daily consumers		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Metropolitan males						
Eastern Metropolitan	**67.5**	60.8	73.5	**17.6**	12.6	23.9
North & West Metropolitan	**67.5**	62.0	72.6	**19.2**	14.9	24.3
Southern Metropolitan	**71.3**	65.3	76.6	**12.6**	9.0	17.5
Total	**68.5**	65.0	71.8	**16.9**	14.2	20.2
Rural males						
Barwon-South Western	**71.3**	64.1	77.6	**18.8**	13.1	26.2
Gippsland	**65.6**	58.6	72.0	**21.7**	16.0	28.7
Grampians	**66.4**	59.1	73.1	**17.0**	12.0	23.5
Hume	**53.8**	48.1	59.4	**32.6**	25.9	40.1
Loddon Mallee	**68.7**	61.1	75.5	**23.1**	16.9	30.8
Total	**65.7**	61.9	69.2	**22.7**	19.4	26.4
All males						
Total	**67.9**	**65.0**	**70.6**	**18.3**	**15.9**	**20.9**
Metropolitan females						
Eastern Metropolitan	**75.9**	71.0	80.2	**4.9**	3.2	7.5
North & West Metropolitan	**76.3**	72.0	80.1	**8.2**	5.8	11.4
Southern Metropolitan	**74.3**	69.1	78.8	**8.4**	5.5	12.7
Total	**75.6**	72.9	78.1	**7.4**	5.8	9.3
Rural females						
Barwon-South Western	**70.8**	65.0	76.0	**12.4**	8.6	17.5
Gippsland	**72.3**	65.5	78.3	**8.3**	6.0	11.4
Grampians	**72.9**	67.5	77.7	**9.2**	6.1	13.8
Hume	**66.0**	59.7	71.7	**13.6**	9.5	19.1
Loddon Mallee	**76.3**	71.4	80.6	**10.2**	7.5	13.9
Total	**71.8**	69.1	74.3	**11.0**	9.2	13.1
All females						
Total	**74.8**	**72.6**	**76.9**	**8.2**	**6.9**	**9.7**
Metropolitan people						
Eastern Metropolitan	**71.7**	67.5	75.6	**11.3**	8.4	14.9
North & West Metropolitan	**71.6**	68.0	75.0	**13.9**	11.2	17.1
Southern Metropolitan	**72.8**	68.8	76.4	**10.5**	8.0	13.7
Total	**72.0**	69.8	74.2	**12.2**	10.5	14.0
Rural people						
Barwon-South Western	**70.9**	66.3	75.1	**15.7**	12.2	20.0
Gippsland	**69.2**	64.3	73.8	**15.3**	11.7	19.7
Grampians	**70.4**	65.8	74.6	**12.9**	9.9	16.7
Hume	**60.0**	55.2	64.7	**23.2**	18.7	28.5
Loddon Mallee	**72.3**	67.7	76.6	**16.9**	13.1	21.4
Total	**68.8**	66.5	71.0	**16.8**	14.8	19.0
All people						
Total	**71.4**	**69.6**	**73.1**	**13.2**	**11.8**	**14.7**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 3.36 shows the prevalence of consumption of sugar-sweetened (non-diet) and diet soft drinks, by frequency, age group and sex, with 'Total' not adjusted for age.

Overall, 26.0 per cent of people reported never consuming soft drinks, the proportion being significantly *higher* in women (32.9 per cent) compared with men (18.9 per cent). However, 18.1 per cent of men and 7.9 per cent of women consumed sugar-sweetened soft drinks daily. An additional 13.4 per cent of men and 7.4 per cent of women consumed sugar-sweetened soft drinks several times a week. Overall, consumption of sugar-sweetened drinks was significantly *higher* among men compared with women. In particular, the proportion of men and people aged 18–24 years who consumed sugar-sweetened soft drinks several times a week was significantly *higher* compared with the proportion in all Victorian men and people, respectively.

Table 3.36: Prevalence (%) of sugar-sweetened and diet soft drink consumption, by frequency, age group and sex, Victoria, 2012

				Consumes sugar sweetened soft drink												Consumes diet soft drink											
				Daily			Several times a week			Once a week			Once a fortnight				Daily			Several times a week			Once a week			Once a fortnight		
Age group (years)	Never consumes %	95% CI LL	UL	%	95% CI LL	UL	%	95% CI LL	UL	%	95% CI LL	UL	%	95% CI LL	UL	%	95% CI LL	UL	%	95% CI LL	UL	%	95% CI LL	UL	%	95% CI LL	UL
Males																											
18–24	6.7*	3.2	13.2	**20.5**	13.7	29.6	27.9	20.0	37.6	**12.7***	7.4	21.0	**	**	**	**10.0***	4.9	19.2	3.3*	**1.3**	7.8	**0.0**	.	.	**	**	**
25–34	8.4*	4.3	15.8	**25.1**	17.5	34.5	**16.5**	10.1	25.9	**8.2***	4.4	14.7	**4.0***	1.5	10.2	**14.0**	8.5	22.2	5.2*	**2.2**	11.4	**	**	**	**0.0**	.	.
35–44	**12.5**	8.9	17.2	**24.1**	18.9	30.2	**11.1**	7.9	15.4	**9.3**	6.4	13.3	**5.1***	2.8	9.0	**12.9**	9.5	17.2	4.7*	**2.8**	8.0	**3.0***	1.7	5.4	**	**	**
45–54	**20.9**	16.6	25.8	**16.2**	12.3	21.0	**9.7**	6.9	13.3	**9.9**	6.8	14.2	**3.8***	2.2	6.4	**11.3**	8.3	15.0	6.8	**4.7**	9.8	**4.4***	2.5	7.6	**1.8***	0.8	3.7
55–64	**24.0**	20.2	28.4	11.5	8.8	15.1	**12.8**	9.8	16.7	**8.2**	5.8	11.5	**3.1***	1.7	5.4	**8.4**	6.1	11.3	7.6	**5.3**	10.8	**3.1***	1.8	5.2	**0.7***	0.3	1.5
65+	41.6	37.9	45.4	9.1	7.2	11.4	4.7	3.3	6.6	**5.3**	3.8	7.3	**3.1**	2.0	4.8	5.3	4.0	7.0	3.4	**2.3**	4.8	**2.9**	1.8	4.7	**1.9***	1.0	3.3
Total	**18.9**	17.0	20.9	**18.1**	15.8	20.7	**13.4**	11.3	15.8	**8.8**	7.3	10.6	**3.6**	2.6	4.9	**10.5**	8.8	12.6	5.2	**4.1**	6.5	**3.1**	2.2	4.4	**1.0**	0.6	1.5
Females																											
18–24	12.4*	6.6	21.9	**11.5***	6.3	20.1	**13.0***	7.6	21.4	**14.7***	8.4	24.5	**	**	**	**8.7***	4.2	17.2	5.7*	**2.5**	12.7	**8.3***	3.8	16.9	**5.3***	2.1	12.8
25–34	22.1	16.0	29.8	**8.6**	5.4	13.5	**13.1**	8.1	20.7	**8.1***	4.8	13.3	**4.7***	2.4	8.7	**15.2**	10.2	21.9	8.3*	**4.8**	14.0	**4.8***	2.1	10.8	**	**	**
35–44	**27.1**	22.9	31.7	**10.2**	7.6	13.5	**6.0**	4.1	8.8	**7.3**	5.1	10.3	**3.2***	1.8	5.8	**11.2**	8.5	14.5	5.5	**3.7**	8.2	**5.9**	4.1	8.5	**2.2***	1.2	3.8
45–54	**32.4**	28.5	36.6	**8.2**	6.3	10.5	**6.0**	4.4	8.2	**6.9**	5.2	9.2	**4.6**	3.1	6.8	**8.5**	6.4	11.1	5.7	**4.0**	8.1	**4.8**	3.3	7.0	**1.6***	0.9	3.1
55–64	43.7	39.7	47.8	4.6	3.4	6.2	3.2	2.0	5.0	**5.0**	3.4	7.3	**3.0**	1.8	4.8	**7.2**	5.5	9.4	6.8	**5.1**	9.2	**3.6**	2.4	5.3	**2.1***	1.3	3.5
65+	54.1	50.9	57.2	**5.1**	3.8	6.7	3.9	2.8	5.5	4.1	3.0	5.5	**2.8**	1.9	4.1	5.7	4.4	7.5	3.6	**2.5**	5.0	2.0	1.3	3.0	**1.2***	0.7	2.3
Total	**32.9**	30.7	35.1	**7.9**	6.7	9.3	**7.4**	6.0	9.1	**7.3**	6.0	8.9	**3.5**	2.7	4.6	**9.5**	8.1	11.2	5.9	**4.8**	7.2	**4.7**	3.6	6.1	**2.1**	1.4	3.0
People																											
18–24	9.5	5.9	14.9	**16.1**	11.5	22.1	20.7	15.5	27.0	13.7	9.3	19.7	**	**	**	**9.4***	5.6	15.1	4.5*	**2.4**	8.1	**4.0***	1.9	8.6	**3.1***	1.3	7.0
25–34	15.3	11.3	20.3	**16.9**	12.6	22.3	**14.8**	10.5	20.6	**8.2**	5.5	12.0	**4.3***	2.5	7.6	**14.6**	10.7	19.6	6.7	**4.2**	10.5	**4.6***	2.4	8.6	**	**	**
35–44	19.9	17.0	23.2	**17.0**	14.0	20.5	**8.5**	6.6	11.0	**8.2**	6.4	10.6	**4.1**	2.7	6.3	**12.0**	9.8	14.7	5.1	**3.7**	7.1	**4.5**	3.3	6.1	**1.5***	0.9	2.5
45–54	**26.7**	23.8	29.9	**12.1**	9.9	14.7	**7.8**	6.2	9.9	**8.4**	6.5	10.7	**4.2**	3.0	5.8	**9.8**	8.0	12.0	6.2	**4.8**	8.1	**4.6**	3.3	6.4	**1.7***	1.0	2.8
55–64	34.1	31.2	37.1	8.0	6.4	9.9	**7.9**	6.2	10.0	**6.6**	5.1	8.5	**3.0**	2.1	4.4	**7.8**	6.3	9.5	7.2	**5.7**	9.1	**3.3**	2.4	4.6	**1.4**	0.9	2.2
65+	48.4	46.0	50.9	6.9	5.7	8.2	4.3	3.4	5.4	4.6	3.7	5.8	**2.9**	2.2	3.9	5.5	4.5	6.7	3.5	**2.7**	4.4	**2.4**	1.7	3.3	**1.5**	1.0	2.3
Total	**26.0**	24.5	27.6	**12.9**	11.6	14.4	**10.3**	9.0	11.8	**8.1**	7.0	9.2	**3.5**	2.9	4.3	**10.0**	8.8	11.3	5.5	**4.8**	6.5	**3.9**	3.2	4.8	**1.5**	1.2	2.0

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of people responding 'both types of soft drink', 'don't know' or refusing to respond, not reported here.

Table 3.37 shows the prevalence of sugar-sweetened and diet soft drink consumption, by frequency, departmental region and sex, adjusted for age. The prevalence of 'daily' consumption of sugar-sweetened soft drinks was significantly *higher* in people who lived in rural regions compared with their metropolitan counterparts. The prevalence of 'daily' consumption of sugar-sweetened soft drinks was significantly *higher* in people who resided in rural regions as a whole, and men and people residing in Hume Region in particular, compared with all Victorian men and people, respectively.

Table 3.37: Prevalence of sugar-sweetened and diet soft drink consumption, by frequency, Department of Health and Human Services region and sex, Victoria, 2012

	Sugar sweetened soft drink consumed:													Diet soft drink consumed:											
	Never consumes			Daily			Several times a week			Once a week			Once a fortnight			Daily			Several times a week			Once a week			Once a fortnight		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL		LL	UL		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males																											
Eastern Metropolitan	**19.4**	16.0	23.3	**17.6**	12.6	23.9	**12.6**	8.4	18.5	**9.6**	6.3	14.3	**5.6***	3.0	10.3	**9.5**	5.9	14.9	**4.9**	3.0	7.9	**1.4***	0.6	3.1	**	**	**
North & West Metropolitan	**21.2**	17.4	25.6	**19.2**	14.9	24.3	**12.1**	9.0	16.2	**8.7**	6.0	12.5	**2.8***	1.6	4.9	**9.3**	6.6	12.9	**5.7**	3.7	8.7	**3.4***	1.7	7.0	**	**	**
Southern Metropolitan	**19.6**	16.0	23.9	**12.6**	9.0	17.5	**16.2**	11.8	21.8	**7.8**	5.2	11.5	**3.1***	1.7	5.8	**12.4**	8.4	17.8	**3.5**	2.1	5.6	**4.1***	2.5	6.8	**1.6***	0.6	4.0
Total	**20.3**	18.0	22.8	**16.9**	14.2	20.2	**13.3**	10.7	16.4	**8.8**	7.0	11.1	**3.4**	2.4	4.8	**10.3**	8.2	12.9	**4.9**	3.7	6.5	**3.2**	2.0	4.9	**0.9***	0.5	1.6
Rural males																											
Barwon-South Western	**17.1**	12.2	23.3	**18.8**	13.1	26.2	**19.1**	12.3	28.5	**10.5**	6.4	16.6	**3.8***	1.9	7.4	**10.0***	5.7	16.7	**5.7***	3.4	9.4	**1.6***	0.8	3.1	**1.4***	0.6	3.2
Gippsland	**17.0**	13.5	21.2	**21.7**	16.0	28.7	**17.6**	12.3	24.4	**5.6***	3.2	9.7	**3.4***	1.6	7.4	**8.8**	5.8	12.9	**5.2***	2.9	8.9	**5.7***	3.2	10.0	**	**	**
Grampians	**14.2**	11.2	17.7	**17.0**	12.0	23.5	**20.2**	14.2	27.8	**5.8***	3.2	10.5	**5.8***	2.7	12.0	**11.2**	7.4	16.5	**4.5***	2.5	7.8	**2.2***	1.0	4.5	**	**	**
Hume	**20.4**	16.0	25.7	**32.6**	25.9	40.1	**8.7**	5.3	13.9	**5.4**	3.5	8.3	**1.8***	0.8	3.8	**8.2**	5.7	11.7	**4.8***	2.6	8.8	**1.3***	0.6	2.9	**0.9***	0.4	2.1
Loddon Mallee	**17.7**	13.3	23.3	**23.1**	16.9	30.8	**12.4**	8.1	18.6	**13.8**	8.9	20.8	**2.8***	1.6	4.8	**9.5***	5.7	15.3	**5.3***	2.7	10.1	**2.8***	1.4	5.4	**2.6***	1.3	4.9
Total	**16.9**	15.0	19.1	**22.7**	19.4	26.4	**15.5**	12.7	18.8	**8.8**	6.8	11.2	**3.5**	2.4	4.9	**9.9**	7.8	12.5	**5.1**	3.9	6.7	**2.6**	1.8	3.6	**1.3**	0.9	2.0
All males																											
Total	**19.5**	17.6	21.4	**18.3**	15.9	20.9	**13.8**	11.6	16.3	**8.8**	7.3	10.5	**3.4**	2.6	4.5	**10.3**	8.6	12.3	**5.0**	4.0	6.2	**3.0**	2.1	4.4	**1.0**	0.7	1.5
Metropolitan females																											
Eastern Metropolitan	**31.0**	27.4	34.8	**4.9**	3.2	7.5	**7.6**	4.9	11.5	**8.4**	5.6	12.5	**3.5***	2.0	5.8	**8.7**	5.9	12.7	**8.8***	5.3	14.4	**3.7***	2.1	6.7	**2.2***	1.1	4.4
North & West Metropolitan	**33.5**	29.0	38.4	**8.2**	5.8	11.4	**8.9**	6.0	13.1	**7.4**	4.9	11.1	**4.6***	2.8	7.5	**9.5**	6.9	12.9	**5.0**	3.4	7.1	**4.4**	2.8	6.9	**1.7***	0.7	4.0
Southern Metropolitan	**33.8**	29.8	38.1	**8.4**	5.5	12.7	**7.2**	4.4	11.5	**6.3**	4.0	9.9	**1.8***	0.9	3.5	**10.9**	7.3	15.9	**5.2**	3.4	7.9	**5.7***	3.2	9.9	**2.2***	0.8	5.5
Total	**33.2**	30.6	35.9	**7.4**	5.8	9.3	**8.1**	6.2	10.6	**7.4**	5.8	9.5	**3.5**	2.5	4.9	**9.5**	7.7	11.8	**5.9**	4.5	7.8	**4.7**	3.4	6.4	**2.0***	1.2	3.3
Rural females																											
Barwon-South Western	**26.0**	22.5	29.8	**12.4**	8.6	17.5	**8.3**	5.2	12.8	**6.5**	4.0	10.4	**6.6***	3.9	11.0	**9.5**	6.7	13.3	**6.1**	3.8	9.8	**4.5***	2.6	7.8	**2.4***	1.3	4.5
Gippsland	**35.7**	28.9	43.0	**8.3**	6.0	11.4	**6.0***	2.9	12.2	**6.3**	4.4	9.0	**3.8***	2.0	7.4	**8.3**	6.0	11.4	**4.5***	2.5	8.1	**4.8***	2.6	8.9	**2.6***	1.0	6.5
Grampians	**31.0**	26.4	36.2	**9.2**	6.1	13.8	**5.5**	3.4	8.8	**8.4**	5.6	12.5	**1.8***	0.9	3.7	**11.0**	7.7	15.5	**5.0**	3.2	7.5	**6.2***	3.7	10.2	**2.8***	1.2	6.3
Hume	**22.6**	19.4	26.0	**13.6**	9.5	19.1	**13.8**	9.4	19.8	**8.8**	5.5	13.7	**1.5***	0.8	2.8	**7.4**	5.1	10.6	**3.6**	2.3	5.6	**3.2***	1.9	5.3	**1.8***	0.9	3.4
Loddon Mallee	**27.8**	23.8	32.1	**10.2**	7.5	13.9	**7.1**	4.5	11.1	**9.0**	6.2	12.8	**3.4***	1.9	5.9	**8.9**	6.3	12.3	**7.9**	5.3	11.6	**4.8***	2.7	8.3	**2.7***	1.3	5.9
Total	**28.3**	26.1	30.7	**11.0**	9.2	13.1	**8.2**	6.5	10.2	**7.7**	6.3	9.3	**3.7**	2.6	5.1	**9.1**	7.7	10.8	**5.5**	4.4	6.8	**4.6**	3.6	5.9	**2.5**	1.8	3.6
All females																											
Total	**32.0**	29.9	34.2	**8.2**	6.9	9.7	**8.2**	6.6	10.2	**7.5**	6.1	9.1	**3.5**	2.7	4.6	**9.5**	8.0	11.3	**5.9**	4.7	7.3	**4.7**	3.6	6.0	**2.1**	1.4	3.1
Metropolitan people																											
Eastern Metropolitan	**25.4**	22.8	28.1	**11.3**	8.4	14.9	**10.1**	7.3	13.7	**8.9**	6.6	12.0	**4.5**	2.9	6.9	**9.2**	6.7	12.6	**6.7**	4.5	9.8	**2.6**	1.6	4.2	**1.5***	0.8	2.6
North & West Metropolitan	**27.5**	24.4	30.7	**13.9**	11.2	17.1	**10.3**	8.1	13.2	**8.0**	6.1	10.5	**3.7**	2.6	5.4	**9.3**	7.3	11.7	**5.4**	4.0	7.1	**3.9**	2.5	6.0	**1.1***	0.5	2.2
Southern Metropolitan	**27.0**	24.1	30.0	**10.5**	8.0	13.7	**11.6**	8.8	15.2	**6.9**	5.1	9.3	**2.5**	1.6	3.9	**11.6**	8.8	15.1	**4.3**	3.1	6.0	**4.8**	3.2	7.2	**1.9***	0.9	3.7
Total	**26.9**	25.1	28.8	**12.2**	10.5	14.0	**10.6**	9.0	12.6	**8.1**	6.8	9.6	**3.4**	2.7	4.4	**9.9**	8.5	11.6	**5.4**	4.4	6.6	**3.9**	3.0	5.0	**1.4**	1.0	2.1
Rural people																											
Barwon-South Western	**21.5**	18.6	24.7	**15.7**	12.2	20.0	**13.5**	9.6	18.6	**8.4**	5.9	12.0	**5.2**	3.2	8.4	**9.6**	6.8	13.4	**6.0**	4.2	8.6	**3.1**	2.0	4.8	**1.9***	1.1	3.1
Gippsland	**26.0**	21.9	30.6	**15.3**	11.7	19.7	**12.2**	8.7	16.8	**6.2**	4.4	8.7	**3.7***	2.2	6.1	**9.0**	6.8	11.8	**4.8**	3.2	7.1	**4.7**	3.0	7.1	**1.7***	0.8	3.6
Grampians	**22.9**	19.9	26.2	**12.9**	9.9	16.7	**12.7**	9.4	17.1	**7.1**	5.0	10.1	**3.6***	2.0	6.4	**11.5**	8.6	15.3	**4.8**	3.3	6.9	**4.3**	2.8	6.6	**2.0***	1.0	3.8
Hume	**21.7**	18.7	25.0	**23.2**	18.7	28.5	**11.2**	8.2	15.1	**7.0**	5.0	9.8	**1.6***	1.0	2.7	**7.8**	6.0	10.1	**4.3**	2.8	6.5	**2.3**	1.5	3.5	**1.3***	0.8	2.2
Loddon Mallee	**22.7**	19.7	26.1	**16.9**	13.1	21.4	**9.6**	7.0	13.0	**11.4**	8.4	15.2	**3.1**	2.0	4.6	**9.4**	6.8	12.7	**6.6**	4.6	9.3	**3.8**	2.5	5.8	**2.6***	1.5	4.3
Total	**22.8**	21.2	24.4	**16.8**	14.8	19.0	**11.8**	10.1	13.8	**8.2**	7.0	9.7	**3.5**	2.8	4.5	**9.6**	8.2	11.1	**5.3**	4.5	6.3	**3.6**	2.9	4.4	**1.9**	1.4	2.5
All people																											
Total	**25.9**	24.5	27.4	**13.2**	11.8	14.7	**11.0**	9.6	12.5	**8.1**	7.0	9.2	**3.5**	2.8	4.2	**9.9**	8.7	11.2	**5.4**	4.6	6.3	**3.8**	3.1	4.7	**1.5**	1.2	2.1

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of people responding 'both types of soft drink', 'don't know' or refusing to respond, not reported here.

Table 3.38 shows the prevalence of daily consumption of sugar-sweetened soft drinks, by selected socioeconomic determinants, modifiable risk factors and health status and sex, adjusted for age.

When compared with all Victorian men and women, there was a significantly *higher* prevalence of daily consumption of sugar-sweetened soft drinks among men and women with the following characteristic:

- secondary education.

When compared with all Victorian men, there was a significantly *higher* prevalence of daily consumption of sugar-sweetened soft drinks among men with the following characteristics:

- unemployed
- very high levels of psychological distress
- current smoker.

When compared with all Victorian women, there was a significantly *higher* prevalence of daily consumption of sugar-sweetened soft drinks among women with the following characteristic:

- high levels of psychological distress.

When compared with all Victorian men, there was a significantly *lower* prevalence of daily consumption of sugar-sweetened soft drinks among men with the following characteristic:

- primary or no education.

When compared with all Victorian women, there was a significantly *lower* prevalence of daily consumption of sugar-sweetened soft drinks among women with the following characteristic:

- met guidelines for vegetable consumption.

Table 3.38 (revised): Daily consumption of sugar-sweetened soft drinks, by selected socioeconomic determinants, modifiable risk factors and health status, Victoria, 2012

	Males						Females					
	Not daily consumers			Daily consumers			Not daily consumers			Daily consumers		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Victoria	67.9	65.0	70.6	18.3	15.9	20.9	74.8	72.6	76.9	8.2	6.9	9.7
Country of birth												
Australia	67.7	64.5	70.7	19.7	17.0	22.7	74.8	72.5	77.0	8.7	7.3	10.3
Overseas	63.5	57.5	69.2	17.5	12.6	23.8	75.2	69.8	80.0	7.7*	4.5	12.9
Language spoken at home												
English only	68.1	65.0	71.1	19.2	16.5	22.2	75.1	72.8	77.2	8.8	7.3	10.5
Language other than English	65.3	58.7	71.4	17.3	12.5	23.5	74.6	69.5	79.1	5.9	3.7	9.3
Metro-Rural regions												
Rural	65.7	61.9	69.2	22.7	19.4	26.4	71.8	69.1	74.3	11.0	9.2	13.1
Metropolitan	68.5	65.0	71.8	16.9	14.2	20.2	75.6	72.9	78.1	7.4	5.8	9.3
Level of education												
None or Primary	23.8	20.0	28.0	5.2*	2.1	12.4	71.0	64.5	76.7	**	**	**
Secondary	60.6	55.2	65.7	28.7	23.8	34.2	73.2	68.4	77.5	14.1	10.4	18.8
TAFE or Tertiary	71.2	67.9	74.4	14.0	11.6	16.9	74.6	71.8	77.3	6.5	5.1	8.4
Employment status (<65 years)												
Employed	68.8	65.1	72.4	19.0	16.1	22.3	74.5	71.3	77.4	8.2	6.4	10.4
Unemployed	54.4	40.6	67.6	35.0	23.3	48.8	67.1	54.6	77.5	7.6*	3.4	16.3
Not in labour force	47.9	37.6	58.3	28.3	19.2	39.8	73.4	68.4	77.9	11.2	8.0	15.3
Total annual household income ($)												
<40,000	55.4	45.3	65.0	28.0	20.6	36.8	68.8	61.6	75.2	18.5	12.8	26.0
40,000 to <100,000	69.2	64.4	73.6	19.9	16.0	24.4	75.1	71.5	78.5	7.5	5.5	10.1
100,000, or more	71.5	66.6	76.0	13.6	10.3	17.8	69.6	64.8	73.9	6.1	4.0	9.3
Psychological distress (K10 score)[a]												
Low (K10 score <16)	70.4	66.9	73.7	15.6	12.8	18.7	76.4	73.7	78.8	6.2	4.9	7.8
Moderate (K10 score 16 to 21)	65.1	59.4	70.4	21.7	17.1	27.2	73.9	69.4	78.0	9.3	6.4	13.3
High (K10 score 22 to 29)	60.9	50.1	70.7	27.3	18.5	38.2	69.7	62.5	76.0	15.2	10.0	22.5
Very high (K10 score ≥30)	58.4	47.3	68.6	29.1	21.2	38.5	72.1	61.4	80.8	15.0	9.0	23.8
Physical activity level[b]												
Sedentary	60.3	51.2	68.8	20.3	13.0	30.4	77.4	66.3	85.7	14.1*	7.2	25.9
Insufficient	64.7	58.9	70.2	20.2	15.6	25.7	72.1	67.3	76.4	10.9	7.9	14.9
Sufficient	69.9	66.4	73.2	17.1	14.3	20.3	75.4	72.9	77.9	6.6	5.4	8.1
Compliance with fruit & vegetable consumption guidelines[c]												
Both	59.6	48.2	70.1	**	**	**	76.7	67.8	83.7	3.3*	1.4	7.7
Vegetable only [d]	68.1	59.7	75.5	10.4*	4.9	20.7	78.9	72.0	84.6	2.4*	1.1	4.9
Fruit only [d]	70.2	65.6	74.4	14.1	10.7	18.4	76.1	72.9	79.0	5.1	3.6	7.1
Neither	66.8	63.1	70.3	20.7	17.6	24.2	72.7	69.5	75.6	11.7	9.5	14.3
Smoking status												
Current smoker	59.7	53.3	65.8	26.5	21.3	32.5	74.8	68.5	80.1	16.4	11.8	22.3
Ex-smoker	68.2	62.3	73.5	20.0	15.2	25.8	73.6	65.8	80.2	10.1*	5.5	17.9
Non-smoker	70.9	67.3	74.3	14.5	11.8	17.7	75.0	72.3	77.5	6.1	4.8	7.7
Lifetime risk of alcohol related harm (2009)[e]												
Abstainer / no longer drinks alcohol	62.7	54.7	70.1	16.8	11.7	23.7	73.2	67.3	78.3	10.4	7.2	14.9
Reduced risk	68.1	59.7	75.5	14.7	9.5	21.9	78.3	74.2	81.8	7.1	4.9	10.1
Increased risk	68.4	65.2	71.5	18.7	16.0	21.7	74.3	71.4	76.9	7.4	5.8	9.5
Self-reported health												
Excellent / Very Good	69.4	65.3	73.2	14.9	11.8	18.7	74.9	71.9	77.6	6.2	4.7	8.0
Good	68.6	63.9	73.0	19.3	15.5	23.6	74.1	70.6	77.4	9.3	7.1	12.1
Fair / Poor	64.4	57.4	70.8	24.7	18.9	31.6	76.8	70.0	82.4	13.1	8.4	20.0
BMI category[f]												
Underweight	52.6	42.8	62.3	12.4	7.7	19.4	63.0	52.0	72.8	23.0	15.3	33.1
Normal	67.2	62.5	71.6	15.4	12.1	19.5	73.8	70.7	76.7	6.8	5.3	8.6
Overweight	67.8	62.9	72.2	18.2	14.4	22.8	75.6	71.1	79.6	8.4	5.8	11.9
Obese	68.8	61.8	74.9	22.5	16.8	29.4	78.0	72.9	82.3	10.0	6.7	14.7
Diabetes												
No diabetes	66.8	63.9	69.6	18.9	16.4	21.5	74.4	72.2	76.5	8.3	7.0	9.9
Diabetes	76.4	73.0	79.6	4.3*	2.4	7.5	87.6	80.7	92.3	**	**	**
Depression												
Yes	62.2	55.3	68.6	22.7	17.6	28.8	72.9	68.3	77.1	11.0	8.1	14.8
No	68.9	65.7	71.9	17.4	14.8	20.3	75.1	72.6	77.5	7.3	5.8	9.0

a Based on the Kessler 10 scale for psychological distress.
b Based on DoHA (1999) guidelines.
c Based on NHMRC (2003) guidelines.
d Includes those meeting both guidelines.
e NHMRC (2009) guidelines.
f Based on Body Mass Index (BMI).

Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.

3.7 Physical activity

Introduction

Physical inactivity is a major modifiable risk factor for a range of conditions, including cardiovascular disease, type 2 diabetes, some cancers, osteoporosis, depression, anxiety and falls among the elderly. Moreover, physical activity improves cognitive function in the elderly and maintains current body weight. In conjunction with a low-calorie diet, it also promotes weight loss. The evidence suggests that health benefits accrue with increasing levels of physical activity and that this protective effect occurs even if adopted in middle and later life. Therefore, physical activity is an obvious target for health promotion. Monitoring physical activity levels at the population level is relevant for investigating the outcomes of health promotion efforts.

Information was collected on three types of physical activity to measure the extent to which the population is engaging in sufficient physical activity to achieve a health benefit and meet the current national guidelines:

- time spent walking (for more than 10 minutes at a time) for recreation or exercise, or to get to and from places
- time spent doing vigorous household chores (excluding gardening)
- time spent doing vigorous activities other than household chores and gardening (for example, tennis, jogging, cycling or keep-fit exercises).

The level of health benefit achieved from physical activity partly depends on the intensity of the activity. In general, to obtain a health benefit from physical activity requires participation in moderate-intensity activities (at least). Accruing 150 or more minutes of moderate-intensity physical activity (such as walking) on a regular basis over one week is believed to be 'sufficient' for health benefits and is the recommended threshold of physical activity according to the *National physical activity guidelines for adults* (DoHA 1999). For those who achieve an adequate baseline level of fitness, extra health benefits may be gained by undertaking at least 30 minutes of regular vigorous exercise on three to four days per week.

The sum of the proportion of people who undertake only vigorous physical activity or walking and vigorous activity sets the upper limit for the proportion of the population who may satisfy both the health benefit and health fitness criteria to meet the guidelines on physical activity. The actual proportion of people who fulfil both criteria is reduced to the extent that individuals do not spend sufficient time on physical activity and/or do not participate in physical activity regularly.

The 'sufficient time and sessions' measure of physical activity is regarded as the preferred indicator of the adequacy of physical activity for a health benefit because it addresses the regularity of the activity undertaken. Under this measure, the requirement to participate in physical activity regularly (that is, on five days per week) is an accrued 150 or more minutes of at least moderate-intensity physical activity.

A person who satisfied both criteria (time and number of sessions) was classified as doing 'sufficient' physical activity to achieve an added health benefit in the analysis that follows. The number of minutes spent on physical activity was calculated by adding the minutes of moderate-intensity activity to two times the minutes of vigorous activity (that is, the minutes of vigorous intensity activity are weighted by a factor of two).

Table 3.39 outlines the definitions of sufficient activity and session per week, as applied to the Victorian Population Health Survey. Data were collected on the number of sessions and the duration of each type of physical activity.

Table 3.39: Definition of sufficient physical activity time and sessions per week[a]

Physical activity category	Time and sessions per week
Sedentary	0 minutes
Insufficient time and/or sessions	Less than 150 minutes, or 150 or more minutes, but less than five sessions
Sufficient time and sessions	150 minutes and five or more sessions

a National physical activity guidelines for Australians (DoHA)

3.7.1 Type of physical activity undertaken in past week

Table 3.40 shows the proportion of the population undertaking physical activity, by type, age group and sex, with 'Total' not adjusted for age.

There were significantly *higher* proportions of men, women and people aged 65 years or older who reported not doing any physical activity compared with the proportion in all Victorian men, women and people, respectively.

There were also significantly *higher* proportions of men, women and people aged 55 years or older who reported 'walking only' as their only form of physical activity compared with the proportion in all Victorian men, women and people, respectively.

Also, a significantly *higher* proportion of men aged 18–24 years, women aged 18–34 years and people aged 18–24 and 35–44 years reported undertaking both walking and vigorous physical activity compared with the proportion in all Victorian men, women and people, respectively.

Table 3.40: Types of physical activity undertaken during the week prior to the interview, by age group and sex, Victoria, 2012

Age group (years)	None			Walking only			Vigorous activity only			Walking & vigorous activity		
	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL
Males												
18–24	**	**	**	10.5*	5.9	18.0	**	**	**	84.4	76.0	90.2
25–34	**	**	**	19.8	13.5	28.1	16.8*	9.7	27.4	58.1	47.9	67.7
35–44	3.4*	1.9	6.2	20.1	15.6	25.5	7.8	5.2	11.5	66.0	60.0	71.5
45–54	5.1*	2.8	9.1	29.5	24.6	34.8	5.8	3.7	9.1	57.4	51.8	62.8
55–64	6.7	4.8	9.3	33.6	29.2	38.3	5.6	3.8	8.1	51.5	46.6	56.3
65+	10.6	8.4	13.3	39.3	35.6	43.1	5.6	4.2	7.5	39.1	35.5	42.9
Total	5.1	4.0	6.5	25.5	23.3	27.9	7.8	6.0	10.1	58.9	56.0	61.7
Females												
18–24	**	**	**	17.9	10.9	28.0	**	**	**	75.7	65.1	83.9
25–34	4.4*	1.7	10.9	14.9	10.1	21.5	4.8*	2.4	9.4	72.2	64.3	79.0
35–44	5.0	3.4	7.4	20.8	17.2	25.1	4.8*	2.9	7.7	67.3	62.5	71.7
45–54	3.9	2.6	5.8	23.1	19.8	26.8	5.7	4.0	8.0	63.9	59.7	67.8
55–64	7.9	5.9	10.4	32.8	29.1	36.8	3.8	2.6	5.4	52.3	48.2	56.4
65+	11.4	9.5	13.6	40.0	36.9	43.1	6.7	5.2	8.5	36.1	33.1	39.2
Total	6.1	5.1	7.4	25.2	23.2	27.2	4.6	3.8	5.6	60.5	58.1	62.8
People												
18–24	**	**	**	14.1	9.7	20.1	**	**	**	80.1	73.6	85.4
25–34	3.6*	1.6	8.1	17.4	13.2	22.5	10.8	6.8	16.7	65.1	58.5	71.2
35–44	4.2	3.0	5.9	20.5	17.5	23.8	6.3	4.6	8.5	66.7	62.9	70.2
45–54	4.5	3.1	6.5	26.2	23.3	29.4	5.7	4.3	7.6	60.7	57.2	64.1
55–64	7.3	5.9	9.1	33.2	30.3	36.2	4.7	3.6	6.1	51.9	48.7	55.1
65+	11.0	9.5	12.7	39.7	37.3	42.1	6.2	5.2	7.5	37.5	35.1	39.9
Total	5.6	4.8	6.5	25.3	23.8	26.9	6.2	5.2	7.4	59.7	57.8	61.5

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 3.41 shows the proportion of the population who undertook physical activity, by type of physical activity, departmental region and sex, adjusted for age.

A significantly higher proportion of people residing in Barwon-South Western Region undertook walking combined with vigorous physical activity compared with the proportion in all Victorian people.

Table 3.41: Types of physical activity undertaken during the past week, by Department of Health and Human Services region and sex, Victoria, 2012

	None			Walking only			Vigorous activity only			Walking & vigorous activity		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males												
Eastern Metropolitan	**4.5**	3.1	6.6	**27.6**	22.6	33.1	**4.8***	2.8	8.2	**60.5**	54.7	66.1
North & West Metropolitan	**7.0**	4.8	10.1	**26.8**	22.5	31.5	**7.2**	5.0	10.2	**55.1**	49.9	60.1
Southern Metropolitan	**3.7***	2.1	6.2	**23.7**	19.5	28.6	**10.5***	6.0	17.7	**60.5**	53.8	66.8
Total	**5.5**	4.2	7.1	**26.2**	23.5	29.2	**7.5**	5.5	10.2	**58.0**	54.5	61.4
Rural males												
Barwon-South Western	**3.7**	2.4	5.6	**22.3**	17.7	27.7	**6.7**	4.2	10.5	**64.6**	58.9	69.9
Gippsland	**3.9***	2.1	7.2	**22.7**	17.6	28.6	**5.8**	3.6	9.3	**64.7**	58.3	70.7
Grampians	**7.4**	4.7	11.5	**25.9**	20.0	32.9	**6.2**	4.0	9.6	**58.7**	51.7	65.3
Hume	**4.5**	2.9	6.8	**34.3**	25.3	44.6	**4.4**	2.8	6.9	**51.4**	41.7	61.1
Loddon Mallee	**3.8**	2.4	5.8	**21.7**	17.2	26.9	**6.8***	4.1	11.1	**63.8**	58.0	69.2
Total	**4.5**	3.6	5.6	**25.2**	22.0	28.6	**6.0**	4.8	7.6	**61.0**	57.4	64.4
All males												
Total	**5.2**	**4.2**	**6.5**	**25.9**	**23.7**	**28.2**	**7.3**	**5.6**	**9.5**	**58.6**	**55.8**	**61.3**
Metropolitan females												
Eastern Metropolitan	**5.1**	3.6	7.0	**24.4**	20.3	29.0	**5.9***	3.2	10.5	**63.3**	57.8	68.5
North & West Metropolitan	**7.1**	4.9	10.2	**29.9**	25.7	34.5	**4.3**	3.0	6.1	**54.5**	49.6	59.2
Southern Metropolitan	**7.2***	4.3	11.7	**22.6**	18.9	26.8	**3.4**	2.2	5.3	**62.4**	56.9	67.6
Total	**6.7**	5.2	8.7	**26.2**	23.7	28.8	**4.4**	3.3	5.8	**59.3**	56.3	62.3
Rural females												
Barwon-South Western	**4.9**	3.5	7.0	**18.3**	15.1	22.0	**4.6**	2.9	7.3	**67.3**	62.7	71.7
Gippsland	**5.7**	4.1	7.9	**22.0**	18.3	26.3	**5.0**	3.3	7.7	**64.5**	60.0	68.8
Grampians	**8.3**	5.4	12.5	**23.2**	18.9	28.2	**4.0***	2.4	6.6	**62.1**	56.3	67.6
Hume	**5.6**	4.1	7.7	**20.7**	16.9	25.2	**6.8***	4.0	11.3	**63.0**	58.1	67.7
Loddon Mallee	**5.8**	4.1	8.3	**22.2**	18.3	26.7	**6.7**	4.3	10.3	**60.6**	55.3	65.7
Total	**6.0**	5.0	7.1	**21.2**	19.4	23.1	**5.4**	4.3	6.8	**63.6**	61.3	66.0
All females												
Total	**6.6**	**5.3**	**8.1**	**24.9**	**23.0**	**27.0**	**4.6**	**3.7**	**5.7**	**60.4**	**57.9**	**62.7**
Metropolitan people												
Eastern Metropolitan	**4.8**	3.7	6.2	**26.0**	22.7	29.6	**5.2**	3.4	8.0	**62.1**	58.1	66.0
North & West Metropolitan	**7.0**	5.4	9.1	**28.4**	25.3	31.7	**5.7**	4.3	7.5	**54.8**	51.2	58.3
Southern Metropolitan	**5.6**	3.7	8.4	**23.4**	20.4	26.5	**6.7**	4.2	10.6	**61.3**	56.9	65.5
Total	**6.1**	5.0	7.3	**26.2**	24.4	28.2	**5.9**	4.7	7.4	**58.7**	56.3	61.0
Rural people												
Barwon-South Western	**4.3**	3.3	5.6	**20.7**	17.6	24.1	**5.9**	4.2	8.4	**65.3**	61.3	69.0
Gippsland	**4.9**	3.6	6.8	**22.4**	19.1	26.1	**5.5**	4.0	7.6	**64.3**	60.2	68.1
Grampians	**8.1**	5.8	11.2	**24.4**	20.7	28.6	**5.1**	3.7	7.1	**60.4**	55.8	64.8
Hume	**5.1**	3.9	6.6	**27.8**	22.3	33.9	**5.4**	3.5	8.1	**57.3**	51.3	63.0
Loddon Mallee	**4.8**	3.7	6.3	**21.8**	18.8	25.2	**6.8**	4.8	9.4	**62.3**	58.4	66.1
Total	**5.3**	4.6	6.0	**23.1**	21.3	25.1	**5.8**	4.9	6.8	**62.2**	60.1	64.3
All people												
Total	**5.9**	**5.1**	**6.9**	**25.4**	**23.9**	**27.0**	**6.0**	**5.0**	**7.2**	**59.5**	**57.6**	**61.3**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 3.42 shows the physical activity levels of the Victorian population, categorised by whether the level of physical activity met Australian guidelines, by age group and sex, with 'Total' not adjusted for age.

Overall, the proportion of men who had engaged in sufficient physical activity (62.6 per cent) was similar to the proportion in women (60.5 per cent). There was a significantly *higher* proportion of men and people aged 18–24 years who had engaged in sufficient physical activity compared with the proportion in all Victorian men and people, respectively. There was a significantly *higher* proportion of women aged 35–44 years who had engaged in sufficient physical activity compared with the proportion in all Victorian women.

Sedentary behaviour was reported by 5.6 per cent of people, with no significant difference in the proportion between the sexes. There were significantly *higher* proportions of men, women and people aged 65 years or older who reported sedentary behaviour compared with the proportion in all Victorian men, women and people, respectively.

Table 3.42: Physical activity,[a] by age group and sex, Victoria, 2012

	Physical activity status								
	Sedentary			Insufficient			Sufficient		
Age group (years)	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL
Males									
18–24	**	**	**	17.1	11.2	25.3	79.6	70.9	86.1
25–34	**	**	**	35.8	26.7	46.0	58.9	48.7	68.5
35–44	3.4*	1.9	6.2	27.5	22.4	33.2	65.3	59.3	70.8
45–54	5.1*	2.8	9.1	26.1	21.5	31.3	65.6	60.1	70.8
55–64	6.7	4.8	9.3	28.2	24.1	32.8	60.2	55.4	64.8
65+	10.6	8.4	13.3	33.5	30.0	37.2	49.2	45.4	53.0
Total	5.1	4.0	6.5	28.6	25.9	31.4	62.6	59.7	65.4
Females									
18–24	**	**	**	26.8	18.2	37.6	65.4	54.3	75.0
25–34	4.4*	1.7	10.9	25.7	19.4	33.3	65.8	57.6	73.1
35–44	5.0	3.4	7.4	23.8	19.8	28.2	68.0	63.3	72.4
45–54	3.9	2.6	5.8	25.7	22.2	29.7	65.9	61.8	69.8
55–64	7.9	5.9	10.4	28.2	24.7	32.0	59.1	55.1	63.1
65+	11.4	9.5	13.6	38.6	35.6	41.8	41.2	38.1	44.3
Total	6.1	5.1	7.4	28.3	26.2	30.6	60.5	58.1	62.8
People									
18–24	**	**	**	21.8	16.4	28.5	72.6	65.6	78.7
25–34	3.6*	1.6	8.1	30.8	25.0	37.2	62.3	55.8	68.5
35–44	4.2	3.0	5.9	25.6	22.3	29.1	66.7	62.9	70.3
45–54	4.5	3.1	6.5	25.9	23.0	29.1	65.8	62.4	69.0
55–64	7.3	5.9	9.1	28.2	25.5	31.1	59.7	56.6	62.7
65+	11.0	9.5	12.7	36.3	34.0	38.7	44.8	42.4	47.2
Total	5.6	4.8	6.5	28.4	26.7	30.2	61.5	59.7	63.4

a Based on DoHA (1999) guidelines.
Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

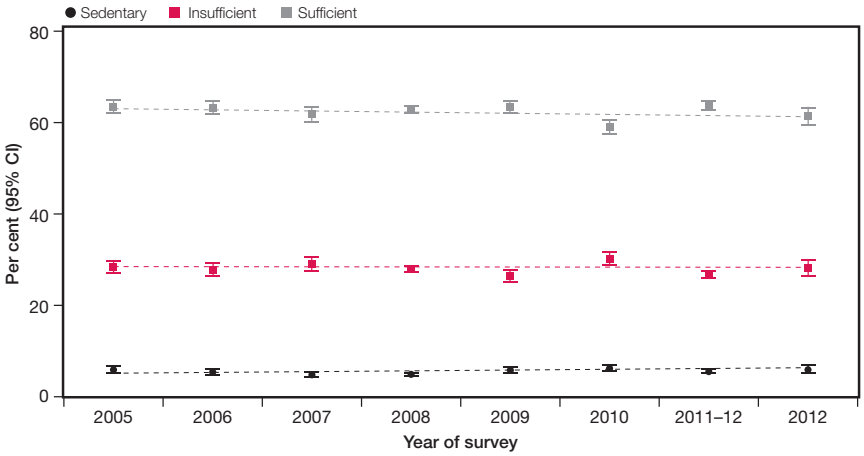
The trend over time of physical activity levels, adjusted for age, is presented in Table 3.43 and Figure 3.7. The proportion of men and women who engaged in sedentary behaviour, insufficient physical activity or sufficient physical activity remained unchanged between 2005 and 2012.

Table 3.43: Prevalence (%) of different physical activity levels, by sex, Victoria, 2005–2012

	Sedentary			Insufficient			Sufficient		
	%	95% CI		%	95% CI		%	95% CI	
Survey year		LL	UL		LL	UL		LL	UL
Males									
2005	**6.6**	5.6	7.9	**28.0**	25.8	30.2	**63.4**	61.0	65.7
2006	**4.9**	4.0	6.1	**27.6**	25.5	29.9	**64.0**	61.6	66.3
2007	**4.8**	3.9	5.8	**28.2**	25.9	30.6	**63.4**	60.9	65.9
2008	**5.1**	4.6	5.6	**27.9**	26.7	29.1	**63.3**	62.0	64.6
2009	**5.9**	4.9	7.0	**26.2**	24.2	28.2	**63.6**	61.4	65.8
2010	**6.2**	5.2	7.3	**28.3**	26.2	30.5	**61.2**	58.8	63.4
2011–12	**5.4**	4.8	6.2	**25.2**	23.9	26.6	**65.9**	64.4	67.3
2012	**5.2**	**4.2**	**6.5**	**28.2**	**25.6**	**31.0**	**62.6**	**59.7**	**65.3**
Females									
2005	**5.4**	4.6	6.2	**28.9**	27.1	30.7	**63.4**	61.5	65.3
2006	**5.6**	4.8	6.5	**28.1**	26.3	29.9	**62.8**	60.9	64.6
2007	**4.9**	4.2	5.8	**29.9**	28.0	31.8	**60.4**	58.4	62.3
2008	**5.4**	5.0	5.8	**27.9**	27.0	28.9	**62.4**	61.4	63.4
2009	**5.7**	4.9	6.6	**26.4**	24.8	28.1	**63.3**	61.6	65.1
2010	**6.2**	5.5	7.1	**32.1**	30.2	34.1	**57.1**	55.1	59.1
2011–12	**5.6**	5.1	6.2	**28.2**	27.1	29.4	**61.7**	60.5	62.9
2012	**6.6**	**5.3**	**8.1**	**28.1**	**25.9**	**30.4**	**60.3**	**57.8**	**62.8**
Persons									
2005	**5.9**	5.3	6.7	**28.4**	27.0	29.8	**63.5**	62.0	65.0
2006	**5.4**	4.7	6.1	**27.8**	26.4	29.3	**63.3**	61.8	64.8
2007	**4.8**	4.3	5.5	**29.1**	27.6	30.6	**61.8**	60.2	63.4
2008	**5.3**	4.9	5.6	**27.9**	27.2	28.7	**62.8**	62.0	63.6
2009	**5.8**	5.2	6.5	**26.4**	25.1	27.7	**63.4**	62.0	64.8
2010	**6.2**	5.6	6.9	**30.2**	28.8	31.7	**59.1**	57.5	60.6
2011–12	**5.5**	5.1	6.0	**26.7**	25.9	27.6	**63.7**	62.8	64.7
2012	**5.9**	**5.1**	**6.9**	**28.2**	**26.4**	**30.0**	**61.4**	**59.5**	**63.3**

LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Data are age-standardised to the 2011 Victorian population.
Ordinary least squares regression was used to test for trends over time.

Figure 3.7: Prevalence (%) of different physical activity levels, Victoria, 2005–2012



LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Data are age-standardised to the 2011 Victorian population.
Ordinary least squares regression was used to test for trends over time.

Table 3.44 shows physical activity levels categorised by whether the level of physical activity met Australian guidelines, by departmental region and sex, adjusted for age.

There were no significant differences in the proportions of men, women and people living in any of the regions who engaged in sedentary behaviour compared with the proportion in all Victorian men, women and people.

The proportion of women and people residing in Barwon-South Western Region who reported insufficient physical activity was significantly *lower* than the proportion in all Victorian women and people, respectively. However, there were significantly *higher* proportions of women and people resident in Barwon-South Western Region and people resident in Gippsland Region who reported sufficient physical activity compared with the proportion in all Victorian women and people, respectively.

Table 3.44: Physical activity,[a] by Department of Health and Human Services region and sex, Victoria, 2012

	Physical activity status								
	Sedentary			Insufficient			Sufficient		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Metropolitan males									
Eastern Metropolitan	**4.5**	3.1	6.6	**31.6**	26.5	37.2	**60.8**	55.3	66.2
North & West Metropolitan	**7.0**	4.8	10.1	**27.1**	22.8	31.9	**61.1**	55.9	66.0
Southern Metropolitan	**3.7***	2.1	6.2	**29.2**	23.6	35.4	**64.5**	58.3	70.3
Total	**5.5**	4.2	7.1	**28.5**	25.3	31.9	**62.4**	58.8	65.8
Rural males									
Barwon-South Western	**3.7**	2.4	5.6	**22.4**	17.8	27.8	**68.8**	62.9	74.2
Gippsland	**3.9***	2.1	7.2	**22.0**	17.5	27.2	**70.7**	64.8	75.9
Grampians	**7.4**	4.7	11.5	**30.5**	23.9	38.1	**59.1**	51.6	66.1
Hume	**4.5**	2.9	6.8	**34.2**	25.2	44.6	**53.9**	43.9	63.6
Loddon Mallee	**3.8**	2.4	5.8	**29.6**	22.8	37.4	**61.8**	54.2	69.0
Total	**4.5**	3.6	5.6	**27.5**	24.1	31.2	**63.2**	59.4	66.8
All males									
Total	**5.2**	**4.2**	**6.5**	**28.2**	**25.6**	**31.0**	**62.6**	**59.7**	**65.3**
Metropolitan females									
Eastern Metropolitan	**5.1**	3.6	7.0	**30.8**	25.9	36.3	**61.9**	56.5	67.1
North & West Metropolitan	**7.1**	4.9	10.2	**31.1**	26.8	35.9	**55.9**	51.0	60.8
Southern Metropolitan	**7.2***	4.3	11.7	**25.1**	20.8	29.9	**61.8**	56.0	67.2
Total	**6.7**	5.2	8.7	**29.2**	26.5	32.2	**59.3**	56.1	62.4
Rural females									
Barwon-South Western	**4.9**	3.5	7.0	**19.3**	15.5	23.8	**69.5**	64.6	74.1
Gippsland	**5.7**	4.1	7.9	**24.3**	20.3	28.7	**65.6**	60.8	70.1
Grampians	**8.3**	5.4	12.5	**26.5**	22.0	31.6	**61.3**	55.8	66.6
Hume	**5.6**	4.1	7.7	**25.8**	20.9	31.3	**62.1**	56.5	67.4
Loddon Mallee	**5.8**	4.1	8.3	**26.6**	22.1	31.7	**59.7**	54.3	64.8
Total	**6.0**	5.0	7.1	**24.3**	22.2	26.5	**63.9**	61.4	66.3
All females									
Total	**6.6**	**5.3**	**8.1**	**28.1**	**25.9**	**30.4**	**60.3**	**57.8**	**62.8**
Metropolitan people									
Eastern Metropolitan	**4.8**	3.7	6.2	**31.0**	27.3	35.1	**61.6**	57.5	65.5
North & West Metropolitan	**7.0**	5.4	9.1	**29.1**	26.0	32.5	**58.6**	55.0	62.1
Southern Metropolitan	**5.6**	3.7	8.4	**26.8**	22.9	31.1	**63.3**	58.9	67.4
Total	**6.1**	5.0	7.3	**28.9**	26.7	31.1	**60.9**	58.5	63.2
Rural people									
Barwon-South Western	**4.3**	3.3	5.6	**21.4**	17.9	25.3	**68.5**	64.3	72.5
Gippsland	**4.9**	3.6	6.8	**23.2**	20.2	26.5	**68.0**	64.4	71.5
Grampians	**8.1**	5.8	11.2	**28.7**	24.5	33.2	**59.9**	55.1	64.5
Hume	**5.1**	3.9	6.6	**30.3**	24.6	36.7	**57.9**	51.6	63.9
Loddon Mallee	**4.8**	3.7	6.3	**28.0**	23.9	32.7	**60.9**	56.2	65.4
Total	**5.3**	4.6	6.0	**25.9**	23.9	28.1	**63.5**	61.2	65.7
All people									
Total	**5.9**	**5.1**	**6.9**	**28.2**	**26.4**	**30.0**	**61.4**	**59.5**	**63.3**

a Based on DoHA (1999) guidelines.
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 3.45 presents levels of physical activity, adjusted for age, by selected socioeconomic determinants, modifiable risk factors and health status and sex.

Sedentary behaviour

When compared with all Victorian men and women, there was a significantly *higher* proportion of men and women who engaged in sedentary behaviour with the following characteristics:

- primary or no education
- fair or poor health status.

When compared with all Victorian men, there were significantly *higher* proportions of men who engaged in sedentary behaviour with the following characteristic:

- current smoker.

When compared with all Victorian women, there were significantly *higher* proportions of women who engaged in sedentary behaviour with the following characteristic:

- high levels of psychological distress.

When compared with all Victorian men and women, there were significantly *lower* proportions of men and women who engaged in sedentary behaviour with the following characteristic:

- excellent or very good health status.

Sufficient physical activity

When compared with all Victorian men and women, there were significantly *higher* proportions of men and women who were sufficiently physically active with the following characteristic:

- excellent or very good health status.

When compared with all Victorian women, there were significantly *higher* proportions of women who were sufficiently physically active with the following characteristics:

- employed
- total annual household income of $100,000 or more
- complied with both fruit and vegetable consumption guidelines
- complied with vegetable compliance guidelines only
- increased lifetime risk of alcohol related harm.

When compared with all Victorian men and women, there were significantly *lower* proportions of men and women who were sufficiently physically active with the following characteristics:

- primary or no education
- fair or poor self-reported health status.

When compared with all Victorian men, there were significantly *lower* proportions of men who were sufficiently physically active with the following characteristics:

- very high levels of psychological distress
- underweight.

Table 3.45 (revised): Physical activity level,[a] by selected socioeconomic determinants, modifiable risk factors, conditions and sex, Victoria, 2012

	Physical activity status in males						Physical activity status in Females					
	Sedentary			Sufficient			Sedentary			Sufficient		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Victoria	**5.2**	**4.2**	**6.5**	**62.6**	**59.7**	**65.3**	**6.6**	**5.3**	**8.1**	**60.3**	**57.8**	**62.8**
Country of birth												
Australia	**4.5**	3.6	5.7	**66.0**	62.8	69.0	**6.2**	5.0	7.7	**63.3**	60.7	65.9
Overseas	**6.4**	4.5	9.1	**55.1**	48.7	61.4	**7.5**	5.0	11.1	**52.6**	46.6	58.5
Language spoken at home												
English only	**3.9**	3.1	4.9	**66.3**	63.3	69.1	**5.8**	4.7	7.0	**64.8**	62.3	67.3
Language other than English	**9.2**	6.4	13.1	**53.6**	47.2	59.9	**8.1**	5.4	12.0	**49.0**	43.6	54.4
Metro-Rural regions												
Rural	**4.5**	3.6	5.6	**63.2**	59.4	66.8	**6.0**	5.0	7.1	**63.9**	61.4	66.3
Metropolitan	**5.5**	4.2	7.1	**62.4**	58.8	65.8	**6.7**	5.2	8.7	**59.3**	56.1	62.4
Level of education												
None or Primary	**17.8**	12.5	24.8	**15.7**	12.2	19.9	**17.9**	14.9	21.4	**33.7**	27.6	40.5
Secondary	**8.2**	6.1	11.0	**56.4**	50.7	61.8	**6.6**	5.0	8.7	**53.8**	49.4	58.2
TAFE or Tertiary	**3.3**	2.4	4.5	**66.2**	62.6	69.6	**5.6**	4.3	7.4	**63.8**	60.5	67.1
Employment status (<65 years)												
Employed	**3.7**	2.6	5.2	**65.6**	61.8	69.2	**4.5**	3.3	6.2	**66.7**	63.0	70.3
Unemployed	**4.3***	1.6	11.0	**69.6**	55.4	80.8	**8.2***	3.4	18.6	**58.7**	46.7	69.6
Not in labour force	**9.5***	5.4	16.1	**55.2**	44.7	65.3	**5.5**	3.4	8.9	**61.8**	56.2	67.2
Total annual household income ($)												
<40,000	**7.5***	4.5	12.2	**54.4**	47.5	61.2	**8.3**	5.4	12.5	**49.3**	43.9	54.7
40,000 to <100,000	**5.0**	3.5	7.1	**62.2**	57.5	66.6	**6.2**	4.4	8.5	**64.8**	60.3	69.0
100,000, or more	**3.9**	2.4	6.2	**66.4**	61.4	71.0	**4.0***	1.9	8.2	**70.8**	65.5	75.5
Psychological distress (K10 score) [b]												
Low (K10 score <16)	**4.4**	3.4	5.8	**63.0**	59.1	66.7	**5.4**	3.9	7.6	**62.1**	58.8	65.3
Moderate (K10 score 16 to 21)	**6.4**	4.4	9.3	**68.3**	63.1	73.1	**6.5**	4.7	9.0	**62.7**	57.6	67.6
High (K10 score 22 to 29)	**9.1***	4.9	16.4	**61.6**	53.0	69.6	**13.6**	8.4	21.1	**52.3**	44.5	60.0
Very high (K10 score ≥30)	**9.2***	4.2	19.1	**45.7**	36.7	55.0	**9.3**	5.9	14.3	**58.2**	50.1	65.9
Compliance with fruit & vegetable consumption guidelines [c]												
Both	**7.5***	4.1	13.3	**67.9**	60.3	74.6	**3.3***	1.5	7.2	**74.3**	67.9	79.8
Vegetable only [d]	**7.0***	3.5	13.6	**70.9**	60.5	79.4	**4.2***	2.4	7.3	**75.3**	70.4	79.6
Fruit only [d]	**3.7**	2.5	5.3	**69.0**	64.7	73.0	**4.5**	3.3	6.1	**64.7**	61.1	68.1
Neither	**6.1**	4.7	7.9	**58.9**	55.0	62.7	**8.8**	6.8	11.4	**54.9**	51.2	58.6
Smoking status												
Current smoker	**9.6**	6.7	13.5	**57.1**	51.3	62.7	**7.7***	4.4	13.1	**57.6**	51.0	64.0
Ex-smoker	**4.2**	2.9	5.9	**65.2**	58.7	71.2	**7.5***	4.2	13.1	**66.2**	60.8	71.2
Non-smoker	**4.4**	3.1	6.2	**62.8**	58.7	66.7	**6.2**	4.9	7.9	**59.6**	56.6	62.6
Lifetime risk of alcohol related harm (2009) [e]												
Abstainer / no longer drinks alcohol	**4.9**	3.3	7.4	**53.2**	44.3	61.8	**11.3**	7.7	16.3	**50.1**	44.0	56.2
Reduced risk	**5.1**	3.2	8.1	**57.1**	48.5	65.2	**5.8**	4.3	7.6	**60.2**	54.3	65.8
Increased risk	**5.4**	4.1	7.1	**65.6**	62.3	68.7	**4.4**	3.3	5.9	**67.4**	64.3	70.3
Self-reported health												
Excellent / Very Good	**2.0**	1.4	2.8	**70.6**	66.2	74.6	**3.8**	2.8	5.1	**70.5**	67.4	73.4
Good	**5.8**	4.2	7.9	**60.6**	56.2	64.8	**7.4**	5.3	10.4	**52.6**	48.3	56.8
Fair / Poor	**12.5**	8.2	18.5	**45.6**	38.5	53.0	**13.5**	8.9	19.9	**43.4**	35.9	51.3
BMI category [f]												
Underweight	**0.0**	.	.	**39.0**	29.9	49.0	**	**	**	**66.5**	56.5	75.2
Normal	**4.5**	3.2	6.2	**66.9**	62.6	71.0	**5.3**	3.6	7.7	**64.7**	61.2	68.1
Overweight	**4.2**	2.9	5.9	**64.0**	59.4	68.4	**6.4**	4.6	8.8	**59.0**	53.3	64.5
Obese	**8.0**	5.4	11.5	**56.2**	49.0	63.2	**9.1**	6.0	13.7	**55.9**	47.8	63.8
Diabetes												
No diabetes	**4.9**	3.9	6.2	**62.8**	59.9	65.7	**6.4**	5.1	7.9	**60.5**	57.9	63.0
Diabetes	**5.5**	3.6	8.3	**57.6**	50.2	64.6	**9.1***	4.5	17.3	**61.8**	50.2	72.2
Depression												
Yes	**3.0**	1.9	4.6	**66.2**	60.6	71.4	**7.4**	5.3	10.1	**61.7**	57.0	66.1
No	**5.6**	4.4	7.0	**62.2**	58.9	65.4	**6.3**	4.8	8.1	**60.0**	57.0	62.9

a Based on DoHA (1999) guidelines.
b Based on the Kessler 10 scale for psychological distress.
c Based on NHMRC (2003) guidelines.
d Includes those meeting both guidelines.
e NHMRC (2009) guidelines.
f Based on Body Mass Index (BMI).

Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: **above**/**below** Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.

When compared with all Victorian women, there were significantly *lower* proportions of women who were sufficiently physically active with the following characteristics:

- speaks a language other than English at home
- total annual household income of less than $40,000
- abstained from alcohol consumption
- good self-reported health status.

The relationship between SES and age-adjusted physical activity levels, using total annual household income as a measure of SES, is presented in Table 3.46.

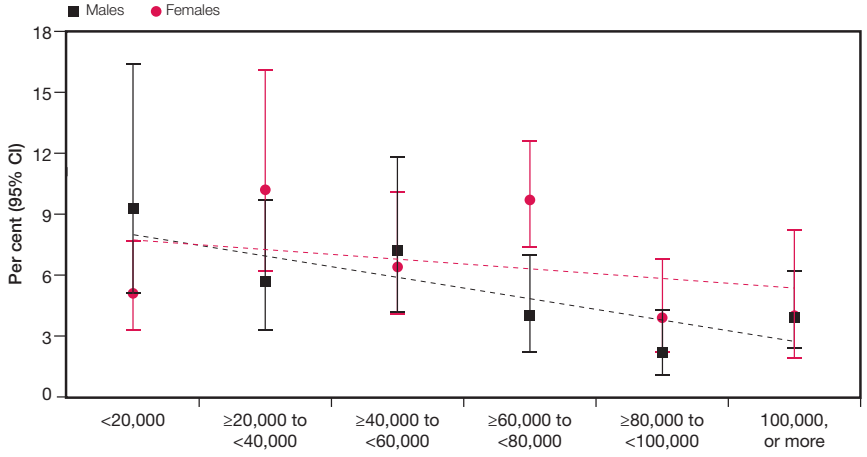
The proportion of men and people, but not women, who engaged in sedentary behaviour significantly *decreased* with increasing total annual household income (Figure 3.8). In contrast, the proportion of men, women and people who were sufficiently physically active significantly *increased* with increasing total annual household income.

Table 3.46: Physical activity status,[a] by total annual household income group and sex, Victoria, 2012

Total annual household income ($)	Sedentary %	Sedentary 95% CI LL	Sedentary 95% CI UL	Insufficient %	Insufficient 95% CI LL	Insufficient 95% CI UL	Sufficient %	Sufficient 95% CI LL	Sufficient 95% CI UL
Males									
<20,000	**9.3***	5.1	16.4	**26.7**	18.5	36.8	**55.4**	45.0	65.3
≥20,000 to <40,000	**5.7***	3.3	9.7	**31.3**	22.2	42.2	**52.6**	44.4	60.7
≥40,000 to <60,000	**7.2***	4.2	11.8	**31.6**	25.5	38.5	**55.5**	48.7	62.1
≥60,000 to <80,000	**4.0***	2.2	7.0	**35.0**	27.3	43.5	**58.4**	49.8	66.5
≥80,000 to <100,000	**2.2***	1.1	4.3	**22.6**	16.0	30.9	**71.2**	62.8	78.3
100,000, or more	**3.9**	2.4	6.2	**28.7**	24.1	33.7	**66.4**	61.4	71.0
Do not know/refused to answer	**7.0**	4.6	10.4	**25.2**	19.8	31.6	**61.7**	53.9	69.0
Total	**5.2**	**4.2**	**6.5**	**28.2**	**25.6**	**31.0**	**62.6**	**59.7**	**65.3**
Females									
<20,000	**5.1**	3.3	7.7	**27.8**	21.3	35.4	**53.6**	45.2	61.8
≥20,000 to <40,000	**10.2**	6.2	16.1	**33.5**	25.3	42.9	**47.8**	41.7	54.0
≥40,000 to <60,000	**6.4**	4.1	10.1	**24.8**	19.1	31.7	**64.5**	57.4	71.1
≥60,000 to <80,000	**9.7**	7.4	12.6	**27.2**	21.5	33.7	**61.8**	55.3	67.9
≥80,000 to <100,000	**3.9***	2.2	6.8	**26.3**	18.9	35.5	**62.5**	54.0	70.4
100,000, or more	**4.0***	1.9	8.2	**18.4**	14.6	22.8	**70.8**	65.5	75.5
Do not know/refused to answer	**9.4**	6.0	14.2	**30.7**	26.3	35.5	**51.9**	46.0	57.6
Total	**6.6**	**5.3**	**8.1**	**28.1**	**25.9**	**30.4**	**60.3**	**57.8**	**62.8**
Persons									
<20,000	**6.8**	4.3	10.4	**25.8**	19.0	33.9	**55.7**	47.0	64.0
≥20,000 to <40,000	**8.1**	5.5	11.8	**31.4**	25.2	38.4	**52.6**	45.7	59.5
≥40,000 to <60,000	**7.3**	5.0	10.6	**28.3**	23.7	33.4	**59.4**	54.0	64.5
≥60,000 to <80,000	**6.3**	4.4	8.9	**30.2**	25.3	35.5	**61.4**	56.1	66.4
≥80,000 to <100,000	**3.4**	2.1	5.4	**24.5**	19.1	30.9	**68.5**	61.9	74.5
100,000, or more	**4.0**	2.8	5.8	**26.2**	22.5	30.2	**68.3**	64.4	72.0
Do not know/refused to answer	**8.4**	5.9	11.7	**28.1**	24.6	31.9	**56.0**	51.3	60.6
Total	**5.9**	**5.1**	**6.9**	**28.2**	**26.4**	**30.0**	**61.4**	**59.5**	**63.3**

a Based on DoHA (1999) guidelines.
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Figure 3.8: Prevalence (%) of sedentary behaviour,[a] by total annual household income group and sex, Victoria, 2012



a Based on DoHA (1999) guidelines.
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

3.7.2 Physical activity associated with occupation

Respondents who were employed were asked whether their work activities were best described as 'mostly sitting or standing', 'mostly walking' or mostly 'heavy labour or physically demanding work'.

Table 3.47 shows physical activity associated with occupation, by age group and sex, with 'Total' not adjusted for age.

Table 3.47: Occupational physical activity, by age group and sex, Victoria, 2012

Age group (years)	Sitting			Standing			Walking			Heavy labour, physically demanding work		
	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL
Males												
18–24	12.4*	5.9	24.1	36.8	25.0	50.5	12.5*	6.2	23.6	38.3	26.4	51.8
25–34	54.6	44.2	64.6	13.4*	8.1	21.5	10.8*	5.9	19.1	21.0	13.8	30.6
35–44	50.9	44.5	57.2	14.9	10.3	21.1	16.2	12.3	21.2	17.1	13.0	22.1
45–54	52.5	46.5	58.4	12.6	9.2	17.1	13.1	9.6	17.5	20.9	16.3	26.5
55–64	49.8	44.0	55.7	15.2	11.5	19.7	17.6	13.6	22.4	15.3	11.7	19.8
65+	40.3	31.1	50.2	22.0	14.5	31.9	18.0	11.6	26.9	17.0	11.4	24.7
Total	47.5	43.8	51.2	16.7	14.0	19.7	14.1	11.8	16.7	20.9	18.0	24.2
Females												
18–24	28.7	17.5	43.3	42.0	27.9	57.6	21.2*	11.3	36.1	5.4*	2.3	12.2
25–34	50.6	40.7	60.6	25.5	17.7	35.3	17.7	11.2	26.8	6.0*	2.7	12.6
35–44	53.3	47.6	58.9	19.4	15.2	24.3	22.2	17.8	27.2	4.4	2.9	6.7
45–54	50.9	46.2	55.6	19.9	16.4	24.0	20.5	17.0	24.5	6.7	4.7	9.5
55–64	46.5	40.9	52.2	24.7	19.8	30.3	20.9	17.0	25.5	6.3	4.4	9.1
65+	44.0	33.1	55.5	16.2*	9.5	26.3	30.5	20.7	42.5	7.5*	4.0	13.6
Total	48.0	44.6	51.4	24.2	21.1	27.5	20.7	18.1	23.6	5.8	4.6	7.3
People												
18–24	20.0	13.4	28.9	39.2	29.8	49.6	16.6	10.4	25.4	22.8	15.8	31.9
25–34	53.0	45.6	60.3	18.2	13.4	24.3	13.6	9.3	19.3	15.0	10.3	21.4
35–44	51.9	47.6	56.3	16.9	13.6	20.8	18.9	15.9	22.4	11.4	9.0	14.4
45–54	51.7	47.9	55.5	16.2	13.6	19.1	16.6	14.1	19.6	14.1	11.4	17.2
55–64	48.3	44.2	52.5	19.5	16.4	23.0	19.1	16.2	22.4	11.2	9.0	13.9
65+	41.6	34.4	49.2	19.9	14.3	27.1	22.5	16.8	29.5	13.6	9.6	18.9
Total	47.7	45.2	50.3	20.0	18.0	22.3	17.0	15.3	18.9	14.2	12.4	16.2

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 3.48 shows physical activity associated with occupation, by departmental region and sex, adjusted for age.

Significantly *higher* proportions of men and women who reported doing mostly heavy labour or physically demanding work lived in rural regions.

In contrast, significantly *higher* proportions of men and women who reported being mostly physical inactive at work (mostly sitting) lived in metropolitan regions .

A significantly *lower* proportion of men, women and people residing in Gippsland and Hume regions, and women and people residing in Barwon-South Western Region, reported mostly sitting at work compared with the proportion in all Victorian men, women and people, respectively.

A significantly *higher* proportion of people who reported doing mostly heavy labour or physically demanding work lived in rural regions as a whole and in Gippsland and Hume regions in particular. In contrast, there was a significantly *lower* proportion in women who reported doing mostly heavy labour or physically demanding work residing in North & West and Southern Metropolitan regions compared with the proportion in all Victorian women.

There were no significant differences in the proportions of people who reported 'mostly standing' at work in any region compared with the corresponding proportion in Victoria, or between rural and metropolitan regions. The exception being women residing in Grampians Region, in whom a significantly lower proportion reported standing at work compared with the proportion in all Victorian women.

The proportion of people who reported 'mostly walking' at work was significantly *higher* in those who lived in rural regions. A significantly *higher* proportion of men and people resident in Hume Region, and women resident in Gippsland Region, also reported walking at work compared with all Victorian men, people and women, respectively.

Table 3.48: Occupational physical activity, by Department of Health and Human Services region and sex, Victoria, 2012

	Sitting			Standing			Walking			Heavy labour, physically demanding work		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males												
Eastern Metropolitan	**52.4**	45.6	59.1	**15.5**	11.0	21.4	**11.6**	7.2	18.3	**16.6**	11.1	24.3
North & West Metropolitan	**41.6**	35.9	47.6	**16.7**	12.2	22.4	**15.2**	10.4	21.6	**17.7**	12.5	24.5
Southern Metropolitan	**43.6**	36.5	51.0	**21.1**	15.0	28.9	**10.2**	6.8	15.0	**22.0**	15.8	29.6
Total	**48.2**	43.8	52.8	**19.8**	15.9	24.4	**12.7**	9.7	16.5	**18.6**	15.2	22.5
Rural males												
Barwon-South Western	**35.0**	27.7	43.0	**21.9**	15.9	29.3	**15.1***	8.9	24.3	**23.8**	16.8	32.6
Gippsland	**32.9**	26.6	39.9	**16.3**	11.2	23.2	**17.8**	13.1	23.8	**27.7**	21.0	35.4
Grampians	**34.5**	28.1	41.6	**18.1**	12.0	26.3	**18.6**	12.7	26.4	**24.1**	17.2	32.6
Hume	**26.7**	19.9	34.8	**11.9***	7.2	19.1	**34.0**	27.1	41.7	**26.5**	20.8	33.1
Loddon Mallee	**39.6**	33.0	46.7	**13.8**	8.9	20.7	**20.2**	14.3	27.8	**23.2**	16.5	31.6
Total	**33.7**	30.1	37.6	**16.7**	13.7	20.2	**20.6**	16.9	24.8	**27.4**	23.8	31.3
All males												
Total	**44.5**	**40.9**	**48.3**	**17.9**	**15.1**	**21.1**	**15.2**	**12.7**	**18.0**	**21.4**	**18.3**	**25.0**
Metropolitan females												
Eastern Metropolitan	**54.0**	46.8	61.1	**14.9**	10.2	21.3	**20.5**	14.9	27.5	**9.4***	5.3	16.1
North & West Metropolitan	**44.8**	38.6	51.2	**29.3**	22.5	37.2	**18.6**	12.9	26.2	**1.9***	1.0	3.6
Southern Metropolitan	**47.2**	39.3	55.2	**26.1**	19.7	33.8	**20.1**	14.3	27.4	**2.7***	1.3	5.2
Total	**51.3**	46.8	55.7	**24.0**	20.1	28.4	**19.2**	15.6	23.4	**4.3**	2.7	6.7
Rural females												
Barwon-South Western	**32.2**	26.0	39.1	**24.1**	18.3	31.0	**27.4**	22.3	33.1	**9.4**	6.1	14.2
Gippsland	**31.4**	25.3	38.2	**18.0**	13.1	24.3	**37.1**	31.5	43.0	**12.7**	8.8	18.0
Grampians	**41.5**	34.5	48.8	**14.1**	9.9	19.5	**26.2**	19.3	34.4	**12.0***	6.9	20.0
Hume	**29.1**	21.9	37.7	**22.5**	15.0	32.3	**29.8**	21.0	40.2	**12.9**	9.7	17.1
Loddon Mallee	**36.9**	30.1	44.3	**23.1**	17.4	30.1	**22.4**	17.0	28.9	**10.3**	6.3	16.4
Total	**36.4**	32.6	40.4	**22.3**	18.9	26.1	**27.0**	23.5	30.8	**12.6**	9.9	15.9
All females												
Total	**45.8**	**42.0**	**49.6**	**23.4**	**20.2**	**27.0**	**21.2**	**18.3**	**24.6**	**7.6**	**5.7**	**10.1**
Metropolitan people												
Eastern Metropolitan	**53.1**	47.7	58.4	**15.7**	11.9	20.5	**14.7**	10.9	19.5	**12.6**	8.8	17.8
North & West Metropolitan	**42.0**	37.8	46.3	**21.4**	17.4	26.0	**16.2**	12.4	20.9	**11.0**	7.7	15.6
Southern Metropolitan	**45.3**	39.6	51.1	**23.8**	18.8	29.7	**14.8**	10.9	19.7	**13.1**	9.5	17.9
Total	**49.3**	45.7	53.0	**22.4**	19.0	26.2	**15.3**	12.7	18.4	**12.0**	9.8	14.5
Rural people												
Barwon-South Western	**34.0**	28.7	39.7	**24.1**	19.1	29.9	**19.9**	15.5	25.2	**17.8**	13.2	23.6
Gippsland	**32.5**	27.6	37.8	**17.7**	13.2	23.2	**24.2**	19.0	30.2	**23.3**	17.9	29.7
Grampians	**38.6**	33.7	43.7	**17.3**	12.7	23.0	**21.3**	16.8	26.7	**18.5**	13.9	24.3
Hume	**27.0**	21.7	33.1	**15.5**	11.4	20.9	**33.8**	27.8	40.5	**22.7**	18.1	28.2
Loddon Mallee	**39.9**	34.5	45.7	**17.3**	13.5	22.0	**21.2**	16.9	26.3	**17.6**	13.2	23.1
Total	**34.6**	32.0	37.4	**19.2**	16.8	21.8	**23.4**	20.6	26.4	**20.9**	18.3	23.7
All people												
Total	**45.0**	**42.1**	**47.9**	**20.4**	**18.2**	**22.9**	**17.9**	**15.8**	**20.1**	**15.3**	**13.1**	**17.7**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

3.8 Overweight and obesity

Obesity is an excess accumulation of body fat and is a significant risk factor for hypertension, cardiovascular disease, type 2 diabetes, gallbladder disease, musculoskeletal disorders (especially osteoarthritis), some cancers (endometrial, breast and colon), psychosocial disorders and breathing difficulties (WHO 2013). Ultimately, being obese can lead to disability and/or premature death.

Measurement of excess body fat as a risk factor for chronic disease is not simple because both the amount of overall fat and its anatomical distribution contribute to chronic disease development and progression. At the population level, a common indicator of excess weight (approximating body fat) is the body mass index (BMI). However, BMI is a poor indicator of the percentage of body fat as it cannot distinguish between body fat and muscle. Therefore an individual who is very muscular with low body fat could have a high BMI estimate and be classified as obese. Nevertheless self-reported data still has a place in monitoring the health of a population because such data are relatively inexpensive and easy to collect, and can be used to track changes over time.

The BMI provides a measure of body weight in relation to height that can be used to estimate levels of unhealthy weight in a population. It is calculated as weight in kilograms divided by height in metres squared: BMI = weight (kg)/height (m^2).

Table 3.49 shows the World Health Organization classifications for adult body weight status based on BMI scores.

It is important to note that studies comparing self-reported height and weight with actual physical measurements have shown that people tend to underestimate their weight or overestimate their height, resulting in an overall underestimation of their BMI (Elgar & Stewart 2008). Therefore estimates of the prevalence of overweight and obesity in a population that are based on self-reported data are likely to be an underestimate.

Table 3.49: World Health Organization classifications for adult body weight

BMI (kg/m^2)	Weight category
< 18.5	Underweight
18.5–24.9	Normal
25.0–29.9	Overweight
30.0–34.9	Obese class I
35.0–39.9	Obese class II
≥ 40.0	Obese class III

Sources: WHO 2000; 2013

Table 3.50 shows the body weight status of the population, by age group and sex, with 'Total' not adjusted for age.

In 2012, 43.1 per cent of Victorian men and 26.9 per cent of women were overweight, while 18.5 per cent of men and 17.4 per cent of women were obese.

Men, women and people aged 18–24 years had a significantly *lower* prevalence of overweight and obesity compared with all men, women and people, respectively.

Women and people aged 55–64 years had a significantly *higher* prevalence of obesity compared with the prevalence in all women and people, respectively.

Table 3.50: Body weight status,[a] by age group and sex, Victoria, 2012

Age group (years)	Underweight			Normal			Overweight			Obese		
	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL
Males												
18–24	**	**	**	54.9	44.8	64.6	28.8	20.5	38.9	6.7*	3.1	13.8
25–34	**	**	**	33.9	25.4	43.5	39.2	30.0	49.3	23.4	15.7	33.3
35–44	**	**	**	31.4	26.0	37.4	48.8	42.7	55.0	17.2	13.3	22.0
45–54	1.5*	0.6	3.5	29.0	24.2	34.3	44.4	39.0	50.0	22.0	17.8	26.8
55–64	**	**	**	25.4	21.5	29.8	48.0	43.2	52.9	23.6	19.5	28.1
65+	0.9*	0.4	2.0	32.1	28.6	35.8	47.3	43.5	51.1	15.7	13.2	18.6
Total	**0.9***	**0.5**	**1.6**	**33.9**	**31.1**	**36.8**	**43.1**	**40.2**	**46.1**	**18.5**	**16.3**	**20.9**
Females												
18–24	7.8*	3.7	15.9	65.6	54.6	75.2	13.5*	7.4	23.4	4.4*	1.7	10.6
25–34	4.5*	2.1	9.4	48.2	40.3	56.3	26.6	19.9	34.6	14.9	10.2	21.3
35–44	3.5*	1.8	6.6	46.4	41.6	51.3	26.7	22.6	31.2	18.0	14.5	22.2
45–54	1.3*	0.6	2.9	40.8	36.7	45.0	27.5	23.8	31.4	21.2	17.9	25.0
55–64	1.0*	0.5	1.8	35.8	31.8	39.9	31.6	28.0	35.5	23.0	19.8	26.6
65+	2.0*	1.2	3.3	34.3	31.4	37.4	31.7	28.8	34.7	20.1	17.6	22.9
Total	**3.2**	**2.3**	**4.5**	**44.3**	**41.8**	**46.8**	**26.9**	**24.8**	**29.0**	**17.4**	**15.8**	**19.2**
People												
18–24	4.6*	2.4	8.9	60.1	52.7	67.1	21.3	15.8	28.2	5.5*	3.1	9.8
25–34	2.7*	1.3	5.5	41.0	35.0	47.4	33.0	27.1	39.4	19.2	14.5	25.0
35–44	1.9*	1.0	3.5	39.0	35.3	42.9	37.6	33.8	41.5	17.6	14.9	20.7
45–54	1.4*	0.8	2.5	35.0	31.7	38.3	35.8	32.5	39.3	21.6	18.9	24.6
55–64	0.6*	0.3	1.1	30.7	27.9	33.7	39.7	36.6	42.8	23.3	20.7	26.1
65+	1.5	1.0	2.3	33.3	31.1	35.7	38.8	36.4	41.2	18.1	16.3	20.1
Total	**2.1**	**1.5**	**2.8**	**39.2**	**37.3**	**41.1**	**34.8**	**33.0**	**36.7**	**18.0**	**16.6**	**19.4**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

The trend of the age-adjusted prevalence of underweight, normal weight, overweight and obesity over time is presented in Table 3.51 and Figure 3.9.

The prevalence of underweight and normal weight in men, women and people declined significantly between 2003 and 2012.

In contrast, the prevalence of overweight significantly increased in people but not men or women independently. However, the prevalence of obesity increased significantly in men, women and people during this period.

Table 3.51: Body weight status[a] from 2003 to 2012, by sex, Victoria

	Underweight (< 18.5 kg/m²)			Normal (18.5–24.9 kg/m²)			Overweight (25.0–29.9 kg/m²)			Obese (≥ 30.0 kg/m²)		
Survey year	%	95% CI LL	UL	%	95% CI LL	UL	%	95% CI LL	UL	%	95% CI LL	UL
Males												
2003	**1.8**	1.2	2.6	**42.6**	40.3	44.9	**38.9**	36.7	41.2	**14.2**	12.7	15.8
2004	**1.6**	1.1	2.5	**40.6**	38.3	42.9	**41.2**	38.9	43.6	**14.0**	12.5	15.6
2005	**1.6**	1.1	2.3	**41.2**	38.8	43.7	**39.1**	36.8	41.4	**15.1**	13.5	16.8
2006	**0.7***	0.4	1.1	**40.0**	37.5	42.5	**39.9**	37.5	42.3	**16.1**	14.5	17.8
2007	**1.2***	0.7	2.1	**39.3**	36.9	41.9	**40.9**	38.4	43.4	**15.7**	14.1	17.4
2008	**0.9**	0.7	1.2	**38.8**	37.5	40.1	**39.8**	38.6	41.1	**17.2**	16.3	18.2
2009	**1.4**	0.9	2.1	**35.6**	33.4	37.9	**39.6**	37.4	41.8	**18.4**	16.7	20.2
2010	**0.6***	0.3	1.0	**34.4**	32.0	36.9	**40.8**	38.5	43.3	**18.5**	16.7	20.5
2011–12	**1.1**	0.8	1.5	**36.4**	34.9	37.9	**40.9**	39.4	42.4	**17.6**	16.5	18.7
2012	**1.0***	**0.5**	**1.8**	**33.9**	**31.2**	**36.7**	**43.4**	**40.5**	**46.3**	**18.0**	**16.0**	**20.3**
Females												
2003	**5.0**	4.1	6.0	**51.9**	50.0	53.9	**23.9**	22.3	25.6	**13.7**	12.4	15.0
2004	**5.3**	4.4	6.3	**49.2**	47.3	51.1	**23.0**	21.5	24.5	**14.7**	13.5	16.1
2005	**3.6**	2.9	4.6	**48.6**	46.6	50.6	**25.6**	24.0	27.4	**16.0**	14.6	17.5
2006	**3.1**	2.5	3.9	**50.2**	48.2	52.1	**24.6**	23.0	26.2	**14.5**	13.3	15.9
2007	**2.8**	2.2	3.6	**47.9**	45.8	49.9	**25.1**	23.4	26.9	**15.1**	13.8	16.4
2008	**3.6**	3.1	4.1	**48.1**	47.0	49.1	**24.2**	23.4	25.1	**16.1**	15.4	16.8
2009	**3.5**	2.7	4.4	**48.3**	46.4	50.2	**22.3**	20.9	23.7	**16.1**	14.9	17.5
2010	**2.9**	2.2	3.7	**45.2**	43.2	47.2	**25.8**	24.1	27.5	**15.2**	14.0	16.5
2011–12	**3.5**	2.9	4.1	**45.2**	44.0	46.5	**24.8**	23.9	25.8	**17.3**	16.5	18.1
2012	**3.1**	**2.2**	**4.4**	**45.2**	**42.7**	**47.7**	**26.4**	**24.3**	**28.6**	**17.0**	**15.4**	**18.7**
Persons												
2003	**3.4**	2.9	4.1	**47.4**	45.9	48.9	**31.1**	29.7	32.6	**13.9**	12.9	15.0
2004	**3.4**	2.9	4.1	**45.0**	43.5	46.5	**31.8**	30.4	33.3	**14.4**	13.4	15.5
2005	**2.6**	2.2	3.2	**45.0**	43.4	46.6	**32.2**	30.7	33.6	**15.6**	14.5	16.8
2006	**1.9**	1.6	2.4	**45.2**	43.6	46.8	**32.0**	30.5	33.5	**15.3**	14.3	16.4
2007	**2.0**	1.6	2.6	**43.7**	42.1	45.3	**32.8**	31.3	34.3	**15.4**	14.4	16.5
2008	**2.3**	2.0	2.6	**43.5**	42.7	44.3	**31.9**	31.1	32.6	**16.7**	16.1	17.3
2009	**2.4**	2.0	3.0	**42.1**	40.6	43.5	**30.8**	29.4	32.1	**17.3**	16.2	18.4
2010	**1.7**	1.4	2.2	**39.8**	38.2	41.4	**33.1**	31.7	34.6	**16.9**	15.7	18.0
2011–12	**2.3**	2.0	2.7	**40.8**	39.8	41.8	**32.7**	31.8	33.6	**17.5**	16.8	18.2
2012	**2.1**	**1.5**	**2.8**	**39.5**	**37.6**	**41.5**	**34.7**	**32.9**	**36.6**	**17.6**	**16.3**	**19.0**

a Body mass index (BMI) computed from self-reported height and weight [BMI = weight (kg)/height squared (m²)]
Note that the figures may not add up to 100 per cent due to a proportion of 'don't know' or 'refused responses'.
LL/UL 95% CI = lower/upper limit of 95% confidence interval.
Data are age-standardised to the 2011 Victorian population.
* Estimate has a relative standard error of between 25 and 50 per cent and should be interpreted with caution.
Ordinary least squares regression was used to test for trends over time.

Figure 3.9: Body weight status[a] from 2003 to 2012, Victoria

a Body mass index (BMI) computed from self-reported height and weight [BMI = weight (kg)/height squared (m²)]
Note that the figures may not add up to 100 per cent due to a proportion of 'don't know' or 'refused responses'.
LL/UL 95% CI = lower/upper limit of 95% confidence interval.
Data are age-standardised to the 2011 Victorian population.
* Estimate has a relative standard error of between 25 and 50 per cent and should be interpreted with caution.
Ordinary least squares regression was used to test for trends over time.

Table 3.52 shows the body weight status of Victorians by departmental region and sex, adjusted for age.

There was no significant difference in the prevalence of obesity in men, women and people who lived in rural regions compared with metropolitan regions. Similarly, there were no significant differences in the prevalence of overweight in men, women and people residing in rural or metropolitan regions compared with the prevalence in all Victorian men, women and people, respectively.

Table 3.52: Body weight status,[a] by Department of Health and Human Services region and sex, Victoria, 2012

	Underweight			Normal			Overweight			Obese		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males												
Eastern Metropolitan	**	**	**	**38.1**	31.8	44.8	**45.0**	38.5	51.8	**12.5**	8.7	17.6
North & West Metropolitan	**	**	**	**31.7**	26.7	37.1	**41.0**	35.7	46.4	**22.4**	18.3	27.2
Southern Metropolitan	**	**	**	**35.4**	29.3	42.1	**46.4**	39.6	53.4	**13.6**	10.3	17.7
Total	**1.1***	0.5	2.2	**34.6**	31.2	38.1	**43.5**	39.9	47.2	**17.2**	14.7	20.0
Rural males												
Barwon-South Western	**	**	**	**34.6**	26.4	43.8	**40.1**	33.0	47.7	**17.7**	12.5	24.4
Gippsland	**	**	**	**31.2**	25.0	38.0	**47.8**	40.9	54.7	**18.1**	13.6	23.8
Grampians	**1.8***	0.7	4.5	**36.0**	28.9	43.8	**38.3**	31.3	45.8	**22.1**	16.4	29.0
Hume	**	**	**	**25.7**	19.0	33.8	**46.1**	36.3	56.1	**23.4**	16.7	31.7
Loddon Mallee	**	**	**	**31.8**	25.7	38.6	**44.2**	37.1	51.6	**18.8**	14.2	24.6
Total	**0.6***	0.3	1.1	**31.6**	28.2	35.1	**43.3**	39.7	47.0	**20.2**	17.2	23.6
All males												
Total	**1.0***	**0.5**	**1.8**	**33.9**	**31.2**	**36.7**	43.4	**40.5**	**46.3**	18.0	**16.0**	**20.3**
Metropolitan females												
Eastern Metropolitan	**3.3***	1.6	6.7	**49.0**	43.4	54.7	**24.7**	20.6	29.3	**15.0**	11.6	19.1
North & West Metropolitan	**4.2***	2.3	7.3	**44.6**	39.6	49.7	**25.6**	21.8	29.7	**16.4**	13.6	19.6
Southern Metropolitan	**2.8***	1.5	5.3	**45.7**	40.2	51.3	**28.4**	23.4	34.0	**16.8**	13.2	21.1
Total	**3.5**	2.3	5.1	**46.1**	42.9	49.3	**26.3**	23.7	29.1	**16.2**	14.2	18.3
Rural females												
Barwon-South Western	**	**	**	**44.3**	39.0	49.8	**28.7**	24.0	34.0	**18.8**	15.0	23.2
Gippsland	**1.3***	0.6	2.6	**39.7**	32.5	47.4	**30.2**	23.5	37.8	**17.0**	13.9	20.7
Grampians	**2.7***	1.0	6.8	**37.6**	32.2	43.3	**26.1**	21.5	31.3	**19.3**	15.0	24.3
Hume	**1.9***	0.9	4.1	**45.9**	40.6	51.2	**20.9**	17.2	25.1	**22.8**	18.0	28.3
Loddon Mallee	**2.7***	1.2	6.3	**42.5**	37.6	47.6	**26.8**	22.6	31.6	**19.9**	16.7	23.6
Total	**1.9**	1.2	3.0	**42.4**	39.7	45.1	**26.6**	24.2	29.0	**19.5**	17.6	21.5
All females												
Total	**3.1**	**2.2**	**4.4**	**45.2**	**42.7**	**47.7**	**26.4**	**24.3**	**28.6**	**17.0**	**15.4**	**18.7**
Metropolitan people												
Eastern Metropolitan	**2.0***	1.0	3.7	**43.6**	39.2	48.0	**34.6**	30.5	38.9	**13.9**	11.2	17.2
North & West Metropolitan	**2.4***	1.4	4.0	**38.0**	34.3	41.7	**33.2**	29.8	36.7	**19.6**	17.0	22.6
Southern Metropolitan	**2.5***	1.4	4.4	**40.7**	36.4	45.1	**37.1**	32.8	41.7	**15.2**	12.7	18.2
Total	**2.3**	1.6	3.2	**40.3**	38.0	42.8	**34.7**	32.4	37.0	**16.8**	15.2	18.6
Rural people												
Barwon-South Western	**1.0***	0.4	2.5	**39.8**	34.9	45.0	**34.2**	30.0	38.7	**18.1**	14.7	22.1
Gippsland	**0.8***	0.4	1.6	**34.8**	30.0	39.9	**39.0**	34.0	44.2	**17.9**	14.8	21.5
Grampians	**2.1***	1.0	4.2	**36.5**	32.0	41.2	**32.2**	28.0	36.7	**21.0**	17.2	25.3
Hume	**1.1***	0.5	2.4	**35.6**	30.9	40.6	**33.4**	27.9	39.4	**23.3**	18.6	28.7
Loddon Mallee	**1.7***	0.8	3.5	**36.6**	32.4	41.1	**35.5**	31.1	40.2	**19.9**	16.7	23.5
Total	**1.3**	0.9	1.8	**36.9**	34.7	39.2	**34.9**	32.7	37.1	**19.9**	18.1	21.9
All people												
Total	**2.1**	**1.5**	**2.8**	**39.5**	**37.6**	**41.5**	**34.7**	**32.9**	**36.6**	**17.6**	**16.3**	**19.0**

a Determined by calculation of body mass index (BMI) from self-reported height and weight, BMI = weight (kg)/height squared (m^2).
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 3.53 shows the prevalence of overweight or obesity of Victorian people, by age group and sex, with 'Total' not adjusted for age.

A significantly *higher* proportion of men and people aged 55–64 years and women aged 55 years or older were either overweight or obese compared with the proportion in all Victorian men, people and women, respectively.

Table 3.53: Overweight or obese status, by age group and sex, Victoria, 2012

	Not overweight or obese			Overweigt or obese		
	%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL
Males						
18–24	56.4	46.3	66.0	35.5	26.4	45.7
25–34	**34.8**	26.3	44.4	**62.6**	52.9	71.5
35–44	**31.7**	26.2	37.7	**66.0**	60.0	71.6
45–54	**30.5**	25.6	35.9	**66.4**	61.0	71.5
55–64	25.6	21.7	30.0	71.6	67.1	75.7
65+	**33.0**	29.5	36.7	**63.0**	59.2	66.6
Total	**34.8**	**32.0**	**37.7**	**61.6**	**58.7**	**64.4**
Females						
18–24	73.5	62.6	82.1	17.9	10.9	28.0
25–34	**52.7**	44.7	60.7	**41.6**	33.9	49.7
35–44	**49.9**	45.0	54.7	**44.7**	39.9	49.6
45–54	**42.1**	38.0	46.3	**48.7**	44.5	52.9
55–64	36.7	32.8	40.9	54.6	50.5	58.7
65+	36.3	33.4	39.4	51.8	48.6	55.0
Total	**47.5**	**45.0**	**50.0**	**44.3**	**41.9**	**46.7**
People						
18–24	64.8	57.4	71.5	26.9	20.8	34.0
25–34	**43.7**	37.6	50.1	**52.2**	45.8	58.5
35–44	**40.9**	37.1	44.8	**55.2**	51.3	59.0
45–54	**36.4**	33.1	39.8	**57.4**	54.0	60.8
55–64	31.3	28.4	34.3	62.9	59.8	65.9
65+	34.8	32.5	37.2	**56.9**	54.4	59.3
Total	**41.3**	**39.4**	**43.2**	**52.8**	**50.8**	**54.7**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 3.54 shows the prevalence of overweight or obesity of Victorian people, by departmental region and sex, adjusted for age.

The prevalence of overweight or obesity was not significantly different in men, women and people in any of the departmental regions compared with the prevalence in all Victorian men, women and people, respectively.

Table 3.54: Overweight or obese status, by Department of Health and Human Services region and sex, Victoria, 2012

	Not overweight or obese			Overweigt or obese		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Metropolitan males						
Eastern Metropolitan	**38.7**	32.4	45.4	**57.6**	51.0	63.9
North & West Metropolitan	**32.3**	27.3	37.7	**63.4**	57.9	68.6
Southern Metropolitan	**37.7**	31.3	44.5	**60.0**	53.1	66.5
Total	**35.6**	32.2	39.2	**60.8**	57.2	64.2
Rural males						
Barwon-South Western	**35.3**	27.1	44.5	**57.8**	49.5	65.7
Gippsland	**31.4**	25.3	38.3	**65.9**	59.3	72.0
Grampians	**37.7**	30.5	45.5	**60.4**	52.6	67.6
Hume	**25.8**	19.1	33.8	**69.5**	61.7	76.3
Loddon Mallee	**32.4**	26.3	39.2	**63.0**	56.5	69.0
Total	**32.2**	28.8	35.7	**63.5**	59.9	67.0
All males						
Total	**34.8**	**32.1**	**37.7**	**61.4**	**58.6**	**64.2**
Metropolitan females						
Eastern Metropolitan	**52.4**	46.8	57.9	**39.6**	34.6	44.9
North & West Metropolitan	**48.7**	43.8	53.6	**41.9**	37.6	46.4
Southern Metropolitan	**48.5**	42.9	54.1	**45.2**	39.6	50.9
Total	**49.6**	46.4	52.7	**42.4**	39.5	45.5
Rural females						
Barwon-South Western	**45.5**	40.2	50.9	**47.5**	42.2	52.9
Gippsland	**41.0**	33.7	48.7	**47.2**	39.9	54.6
Grampians	**40.3**	34.9	45.9	**45.4**	40.0	50.9
Hume	**47.8**	42.5	53.1	**43.6**	38.2	49.2
Loddon Mallee	**45.3**	40.5	50.1	**46.7**	41.9	51.6
Total	**44.3**	41.6	47.0	**46.1**	43.4	48.7
All females						
Total	**48.3**	**45.8**	**50.8**	**43.4**	**41.0**	**45.8**
Metropolitan people						
Eastern Metropolitan	**45.6**	41.2	50.0	**48.5**	44.2	52.8
North & West Metropolitan	**40.3**	36.7	44.1	**52.8**	49.1	56.5
Southern Metropolitan	**43.2**	38.9	47.6	**52.4**	47.9	56.8
Total	**42.6**	40.3	45.1	**51.5**	49.1	53.9
Rural people						
Barwon-South Western	**40.9**	35.9	46.0	**52.3**	47.5	57.2
Gippsland	**35.6**	30.8	40.7	**56.9**	51.9	61.8
Grampians	**38.6**	34.1	43.3	**53.2**	48.5	57.9
Hume	**36.7**	31.9	41.6	**56.7**	51.4	61.7
Loddon Mallee	**38.3**	34.1	42.7	**55.3**	51.1	59.5
Total	**38.2**	36.0	40.5	**54.8**	52.5	57.1
All people						
Total	**41.6**	**39.7**	**43.5**	**52.3**	**50.4**	**54.2**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 3.55 shows the extended BMI status, by age group and sex, with 'Total' not adjusted for age.

The prevalence of Class 1 obesity was significantly *higher* in people aged 55–64 years and significantly *lower* in people aged 18–24 years compared with the prevalence in all Victorian people.

The prevalence of Class 2 obesity was significantly *higher* in women aged 55–64 years and significantly *lower* in women age 25–34 years compared with the prevalence in all Victorian women.

There was no significant difference in the prevalence of Class 3 obesity by age group or sex.

Table 3.55: Extended body mass index status, by age group and sex, Victoria, 2012

	Underweight			Normal weight			Overweight			Obese class I			Obese class II			Obese class III		
Age group (years)	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL
Males																		
18–24	**	**	**	54.9	44.8	64.6	28.8	20.5	38.9	4.8*	1.8	11.8	**	**	**	**	**	**
25–34	**	**	**	33.9	25.4	43.5	39.2	30.0	49.3	16.3	10.0	25.6	4.6*	1.7	11.6	**	**	**
35–44	**	**	**	31.4	26.0	37.4	48.8	42.7	55.0	12.2	9.0	16.4	3.6*	1.9	6.7	1.3*	0.5	3.4
45–54	1.5*	0.6	3.5	29.0	24.2	34.3	44.4	39.0	50.0	15.0	11.5	19.3	5.1	3.2	8.2	1.9*	0.8	4.1
55–64	**	**	**	25.4	21.5	29.8	48.0	43.2	52.9	17.7	14.2	21.8	4.0*	2.3	6.7	1.9*	0.9	4.2
65+	0.9*	0.4	2.0	32.1	28.6	35.8	47.3	43.5	51.1	11.8	9.6	14.3	2.6	1.6	4.2	1.4*	0.7	2.5
Total	**0.9***	**0.5**	**1.6**	**33.9**	**31.1**	**36.8**	**43.1**	**40.2**	**46.1**	**13.2**	**11.3**	**15.4**	**3.6**	**2.6**	**4.9**	**1.7***	**1.0**	**2.8**
Females																		
18–24	7.8*	3.7	15.9	65.6	54.6	75.2	13.5*	7.4	23.4	**	**	**	**	**	**	0.0	.	.
25–34	4.5*	2.1	9.4	48.2	40.3	56.3	26.6	19.9	34.6	11.1	7.1	16.9	0.7*	0.3	1.7	3.1*	1.2	7.7
35–44	3.5*	1.8	6.6	46.4	41.6	51.3	26.7	22.6	31.2	11.4	8.6	15.0	3.3	2.0	5.3	3.4*	1.8	6.1
45–54	1.3*	0.6	2.9	40.8	36.7	45.0	27.5	23.8	31.4	13.0	10.4	16.1	5.3	3.5	7.9	3.0	1.8	4.7
55–64	1.0*	0.5	1.8	35.8	31.8	39.9	31.6	28.0	35.5	14.4	11.8	17.5	6.2	4.5	8.5	2.3*	1.4	3.9
65+	2.0*	1.2	3.3	34.3	31.4	37.4	31.7	28.8	34.7	15.0	12.8	17.5	3.9	2.8	5.4	1.2*	0.7	2.1
Total	**3.2**	**2.3**	**4.5**	**44.3**	**41.8**	**46.8**	**26.9**	**24.8**	**29.0**	**11.6**	**10.3**	**13.1**	**3.5**	**2.9**	**4.3**	**2.3**	**1.7**	**3.1**
People																		
18–24	4.6*	2.4	8.9	60.1	52.7	67.1	21.3	15.8	28.2	3.6*	1.7	7.4	**	**	**	**	**	**
25–34	2.7*	1.3	5.5	41.0	35.0	47.4	33.0	27.1	39.4	13.7	9.7	19.0	2.7*	1.1	6.1	2.8*	1.3	6.1
35–44	1.9*	1.0	3.5	39.0	35.3	42.9	37.6	33.8	41.5	11.8	9.6	14.5	3.4	2.3	5.1	2.4*	1.4	3.9
45–54	1.4*	0.8	2.5	35.0	31.7	38.3	35.8	32.5	39.3	14.0	11.8	16.5	5.2	3.8	7.1	2.4	1.6	3.7
55–64	0.6*	0.3	1.1	30.7	27.9	33.7	39.7	36.6	42.8	16.0	13.8	18.5	5.1	3.9	6.8	2.1	1.3	3.4
65+	1.5	1.0	2.3	33.3	31.1	35.7	38.8	36.4	41.2	13.5	11.9	15.3	3.3	2.5	4.3	1.3	0.9	1.9
Total	**2.1**	**1.5**	**2.8**	**39.2**	**37.3**	**41.1**	**34.8**	**33.0**	**36.7**	**12.4**	**11.2**	**13.7**	**3.6**	**3.0**	**4.3**	**2.0**	**1.5**	**2.6**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 3.56 shows the extended BMI status, by departmental region and sex, adjusted for age.

The prevalence of Class 1, 2 and 3 obesity was not significantly different in men, women or people resident in any of the regions compared with the prevalence in all Victorian men, women and people, respectively.

Table 3.56: Extended body mass index status,[a] by Department of Health and Human Services region and sex, Victoria, 2012

	Underweight			Normal weight			Overweight			Obese class I			Obese class II			Obese class III		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males																		
Eastern Metropolitan	**	**	**	**38.1**	31.8	44.8	**45.0**	38.5	51.8	**9.9**	6.5	14.8	**2.0***	0.9	4.3	**	**	**
North & West Metropolitan	**	**	**	**31.7**	26.7	37.1	**41.0**	35.7	46.4	**15.2**	11.7	19.5	**4.7**	3.0	7.4	**2.5***	1.1	5.7
Southern Metropolitan	**	**	**	**35.4**	29.3	42.1	**46.4**	39.6	53.4	**10.1**	7.1	14.1	**2.3***	1.2	4.3	**1.2***	0.6	2.7
Total	**1.1***	0.5	2.2	**34.6**	31.2	38.1	**43.5**	39.9	47.2	**12.3**	10.2	14.8	**3.2**	2.3	4.6	**1.7***	0.9	3.1
Rural males																		
Barwon-South Western	**	**	**	**34.6**	26.4	43.8	**40.1**	33.0	47.7	**11.4**	8.4	15.3	**3.1***	1.4	6.8	**	**	**
Gippsland	**	**	**	**31.2**	25.0	38.0	**47.8**	40.9	54.7	**13.7**	9.8	18.7	**3.5***	1.7	7.0	**	**	**
Grampians	**1.8***	0.7	4.5	**36.0**	28.9	43.8	**38.3**	31.3	45.8	**16.3**	11.5	22.5	**4.5***	2.1	9.3	**	**	**
Hume	**	**	**	**25.7**	19.0	33.8	**46.1**	36.3	56.1	**18.7**	12.4	27.1	**3.0***	1.8	5.0	**1.7***	0.8	3.9
Loddon Mallee	**	**	**	**31.8**	25.7	38.6	**44.2**	37.1	51.6	**15.1**	10.8	20.7	**2.4***	1.2	5.0	**1.3***	0.5	3.2
Total	**0.6***	0.3	1.1	**31.6**	28.2	35.1	**43.3**	39.7	47.0	**15.0**	12.4	18.0	**3.4**	2.4	4.8	**1.8***	0.8	3.8
All males																		
Total	**1.0***	**0.5**	**1.8**	**33.9**	**31.2**	**36.7**	**43.4**	**40.5**	**46.3**	**13.1**	**11.3**	**15.1**	**3.3**	**2.5**	**4.3**	**1.7***	**1.0**	**2.9**
Metropolitan females																		
Eastern Metropolitan	**3.3***	1.6	6.7	**49.0**	43.4	54.7	**24.7**	20.6	29.3	**10.1**	7.5	13.4	**3.4***	1.8	6.4	**1.5***	0.7	3.2
North & West Metropolitan	**4.2***	2.3	7.3	**44.6**	39.6	49.7	**25.6**	21.8	29.7	**10.6**	8.3	13.6	**3.7**	2.6	5.3	**2.0***	1.1	3.5
Southern Metropolitan	**2.8***	1.5	5.3	**45.7**	40.2	51.3	**28.4**	23.4	34.0	**12.1**	9.0	16.1	**2.3***	1.3	4.1	**2.4***	1.2	4.6
Total	**3.5**	2.3	5.1	**46.1**	42.9	49.3	**26.3**	23.7	29.1	**11.0**	9.4	12.9	**3.2**	2.4	4.2	**2.0**	1.4	2.9
Rural females																		
Barwon-South Western	**	**	**	**44.3**	39.0	49.8	**28.7**	24.0	34.0	**13.0**	9.9	16.9	**3.6***	2.1	6.0	**2.2***	0.9	4.9
Gippsland	**1.3***	0.6	2.6	**39.7**	32.5	47.4	**30.2**	23.5	37.8	**11.8**	9.1	15.1	**3.9**	2.5	5.8	**1.4***	0.7	2.7
Grampians	**2.7***	1.0	6.8	**37.6**	32.2	43.3	**26.1**	21.5	31.3	**11.2**	8.2	15.0	**6.3***	3.5	11.2	**1.8***	0.8	3.7
Hume	**1.9***	0.9	4.1	**45.9**	40.6	51.2	**20.9**	17.2	25.1	**14.3**	10.6	19.1	**6.4**	4.0	10.1	**2.0***	1.1	3.6
Loddon Mallee	**2.7***	1.2	6.3	**42.5**	37.6	47.6	**26.8**	22.6	31.6	**12.7**	10.2	15.8	**4.6**	2.9	7.2	**2.6***	1.5	4.3
Total	**1.9**	1.2	3.0	**42.4**	39.7	45.1	**26.6**	24.2	29.0	**12.7**	11.2	14.3	**4.8**	3.8	6.1	**2.0**	1.5	2.8
All females																		
Total	**3.1**	**2.2**	**4.4**	**45.2**	**42.7**	**47.7**	**26.4**	**24.3**	**28.6**	**11.4**	**10.1**	**12.9**	**3.5**	**2.9**	**4.3**	**2.0**	**1.5**	**2.7**
Metropolitan people																		
Eastern Metropolitan	**2.0***	1.0	3.7	**43.6**	39.2	48.0	**34.6**	30.5	38.9	**10.1**	7.8	13.1	**2.7***	1.6	4.4	**1.1***	0.6	2.0
North & West Metropolitan	**2.4***	1.4	4.0	**38.0**	34.3	41.7	**33.2**	29.8	36.7	**13.0**	10.8	15.6	**4.3**	3.2	5.8	**2.3***	1.4	4.0
Southern Metropolitan	**2.5***	1.4	4.4	**40.7**	36.4	45.1	**37.1**	32.8	41.7	**11.2**	8.9	13.9	**2.3**	1.5	3.5	**1.8***	1.1	3.0
Total	**2.3**	1.6	3.2	**40.3**	38.0	42.8	**34.7**	32.4	37.0	**11.7**	10.3	13.3	**3.2**	2.6	4.1	**1.9**	1.3	2.7
Rural people																		
Barwon-South Western	**1.0***	0.4	2.5	**39.8**	34.9	45.0	**34.2**	30.0	38.7	**12.0**	9.7	14.7	**3.3**	2.1	5.4	**2.8***	1.1	6.8
Gippsland	**0.8***	0.4	1.6	**34.8**	30.0	39.9	**39.0**	34.0	44.2	**13.1**	10.4	16.4	**3.6**	2.4	5.4	**1.2***	0.7	2.1
Grampians	**2.1***	1.0	4.2	**36.5**	32.0	41.2	**32.2**	28.0	36.7	**13.7**	10.8	17.1	**5.8***	3.5	9.5	**1.5***	0.8	2.8
Hume	**1.1***	0.5	2.4	**35.6**	30.9	40.6	**33.4**	27.9	39.4	**16.7**	12.4	22.0	**4.7**	3.3	6.7	**1.8**	1.1	3.0
Loddon Mallee	**1.7***	0.8	3.5	**36.6**	32.4	41.1	**35.5**	31.1	40.2	**14.3**	11.5	17.7	**3.5**	2.4	5.2	**2.0**	1.3	3.3
Total	**1.3**	0.9	1.8	**36.9**	34.7	39.2	**34.9**	32.7	37.1	**13.8**	12.3	15.6	**4.1**	3.3	5.0	**2.0**	1.3	2.9
All people																		
Total	**2.1**	**1.5**	**2.8**	**39.5**	**37.6**	**41.5**	**34.7**	**32.9**	**36.6**	**12.3**	**11.1**	**13.5**	**3.4**	**2.9**	**4.1**	**1.9**	**1.4**	**2.5**

a Determined by calculation of body mass index (BMI) from self-reported height and weight, BMI = weight (kg)/height squared (m^2)
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 3.57 shows the prevalence of overweight or obesity in males and females, by selected socioeconomic determinants, modifiable risk factors and health status, adjusted for age.

When compared with all Victorian men and women, a significantly *higher* prevalence of overweight or obesity was observed in men and women with the following characteristics:

- good self-reported health status
- doctor-diagnosed diabetes.

When compared with all Victorian women, a significantly *higher* prevalence of overweight or obesity was observed in men with the following characteristics:

- total annual household income of less than $40,000
- very high levels of psychological distress
- sedentary
- fair or poor self-reported health.

When compared with all Victorian men, a significantly *lower* prevalence of overweight and obesity was observed among men and women with the following characteristics:

- primary or no education
- excellent or very good self-reported health.

When compared with all Victorian men, a significantly *lower* prevalence of overweight and obesity was observed in men with the following characteristics:

- not in the labour force
- complied with both fruit and vegetable consumption guidelines.

Table 3.57 (revised): Body weight status,[a] by selected socioeconomic determinants, modifiable risk factors and health status and sex, Victoria, 2012

	Males			Females		
	Overweight or obese			Overweight or obese		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Victoria	**61.4**	**58.6**	**64.2**	**43.4**	**41.0**	**45.8**
Country of birth						
Australia	**62.5**	59.3	65.7	**44.4**	41.8	47.0
Overseas	**60.1**	54.2	65.8	**39.5**	35.2	44.0
Language spoken at home						
English only	**61.5**	58.4	64.6	**43.9**	41.3	46.6
Language other than English	**63.5**	57.6	69.0	**40.7**	35.8	45.8
Metro-Rural regions						
Rural	**63.5**	59.9	67.0	**46.1**	43.4	48.7
Metropolitan	**60.8**	57.2	64.2	**42.4**	39.5	45.5
Level of education						
None or Primary	**43.3**	37.9	48.8	**30.7**	25.0	37.1
Secondary	**64.4**	59.6	69.0	**45.6**	41.3	50.0
TAFE or Tertiary	**61.7**	57.9	65.4	**42.6**	39.3	46.0
Employment status (<65 years)						
Employed	**63.7**	59.9	67.3	**42.5**	38.8	46.3
Unemployed	**53.2**	44.7	61.5	**48.8**	36.9	60.9
Not in labour force	**48.1**	38.2	58.1	**41.6**	36.8	46.6
Total annual household income ($)						
<40,000	**53.3**	45.5	61.0	**51.7**	45.9	57.5
40,000 to <100,000	**61.5**	56.5	66.2	**45.1**	41.0	49.2
100,000, or more	**62.7**	57.6	67.6	**38.5**	34.1	43.1
Psychological distress (K10 score)[a]						
Low (K10 score <16)	**64.4**	61.0	67.6	**41.3**	38.4	44.3
Moderate (K10 score 16 to 21)	**58.6**	53.1	63.9	**44.5**	39.9	49.3
High (K10 score 22 to 29)	**56.5**	46.8	65.8	**47.7**	40.8	54.8
Very high (K10 score ≥30)	**61.0**	52.2	69.1	**59.4**	50.4	67.7
Physical activity level[b]						
Sedentary	**54.8**	48.0	61.4	**54.4**	47.1	61.5
Insufficient	**64.2**	58.9	69.1	**45.5**	40.8	50.2
Sufficient	**60.0**	56.5	63.4	**41.2**	38.3	44.2
Compliance with fruit & vegetable consumption guidelines[c]						
Both	**43.5**	36.1	51.2	**44.2**	36.5	52.2
Vegetable only[d]	**53.2**	43.4	62.7	**44.4**	36.7	52.3
Fruit only[d]	**61.5**	56.9	65.8	**38.6**	35.7	41.6
Neither	**62.5**	58.7	66.1	**48.0**	44.4	51.6
Smoking status						
Current smoker	**59.2**	53.1	64.9	**41.0**	34.7	47.7
Ex-smoker	**60.3**	54.8	65.6	**46.3**	42.2	50.5
Non-smoker	**59.2**	55.3	63.1	**41.1**	38.2	44.0
Lifetime risk of alcohol related harm (2009)[e]						
Abstainer / no longer drinks alcohol	**55.9**	47.2	64.4	**44.5**	40.0	49.1
Reduced risk	**56.5**	47.6	64.9	**39.8**	34.8	45.2
Increased risk	**63.0**	59.8	66.1	**43.5**	40.3	46.8
Self-reported health						
Excellent / Very Good	**52.7**	48.4	57.0	**32.6**	29.9	35.3
Good	**72.0**	68.0	75.8	**52.0**	47.8	56.1
Fair / Poor	**67.7**	60.5	74.1	**60.7**	53.7	67.3
Diabetes						
No diabetes	**60.4**	57.4	63.3	**42.6**	40.2	45.0
Diabetes	**72.2**	67.6	76.5	**67.2**	55.3	77.2
Depression						
Yes	**58.3**	52.5	64.0	**49.9**	45.0	54.8
No	**62.4**	59.2	65.5	**41.3**	38.6	44.1

a Based on the Kessler 10 scale for psychological distress.
b Based on DoHA (1999) guidelines.
c Based on NHMRC (2003) guidelines.
d Includes those meeting both guidelines.
e NHMRC (2009) guidelines.

Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Data were age-standardised to the 2011 Victorian population.

LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.

* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.

** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.

Table 3.58 shows body weight status, by total annual household income, adjusted for age.

The relationship of underweight status and total annual household income could not be assessed as the sample size was too small to provide reliable estimates.

There was a significant *increase* in the prevalence of normal weight status in women and people (but not men) with increasing total annual household income.

Table 3.58: Body mass index category,[a] by total annual household income group and sex, Victoria, 2012

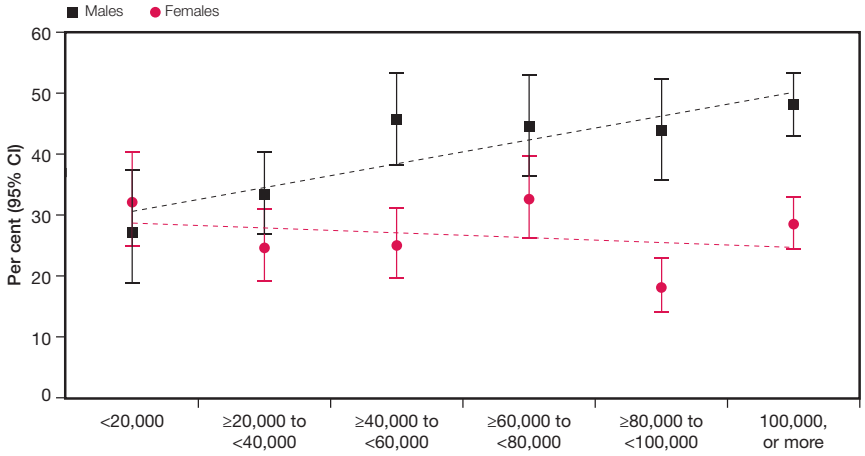
	Underweight			Normal			Overweight			Obese		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
Total annual household income ($)		**LL**	**UL**		**LL**	**UL**		**LL**	**UL**		**LL**	**UL**
Males												
<20,000	**	**	**	**41.3**	34.8	48.1	**27.1**	18.8	37.4	**20.8**	13.4	31.0
≥20,000 to <40,000	**	**	**	**40.3**	32.7	48.4	**33.3**	26.9	40.4	**19.6**	13.6	27.5
≥40,000 to <60,000	**	**	**	**34.7**	27.3	42.9	**45.6**	38.2	53.3	**13.7**	10.2	18.2
≥60,000 to <80,000	**	**	**	**36.1**	28.1	44.9	**44.6**	36.4	53.0	**15.4**	11.0	21.2
≥80,000 to <100,000	**	**	**	**31.9**	25.5	39.0	**43.9**	35.8	52.4	**22.8**	17.1	29.7
100,000, or more	**	**	**	**35.4**	30.5	40.6	**48.2**	43.0	53.3	**14.6**	11.6	18.2
Do not know/refused to answer	**	**	**	**31.7**	25.4	38.8	**39.1**	32.0	46.7	**18.8**	13.7	25.2
Total	**1.0***	**0.5**	**1.8**	**33.9**	**31.2**	**36.7**	**43.4**	**40.5**	**46.3**	**18.0**	**16.0**	**20.3**
Females												
<20,000	**	**	**	**32.9**	25.5	41.3	**32.1**	24.9	40.4	**24.5**	18.8	31.2
≥20,000 to <40,000	**	**	**	**36.8**	28.6	45.8	**24.6**	19.2	31.0	**24.9**	18.7	32.5
≥40,000 to <60,000	**	**	**	**43.6**	36.8	50.6	**25.0**	19.6	31.2	**21.5**	17.3	26.4
≥60,000 to <80,000	**	**	**	**45.1**	37.9	52.6	**32.6**	26.3	39.7	**16.1**	11.6	21.9
≥80,000 to <100,000	**3.1***	1.3	7.4	**46.5**	38.3	54.9	**18.1**	14.1	23.0	**18.4**	14.2	23.6
100,000, or more	**3.2***	1.6	6.4	**48.3**	42.7	53.9	**28.5**	24.5	32.9	**10.0**	7.5	13.2
Do not know/refused to answer	**2.7***	1.5	4.8	**48.7**	42.9	54.4	**23.2**	18.8	28.2	**12.4**	9.5	16.1
Total	**3.1**	**2.2**	**4.4**	**45.2**	**42.7**	**47.7**	**26.4**	**24.3**	**28.6**	**17.0**	**15.4**	**18.7**
Persons												
<20,000	**4.2***	1.9	9.0	**36.1**	29.8	42.9	**29.8**	23.2	37.5	**23.1**	16.8	30.8
≥20,000 to <40,000	**	**	**	**37.3**	31.0	44.1	**27.9**	23.3	32.9	**23.7**	18.5	29.7
≥40,000 to <60,000	**2.3***	0.9	5.5	**38.4**	33.3	43.9	**36.4**	31.4	41.8	**17.7**	14.7	21.1
≥60,000 to <80,000	**	**	**	**41.8**	36.3	47.5	**37.0**	32.0	42.4	**16.0**	12.3	20.6
≥80,000 to <100,000	**1.9***	0.8	4.4	**41.7**	35.2	48.4	**32.4**	27.0	38.3	**19.8**	15.5	24.9
100,000, or more	**1.6***	0.9	2.9	**41.3**	37.4	45.3	**42.0**	38.1	46.1	**12.9**	10.8	15.4
Do not know/refused to answer	**2.0***	1.2	3.4	**42.1**	37.6	46.7	**29.1**	25.1	33.6	**15.1**	12.3	18.4
Total	**2.1**	**1.5**	**2.8**	**39.5**	**37.6**	**41.5**	**34.7**	**32.9**	**36.6**	**17.6**	**16.3**	**19.0**

a Determined by calculation of body mass index (BMI) from self-reported height and weight, BMI = weight (kg)/height squared (m^2)
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: **above**/**below** Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

There was a significant *increase* in the prevalence of overweight men (but not women and people) with increasing total annual household income (Figure 3.10).

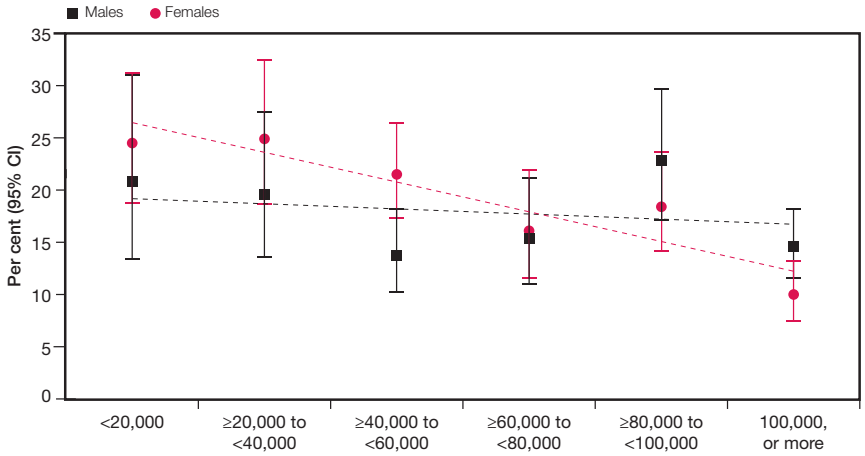
There was a significant *decrease* in the prevalence of obesity in women and people (but not men) with increasing total annual household income (Figure 3.11).

Figure 3.10: Prevalence (%) of overweight,[a] by total annual household income group and sex, Victoria, 2012



a Based on self-reported height and weight.
Data were age-standardised to the 2011 Victorian population.
95% CI = 95 per cent confidence interval.

Figure 3.11: Prevalence (%) of obesity,[a] by total annual household income group and sex, Victoria, 2012



a Based on self-reported height and weight.
Data were age-standardised to the 2011 Victorian population.
95% CI = 95 per cent confidence interval.

3.9 Psychological distress

Psychological distress is an important risk factor for a number of diseases and conditions including fatigue, migraine, cardiovascular disease (CVD), chronic obstructive pulmonary disease (COPD), cerebrovascular disease, injury, obesity, depression and anxiety (Hamer et al. 2012; Holden et al. 2010; Stansfeld et al. 2002). It is also a significant risk factor for risky drinking, smoking and drug use (Holden et al. 2010).

A measure of psychological distress, the Kessler 10 Psychological Distress Scale (K10), has been included in the survey. The K10 is a set of 10 questions designed to categorise the level of psychological distress over a four-week period. It has been validated as a screening tool for detecting affective disorders such as depression and anxiety, and is currently in use in general practice in Australia (Andrews & Slade 2001; Furukawa et al. 2003; Kessler et al. 2003).

The K10 covers the dimensions of nervousness, hopelessness, restlessness, sadness and worthlessness. It consists of 10 questions that have the same response categories: all of the time, most of the time, some of the time, a little of the time and none of the time (that are scored five through to one). The 10 items are summed to yield scores ranging from 10 to 50. Individuals are categorised to four levels of psychological distress based on their score: low (10–15), moderate (16–21), high (22–29) and very high (30–50) (Andrews & Slade 2001).

In addition, the augmented K10+ scale was used in the survey, which includes additional questions that are asked when the respondent answers 'a little', 'some', 'most' or 'all of the time' to any of the K10 questions. The purpose is to assess the impact of psychological distress on the respondent's functioning and wellbeing.

The prevalence of the different levels of psychological distress, by age group and sex, with 'Total' not adjusted for age, is presented in Table 3.59. Overall, 10.7 per cent of people had high or very high levels of psychological distress; the prevalence was similar in men (9.1 per cent) and women (12.2 per cent).

The prevalence of high or very high levels of psychological distress was significantly *lower* in men, women and people aged 65 years or older, compared with the prevalence in all Victorian men, women and people, respectively.

Table 3.59: Prevalence of psychological distress, by level, age group and sex, Victoria, 2012

	Level of psychological distress:								
	Mild (K10 score <16)			Moderate (K10 score 16–21)			High or very high (K10 score ≥22)		
Age group (years)	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL
Males									
18–24	**58.5**	48.5	67.9	**32.5**	24.0	42.3	**8.0***	4.0	15.2
25–34	**58.0**	48.0	67.4	**25.3**	17.9	34.4	**13.6***	7.8	22.6
35–44	**66.4**	60.4	72.0	**23.6**	18.8	29.2	**8.6**	5.7	12.6
45–54	**68.9**	63.4	73.8	**17.6**	13.9	22.0	**10.1**	7.0	14.5
55–64	**76.8**	72.7	80.4	**13.7**	10.8	17.2	**8.0**	5.9	10.8
65+	**72.1**	68.5	75.5	**17.0**	14.2	20.3	**5.4**	4.0	7.3
Total	**66.6**	**63.7**	**69.4**	**21.6**	**19.2**	**24.1**	**9.1**	**7.4**	**11.2**
Females									
18–24	**63.6**	53.2	72.9	**23.3**	15.9	32.8	**12.7***	7.5	20.8
25–34	**60.4**	52.2	68.0	**19.1**	13.7	26.0	**17.7**	12.1	25.3
35–44	**59.4**	54.5	64.1	**27.1**	22.9	31.8	**11.4**	8.7	14.8
45–54	**64.7**	60.5	68.6	**20.3**	17.1	23.9	**11.7**	9.3	14.5
55–64	**64.0**	59.9	67.9	**20.3**	17.1	24.0	**12.4**	9.9	15.4
65+	**69.7**	66.7	72.6	**17.1**	14.8	19.7	**7.9**	6.3	9.7
Total	**63.7**	**61.3**	**66.0**	**21.1**	**19.2**	**23.1**	**12.2**	**10.6**	**14.1**
People									
18–24	**61.0**	53.8	67.8	**28.0**	22.1	34.8	**10.3**	6.8	15.3
25–34	**59.2**	52.7	65.3	**22.2**	17.5	27.8	**15.7**	11.4	21.2
35–44	**62.9**	59.0	66.6	**25.4**	22.1	28.9	**10.0**	7.9	12.5
45–54	**66.7**	63.4	70.0	**18.9**	16.4	21.7	**10.9**	8.9	13.4
55–64	**70.2**	67.3	73.0	**17.1**	14.8	19.6	**10.3**	8.6	12.2
65+	**70.8**	68.5	73.0	**17.1**	15.3	19.1	**6.8**	5.7	8.0
Total	**65.1**	**63.2**	**66.9**	**21.3**	**19.8**	**22.9**	**10.7**	**9.5**	**12.1**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

The trend over time of the age-adjusted prevalence of the various levels of psychological distress, by sex, is presented in Table 3.60 and Figure 3.12.

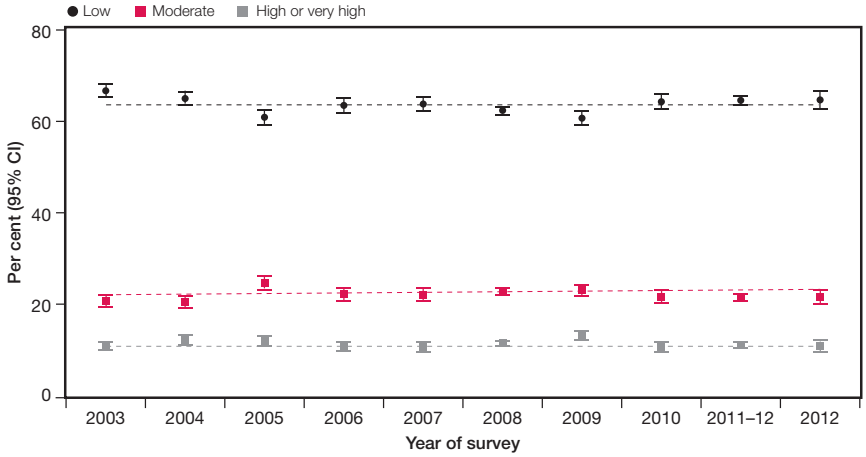
The prevalence in men, women and people of low, moderate or high/very high levels of psychological distress remained unchanged from 2003 to 2012.

Table 3.60: Prevalence (%) of psychological distress, by level and sex, Victoria, 2003–2012

	Level of psychological distress:								
	Low (K10 score <16)			Moderate (K10 score 16–21)			High/Very high (K10 score ≥22)		
	%	95% CI		%	95% CI		%	95% CI	
Survey years		LL	UL		LL	UL		LL	UL
Males									
2003	**70.1**	67.9	72.2	**19.2**	17.4	21.2	**9.1**	7.9	10.5
2004	**68.8**	66.5	71.0	**19.8**	17.9	21.7	**9.0**	7.7	10.6
2005	**63.9**	61.5	66.3	**23.3**	21.2	25.6	**9.9**	8.5	11.6
2006	**67.3**	64.8	69.7	**19.5**	17.5	21.7	**9.1**	7.7	10.8
2007	**69.1**	66.6	71.5	**18.8**	16.8	21.0	**8.5**	7.0	10.2
2008	**65.2**	63.9	66.6	**21.5**	20.4	22.7	**9.7**	8.9	10.6
2009	**65.2**	62.9	67.4	**21.2**	19.3	23.2	**10.8**	9.4	12.4
2010	**68.8**	66.3	71.2	**19.1**	17.1	21.2	**8.8**	7.4	10.6
2011–12	**68.6**	67.1	70.0	**19.7**	18.5	21.0	**9.0**	8.1	10.0
2012	**66.5**	**63.6**	**69.3**	**21.5**	**19.1**	**24.0**	**9.1**	**7.4**	**11.1**
Females									
2003	**63.7**	61.7	65.6	**21.9**	20.2	23.6	**12.6**	11.3	14.0
2004	**61.4**	59.5	63.3	**21.0**	19.4	22.6	**15.1**	13.7	16.6
2005	**57.9**	55.9	59.9	**25.8**	24.0	27.7	**13.9**	12.5	15.4
2006	**59.8**	57.8	61.8	**24.7**	23.0	26.6	**12.2**	10.9	13.6
2007	**58.9**	56.9	60.9	**25.3**	23.5	27.2	**12.6**	11.3	14.0
2008	**59.7**	58.6	60.8	**24.0**	23.0	24.9	**13.1**	12.3	13.8
2009	**56.2**	54.3	58.1	**24.8**	23.1	26.6	**15.4**	14.1	16.9
2010	**59.9**	57.9	61.9	**23.9**	22.2	25.7	**12.4**	11.0	14.0
2011–12	**60.7**	59.5	62.0	**23.2**	22.2	24.4	**13.0**	12.1	13.9
2012	**63.1**	**60.6**	**65.6**	**21.5**	**19.5**	**23.7**	**12.5**	**10.8**	**14.4**
Persons									
2003	**66.7**	65.3	68.2	**20.6**	19.4	21.9	**10.8**	9.9	11.8
2004	**65.0**	63.5	66.5	**20.5**	19.2	21.8	**12.1**	11.1	13.2
2005	**60.9**	59.3	62.4	**24.6**	23.2	26.1	**11.9**	10.9	13.0
2006	**63.5**	61.9	65.1	**22.2**	20.8	23.6	**10.6**	9.7	11.7
2007	**63.8**	62.2	65.4	**22.1**	20.8	23.6	**10.6**	9.6	11.7
2008	**62.4**	61.5	63.2	**22.8**	22.0	23.5	**11.4**	10.9	12.0
2009	**60.7**	59.2	62.2	**23.0**	21.7	24.3	**13.1**	12.1	14.2
2010	**64.3**	62.7	65.9	**21.6**	20.3	23.0	**10.6**	9.5	11.7
2011–12	**64.6**	63.6	65.6	**21.5**	20.7	22.3	**11.0**	10.4	11.7
2012	**64.7**	**62.8**	**66.6**	**21.6**	**20.0**	**23.2**	**10.8**	**9.5**	**12.1**

Based on the Kessler 10 psychological distress scale.
Note that the figures may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses.
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Note that estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses not reported here.

Figure 3.12: Prevalence of psychological distress levels in people, Victoria, 2003–2012



a Based on the Kessler 10 psychological distress scale.
Data were age-standardised to the 2011 Victorian population.
Ordinary least squares linear regression was used to test for statistical significance (NS).

Table 3.61 shows the prevalence of psychological distress, by level of distress, departmental region and sex, adjusted for age.

There were no significant differences in the prevalence of low, moderate or high/very high levels of psychological distress in men, women and people in any departmental region compared with the prevalence in all Victorian men, women and people, respectively.

Table 3.61: Psychological distress, by Department of Health and Human Services region and sex, Victoria, 2012

	Level of psychological distress:								
	Mild (K10 score <16)			Moderate (K10 score 16–21)			High or very high (K10 score ≥22)		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Metropolitan males									
Eastern Metropolitan	**68.0**	61.3	74.1	**18.3**	13.5	24.3	**10.1**	6.2	16.0
North & West Metropolitan	**65.4**	59.9	70.6	**22.9**	18.5	27.8	**8.2**	5.3	12.4
Southern Metropolitan	**65.8**	59.0	72.0	**21.6**	16.4	28.0	**9.9**	6.8	14.2
Total	**66.1**	62.5	69.6	**21.1**	18.2	24.3	**9.4**	7.4	12.0
Rural males									
Barwon-South Western	**63.9**	54.9	71.9	**28.3**	20.7	37.3	**6.1**	4.2	8.8
Gippsland	**62.4**	55.3	69.0	**25.7**	19.6	32.9	**9.9**	6.1	15.6
Grampians	**72.7**	65.2	79.1	**16.8**	11.6	23.5	**8.8***	5.0	14.9
Hume	**70.9**	63.1	77.6	**20.0**	13.9	27.8	**7.7***	4.6	12.6
Loddon Mallee	**70.4**	62.7	77.2	**22.1**	15.9	29.9	**5.5**	3.5	8.5
Total	**67.6**	63.8	71.1	**23.3**	20.0	27.1	**7.3**	5.9	9.0
All males									
Total	**66.5**	**63.6**	**69.3**	**21.5**	**19.1**	**24.0**	**9.1**	**7.4**	**11.1**
Metropolitan females									
Eastern Metropolitan	**66.0**	60.4	71.3	**20.2**	16.4	24.6	**10.6**	7.2	15.4
North & West Metropolitan	**63.6**	58.8	68.2	**21.0**	17.2	25.4	**11.8**	9.1	15.0
Southern Metropolitan	**59.2**	53.5	64.8	**22.3**	17.8	27.5	**16.1**	11.9	21.3
Total	**62.8**	59.6	65.8	**21.3**	18.8	24.0	**12.7**	10.6	15.2
Rural females									
Barwon-South Western	**65.2**	59.4	70.5	**20.2**	15.9	25.3	**12.7**	8.9	17.9
Gippsland	**65.4**	58.2	72.0	**21.6**	16.3	28.1	**11.7**	7.6	17.6
Grampians	**64.4**	58.6	69.9	**23.4**	18.9	28.7	**10.1**	7.3	13.7
Hume	**64.5**	58.5	70.1	**22.3**	17.5	28.1	**11.5**	7.6	17.0
Loddon Mallee	**61.6**	56.2	66.7	**23.9**	19.5	28.9	**11.3**	8.3	15.2
Total	**63.9**	61.1	66.6	**22.4**	20.1	24.9	**11.7**	9.8	13.9
All females									
Total	**63.1**	**60.6**	**65.6**	**21.5**	**19.5**	**23.7**	**12.5**	**10.8**	**14.4**
Metropolitan people									
Eastern Metropolitan	**66.8**	62.4	70.9	**19.4**	16.2	23.1	**10.4**	7.6	14.1
North & West Metropolitan	**64.3**	60.6	67.8	**22.0**	19.1	25.3	**10.1**	8.0	12.6
Southern Metropolitan	**62.5**	58.0	66.8	**22.1**	18.5	26.1	**12.9**	10.1	16.4
Total	**64.4**	62.0	66.7	**21.3**	19.3	23.3	**11.1**	9.6	12.8
Rural people									
Barwon-South Western	**63.9**	58.7	68.8	**25.1**	20.4	30.4	**9.4**	6.9	12.7
Gippsland	**63.4**	58.2	68.4	**23.9**	19.5	28.9	**11.0**	8.0	15.0
Grampians	**68.5**	63.8	72.9	**20.1**	16.4	24.3	**9.4**	7.0	12.6
Hume	**67.7**	62.9	72.2	**21.2**	17.1	25.8	**9.6**	6.9	13.1
Loddon Mallee	**65.9**	61.2	70.3	**23.2**	19.1	27.7	**8.4**	6.5	10.8
Total	**65.7**	63.4	68.0	**22.9**	20.8	25.2	**9.4**	8.2	10.8
All people									
Total	**64.7**	**62.8**	**66.6**	**21.6**	**20.0**	**23.2**	**10.8**	**9.5**	**12.1**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 3.62 shows the prevalence of low and high or very psychological distress, by selected socioeconomic determinants, modifiable risk factors, health status and sex, adjusted for age.

3.9.1 Low levels of psychological distress

When compared with all Victorian men and women, there was a significantly *higher* proportion of men and women with low levels of psychological distress with the following characteristics:

- total household income of $100,000 or more
- excellent or very good self-reported health.

When compared with all Victorian women, there was a significantly *higher* proportion of women with low levels of psychological distress, with the following characteristic:

- not diagnosed with depression.

When compared with all Victorian men and women, there was a significantly *lower* proportion of men and women with low levels of psychological distress with the following characteristics:

- primary or no education
- unemployed
- total annual household income of less than $40,000
- sedentary
- current smoker
- fair or poor self-reported health
- diagnosed with depression.

When compared with all Victorian men, there was a significantly *lower* proportion of men with low levels of psychological distress with the following characteristics:

- not in the labour force
- underweight
- diagnosed with diabetes.

3.9.2 High or very high levels of psychological distress

When compared with all Victorian men and women, there was a significantly *higher* proportion of men and women with high, or very high, levels of psychological distress with the following characteristics:

- not in the labour force
- total annual household income of less than $40,000
- current smoker
- fair/poor self-reported health
- diagnosed with depression.

When compared with all Victorian men, there was a significantly *higher* proportion of men with high, or very high, levels of psychological distress with the following characteristics:

- underweight.

When compared with all Victorian women, there was a significantly *higher* proportion of women with high, or very high, levels of psychological distress with the following characteristics:

- primary or no education
- unemployed
- sedentary.

When compared with all Victorian men, there was a significantly *lower* proportion of men with high, or very high, levels of psychological distress with the following characteristic:

- met vegetable consumption guidelines only.

When compared with all Victorian women, there was a significantly *lower* proportion of women with high, or very high, levels of psychological distress with the following characteristics:

- total annual household income of $100,000 or more
- met fruit consumption guidelines only
- excellent or very good self-reported health
- not diagnosed with depression.

Table 3.62 (revised): Psychological distress, by selected socioeconomic determinants, modifiable risk factors, health status and sex, Victoria, 2012

	Males						Females					
	Low (K10 score <16)			High or very high (K10 score ≥22)			Low (K10 score <16)			High or very high (K10 score ≥22)		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Males	**66.5**	**63.6**	**69.3**	**9.1**	**7.4**	**11.1**	**63.1**	**60.6**	**65.6**	**12.5**	**10.8**	**14.4**
Country of birth												
Australia	**67.0**	63.7	70.2	**7.7**	6.1	9.7	**64.2**	61.3	66.9	**11.6**	9.7	13.8
Overseas	**66.1**	59.5	72.1	**11.2**	7.4	16.6	**61.5**	55.6	67.0	**13.2**	10.1	17.2
Language spoken at home												
English only	**66.3**	63.1	69.4	**8.3**	6.6	10.4	**64.1**	61.2	66.9	**10.7**	8.9	12.7
Language other than English	**67.1**	60.8	72.7	**10.8**	7.2	15.9	**59.5**	54.3	64.4	**16.8**	13.1	21.3
Metro-Rural regions												
Rural	**67.6**	63.8	71.1	**7.3**	5.9	9.0	**63.9**	61.1	66.6	**11.7**	9.8	13.9
Metropolitan	**66.1**	62.5	69.6	**9.4**	7.4	12.0	**62.8**	59.6	65.8	**12.7**	10.6	15.2
Level of education												
None or Primary	40.1	36.2	44.1	**6.2***	3.5	10.5	30.9	27.6	34.5	23.9	18.9	29.8
Secondary	**61.0**	55.7	66.1	**14.9**	10.7	20.2	**62.9**	58.0	67.5	**14.3**	10.9	18.6
TAFE or Tertiary	**69.0**	65.3	72.6	**6.6**	5.0	8.7	**64.5**	61.3	67.7	**10.7**	8.8	13.1
Employment status (<65 years)												
Employed	**67.4**	63.5	71.1	**8.8**	6.7	11.6	**64.6**	60.9	68.2	**9.7**	7.8	12.1
Unemployed	42.1	30.6	54.5	**8.9***	4.7	16.4	43.2	31.8	55.5	35.9	25.1	48.5
Not in labour force	40.3	33.1	48.1	20.3	12.2	31.8	**55.4**	49.8	60.9	19.9	15.6	24.9
Total annual household income ($)												
<40,000	48.8	40.3	57.4	23.8	17.6	31.4	47.2	40.3	54.2	22.5	17.4	28.7
40,000 to <100,000	**66.9**	61.9	71.5	**8.8**	6.4	12.1	**66.1**	61.8	70.2	**12.1**	9.2	15.6
100,000, or more	74.7	69.6	79.3	**5.1***	2.9	8.7	73.0	68.9	76.8	5.2	3.5	7.8
Physical activity level [b]												
Sedentary	53.7	46.4	60.9	**12.4**	7.7	19.6	41.5	34.7	48.6	33.8	24.1	45.1
Insufficient	**70.0**	64.2	75.2	**9.5**	6.4	13.9	**63.4**	58.6	68.0	**10.7**	8.2	13.7
Sufficient	**67.0**	63.5	70.4	**8.1**	6.2	10.4	**64.9**	61.7	68.0	**11.3**	9.2	13.8
Compliance with fruit & vegetable consumption guidelines [c]												
Both	**72.0**	62.3	79.9	**	**	**	**70.8**	63.6	77.0	**8.1***	3.8	16.3
Vegetable only [d]	**78.8**	68.4	86.4	2.3*	1.0	5.3	**64.0**	57.8	69.8	**14.7**	9.8	21.4
Fruit only [d]	**68.2**	63.5	72.6	**7.8**	5.6	10.9	**68.4**	64.9	71.7	8.3	6.5	10.6
Neither	**65.8**	61.9	69.5	**9.9**	7.7	12.8	**58.4**	54.7	62.0	**16.3**	13.6	19.4
Smoking status												
Current smoker	56.7	50.4	62.9	16.2	11.8	21.9	42.4	35.9	49.2	21.4	16.1	27.9
Ex-smoker	**65.4**	57.9	72.3	**11.7***	6.7	19.7	**67.0**	61.2	72.4	**9.9**	7.3	13.4
Non-smoker	**69.4**	65.5	73.1	**6.6**	4.6	9.3	**67.5**	64.4	70.4	**10.5**	8.6	12.8
Lifetime risk of alcohol related harm (2009) [e]												
Abstainer / no longer drinks alcohol	**68.7**	61.8	74.8	**12.5**	8.3	18.4	**62.0**	56.1	67.5	**16.3**	12.2	21.6
Reduced risk	**67.4**	58.9	75.0	**5.9***	3.4	10.1	**68.1**	62.5	73.2	**10.9**	7.4	15.8
Increased risk	**67.4**	64.0	70.7	**8.7**	6.8	11.2	**61.8**	58.4	65.1	**11.6**	9.4	14.3
Self-reported health												
Excellent / Very Good	76.5	72.4	80.2	**5.3**	3.4	8.4	74.4	71.2	77.4	5.6	3.9	7.9
Good	**63.0**	58.4	67.4	**8.2**	6.0	11.1	**59.1**	54.9	63.2	**14.9**	12.0	18.4
Fair / Poor	48.4	41.1	55.7	21.1	16.1	27.2	33.2	26.6	40.5	30.5	24.3	37.5
BMI category [f]												
Underweight	35.3	32.4	38.3	18.9	17.1	20.8	**73.1**	62.2	81.8	**9.9***	4.8	19.1
Normal	**62.0**	57.5	66.4	**10.4**	7.7	14.0	**67.2**	63.8	70.5	**10.1**	8.1	12.6
Overweight	**71.5**	67.0	75.6	**6.4**	4.4	9.2	**62.8**	57.6	67.7	**13.1**	9.5	17.8
Obese	**63.9**	56.0	71.0	**11.6**	7.7	17.2	**56.8**	49.0	64.3	**19.7**	13.7	27.6
Diabetes												
No diabetes	**66.7**	63.7	69.6	**9.0**	7.3	11.1	**63.6**	61.0	66.1	**12.2**	10.5	14.2
Diabetes	55.2	49.6	60.7	**6.3***	3.5	11.2	**54.7**	43.9	65.1	**19.4**	12.2	29.4
Depression												
Yes	41.9	36.0	48.0	22.5	17.3	28.6	37.0	31.8	42.6	29.9	25.3	35.1
No	**71.8**	68.6	74.8	**6.6**	4.8	8.9	71.6	68.8	74.3	6.7	5.2	8.6

a Based on the Kessler 10 scale for psychological distress.
b Based on DoHA (1999) guidelines.
c Based on NHMRC (2003) guidelines.
d Includes those meeting both guidelines.
e NHMRC (2009) guidelines.
f Based on Body Mass Index (BMI).

Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: **above**/**below** Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.

The prevalence of the various levels of psychological distress by total annual household income and sex, adjusted for age, is presented in Table 3.63.

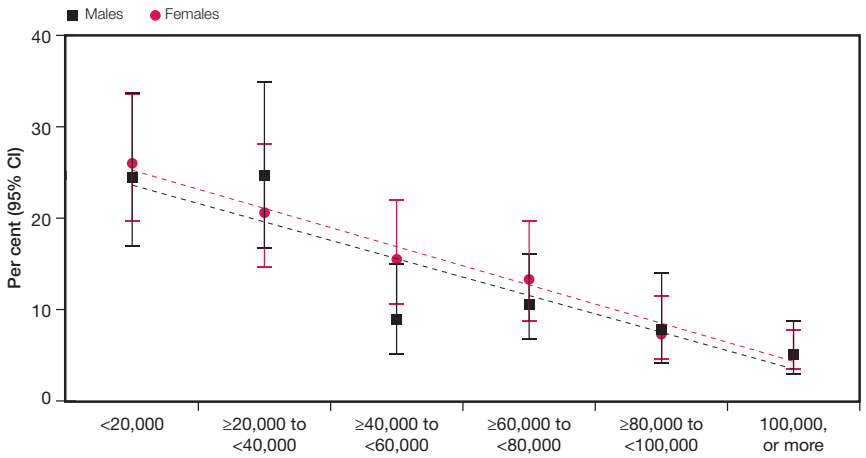
The prevalence of high, or very high, levels of psychological distress significantly *decreased* with increasing total annual household income in men, women and people (Figure 3.13). In contrast, the prevalence of low levels of psychological distress significantly *increased* with increasing total annual household income in men, women and people.

Table 3.63: Psychological distress level,[a] by total annual household income group and sex, Victoria, 2012

Total annual household income ($)	Low (K10 score <16)			Moderate (K10 score 16–21)			High or very high (K10 score ≥22)		
	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL
Males									
<20,000	36.3	29.0	44.2	**29.5**	23.0	36.9	24.4	17.0	33.7
≥20,000 to <40,000	53.4	45.7	61.1	**19.3**	12.1	29.3	24.7	16.7	34.9
≥40,000 to <60,000	**64.8**	56.8	72.1	**23.9**	17.4	31.9	**8.9***	5.1	15.0
≥60,000 to <80,000	**66.9**	59.9	73.3	**21.0**	15.7	27.5	**10.6**	6.8	16.1
≥80,000 to <100,000	**72.1**	63.6	79.3	**18.4**	12.7	25.9	**7.8***	4.2	14.0
100,000, or more	74.7	69.6	79.3	**19.3**	15.3	24.0	**5.1***	2.9	8.7
Do not know/Refused to answer	**62.0**	54.8	68.7	**23.6**	18.1	30.3	**6.8***	3.9	11.6
Total	**66.5**	**63.6**	**69.3**	**21.5**	**19.1**	**24.0**	**9.1**	**7.4**	**11.1**
Females									
<20,000	46.4	36.7	56.3	**24.7**	17.6	33.5	26.0	19.7	33.6
≥20,000 to <40,000	47.2	39.0	55.6	**29.7**	21.7	39.1	20.6	14.7	28.1
≥40,000 to <60,000	**57.9**	51.1	64.4	**25.6**	20.2	32.0	**15.5**	10.6	22.0
≥60,000 to <80,000	**65.3**	58.2	71.9	**17.2**	12.4	23.3	**13.3**	8.7	19.7
≥80,000 to <100,000	**69.1**	61.8	75.6	**17.0**	11.5	24.5	**7.3**	4.6	11.5
100,000, or more	73.0	68.9	76.8	15.4	12.2	19.1	5.2	3.5	7.8
Do not know/Refused to answer	**59.3**	53.5	64.9	**21.3**	16.8	26.7	**13.5**	9.6	18.5
Total	**63.1**	**60.6**	**65.6**	**21.5**	**19.5**	**23.7**	**12.5**	**10.8**	**14.4**
Persons									
<20,000	43.0	36.3	50.0	**25.8**	20.4	32.1	25.3	19.9	31.6
≥20,000 to <40,000	50.3	44.0	56.6	**25.5**	19.9	32.1	21.7	16.9	27.3
≥40,000 to <60,000	**61.8**	56.4	66.9	**24.4**	19.9	29.7	**11.9**	8.7	16.1
≥60,000 to <80,000	**66.4**	60.9	71.6	**19.7**	15.5	24.7	**11.9**	8.7	16.1
≥80,000 to <100,000	73.5	67.4	78.7	**17.5**	13.1	23.1	**7.4**	5.0	10.9
100,000, or more	75.2	71.4	78.6	**18.6**	15.6	22.1	5.1	3.5	7.4
Do not know/Refused to answer	**59.9**	55.3	64.4	**22.5**	18.8	26.6	**11.0**	8.2	14.5
Total	**64.7**	**62.8**	**66.6**	**21.6**	**20.0**	**23.2**	**10.8**	**9.5**	**12.1**

a Based on the Kessler 10 scale for psychological distress.
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.

Figure 3.13: Prevalence (%) of high, or very high, levels of psychological distress,[a] by total annual household income group and sex, Victoria, 2012



a Based on the Kessler 10 scale for psychological distress.
Data were age-standardised to the 2011 Victorian population.
95% CI = 95 per cent confidence interval.

3.9.3 Impact of psychological distress (K10+ scale)

People who responded 'a little', 'some', 'most' or 'all of the time' to at least one of the K10 questions were judged to have experienced some level of psychological distress. They were subsequently asked an additional four questions, which constitutes the K10+ scale, to assess the impact of their psychological distress on their daily lives.

Respondents who had indicated some level of psychological distress in the four weeks prior to the survey were asked how many days this had resulted in a total inability to work, study or to manage day-to-day activities.

Table 3.64 shows the inability to work, study or manage day-to-day activities due to psychological distress, by duration, age group and sex, with 'Total' not adjusted for age.

The majority of people (88.3 per cent) who had answered at least 'a little' to any of the K10 questions reported that they did not experience being totally unable to work, study or manage day-to-day activities in the four weeks prior to the survey. Of those who reported experiencing being totally unable to work, study or manage day-to-day activities, 1.3 per cent reported that this had lasted for '15 to 28 days', 0.9 per cent for '8 to 14 days' and 8.4 per cent for '1 to 7 days'.

There were significantly *lower* proportions of men aged 55–64 years and women and people aged 65 years or older who were totally unable to work, study or manage day-to-day activities for a period of one to seven days due to psychological distress compared with all Victorian men, women and people, respectively.

Table 3.64: Number of days totally unable to work study or manage day-to-day activities, by age group and sex, Victoria, 2012

Age group (years)	None			1 to 7 days			8 to 14 days			15 to 28 days		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Males												
18–24	**85.9**	76.8	91.8	**11.1***	5.9	19.8	**0.0**	.	.	**0.0**	.	.
25–34	**84.0**	73.9	90.7	**12.8***	6.9	22.7	**0.0**	.	.	**	**	**
35–44	**91.7**	87.4	94.7	**7.4**	4.6	11.7	**	**	**	**	**	**
45–54	**90.2**	85.5	93.5	**8.1**	5.0	12.8	**	**	**	**0.5***	0.2	1.4
55–64	**91.8**	88.5	94.2	**3.7**	2.3	5.8	**	**	**	**2.9***	1.5	5.5
65+	**90.3**	87.0	92.8	**5.1**	3.3	7.7	**1.0***	0.4	2.5	**1.4***	0.7	2.9
Total	**88.8**	**86.2**	**90.9**	**8.3**	**6.4**	**10.8**	**0.3***	**0.2**	**0.7**	**1.1***	**0.6**	**2.0**
Females												
18–24	**82.2**	72.7	88.9	**15.6**	9.4	24.8	**	**	**	**	**	**
25–34	**86.7**	79.7	91.5	**8.3***	4.8	13.7	**	**	**	**	**	**
35–44	**89.9**	86.3	92.6	**7.8**	5.5	11.0	**	**	**	**	**	**
45–54	**88.5**	85.3	91.0	**6.6**	4.7	9.3	**2.1***	1.2	3.7	**1.4***	0.7	2.8
55–64	**86.9**	83.5	89.6	**9.0**	6.7	12.1	**1.3***	0.7	2.4	**1.9***	1.0	3.5
65+	**92.1**	90.1	93.7	**4.7**	3.4	6.4	**0.7***	0.4	1.4	**0.6***	0.3	1.3
Total	**87.9**	**85.9**	**89.6**	**8.4**	**7.0**	**10.1**	**1.4***	**0.8**	**2.3**	**1.5***	**0.9**	**2.4**
People												
18–24	**84.0**	77.8	88.8	**13.4**	9.0	19.3	**	**	**	**	**	**
25–34	**85.4**	79.6	89.7	**10.5**	6.8	15.8	**	**	**	**	**	**
35–44	**90.7**	88.1	92.8	**7.6**	5.7	10.1	**	**	**	**0.8***	0.3	1.9
45–54	**89.3**	86.7	91.5	**7.3**	5.4	9.8	**1.3***	0.8	2.3	**1.0***	0.5	1.7
55–64	**89.3**	87.0	91.2	**6.4**	5.0	8.3	**0.9***	0.5	1.7	**2.4**	1.5	3.7
65+	**91.3**	89.5	92.8	**4.9**	3.7	6.3	**0.8***	0.5	1.5	**0.9***	0.6	1.6
Total	**88.3**	**86.8**	**89.7**	**8.4**	**7.1**	**9.8**	**0.9**	**0.6**	**1.4**	**1.3**	**0.9**	**1.9**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 3.65 shows the proportion of the population with an inability to work, study or manage day-to-day activities due to psychological distress, by duration, departmental region and sex, adjusted for age.

The proportion reported by men, women and people in all departmental regions was not significantly different from the proportions reported by all Victorian men, women and people, respectively. The notable exception being people residing in Eastern Metropolitan Region, of whom a significantly *lower* proportion reported being unable to work or manage day-to-day activities due to psychological distress in the previous four weeks compared with the proportion in all Victorian people.

Table 3.65 (revised): Number of days totally unable to work study or manage day-to-day activities, by Department of Health and Human Services region and sex, Victoria, 2012

	None			1 to 7			8 to 14			15 to 28		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males												
Eastern Metropolitan	**89.5**	83.3	93.6	**8.8***	4.9	15.1	**	**	**	**	**	**
North & West Metropolitan	**86.0**	80.9	89.9	**10.3**	7.0	14.9	**	**	**	**	**	**
Southern Metropolitan	**90.5**	86.2	93.6	**6.0***	3.5	9.9	**	**	**	**1.0***	0.4	2.5
Total	**88.2**	85.2	90.7	**8.6**	6.4	11.4	**0.3***	0.1	0.8	**1.2***	0.5	2.8
Rural males												
Barwon-South Western	**95.7**	90.6	98.1	**	**	**	**0.0**	.	.	**	**	**
Gippsland	**86.9**	80.5	91.4	**9.8***	5.8	16.1	**	**	**	**1.9***	0.9	3.9
Grampians	**92.6**	88.1	95.5	**4.6***	2.6	8.1	**	**	**	**	**	**
Hume	**91.1**	85.5	94.7	**6.7***	3.6	12.3	**0.0**	.	.	**	**	**
Loddon Mallee	**91.3**	86.4	94.5	**5.4***	2.8	10.3	**	**	**	**1.5***	0.7	3.2
Total	**91.6**	89.3	93.4	**5.7**	4.1	7.9	**0.5***	0.2	1.1	**1.3**	0.8	2.2
All males												
Total	**88.9**	**86.5**	**90.9**	**8.0**	**6.2**	**10.2**	**0.4***	**0.2**	**0.7**	**1.3***	**0.7**	**2.4**
Metropolitan females												
Eastern Metropolitan	**87.6**	82.3	91.4	**9.8**	6.2	15.2	**1.0***	0.5	2.1	**	**	**
North & West Metropolitan	**88.9**	85.4	91.7	**7.2**	5.0	10.4	**1.5***	0.6	3.6	**1.2***	0.6	2.3
Southern Metropolitan	**86.4**	81.6	90.2	**8.9**	6.0	13.1	**	**	**	**2.3***	1.0	5.2
Total	**88.0**	85.5	90.1	**8.3**	6.6	10.5	**1.5***	0.8	2.6	**1.3***	0.8	2.3
Rural females												
Barwon-South Western	**86.3**	80.7	90.5	**9.8**	6.2	15.0	**0.7***	0.3	1.7	**	**	**
Gippsland	**88.5**	83.0	92.4	**8.3***	4.8	13.9	**1.0***	0.4	2.4	**0.9***	0.4	2.0
Grampians	**89.2**	84.0	92.8	**8.6**	5.3	13.8	**0.7***	0.3	1.7	**0.7***	0.3	1.6
Hume	**88.0**	82.0	92.1	**9.3***	5.5	15.3	**1.1***	0.5	2.5	**1.2***	0.5	2.9
Loddon Mallee	**85.5**	80.4	89.5	**10.9**	7.3	15.9	**1.4***	0.6	3.0	**	**	**
Total	**87.2**	84.8	89.3	**9.5**	7.7	11.7	**0.9**	0.6	1.4	**1.4***	0.7	2.7
All females												
Total	**87.9**	**85.9**	**89.6**	**8.5**	**7.1**	**10.2**	**1.4***	**0.8**	**2.3**	**1.4**	**0.9**	**2.1**
Metropolitan people												
Eastern Metropolitan	**88.5**	84.6	91.5	**9.2**	6.4	13.1	**0.6***	0.3	1.2	**0.3***	0.1	0.9
North & West Metropolitan	**87.5**	84.5	90.0	**8.7**	6.6	11.4	**0.9***	0.4	2.0	**1.5***	0.7	3.2
Southern Metropolitan	**88.5**	85.3	91.1	**7.5**	5.4	10.3	**1.2***	0.5	3.0	**1.6***	0.8	3.1
Total	**88.1**	86.2	89.8	**8.4**	7.0	10.1	**0.9***	0.5	1.5	**1.3***	0.8	2.1
Rural people												
Barwon-South Western	**90.0**	85.5	93.2	**6.9**	4.3	10.8	**0.4***	0.2	0.9	**	**	**
Gippsland	**87.6**	83.4	90.9	**9.1**	6.1	13.2	**1.1***	0.5	2.6	**1.4***	0.8	2.4
Grampians	**90.9**	87.5	93.4	**6.6**	4.4	9.8	**0.6***	0.3	1.4	**1.2***	0.5	3.1
Hume	**89.7**	85.9	92.6	**7.9**	5.2	11.6	**0.6***	0.2	1.3	**1.3***	0.6	2.8
Loddon Mallee	**88.5**	85.1	91.2	**8.1**	5.7	11.4	**0.9***	0.5	1.9	**1.1***	0.6	2.1
Total	**89.4**	87.8	90.9	**7.6**	6.4	9.2	**0.7**	0.5	1.0	**1.4**	0.9	2.1
All people												
Total	**88.4**	**86.9**	**89.7**	**8.2**	**7.1**	**9.6**	**0.9**	**0.6**	**1.3**	**1.3**	**0.9**	**2.0**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: **above**/**below** Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Respondents who had indicated some level of psychological distress in the four weeks prior to the survey were asked how many days this had caused them to cut down on work, study or day-to-day activities. Table 3.66 shows the number of days of work, study or day-to-day activities that were cut down due to psychological distress, by duration, age group and sex, with 'Total' not adjusted for age.

The majority of people (80.1 per cent) reported that the psychological distress they had experienced in the four weeks prior to the survey had not impacted on them by causing them to cut down on their usual activities. A total of 14.3 per cent of people reported that their distress caused them to cut down on work or day-to-day activities for one to seven days, 2.9 per cent reported this period to be eight to 14 days and a further 1.8 per cent reported to be 15 to 28 days.

There were no significant differences in the proportion and period being reported by age group or sex compared with the corresponding estimate in all Victorian men, women and people.

Table 3.66: Number of days cut down on work, study or day-to-day activities, by age group and sex, Victoria, 2012

Age group (years)	None			1 to 7 days			8 to 14 days			15 to 28 days		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Males												
18–24	**79.3**	69.6	86.5	**18.4**	11.7	27.7	**	**	**	**	**	**
25–34	**75.8**	64.6	84.3	**16.2***	9.4	26.5	**	**	**	**	**	**
35–44	**86.5**	81.4	90.4	**11.6**	8.0	16.5	**	**	**	**	**	**
45–54	**84.9**	79.6	89.0	**11.8**	8.1	16.8	**1.2***	0.5	2.8	**	**	**
55–64	**86.6**	82.7	89.8	**9.9**	7.1	13.6	**2.0***	1.0	3.8	**0.7***	0.4	1.5
65+	**81.5**	77.4	85.0	**12.5**	9.7	16.1	**1.7***	0.8	3.7	**2.1***	1.1	3.9
Total	**82.3**	**79.3**	**84.9**	**13.5**	**11.2**	**16.1**	**2.1***	**1.2**	**3.7**	**1.6***	**0.8**	**3.0**
Females												
18–24	**75.4**	65.6	83.2	**18.5**	11.8	27.7	**5.0***	2.0	11.8	**	**	**
25–34	**76.8**	68.8	83.3	**12.5**	8.2	18.7	**5.7***	2.5	12.5	**3.3***	1.3	8.5
35–44	**77.8**	72.9	82.0	**17.8**	14.0	22.5	**2.5***	1.3	4.7	**1.2***	0.5	2.8
45–54	**81.3**	77.6	84.6	**12.4**	9.7	15.7	**2.4***	1.4	4.0	**2.1***	1.2	3.7
55–64	**76.9**	72.5	80.8	**17.6**	14.0	21.9	**2.8**	1.7	4.4	**1.6***	0.8	3.2
65+	**80.2**	77.1	82.9	**13.0**	10.7	15.6	**3.2**	2.2	4.7	**1.9***	1.1	3.4
Total	**78.1**	**75.8**	**80.3**	**15.1**	**13.3**	**17.1**	**3.6**	**2.6**	**5.0**	**1.9**	**1.3**	**2.8**
People												
18–24	**77.3**	70.7	82.8	**18.4**	13.5	24.7	**3.3***	1.4	7.5	**	**	**
25–34	**76.3**	69.7	81.8	**14.3**	10.1	20.0	**5.0***	2.5	9.7	**3.6***	1.6	7.6
35–44	**81.9**	78.4	84.9	**14.9**	12.1	18.1	**1.9***	1.1	3.3	**1.0***	0.4	2.1
45–54	**83.1**	80.0	85.8	**12.1**	9.7	14.9	**1.8**	1.1	2.8	**1.6***	0.9	2.8
55–64	**81.6**	78.6	84.2	**13.9**	11.5	16.7	**2.4**	1.6	3.5	**1.2***	0.7	2.0
65+	**80.7**	78.3	82.9	**12.8**	11.0	14.9	**2.6**	1.8	3.7	**2.0**	1.3	3.0
Total	**80.1**	**78.3**	**81.8**	**14.3**	**12.8**	**15.9**	**2.9**	**2.1**	**3.9**	**1.8**	**1.2**	**2.5**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 3.67 shows the number of days of work, study or day-to-day activities that were cut down because of psychological distress, by duration, departmental region and sex, adjusted for age.

There were significantly *lower* proportions of women residing in Barwon-South Western and Grampians regions and people residing in Grampians Region who reported cutting down on work, study or day-to-day activities for a period of eight to 14 days due to psychological distress compared with the proportion in all Victorians women and people, respectively.

Table 3.67: Number of days cut down on work, study or day-to-day activities, by Department of Health and Human Services region and sex, Victoria, 2012

	None			1 to 7 days			8 to 14 days			15 to 28 days		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males												
Eastern Metropolitan	**81.2**	74.8	86.3	**15.7**	10.9	21.9	**	**	**	**	**	**
North & West Metropolitan	**81.4**	75.9	85.9	**13.9**	9.9	19.2	**1.9***	0.8	4.4	**2.0***	0.8	4.8
Southern Metropolitan	**83.5**	78.6	87.4	**11.9**	8.5	16.3	**3.0***	1.3	6.8	**	**	**
Total	**81.8**	78.3	84.8	**14.0**	11.2	17.3	**2.0***	1.1	3.6	**1.5***	0.8	3.0
Rural males												
Barwon-South Western	**82.9**	76.1	88.0	**12.6**	7.8	19.8	**1.5***	0.6	3.8	**	**	**
Gippsland	**81.8**	75.5	86.8	**14.1**	9.7	20.0	**2.3***	1.0	5.2	**	**	**
Grampians	**85.0**	79.3	89.3	**11.6**	7.7	17.2	**1.2***	0.5	3.0	**	**	**
Hume	**84.2**	77.9	89.0	**14.4**	9.8	20.7	**	**	**	**0.9***	0.4	2.3
Loddon Mallee	**82.8**	75.2	88.5	**14.2**	8.9	21.9	**	**	**	**	**	**
Total	**83.0**	79.6	85.9	**13.7**	11.0	17.1	**1.3**	0.8	2.1	**1.2***	0.6	2.4
All males												
Total	**82.0**	**79.2**	**84.5**	**13.9**	**11.6**	**16.5**	**1.9***	**1.1**	**3.1**	**1.5***	**0.9**	**2.6**
Metropolitan females												
Eastern Metropolitan	**76.6**	71.0	81.4	**16.1**	12.2	21.0	**3.9***	1.6	9.4	**	**	**
North & West Metropolitan	**79.3**	74.9	83.1	**15.5**	12.1	19.7	**2.9***	1.7	4.9	**1.5***	0.8	2.8
Southern Metropolitan	**74.9**	69.2	79.8	**14.6**	11.0	19.2	**5.3***	3.1	9.0	**2.6***	1.2	5.8
Total	**77.6**	74.6	80.4	**15.2**	13.0	17.8	**3.8**	2.6	5.5	**2.0**	1.2	3.3
Rural females												
Barwon-South Western	**79.5**	73.7	84.2	**16.2**	11.8	21.9	**1.2***	0.6	2.3	**1.4***	0.6	3.4
Gippsland	**75.7**	68.3	81.8	**18.5**	12.9	25.9	**3.1**	2.0	5.0	**2.1***	1.0	4.4
Grampians	**82.2**	77.1	86.4	**14.3**	10.5	19.1	**1.1***	0.5	2.0	**2.0***	0.7	5.0
Hume	**78.2**	71.6	83.6	**17.1**	12.3	23.3	**3.3***	1.4	7.8	**	**	**
Loddon Mallee	**76.0**	70.4	80.8	**15.6**	11.5	20.8	**2.6***	1.5	4.6	**3.4***	1.7	6.6
Total	**78.2**	75.5	80.6	**16.4**	14.1	18.9	**2.2**	1.6	3.0	**1.9**	1.3	2.8
All females												
Total	**77.9**	**75.5**	**80.1**	**15.3**	**13.5**	**17.3**	**3.5**	**2.5**	**4.8**	**2.0**	**1.3**	**3.0**
Metropolitan people												
Eastern Metropolitan	**78.5**	74.3	82.2	**16.2**	12.8	20.4	**2.6***	1.2	5.6	**1.8***	0.8	4.2
North & West Metropolitan	**80.4**	77.0	83.4	**14.7**	11.9	17.9	**2.4**	1.5	3.8	**1.8***	1.0	3.2
Southern Metropolitan	**79.1**	75.2	82.6	**13.1**	10.4	16.3	**4.2**	2.7	6.7	**1.9***	0.9	3.7
Total	**79.7**	77.4	81.8	**14.6**	12.8	16.6	**2.9**	2.1	4.0	**1.8**	1.2	2.7
Rural people												
Barwon-South Western	**80.7**	75.9	84.7	**14.9**	11.1	19.8	**1.3***	0.8	2.3	**1.9***	0.8	4.4
Gippsland	**77.9**	72.9	82.3	**16.8**	12.9	21.7	**2.9**	1.9	4.6	**1.4***	0.7	2.8
Grampians	**83.7**	79.9	86.8	**12.9**	10.0	16.5	**1.1***	0.6	2.0	**1.4***	0.7	2.9
Hume	**81.1**	76.6	85.0	**16.0**	12.4	20.4	**1.7***	0.7	3.7	**0.7***	0.3	1.3
Loddon Mallee	**79.4**	74.8	83.4	**14.8**	11.2	19.3	**1.9***	1.1	3.1	**2.2***	1.2	4.0
Total	**80.5**	78.4	82.5	**15.1**	13.2	17.1	**1.8**	1.4	2.3	**1.6**	1.1	2.3
All people												
Total	**79.9**	**78.1**	**81.6**	**14.6**	**13.1**	**16.3**	**2.7**	**2.1**	**3.6**	**1.8**	**1.3**	**2.5**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Respondents who had indicated some level of psychological distress in the four weeks prior to the survey were asked whether this had resulted in them seeking help from a health professional. Table 3.68 shows the frequency of visiting a health professional about psychological distress, by frequency, age group and sex, with 'Total' not adjusted for age.

The majority of people (91.1 per cent) did not visit a health professional about their psychological distress.

There were few differences by age group, with the exception that there was a significantly *lower* proportion of women and people aged 55–64 years who did *not* visit a health professional about their psychological distress compared with all Victorian women and people, respectively.

However, significantly *higher* proportions of women and people aged 55–64 years visited a health professional about their psychological distress once in the four weeks prior to the survey compared with all Victorian women and people, respectively.

Table 3.68: Number of visits to a health professional due to psychological distress, by age group and sex, Victoria, 2012

Age group (years)	None			Once			Twice			More than twice		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Males												
18–24	**93.7**	85.7	97.4	**	**	**	**	**	**	**	**	**
25–34	**94.9**	88.5	97.8	**	**	**	**	**	**	**	**	**
35–44	**95.4**	91.8	97.4	**3.6***	1.8	7.3	**	**	**	**	**	**
45–54	**92.9**	89.4	95.3	**3.9***	2.2	6.6	**2.8***	1.4	5.8	**	**	**
55–64	**91.7**	88.8	93.9	**5.2**	3.4	7.8	**1.4***	0.8	2.6	**1.6***	0.8	3.1
65+	**89.9**	86.8	92.4	**4.8**	3.2	7.1	**2.9***	1.7	4.8	**1.6***	0.7	3.6
Total	**93.3**	**91.6**	**94.6**	**3.6**	**2.6**	**5.0**	**1.8**	**1.2**	**2.6**	**0.8**	**0.5**	**1.2**
Females												
18–24	**93.8**	87.8	96.9	**	**	**	**	**	**	**	**	**
25–34	**93.6**	89.0	96.4	**3.3***	1.5	7.2	**	**	**	**	**	**
35–44	**87.9**	84.1	90.9	**8.6**	6.1	12.1	**1.8***	0.8	4.0	**1.5***	0.7	3.1
45–54	**86.8**	83.5	89.6	**7.9**	5.7	10.9	**2.7***	1.6	4.5	**2.1**	1.3	3.5
55–64	**82.8**	78.6	86.3	**11.0**	8.0	14.9	**3.1**	2.0	4.9	**2.8***	1.6	4.8
65+	**89.0**	86.6	91.1	**6.3**	4.6	8.4	**2.4**	1.6	3.6	**1.0***	0.6	1.6
Total	**89.1**	**87.6**	**90.5**	**6.3**	**5.3**	**7.5**	**2.2**	**1.6**	**3.0**	**1.9**	**1.3**	**2.7**
People												
18–24	**93.7**	89.3	96.4	**	**	**	**2.3***	1.0	5.2	**1.6***	0.7	4.0
25–34	**94.2**	90.8	96.4	**2.6***	1.2	5.5	**1.2***	0.5	3.0	**	**	**
35–44	**91.4**	88.9	93.4	**6.3**	4.6	8.6	**1.2***	0.6	2.4	**1.0***	0.5	1.8
45–54	**89.8**	87.5	91.7	**5.9**	4.5	7.8	**2.8**	1.8	4.3	**1.2**	0.8	1.9
55–64	**87.1**	84.5	89.3	**8.2**	6.3	10.5	**2.3**	1.6	3.3	**2.2**	1.4	3.4
65+	**89.4**	87.6	91.0	**5.6**	4.4	7.1	**2.6**	1.9	3.6	**1.2***	0.7	2.0
Total	**91.1**	**90.0**	**92.1**	**5.1**	**4.3**	**5.9**	**2.0**	**1.6**	**2.5**	**1.3**	**1.0**	**1.8**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 3.69 shows the frequency of visiting a health professional about psychological distress, by departmental region and sex, adjusted for age.

There were no significant differences in the proportion of men, women and people who visited a health professional about psychological distress in the various departmental regions compared with the proportion in all Victorian men, women and people, respectively.

Table 3.69: Number of visits to a health professional due to psychological distress, by Department of Health and Human Services region and sex, Victoria, 2012

	None			Once			Twice			More than twice		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males												
Eastern Metropolitan	**94.5**	90.5	96.9	**1.7***	0.7	4.1	**	**	**	**	**	**
North & West Metropolitan	**93.3**	89.5	95.8	**4.5***	2.4	8.3	**1.5***	0.7	3.4	**	**	**
Southern Metropolitan	**92.9**	89.2	95.4	**4.1***	2.3	7.3	**1.6***	0.7	3.9	**	**	**
Total	**93.5**	91.3	95.1	**3.8**	2.5	5.6	**1.6***	1.0	2.7	**0.6***	0.3	1.2
Rural males												
Barwon-South Western	**91.8**	87.0	95.0	**4.2**	2.6	6.8	**	**	**	**	**	**
Gippsland	**88.5**	82.7	92.5	**6.2***	3.3	11.5	**3.6***	1.8	7.0	**	**	**
Grampians	**89.6**	84.9	93.0	**5.6**	3.5	9.0	**1.4***	0.6	3.3	**3.0***	1.1	7.8
Hume	**93.2**	90.0	95.4	**3.9***	2.3	6.4	**1.9***	0.7	4.6	**	**	**
Loddon Mallee	**94.7**	91.9	96.5	**1.8***	0.8	4.1	**2.1***	1.1	4.0	**	**	**
Total	**91.7**	89.7	93.3	**4.2**	3.1	5.6	**2.4**	1.5	3.7	**1.5***	0.8	2.7
All males												
Total	**92.9**	**91.3**	**94.3**	**3.9**	**2.9**	**5.4**	**1.8**	**1.3**	**2.7**	**0.8**	**0.5**	**1.2**
Metropolitan females												
Eastern Metropolitan	**91.4**	88.6	93.6	**6.1**	4.3	8.7	**1.4***	0.6	3.0	**0.7***	0.3	1.6
North & West Metropolitan	**91.0**	88.5	93.0	**5.0**	3.4	7.1	**2.3**	1.4	3.7	**1.1***	0.6	2.2
Southern Metropolitan	**84.2**	79.8	87.8	**9.7**	7.1	13.0	**2.6***	1.3	5.2	**3.1***	1.5	6.3
Total	**89.1**	87.3	90.7	**6.7**	5.5	8.2	**2.1**	1.4	3.0	**1.6**	1.0	2.7
Rural females												
Barwon-South Western	**90.5**	86.1	93.6	**5.4**	3.5	8.2	**1.9***	0.9	3.8	**	**	**
Gippsland	**87.0**	81.9	90.8	**6.0**	4.1	8.8	**2.5***	1.4	4.3	**4.0***	1.6	9.5
Grampians	**88.7**	84.8	91.6	**5.9**	3.7	9.3	**2.8***	1.5	5.3	**2.1***	1.1	3.7
Hume	**86.3**	81.1	90.3	**6.4***	3.8	10.5	**3.9***	1.9	7.8	**2.3***	1.2	4.4
Loddon Mallee	**88.2**	83.8	91.5	**5.0**	3.3	7.5	**2.2***	0.9	4.9	**4.0***	2.0	7.9
Total	**88.3**	86.3	89.9	**5.7**	4.7	6.9	**2.5**	1.8	3.4	**2.9**	1.9	4.4
All females												
Total	**89.1**	**87.6**	**90.4**	**6.3**	**5.4**	**7.5**	**2.2**	**1.7**	**2.9**	**1.9**	**1.4**	**2.7**
Metropolitan people												
Eastern Metropolitan	**92.7**	90.4	94.5	**4.1**	3.0	5.7	**1.7***	0.9	3.4	**0.7***	0.3	1.3
North & West Metropolitan	**92.0**	89.8	93.8	**4.9**	3.4	7.0	**1.9**	1.2	2.9	**0.8***	0.5	1.5
Southern Metropolitan	**88.4**	85.6	90.8	**6.9**	5.2	9.1	**2.2***	1.3	3.7	**2.0***	1.0	3.8
Total	**91.2**	89.8	92.4	**5.3**	4.4	6.5	**1.9**	1.4	2.5	**1.1**	0.8	1.7
Rural people												
Barwon-South Western	**91.0**	87.6	93.6	**4.6**	3.4	6.3	**2.1***	1.0	4.5	**	**	**
Gippsland	**87.3**	83.2	90.5	**6.4**	4.1	9.6	**3.0**	1.9	4.9	**2.9***	1.3	6.3
Grampians	**89.1**	86.2	91.5	**5.8**	4.1	8.0	**2.1***	1.3	3.5	**2.6***	1.4	4.8
Hume	**89.8**	86.8	92.2	**5.1**	3.6	7.3	**2.8***	1.6	4.9	**1.7***	1.0	2.9
Loddon Mallee	**91.5**	88.9	93.5	**3.4**	2.3	5.0	**2.1***	1.2	3.6	**2.5***	1.3	4.6
Total	**90.0**	88.6	91.2	**4.9**	4.1	5.8	**2.4**	1.9	3.2	**2.2**	1.6	3.1
All people												
Total	**90.9**	**89.8**	**91.9**	**5.2**	**4.4**	**6.1**	**2.0**	**1.6**	**2.5**	**1.4**	**1.0**	**1.8**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Respondents who had indicated some level of psychological distress in the four weeks prior to the survey were asked if physical ill-health was the main cause of their distress. Table 3.70 shows the number of times that physical ill-health was the main cause of the psychological distress, by age group and sex, with 'Total' not adjusted for age.

Overall, the majority of people indicated that physical ill-health was not the main cause of their psychological distress (71.6 per cent). This was significantly *higher* in men (75.9 per cent) compared with women (67.6 per cent) and in men and people aged 18–24 years compared with all Victorian men and people, respectively.

Significantly *higher* proportions of men and people aged 65 years or older reported that physical ill-health was the main cause of their psychological distress 'all or most of the time' or 'some of the time' in people aged 65 years or older compared with the corresponding proportion in all Victorian men and people, respectively.

The proportion was significantly *lower* in people aged 18–24 years reporting that physical ill-health was the main cause of their psychological distress 'all or most of the time' compared with the proportion in all Victorian people.

Table 3.70: Physical ill-health as the main cause of psychological distress, by age group and sex, Victoria, 2012

Age group (years)	None of the time			All or most of the time			Some of the time			A little of the time		
	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL
Males												
18–24	87.6	79.5	92.8	**	**	**	**	**	**	**10.2***	5.5	18.3
25–34	**74.6**	64.3	82.8	**6.8***	2.8	15.9	**5.2***	2.2	11.5	**10.0***	5.3	18.1
35–44	**79.0**	73.2	83.9	**4.6***	2.6	8.2	**4.5***	2.4	8.3	**10.4**	7.0	15.2
45–54	**76.4**	71.0	81.1	**6.8**	4.6	10.0	**5.4***	2.9	9.8	**9.9**	6.9	13.9
55–64	**74.7**	69.9	78.9	**7.4**	5.3	10.2	**5.6**	3.6	8.6	**11.5**	8.6	15.3
65+	61.8	57.2	66.2	10.7	8.3	13.8	**8.9**	6.5	12.1	**15.4**	12.3	19.1
Total	**75.9**	**73.1**	**78.5**	**6.1**	**4.8**	**7.9**	**5.1**	**3.9**	**6.6**	**11.0**	**9.2**	**13.2**
Females												
18–24	**75.7**	65.3	83.8	**5.1***	2.3	11.0	**6.4***	2.7	14.5	**12.4***	6.6	22.0
25–34	**71.9**	63.9	78.7	**8.4***	5.0	14.0	**8.0***	4.3	14.3	**11.5**	7.3	17.7
35–44	**67.8**	62.6	72.5	**8.9**	6.1	12.8	**8.2**	5.6	11.8	**12.9**	9.8	16.8
45–54	**70.2**	65.9	74.1	**10.9**	8.4	14.2	**6.2**	4.4	8.7	**11.0**	8.6	13.9
55–64	**61.3**	56.7	65.8	**14.6**	11.4	18.6	**9.7**	7.3	12.7	**13.2**	10.3	16.8
65+	58.5	54.8	62.0	**12.3**	10.1	14.8	**12.2**	10.0	14.9	**13.5**	11.1	16.4
Total	**67.6**	**65.1**	**70.0**	**10.0**	**8.6**	**11.5**	**8.5**	**7.1**	**10.1**	**12.4**	**10.7**	**14.2**
People												
18–24	81.6	75.2	86.7	3.0*	1.5	6.1	**3.8***	1.8	8.1	**11.3**	7.3	17.2
25–34	**73.2**	66.9	78.7	**7.6**	4.7	12.3	**6.6***	4.0	10.7	**10.7**	7.3	15.4
35–44	**73.1**	69.2	76.6	**6.9**	5.0	9.4	**6.4**	4.6	8.9	**11.7**	9.3	14.7
45–54	**73.2**	69.9	76.4	**8.9**	7.1	11.1	**5.8**	4.1	8.1	**10.4**	8.4	12.8
55–64	**67.8**	64.4	71.0	**11.1**	9.1	13.5	**7.7**	6.1	9.7	**12.4**	10.2	14.9
65+	59.9	57.0	62.7	11.6	9.9	13.5	10.8	9.1	12.8	**14.3**	12.3	16.5
Total	**71.6**	**69.7**	**73.4**	**8.2**	**7.2**	**9.3**	**6.8**	**5.9**	**7.9**	**11.7**	**10.5**	**13.1**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.

Table 3.71 shows the number of times that physical ill-health was the main cause of psychological distress, by departmental region and sex, adjusted for age.

There were no significant regional differences among men, women and people, with the exception of people residing in Eastern Metropolitan Region where the proportion reporting that physical ill-health was the main cause of their psychological distress 'none of the time' was significantly *higher* compared with the proportion of all Victorian people. In contrast, men and people residing in Eastern Metropolitan Region who reported that physical ill-health was the main cause of their psychological distress all or most of the time was significantly *lower* compared with the proportion in all Victorian men and people, respectively.

Table 3.71: Physical ill-health as the main cause of psychological distress, by Department of Health and Human Services region and sex, Victoria, 2012

	None of the time			All or most of the time			Some of the time			A little of the time		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males												
Eastern Metropolitan	**81.7**	76.4	86.1	**2.5***	1.4	4.5	**5.1***	2.9	8.8	**7.9**	5.1	12.0
North & West Metropolitan	**74.4**	68.8	79.3	**6.5**	4.0	10.4	**5.0**	3.3	7.7	**12.4**	8.8	17.3
Southern Metropolitan	**73.8**	67.4	79.4	**7.7**	4.9	12.1	**5.1***	3.0	8.7	**11.8**	8.1	16.9
Total	**76.0**	72.6	79.1	**6.1**	4.5	8.2	**5.0**	3.7	6.8	**11.1**	8.8	13.8
Rural males												
Barwon-South Western	**76.2**	70.2	81.3	**5.9***	3.2	10.8	**3.0***	1.7	5.3	**12.7**	9.1	17.6
Gippsland	**65.7**	58.4	72.3	**9.1**	5.8	13.8	**7.9***	4.2	14.3	**14.5**	10.0	20.6
Grampians	**74.5**	67.5	80.4	**10.7***	6.4	17.1	**5.8**	3.6	9.1	**8.8**	5.8	13.0
Hume	**71.4**	60.2	80.5	**4.9***	3.0	8.0	**9.2***	4.4	18.4	**13.3***	7.3	22.9
Loddon Mallee	**69.3**	62.2	75.5	**9.5**	6.8	13.3	**6.3***	3.6	10.9	**13.3**	8.7	19.8
Total	**71.3**	67.5	74.7	**8.0**	6.4	10.0	**6.1**	4.5	8.3	**12.9**	10.3	16.0
All males												
Total	**74.8**	**72.1**	**77.4**	**6.6**	**5.3**	**8.3**	**5.2**	**4.1**	**6.5**	**11.5**	**9.7**	**13.7**
Metropolitan females												
Eastern Metropolitan	**72.8**	68.2	77.0	**7.6**	5.5	10.5	**8.4**	5.9	11.7	**9.9**	7.5	13.0
North & West Metropolitan	**67.0**	62.1	71.6	**10.5**	7.9	13.7	**8.9**	6.5	12.1	**12.6**	9.4	16.6
Southern Metropolitan	**61.8**	56.0	67.2	**12.7**	9.4	17.1	**9.2**	6.1	13.7	**13.9**	10.2	18.7
Total	**66.9**	63.7	69.9	**10.3**	8.6	12.3	**9.0**	7.2	11.1	**12.2**	10.2	14.6
Rural females												
Barwon-South Western	**68.5**	62.6	73.9	**7.9**	5.5	11.1	**8.8**	5.6	13.5	**13.1**	9.2	18.3
Gippsland	**69.2**	62.0	75.5	**10.4**	6.4	16.3	**6.2**	4.3	9.0	**12.8**	8.6	18.8
Grampians	**70.6**	65.1	75.6	**8.3**	5.9	11.6	**5.2**	3.3	8.1	**13.7**	9.9	18.6
Hume	**64.4**	57.4	70.9	**13.3**	8.8	19.6	**6.3***	3.8	10.3	**13.6**	9.2	19.5
Loddon Mallee	**67.2**	61.7	72.4	**11.6**	8.2	16.1	**8.0**	5.6	11.2	**12.1**	9.0	16.0
Total	**67.8**	65.0	70.5	**10.2**	8.6	12.2	**7.1**	5.7	8.7	**13.1**	11.1	15.3
All females												
Total	**67.3**	**64.8**	**69.7**	**10.2**	**8.8**	**11.7**	**8.5**	**7.1**	**10.2**	**12.4**	**10.8**	**14.2**
Metropolitan people												
Eastern Metropolitan	**76.8**	73.4	79.9	**5.4**	4.0	7.2	**6.8**	5.0	9.1	**8.9**	7.0	11.3
North & West Metropolitan	**70.9**	67.2	74.4	**8.4**	6.5	10.8	**7.1**	5.5	9.2	**12.3**	9.8	15.4
Southern Metropolitan	**67.6**	63.1	71.7	**10.2**	7.9	13.2	**7.3**	5.1	10.3	**12.9**	10.2	16.3
Total	**71.3**	69.0	73.5	**8.2**	7.0	9.6	**7.1**	6.0	8.4	**11.7**	10.1	13.4
Rural people												
Barwon-South Western	**71.0**	66.0	75.6	**7.0**	5.1	9.6	**6.6**	4.2	10.0	**13.3**	10.0	17.5
Gippsland	**66.8**	61.6	71.6	**10.1**	7.2	14.1	**7.3**	4.8	10.8	**13.5**	10.3	17.6
Grampians	**72.6**	68.2	76.5	**9.4**	6.9	12.8	**5.3**	3.8	7.4	**11.4**	8.8	14.6
Hume	**68.1**	61.4	74.1	**9.2**	6.5	12.7	**7.1**	4.4	11.2	**13.8**	9.4	19.9
Loddon Mallee	**68.4**	63.9	72.5	**10.7**	8.3	13.7	**7.1**	5.2	9.7	**12.5**	9.6	16.1
Total	**69.5**	67.2	71.7	**9.2**	8.0	10.5	**6.6**	5.5	7.9	**12.9**	11.3	14.8
All people												
Total	**70.9**	**69.1**	**72.7**	**8.5**	**7.5**	**9.6**	**6.9**	**6.0**	**8.0**	**12.0**	**10.7**	**13.3**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

3.10 Hypertension

Introduction

Hypertension, commonly known as 'high blood pressure', is a chronic medical condition in which the blood pressure in the arteries is elevated. A person is clinically diagnosed with hypertension if their systolic blood pressure is 140 mmHg or more or their diastolic blood pressure is 90 mmHg or more (Sutters 2007).

Hypertension is an important risk factor for cardiovascular disease and the risk of disease increases with increasing blood pressure levels. Adults are advised to have their blood pressure checked regularly.

There are several modifiable causes of high blood pressure: poor nutrition (especially a diet high in salt), low levels of physical activity, obesity and high levels of alcohol consumption.

Hypertension is an important modifiable risk factor rating second only to tobacco use. Tobacco use is responsible for 7.8 per cent of the total health loss associated with all causes of disease and injury, while hypertension is responsible for 7.6 per cent (Begg et al. 2008). Hypertension is the most significant risk factor for cardiovascular disease and accounts for 42.1 per cent of the health loss due to cardiovascular disease.

Survey respondents were asked if they had ever been told by a doctor that they had high blood pressure, distinguishing between gestational hypertension and hypertension in women. If they responded 'yes' they were then asked to indicate what they were doing to treat their condition.

Table 3.72 shows the prevalence of hypertension, by age group and sex, with 'Total' not adjusted for age. Overall, the prevalence of hypertension was 25.8 per cent and was not significantly different in men (25.6 per cent) and women (25.9 per cent).

The prevalence of hypertension was age-related, increasing with age to 59.0 per cent in people aged 65 years or older compared with 2.8 per cent in people aged 18–24 years.

The overall prevalence of hypertension during pregnancy was 4.1 per cent. The prevalence was significantly *higher* in women aged 35–44 years compared with the prevalence in all pregnant Victorian women.

Table 3.72: Prevalence (%) of hypertension, by age group and sex, Victoria, 2012

	No			Yes			During pregnancy only		
	%	95% CI		%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL		LL	UL
Males									
18–24	96.2	90.2	98.6	3.8*	1.4	9.8			
25–34	91.4	84.2	95.4	8.6*	4.6	15.8			
35–44	85.4	80.8	89.0	14.2	10.6	18.7			
45–54	71.7	66.6	76.3	27.9	23.4	33.0			
55–64	55.3	50.4	60.1	44.6	39.9	49.5			
65+	43.2	39.4	47.0	56.7	52.8	60.4			
Total	74.2	72.0	76.3	25.6	23.5	27.8			
Females									
18–24	95.7	87.8	98.5	**	**	**	**	**	**
25–34	86.2	79.5	90.9	10.4*	6.2	17.1	3.1*	1.7	5.7
35–44	80.2	76.1	83.7	10.2	7.6	13.6	9.2	6.9	12.2
45–54	69.4	65.4	73.2	26.0	22.5	30.0	4.5	3.0	6.6
55–64	57.5	53.4	61.6	39.8	35.8	43.9	2.6*	1.6	4.4
65+	37.3	34.2	40.4	60.9	57.7	64.0	1.8*	1.1	3.1
Total	69.8	67.8	71.8	25.9	24.2	27.8	4.1	3.3	5.0
People									
18–24	95.9	91.7	98.0	2.8*	1.2	6.5			
25–34	88.8	84.2	92.1	9.5	6.3	14.1			
35–44	82.8	79.8	85.4	12.2	9.9	14.9			
45–54	70.6	67.4	73.6	27.0	24.0	30.1			
55–64	56.5	53.3	59.6	42.2	39.0	45.3			
65+	40.0	37.6	42.4	59.0	56.5	61.4			
Total	72.0	70.5	73.4	25.8	24.4	27.2			

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

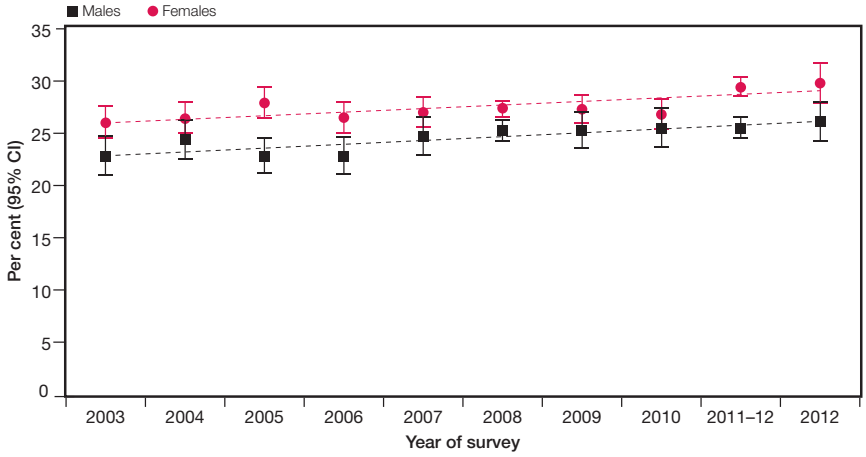
Table 3.73 and Figure 3.14 show the age-adjusted prevalence of hypertension, including pregnancy-induced hypertension in women, from 2003 to 2012, by sex. The prevalence of hypertension significantly increased in men, women and people from 2003 to 2012.

Table 3.73: Prevalence (%) of hypertension,[a] by sex, Victoria, 2003–2012

	Males			Females[a]			People		
	%	95% CI		%	95% CI		%	95% CI	
Year of survey		LL	UL		LL	UL		LL	UL
2003	**22.8**	21.0	24.7	**26.0**	24.5	27.6	**24.7**	23.5	25.9
2004	**24.4**	22.5	26.3	**26.4**	25.0	28.0	**25.7**	24.6	27.0
2005	**22.8**	21.2	24.5	**27.9**	26.5	29.4	**25.6**	24.5	26.7
2006	**22.8**	21.1	24.6	**26.5**	25.0	28.0	**24.8**	23.7	26.0
2007	**24.7**	22.9	26.6	**27.0**	25.6	28.5	**25.9**	24.8	27.1
2008	**25.3**	24.3	26.3	**27.4**	26.6	28.1	**26.4**	25.8	27.1
2009	**25.3**	23.6	27.0	**27.3**	26.0	28.7	**26.3**	25.3	27.5
2010	**25.5**	23.7	27.4	**26.8**	25.4	28.3	**26.2**	25.1	27.4
2011–12	**25.5**	24.5	26.6	**29.4**	28.6	30.4	**27.6**	26.9	28.3
2012	**26.1**	**24.3**	**28.0**	**29.8**	**27.9**	**31.7**	**28.0**	**26.7**	**29.3**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Statistical significance of trend determined using ordinary least squares regression analysis
a Includes pregnancy-induced hypertension

Figure 3.14: Prevalence (%) of hypertension,[a] by sex, Victoria, 2003–2012



Data were age-standardised to the 2011 Victorian population.
Statistical significance of trend determined using ordinary least squares regression analysis
a Includes pregnancy-induced hypertension

Table 3.74 shows the prevalence of hypertension, by departmental region and sex, adjusted for age.

The prevalence of pregnancy-induced hypertension was significantly *higher* in women residing in rural regions as a whole and Grampians Region in particular compared with the prevalence in all pregnant Victorian women. However, the prevalence of hypertension was not significantly different in men, women and people residing in the various departmental regions compared with the prevalence in all Victorian men, women and people, respectively.

Table 3.74: Prevalence of hypertension, by Department of Health and Human Services region and sex, Victoria, 2012

	No			Yes			During pregnancy only		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Metropolitan males									
Eastern Metropolitan	**74.9**	69.8	79.4	**24.8**	20.3	29.9			
North & West Metropolitan	**73.2**	69.7	76.4	**26.5**	23.3	30.0			
Southern Metropolitan	**74.7**	70.4	78.6	**25.3**	21.4	29.6			
Total	**74.3**	71.9	76.6	**25.4**	23.2	27.8			
Rural males									
Barwon-South Western	**77.2**	73.7	80.4	**22.8**	19.6	26.3			
Gippsland	**67.7**	62.2	72.7	**32.3**	27.3	37.8			
Grampians	**71.1**	65.6	75.9	**28.8**	23.9	34.2			
Hume	**70.0**	63.5	75.8	**30.0**	24.2	36.5			
Loddon Mallee	**72.2**	66.9	77.0	**27.5**	22.8	32.8			
Total	**71.9**	69.4	74.3	**28.0**	25.7	30.5			
All males									
Total	**73.7**	**71.8**	**75.5**	**26.1**	**24.3**	**28.0**			
Metropolitan females									
Eastern Metropolitan	**72.9**	68.8	76.7	**24.2**	20.6	28.3	**2.8**	1.8	4.5
North & West Metropolitan	**71.7**	67.9	75.2	**23.6**	20.6	27.0	**4.6**	2.9	7.1
Southern Metropolitan	**68.4**	63.7	72.8	**29.1**	24.8	33.7	**2.3***	1.3	4.1
Total	**71.0**	68.6	73.4	**25.5**	23.3	27.8	**3.4**	2.5	4.6
Rural females									
Barwon-South Western	**68.5**	63.8	73.0	**23.5**	20.5	26.7	**6.9***	4.2	11.4
Gippsland	**66.7**	62.1	71.0	**27.4**	23.8	31.2	**5.8***	3.5	9.5
Grampians	**64.7**	59.3	69.7	**27.5**	23.3	32.1	7.9	5.2	11.6
Hume	**69.4**	64.4	73.9	**23.9**	20.9	27.2	**6.6***	3.7	11.6
Loddon Mallee	**64.9**	60.9	68.8	**29.0**	25.7	32.6	**6.0**	4.0	8.9
Total	**66.9**	64.7	69.0	**26.2**	24.5	27.8	6.6	5.2	8.3
All females									
Total	**70.0**	**68.1**	**71.9**	**25.8**	**24.0**	**27.6**	**4.1**	**3.3**	**5.0**
Metropolitan people									
Eastern Metropolitan	**73.8**	70.5	76.9	**24.6**	21.6	27.9			
North & West Metropolitan	**72.5**	69.9	74.8	**25.0**	22.8	27.4			
Southern Metropolitan	**71.5**	68.0	74.7	**27.3**	24.1	30.7			
Total	**72.7**	70.9	74.3	**25.5**	23.9	27.1			
Rural people									
Barwon-South Western	**72.8**	69.5	75.8	**23.3**	21.1	25.7			
Gippsland	66.7	62.9	70.3	**30.3**	26.9	34.0			
Grampians	**67.4**	63.3	71.2	**28.7**	25.1	32.5			
Hume	**69.8**	65.9	73.5	**26.8**	23.6	30.4			
Loddon Mallee	**68.4**	65.0	71.6	**28.4**	25.4	31.6			
Total	**69.3**	67.7	70.9	**27.2**	25.7	28.6			
All people									
Total	**71.9**	**70.5**	**73.2**	**25.9**	**24.7**	**27.2**			

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 3.75 shows the age-adjusted prevalence of hypertension, by selected socioeconomic determinants, modifiable risk factor, health status and sex.

When compared with all Victorian men and women, a significantly *higher* prevalence of hypertension was observed among men and women with the following characteristics:

- fair or poor self-reported health
- obesity
- diagnosed with diabetes.

When compared with all Victorian men, a significantly *higher* prevalence of hypertension was observed among men with the following characteristic:

- underweight.

When compared with all Victorian women, a significantly *higher* prevalence of hypertension was observed among women with the following characteristics:

- pregnant women residing in rural regions
- high levels of psychological distress
- sedentary.

When compared with all Victorian men and women, a significantly *lower* prevalence of hypertension was observed among men and women with the following characteristics:

- employed
- total annual household income of $100,000 or more
- normal BMI.

When compared with all Victorian men, a significantly *lower* prevalence of hypertension was observed among men with the following characteristic:

- primary or no education.

When compared with all Victorian women, a significantly *lower* prevalence of hypertension was observed among women with the following characteristics:

- unemployed
- total annual household income of $100,000 or more
- excellent or very good health
- underweight.

Table 3.75 (revised): Prevalence (%) of hypertension, by selected socioeconomic determinants, modifiable risk factors and health status, Victoria, 2012

	Males			Females					
	Hypertension			Hypertension			Hypertension during pregnancy only		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Males	**26.1**	**24.3**	**28.0**	**25.8**	**24.0**	**27.6**	**4.1**	**3.3**	**5.0**
Country of birth									
Australia	**25.8**	23.8	27.9	**26.0**	24.1	27.9	**3.7**	3.0	4.5
Overseas	**27.8**	23.3	32.8	**24.7**	21.3	28.4	**6.1***	3.2	11.0
Language spoken at home									
English only	**25.9**	24.0	27.9	**25.7**	23.8	27.7	**4.0**	3.2	4.9
Language other than English	**28.2**	23.6	33.4	**24.8**	21.2	28.8	**4.3***	2.5	7.3
Metro-Rural regions									
Rural	**28.0**	25.7	30.5	**26.2**	24.5	27.8	6.6	5.2	8.3
Metropolitan	**25.4**	23.2	27.8	**25.5**	23.3	27.8	**3.4**	2.5	4.6
Level of education									
None or Primary	14.6	9.6	21.6	**32.7**	26.8	39.1	**	**	**
Secondary	**27.2**	23.6	31.1	**28.1**	25.2	31.2	**4.6**	3.2	6.5
TAFE or Tertiary	**26.0**	24.1	28.1	**24.3**	22.1	26.7	**3.7**	2.9	4.6
Employment status (<65 years)									
Employed	18.0	15.8	20.3	17.0	14.6	19.7	**4.8**	3.5	6.6
Unemployed	**17.7**	11.6	26.2	14.9	9.5	22.5	**5.8***	2.3	14.2
Not in labour force	**25.0**	17.9	33.7	**21.7**	17.7	26.3	**4.6**	3.2	6.5
Total annual household income ($)									
<40,000	**30.6**	25.8	35.8	**31.9**	27.1	37.0	**4.2***	2.4	7.2
40,000 to <100,000	**26.4**	23.7	29.3	**26.0**	22.9	29.3	**5.2**	3.5	7.8
100,000, or more	**24.1**	20.7	27.9	15.4	11.8	20.0	**4.2**	2.8	6.2
Psychological distress (K10 score) [a]									
Low (K10 score <16)	**23.5**	21.6	25.4	**22.6**	20.9	24.4	**4.6**	3.5	5.9
Moderate (K10 score 16 to 21)	**31.4**	27.3	35.7	**28.8**	25.0	32.9	**3.0**	1.9	4.7
High (K10 score 22 to 29)	**31.2**	24.1	39.3	36.6	31.1	42.4	**2.4***	1.1	5.2
Very high (K10 score ≥30)	**38.2**	27.3	50.4	**34.6**	26.8	43.3	13.1*	7.6	21.6
Physical activity level [b]									
Sedentary	**24.7**	19.5	30.9	40.0	33.8	46.6	**2.9***	1.3	6.4
Insufficient	**23.2**	20.6	26.1	**25.5**	22.7	28.5	**3.7**	2.4	5.8
Sufficient	**27.4**	25.0	30.0	**24.8**	22.6	27.1	**4.6**	3.5	5.9
Compliance with fruit & vegetable consumption guidelines [c]									
Both	**20.5**	14.6	27.9	**22.0**	18.5	25.8	**4.4***	2.2	8.4
Vegetable only [d]	**23.4**	18.1	29.6	**24.0**	20.0	28.4	**4.9**	3.1	7.8
Fruit only [d]	**26.0**	23.2	29.1	**24.6**	22.7	26.6	**3.3**	2.5	4.2
Neither	**26.4**	24.0	29.0	**26.7**	24.0	29.6	**4.6**	3.3	6.3
Smoking status									
Current smoker	**22.4**	18.8	26.5	**27.2**	22.9	31.9	**4.6**	3.0	7.1
Ex-smoker	**29.0**	25.5	32.9	**28.0**	24.4	32.0	**3.6**	2.4	5.4
Non-smoker	**24.4**	21.7	27.2	**24.1**	22.1	26.2	**4.0**	3.1	5.2
Lifetime risk of alcohol related harm (2009) [e]									
Abstainer / no longer drinks alcohol	**26.0**	21.8	30.8	**28.2**	24.5	32.2	**3.2**	2.2	4.9
Reduced risk	**29.8**	23.6	36.9	**22.4**	19.8	25.2	**3.9**	2.7	5.4
Increased risk	**25.8**	23.7	28.0	**26.5**	24.0	29.1	**4.0**	3.0	5.5
Self-reported health									
Excellent / Very Good	**22.0**	19.2	25.1	17.1	15.7	18.5	**4.6**	3.5	6.0
Good	**28.8**	26.0	31.7	**30.5**	27.4	33.8	**3.8**	2.7	5.3
Fair / Poor	32.7	28.8	36.7	43.1	37.6	48.7	**2.7***	1.3	5.2
BMI category [f]									
Underweight	41.0	29.5	53.5	14.0	9.9	19.4	**5.2***	2.3	11.2
Normal	18.2	15.6	21.0	17.6	15.9	19.3	**4.2**	3.0	5.6
Overweight	**27.2**	24.5	30.1	**28.7**	25.3	32.2	**3.7**	2.5	5.5
Obese	32.8	28.5	37.4	44.5	36.9	52.4	**4.1**	2.5	6.6
Diabetes									
No diabetes	**24.4**	22.5	26.3	**24.8**	23.1	26.6	**4.1**	3.3	5.0
Diabetes	38.7	33.6	44.2	44.0	36.9	51.3	**8.1***	3.2	19.1
Depression									
Yes	**32.1**	28.0	36.4	**29.7**	26.6	32.9	**3.0**	2.1	4.2
No	**24.8**	22.8	27.0	**24.5**	22.5	26.5	**4.4**	3.4	5.7

a Based on the Kessler 10 scale for psychological distress.
b Based on DoHA (1999) guidelines.
c Based on NHMRC (2003) guidelines.
d Includes those meeting both guidelines.
e NHMRC (2001) guidelines.
f Based on Body Mass Index (BMI).

Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.

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4. Biomedical checks




4. Biomedical checks

A variety of tests may be done by a health professional during a routine physical examination, depending on the individual's age, family history and state of health. Some of the following tests may be done each time the patient visits the doctor and some are necessary only when specific complaints or concerns are raised, or when an individual reaches a certain age or risk category.

Survey respondents were asked about frequency of visits to their general practitioner (GP) and whether, in the two years prior to the survey, they had had a blood pressure check, a blood test for cholesterol or a test for diabetes or high glucose (blood sugar) levels.

4.1 Visits to a doctor or general practitioner

Respondents were asked 'When was the last time you consulted a doctor or general practitioner (GP) about your own health?' Table 4.1 shows the most recent visit to a doctor or GP, by age group and sex. The majority of men (55.2 per cent) and women (67.6 per cent) had visited a doctor or GP less than three months prior to the survey. By contrast almost no-one had not visited a doctor or GP and 14.4 per cent of men and 7.0 per cent of women had visited a doctor or GP 12 months or more prior to the survey.

A significantly higher proportion of women, particularly those aged 35–54 years and 65 years or older, had visited a doctor or GP less than three months prior to the survey compared with their male counterparts. There was no difference between the sexes for those who had visited a doctor or GP three to six months prior to the interview. By contrast a significantly higher proportion of men had visited a doctor or GP six to 12 months prior to the survey interview compared with their female counterparts. Similarly, a significantly higher proportion of men, particularly those aged 35–54 years, had visited a doctor or GP 12 months or more prior to the survey interview compared with their female counterparts. The proportion of men and women aged 65 years or older

Table 4.1: Last visit to a doctor or general practitioner, by age group and sex, Victoria, 2012

	< 3 months ago			3 to < 6 months ago			6 to < 12 months ago			12 months ago or more			Have never consulted a doctor		
Age group		95% CI			95% CI			95% CI			95% CI			95% CI	
(years)	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL
Males															
18–24	**44.0**	34.3	54.2	**18.5**	12.0	27.5	**13.2**	8.2	20.5	**22.7**	15.4	32.2	**	**	**
25–34	**46.6**	36.9	56.5	**19.9**	13.2	28.8	**14.0***	7.8	23.8	**16.5**	10.9	24.1	**	**	**
35–44	**43.8**	37.8	49.9	**20.9**	15.9	26.9	**13.9**	10.3	18.4	**21.1**	16.5	26.4	**	**	**
45–54	**50.8**	45.3	56.3	**19.2**	15.4	23.7	**14.3**	10.8	18.9	**15.3**	11.6	19.9	**0.0**	.	.
55–64	**69.4**	64.8	73.6	**16.6**	13.2	20.6	**6.5**	4.7	8.9	**7.4**	5.2	10.5	**	**	**
65+	**79.3**	75.8	82.3	**12.7**	10.3	15.7	**5.1**	3.5	7.4	**2.9**	1.9	4.4	**0.0**	.	.
Total	**55.2**	**52.2**	**58.1**	**18.1**	**15.9**	**20.5**	**11.4**	**9.4**	**13.6**	**14.4**	**12.4**	**16.7**	**0.6**	**0.2**	**1.8**
Females															
18–24	**61.4**	50.4	71.4	**19.5**	12.4	29.3	**7.7***	3.4	16.6	**11.4***	6.0	20.5	**0.0**	.	.
25–34	**63.6**	55.5	71.0	**19.4**	13.8	26.6	**10.6**	6.8	16.2	**6.2***	3.0	12.5	**0.0**	.	.
35–44	**58.7**	53.9	63.4	**23.2**	19.3	27.6	**8.8**	6.6	11.7	**9.1**	6.7	12.2	**0.0**	.	.
45–54	**64.4**	60.3	68.3	**18.5**	15.5	22.0	**9.0**	6.9	11.6	**8.1**	6.0	10.7	**0.0**	.	.
55–64	**70.9**	67.0	74.5	**15.9**	13.1	19.0	**6.6**	4.9	9.0	**6.6**	4.7	9.3	**0.0**	.	.
65+	**84.1**	81.7	86.2	**10.1**	8.4	12.2	**3.3**	2.4	4.5	**2.4**	1.7	3.6	**0.0**	.	.
Total	**67.6**	**65.1**	**69.9**	**17.7**	**15.8**	**19.7**	**7.7**	**6.4**	**9.1**	**7.0**	**5.7**	**8.6**	**0.0**	**.**	**.**
Persons															
18–24	**52.5**	45.1	59.8	**19.0**	14.0	25.3	**10.5**	6.9	15.6	**17.2**	12.3	23.5	**	**	**
25–34	**55.0**	48.6	61.3	**19.6**	15.0	25.2	**12.3**	8.4	17.7	**11.4**	8.0	15.9	**	**	**
35–44	**51.4**	47.4	55.3	**22.0**	18.8	25.6	**11.3**	9.1	13.9	**15.0**	12.3	18.0	**	**	**
45–54	**57.7**	54.2	61.1	**18.9**	16.4	21.7	**11.6**	9.5	14.1	**11.6**	9.5	14.2	**0.0**	.	.
55–64	**70.1**	67.2	73.0	**16.2**	14.0	18.7	**6.6**	5.3	8.2	**7.0**	5.5	9.0	**	**	**
65+	**81.9**	79.9	83.8	**11.3**	9.8	13.0	**4.1**	3.2	5.3	**2.7**	2.0	3.5	**0.0**	.	.
Total	**61.5**	**59.6**	**63.4**	**17.9**	**16.4**	**19.4**	**9.5**	**8.3**	**10.8**	**10.6**	**9.4**	**12.0**	**0.3**	**0.1**	**0.9**

LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Data are age-specific estimates, except for 'Total', which represent the estimates for Victoria and have been age-standardised to the 2011 Victorian population.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: **above**/**below** Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a RSE greater than 50 per cent and is not reported as it is unreliable for general use.

who had visited their doctor or GP less than three months prior to the interview was significantly higher compared with all Victorian men and women. By contrast the proportion of men and women aged 35–44 years who had visited their doctor or GP less than three months prior to the interview was significantly lower compared with all Victorian men, women and people, respectively.

Table 4.2 shows the most recent visit to a doctor or GP, by departmental region and sex. There were no significant regional differences in the proportion of men or women by frequency of visit to a GP. There was a significantly lower proportion of females residing in the Gippsland Region who had visited a doctor or GP three to six months prior to the interview compared with all Victorian females. The proportion of males residing in the Barwon-South Western Region and Gippsland Region who consulted a doctor or GP 12 months or more prior to the interview was significantly higher compared with all Victorians males.

Table 4.2: Last visit to a doctor or GP, by Department of Health and Human Services region and sex, Victoria, 2012

Region	< 3 months ago			3 to < 6 months ago			6 to < 12 months ago			12 months ago or more			Have never consulted a doctor		
		95% CI			95% CI			95% CI			95% CI			95% CI	
	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL
Males															
Eastern Metropolitan	**53.2**	46.6	59.6	**15.6**	11.8	20.3	**14.9**	10.3	21.0	**13.7**	9.8	19.0	**	**	**
North & West Metropolitan	**57.1**	51.5	62.5	**18.7**	14.7	23.6	**11.8**	8.6	16.1	**12.3**	9.0	16.6	**	**	**
Southern Metropolitan	**57.4**	51.0	63.6	**18.3**	13.8	23.9	**8.9***	4.8	15.8	**13.7**	9.5	19.5	**0**	.	.
Metropolitan males	**56.3**	52.6	59.8	**18.0**	15.3	21.1	**11.5**	9.0	14.4	**13.1**	10.8	15.8	**	**	**
Barwon-South Western	**50.7**	44.0	57.3	**12.6**	8.5	18.3	**13.6**	9.0	20.1	**23.1**	18.4	28.6	**0**	.	.
Gippsland	**51.4**	45.1	57.5	**18.7**	13.6	25.0	**7.3***	4.3	11.9	**22.5**	16.9	29.3	**	**	**
Grampians	**51.2**	43.8	58.6	**21.4**	15.4	28.9	**11.1**	7.0	17.0	**15.4**	10.5	22.0	**	**	**
Hume	**56.6**	46.6	66.1	**15.3**	10.0	22.8	**12.2***	7.1	20.1	**11.9**	7.9	17.6	**0**	.	.
Loddon Mallee	**51.0**	44.4	57.6	**22.5**	16.3	30.3	**10.8**	7.2	15.9	**14.3**	10.5	19.1	**	**	**
Rural males	**52.5**	48.7	56.2	**17.8**	15.0	21.0	**11.5**	9.3	14.1	**17.0**	14.0	20.5	**	**	**
Total	**55.6**	**52.7**	**58.5**	**17.8**	**15.6**	**20.2**	**11.4**	**9.4**	**13.8**	**14.0**	**12.0**	**16.2**	**	**	**
Females															
Eastern Metropolitan	**63.0**	57.3	68.4	**19.2**	15.2	23.8	**12.4**	8.8	17.4	**5.3**	3.3	8.5	**0**	.	.
North & West Metropolitan	**69.0**	64.3	73.4	**19.0**	15.2	23.4	**5.6**	3.6	8.7	**6.4**	4.1	10.0	**0**	.	.
Southern Metropolitan	**67.5**	62.1	72.5	**17.0**	13.3	21.6	**7.2**	4.7	10.9	**8.2**	5.4	12.5	**0**	.	.
Metropolitan females	**67.1**	63.9	70.1	**18.4**	15.9	21.2	**7.8**	6.1	9.8	**6.7**	5.1	8.8	**0**	.	.
Barwon-South Western	**64.9**	59.1	70.2	**16.2**	12.1	21.5	**8.6**	5.6	12.9	**8.9**	6.2	12.6	**0**	.	.
Gippsland	**69.3**	61.8	76.0	**12.0**	8.9	16.0	**9.5**	6.6	13.4	**9.2***	4.8	17.0	**0**	.	.
Grampians	**67.8**	62.2	73.0	**18.5**	14.3	23.6	**7.9**	5.2	11.8	**5.7**	3.8	8.5	**0**	.	.
Hume	**67.4**	61.1	73.2	**19.1**	14.0	25.5	**6.3**	4.3	9.0	**7.2**	5.1	10.1	**0**	.	.
Loddon Mallee	**68.8**	63.4	73.7	**17.4**	13.6	22.1	**7.5**	4.7	11.7	**6.2**	4.3	9.0	**0**	.	.
Rural females	**67.2**	64.4	69.8	**16.7**	14.6	19.0	**8.0**	6.6	9.7	**7.7**	6.2	9.5	**0**	.	.
Total	**67.1**	**64.5**	**69.5**	**18.0**	**16.0**	**20.2**	**7.8**	**6.5**	**9.4**	**7.0**	**5.7**	**8.6**	**0**	**.**	**.**
Persons															
Eastern Metropolitan	**58.1**	53.6	62.4	**17.4**	14.6	20.7	**13.6**	10.5	17.4	**9.5**	7.1	12.5	**	**	**
North & West Metropolitan	**63.4**	59.7	67.0	**18.6**	15.7	21.8	**8.6**	6.6	11.2	**9.4**	7.2	12.1	**0**	.	.
Southern Metropolitan	**62.6**	58.1	66.9	**17.8**	14.7	21.3	**7.9**	5.3	11.7	**10.9**	8.3	14.3	**	**	**
Metropolitan persons	**61.8**	59.3	64.1	**18.1**	16.3	20.2	**9.6**	8.1	11.4	**9.9**	8.5	11.6	**	**	**
Barwon-South Western	**57.5**	52.6	62.1	**14.7**	11.5	18.8	**11.4**	8.3	15.5	**15.5**	11.7	20.4	**0**	.	.
Gippsland	**60.1**	55.1	65.0	**15.4**	12.3	19.3	**8.4**	6.2	11.3	**15.9**	12.1	20.7	**	**	**
Grampians	**59.9**	55.0	64.5	**19.7**	16.0	24.0	**9.6**	6.9	13.2	**10.3**	7.7	13.8	**0**	.	.
Hume	**61.9**	55.7	67.7	**17.0**	13.1	21.8	**9.1**	6.2	13.2	**9.8**	7.1	13.2	**	**	**
Loddon Mallee	**60.1**	55.4	64.6	**20.3**	16.4	24.9	**8.9**	6.5	12.1	**9.9**	7.4	13.0	**	**	**
Rural persons	**59.7**	57.3	62.0	**17.3**	15.5	19.2	**9.7**	8.3	11.3	**12.4**	10.7	14.4	**	**	**
Total	**61.4**	**59.4**	**63.3**	**17.9**	**16.4**	**19.5**	**9.6**	**8.4**	**11.0**	**10.5**	**9.3**	**11.9**	**	**	**

LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.
Note that the figures may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses, not reported here.
Data were age-standardised to the 2011 Victorian population.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a RSE greater than 50 per cent and is not reported as it is unreliable for general use.

4.2 Blood pressure check in previous two years

Table 4.3 shows the proportion of men and women who had had a blood pressure check in the previous two years, by age group and sex, with 'Total' not adjusted for age.

Overall, 81.6 per cent of Victorian people had had their blood pressure checked in the previous two years and this was significantly *higher* for women (85.1 per cent) compared with men (78.0 per cent).

There was a significantly *higher* proportion of men and people aged 45 years or older and women aged 55 years or older who had had their blood pressure checked compared with all Victorian men, people and women, respectively. By contrast, the proportion was significantly *lower* in men and people aged 18–34 years and women aged 18–44 years compared with all Victorian men, people and women, respectively.

Table 4.3: Blood pressure check in the past two years, by age group and sex, Victoria, 2012

	Yes			No		
	%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL
Males						
18–24	47.8	37.9	57.8	51.2	41.3	61.1
25–34	65.5	55.2	74.5	34.3	25.3	44.6
35–44	74.2	68.4	79.3	25.3	20.3	31.1
45–54	87.4	82.4	91.1	12.6	8.9	17.6
55–64	94.6	92.3	96.3	5.3	3.7	7.6
65+	96.9	95.4	98.0	2.7	1.7	4.2
Total	**78.0**	**75.0**	**80.7**	**21.7**	**19.0**	**24.7**
Females						
18–24	65.2	54.6	74.6	34.5	25.2	45.2
25–34	81.1	73.8	86.8	18.8	13.2	26.1
35–44	81.2	77.2	84.6	18.6	15.1	22.5
45–54	88.6	85.5	91.1	11.2	8.7	14.3
55–64	91.8	88.9	93.9	8.1	6.0	11.0
65+	97.1	96.0	97.9	2.8	2.0	3.8
Total	**85.1**	**82.9**	**87.0**	**14.8**	**12.9**	**16.9**
People						
18–24	56.3	48.9	63.4	43.1	36.0	50.5
25–34	73.3	66.9	78.8	26.6	21.0	33.0
35–44	77.8	74.3	80.9	21.9	18.8	25.3
45–54	88.0	85.2	90.3	11.9	9.6	14.7
55–64	93.2	91.4	94.6	6.7	5.3	8.5
65+	97.0	96.2	97.7	2.7	2.1	3.6
Total	**81.6**	**79.8**	**83.3**	**18.2**	**16.5**	**20.0**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 4.4 shows the proportion of men and women who had had a blood pressure check in the previous two years, by departmental region and sex, adjusted for age.

There were no significant regional differences in the proportion of men or women who had had a blood pressure check in the previous two years, with the exception of women residing in Gippsland Region, where the proportion was significantly *higher* compared with all Victorian women.

Table 4.4: Blood pressure check in the past two years, by Department of Health and Human Services region and sex, Victoria, 2012

	Yes			No		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Metropolitan males						
Eastern Metropolitan	**78.4**	73.0	83.0	**20.7**	16.1	26.1
North & West Metropolitan	**78.1**	72.8	82.5	**21.9**	17.5	27.2
Southern Metropolitan	**77.1**	70.8	82.3	**22.9**	17.7	29.2
Total	**77.6**	74.1	80.7	**22.2**	19.0	25.6
Rural males						
Barwon-South Western	**75.2**	66.7	82.1	**24.8**	17.9	33.3
Gippsland	**80.0**	73.4	85.2	**19.4**	14.2	26.0
Grampians	**77.9**	71.5	83.1	**20.6**	15.5	27.0
Hume	**83.5**	73.8	90.1	**15.1***	8.7	25.0
Loddon Mallee	**80.6**	72.9	86.5	**19.4**	13.5	27.1
Total	**79.0**	75.3	82.3	**20.4**	17.1	24.1
All males						
Total	**77.9**	**75.1**	**80.5**	**21.8**	**19.2**	**24.6**
Metropolitan females						
Eastern Metropolitan	**79.5**	73.9	84.2	**20.3**	15.6	25.9
North & West Metropolitan	**87.0**	83.2	90.1	**13.0**	9.9	16.8
Southern Metropolitan	**84.6**	79.4	88.7	**15.4**	11.3	20.6
Total	**84.5**	81.8	86.9	**15.4**	13.1	18.2
Rural females						
Barwon-South Western	**84.6**	79.7	88.5	**14.9**	11.1	19.8
Gippsland	**91.5**	88.3	94.0	**7.8**	5.5	11.1
Grampians	**86.6**	82.0	90.1	**12.6**	9.1	17.1
Hume	**84.7**	79.3	88.9	**15.2**	11.0	20.6
Loddon Mallee	**84.3**	79.2	88.3	**15.2**	11.3	20.3
Total	**86.0**	83.8	88.0	**13.5**	11.5	15.7
All females						
Total	**84.8**	**82.6**	**86.7**	**15.0**	**13.1**	**17.2**
Metropolitan people						
Eastern Metropolitan	**79.1**	75.2	82.6	**20.3**	16.9	24.2
North & West Metropolitan	**82.3**	78.8	85.3	**17.7**	14.7	21.2
Southern Metropolitan	**81.0**	76.6	84.8	**18.9**	15.2	23.3
Total	**81.0**	78.7	83.1	**18.8**	16.8	21.1
Rural people						
Barwon-South Western	**80.3**	75.0	84.7	**19.5**	15.1	24.8
Gippsland	**85.6**	81.3	89.0	**13.8**	10.4	18.1
Grampians	**81.8**	77.7	85.3	**17.0**	13.6	21.1
Hume	**83.8**	78.2	88.2	**15.4**	11.0	21.1
Loddon Mallee	**82.1**	77.5	86.0	**17.6**	13.8	22.3
Total	**82.4**	80.2	84.5	**17.0**	15.0	19.3
All people						
Total	**81.3**	**79.5**	**83.0**	**18.5**	**16.8**	**20.3**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

4.3 Blood cholesterol check in the previous two years

Table 4.5 shows the proportion of men and women who had had a cholesterol check in the previous two years, by age group and sex, with 'Total' not adjusted for age.

Overall, 62.1 per cent of Victorian people had had their cholesterol checked in the previous two years, and this proportion was not significantly different for men (63.4 per cent) compared with women (61.0 per cent). There was a significantly *higher* proportion of men, women and people aged 45 years or older who had had their cholesterol checked compared with all Victorian men, women and people, respectively. In contrast, the proportion was significantly *lower* in men, women and people aged18–34 years.

Table 4.5: Cholesterol check in the past two years, by age group and sex, Victoria, 2012

	Yes			No		
	%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL
Males						
18–24	14.8*	8.6	24.1	84.0	74.7	90.3
25–34	46.2	36.5	56.2	53.6	43.6	63.3
35–44	59.9	53.8	65.7	38.1	32.4	44.2
45–54	74.6	69.2	79.4	24.6	19.9	30.0
55–64	90.3	87.6	92.5	9.4	7.2	12.0
65+	91.4	89.2	93.2	7.3	5.6	9.4
Total	**63.4**	**60.3**	**66.3**	**35.7**	**32.7**	**38.8**
Females						
18–24	16.9*	10.0	27.2	81.7	71.2	88.9
25–34	38.1	30.6	46.2	61.1	53.0	68.6
35–44	54.3	49.4	59.0	44.2	39.5	49.0
45–54	77.5	73.9	80.7	21.8	18.6	25.4
55–64	82.6	79.3	85.4	17.0	14.2	20.2
65+	86.8	84.7	88.6	11.1	9.4	13.1
Total	**61.0**	**58.4**	**63.5**	**37.8**	**35.3**	**40.4**
People						
18–24	15.8	10.9	22.4	82.8	76.2	87.9
25–34	42.2	35.9	48.7	57.3	50.8	63.6
35–44	57.1	53.2	60.8	41.2	37.5	45.0
45–54	76.1	72.9	79.0	23.2	20.3	26.4
55–64	86.4	84.2	88.2	13.3	11.4	15.3
65+	88.9	87.4	90.2	9.4	8.1	10.8
Total	**62.1**	**60.1**	**64.1**	**36.8**	**34.8**	**38.8**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 4.6 shows the proportion of men and women who had had a blood cholesterol check in the previous two years, by departmental region and sex, adjusted for age.

The proportion of women and people who had had a cholesterol check was significantly *lower* in those residing in rural regions as a whole and Barwon-South Western Region in particular, together with people residing in Grampians Region compared with all Victorian women and people, respectively.

Table 4.6: Blood cholesterol check in the past two years, by Department of Health and Human Services region and sex, Victoria, 2012

	Yes			No		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Metropolitan males						
Eastern Metropolitan	**62.6**	56.3	68.5	**36.0**	30.1	42.3
North & West Metropolitan	**62.4**	57.8	66.8	**36.6**	32.2	41.2
Southern Metropolitan	**69.0**	63.0	74.5	**30.5**	25.1	36.5
Total	**64.4**	61.1	67.7	**34.6**	31.4	38.0
Rural males						
Barwon-South Western	**58.9**	53.3	64.2	**40.5**	35.1	46.1
Gippsland	**62.6**	55.8	68.9	**36.8**	30.5	43.6
Grampians	**54.8**	48.1	61.2	**41.9**	35.3	48.9
Hume	**57.8**	51.8	63.5	**40.3**	34.2	46.7
Loddon Mallee	**60.9**	54.3	67.0	**38.7**	32.6	45.3
Total	**59.1**	56.1	62.1	**39.6**	36.6	42.6
All males						
Total	**63.2**	**60.4**	**65.8**	**35.8**	**33.2**	**38.5**
Metropolitan females						
Eastern Metropolitan	**59.6**	54.7	64.3	**39.8**	35.1	44.6
North & West Metropolitan	**62.1**	57.4	66.5	**36.6**	32.2	41.3
Southern Metropolitan	**63.3**	58.0	68.2	**35.6**	30.7	40.9
Total	**61.8**	58.9	64.7	**37.1**	34.2	40.0
Rural females						
Barwon-South Western	**49.4**	44.8	54.1	**47.6**	42.9	52.4
Gippsland	**58.2**	53.4	62.9	**40.5**	35.8	45.3
Grampians	**53.3**	47.8	58.6	**45.2**	39.8	50.7
Hume	**58.2**	52.9	63.3	**40.4**	35.3	45.7
Loddon Mallee	**57.3**	52.7	61.8	**42.2**	37.8	46.8
Total	**54.9**	52.7	57.1	**43.5**	41.3	45.8
All females						
Total	**60.1**	**57.8**	**62.4**	**38.6**	**36.3**	**41.0**
Metropolitan people						
Eastern Metropolitan	**61.1**	57.0	65.0	**37.9**	34.0	42.0
North & West Metropolitan	**62.1**	58.8	65.3	**36.7**	33.5	40.0
Southern Metropolitan	**66.0**	62.0	69.8	**33.2**	29.4	37.2
Total	**63.0**	60.8	65.2	**35.9**	33.7	38.2
Rural people						
Barwon-South Western	**54.5**	50.6	58.4	**43.8**	40.0	47.7
Gippsland	**60.6**	56.2	64.8	**38.4**	34.2	42.8
Grampians	**53.7**	49.4	57.8	**43.7**	39.4	48.1
Hume	**57.7**	53.5	61.7	**40.6**	36.4	45.0
Loddon Mallee	**58.9**	54.9	62.8	**40.6**	36.8	44.6
Total	**57.0**	55.1	58.8	**41.6**	39.7	43.5
All people						
Total	**61.6**	**59.8**	**63.3**	**37.3**	**35.5**	**39.1**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

4.4 Blood glucose check in the previous two years

Table 4.7 shows the proportion of men, women and people who had had a blood glucose check in the previous two years, by age group and sex, with 'Total' not adjusted for age.

Overall, 57.6 per cent of Victorian people had had their blood glucose checked in the previous two years and there was no significant difference between men (55.4 per cent) and women (59.8 per cent). There was a significantly *higher* proportion of men, women and people aged 45 years or older who had had their blood glucose checked compared with all Victorian men, women and people, respectively. In contrast, the proportion was significantly *lower* in men aged 18–34 years, women aged 18–24 and 35–44 years, and people aged 18–44 years compared with all Victorian men, women and people, respectively.

Table 4.7: Blood glucose check in the past two years, by age group and sex, Victoria, 2012

	Yes			No		
	%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL
Males						
18–24	16.7	10.3	25.9	82.7	73.5	89.2
25–34	40.3	30.9	50.4	59.1	49.0	68.5
35–44	50.3	44.2	56.4	46.8	40.8	53.0
45–54	64.7	59.1	69.9	32.0	27.0	37.5
55–64	79.8	75.9	83.2	17.7	14.5	21.3
65+	79.2	75.9	82.1	17.2	14.5	20.3
Total	**55.4**	**52.4**	**58.4**	**42.3**	**39.4**	**45.4**
Females						
18–24	28.6	19.6	39.7	67.9	56.5	77.6
25–34	53.3	45.2	61.3	45.8	37.9	53.9
35–44	51.5	46.7	56.4	45.7	40.9	50.6
45–54	64.8	60.7	68.7	33.7	29.8	37.7
55–64	73.2	69.4	76.6	23.6	20.3	27.3
65+	79.2	76.7	81.6	17.0	14.9	19.3
Total	**59.8**	**57.2**	**62.3**	**37.7**	**35.2**	**40.2**
People						
18–24	22.5	16.7	29.6	75.5	68.2	81.6
25–34	46.8	40.4	53.2	52.5	46.1	58.8
35–44	50.9	47.0	54.8	46.3	42.4	50.2
45–54	64.7	61.3	68.0	32.9	29.7	36.2
55–64	76.4	73.7	78.9	20.7	18.4	23.3
65+	79.2	77.2	81.1	17.1	15.4	19.0
Total	**57.6**	**55.6**	**59.6**	**40.0**	**38.0**	**41.9**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 4.8 shows the proportion of men and women who had had a blood glucose check in the previous two years, by departmental region and sex, adjusted for age.

The proportion of women and people who had had a glucose check in the previous two years was significantly *lower* in those residing in Barwon-South Western Region compared with all Victorian women and people, respectively.

Table 4.8: Blood glucose check in the past two years, by Department of Health and Human Services region and sex, Victoria, 2012

	Yes			No		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Metropolitan males						
Eastern Metropolitan	**55.1**	48.9	61.2	**41.9**	36.0	48.2
North & West Metropolitan	**56.7**	51.6	61.6	**41.7**	36.8	46.8
Southern Metropolitan	**57.9**	51.6	64.0	**40.0**	34.0	46.4
Total	**56.5**	53.0	59.9	**41.3**	37.9	44.8
Rural males						
Barwon-South Western	**50.6**	44.8	56.3	**47.6**	42.0	53.3
Gippsland	**57.6**	51.1	63.9	**40.4**	34.2	46.9
Grampians	**53.5**	46.5	60.3	**44.7**	37.9	51.7
Hume	**50.5**	43.6	57.3	**43.1**	36.5	50.1
Loddon Mallee	**53.4**	46.6	60.1	**44.2**	37.6	51.0
Total	**52.7**	49.6	55.8	**44.5**	41.5	47.6
All males						
Total	**55.6**	**52.8**	**58.3**	**42.1**	**39.4**	**44.9**
Metropolitan females						
Eastern Metropolitan	**58.5**	53.3	63.5	**39.5**	34.6	44.6
North & West Metropolitan	**62.0**	57.0	66.7	**35.7**	31.0	40.8
Southern Metropolitan	**59.5**	53.7	65.0	**38.2**	32.8	44.0
Total	**60.1**	57.0	63.2	**37.5**	34.4	40.7
Rural females						
Barwon-South Western	**50.8**	45.7	55.9	**46.7**	41.7	51.8
Gippsland	**55.4**	49.6	61.1	**40.0**	34.0	46.3
Grampians	**55.5**	49.8	61.0	**42.4**	36.9	48.2
Hume	**63.2**	57.4	68.7	**33.3**	27.8	39.4
Loddon Mallee	**57.9**	52.6	63.0	**39.4**	34.3	44.7
Total	**56.3**	53.6	58.8	**40.9**	38.3	43.5
All females						
Total	**59.1**	**56.6**	**61.6**	**38.4**	**35.9**	**41.0**
Metropolitan people						
Eastern Metropolitan	**56.7**	52.7	60.6	**40.8**	36.9	44.8
North & West Metropolitan	**59.1**	55.5	62.7	**38.9**	35.3	42.6
Southern Metropolitan	**58.4**	54.1	62.6	**39.4**	35.3	43.7
Total	**58.2**	55.9	60.5	**39.5**	37.2	41.9
Rural people						
Barwon-South Western	**50.6**	46.5	54.7	**47.3**	43.2	51.4
Gippsland	**56.5**	52.1	60.9	**40.5**	36.1	45.0
Grampians	**54.1**	49.6	58.6	**43.9**	39.4	48.5
Hume	**56.4**	50.9	61.8	**38.8**	33.5	44.5
Loddon Mallee	**55.5**	51.1	59.9	**41.9**	37.6	46.3
Total	**54.4**	52.3	56.4	**42.8**	40.7	44.9
All people						
Total	**57.2**	**55.4**	**59.1**	**40.4**	**38.5**	**42.3**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

5. Oral health




5. Oral health

Oral health is important for overall health and wellbeing. Oral diseases place a considerable burden on individuals, families and the community. The impact of oral disease comes from the four main conditions of tooth decay, gum disease, oral cancer and oral trauma. About 90 per cent of all tooth loss can be attributed to tooth decay and gum disease health problems (AIHW 2011). Tooth decay is amenable to prevention through good nutrition, exposure to fluoride (such as in water and toothpastes), maintenance of adequate oral hygiene and access to regular dental visits.

Oral health is linked to overall health and wellbeing in a number of ways. The ability to chew and swallow our food is essential for obtaining the nutrients we need for good health. Other adverse impacts of poor dental health include problems with speech and low self-esteem. Moreover the impact of poor dental health is not just on the individual but also on the broader community through the health system and high associated economic costs. For example, dental health conditions are the highest cause of avoidable hospital admissions in young people up to 19 years old in Victoria (Rogers & Morgan 2012).

Questions were included in the survey to measure self-rated dental health, the period of time since the last visit to a dental professional, and avoidance or delaying a dental visit because of cost. Analyses of the answers to these questions will assist in identifying which Victorians are at *higher* risk of poorer oral health and what can be done to address this.

5.1 Self-reported dental health

Self-reported dental health status by age group and sex is presented in Table 5.1, with 'Total' not adjusted for age.

Overall, 44.4 per cent of people rated their dental health as 'excellent' or 'very good', while 30.5 per cent rated their dental health as 'good' and a further 19.5 per cent as being 'fair or poor'. The proportion of people who reported having no natural teeth was 5.3 per cent.

A significantly *lower* proportion of men (40.8 per cent) rated their dental health as excellent or very good compared with women (47.9 per cent).

A significantly *lower* proportion of men and people aged 55 years or older and women aged 65 years or older rated their dental health as excellent or very good compared with the proportion in all Victorian men, people and women, respectively. In contrast, a significantly *higher* proportion of men, women and people aged 18–24 and 35–44 years rated their dental health as excellent or very good compared with all Victorian men, women and people, respectively.

The proportion of men aged 55 years or older, and women and people aged 65 years or older with dentures or no natural teeth, was significantly *higher* compared with the proportion in all Victorian men, women and people, respectively.

Table 5.1: Self-rated dental health, by age group and sex, Victoria, 2012

Age group (years)	Excellent or very good			Good			Fair or Poor			Has dentures, no natural teeth		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Males												
18–24	54.8	44.7	64.5	**33.5**	24.7	43.6	**11.7***	6.6	19.9	**0.0**	.	.
25–34	**42.5**	33.0	52.6	**27.6**	20.1	36.6	**28.3**	20.0	38.3	**0.0**	.	.
35–44	50.4	44.3	56.5	**32.3**	26.9	38.3	**16.9**	12.9	21.8	**0.0**	.	.
45–54	**38.4**	33.1	44.0	**34.9**	29.9	40.3	**23.5**	19.0	28.6	**2.7***	1.4	5.2
55–64	32.1	27.5	37.0	**33.4**	29.0	38.1	**26.7**	22.7	31.1	7.8	5.9	10.3
65+	27.0	23.8	30.6	**30.4**	27.0	34.0	**22.5**	19.5	25.9	19.4	16.6	22.7
Total	**40.8**	**37.9**	**43.8**	**31.8**	**29.2**	**34.6**	**21.9**	**19.5**	**24.5**	**4.8**	**4.1**	**5.6**
Females												
18–24	65.6	54.9	75.0	**24.1**	16.0	34.4	**10.3***	5.5	18.3	**0.0**	.	.
25–34	**52.2**	44.1	60.2	**32.5**	25.3	40.7	**15.2**	10.2	21.9	**0.0**	.	.
35–44	57.8	52.9	62.5	**26.5**	22.4	31.1	**15.4**	12.3	19.1	**	**	**
45–54	**48.1**	43.9	52.4	**31.3**	27.6	35.3	**18.6**	15.5	22.2	1.9*	1.1	3.2
55–64	**43.0**	38.9	47.1	**29.0**	25.5	32.8	**21.3**	18.2	24.7	**6.7**	4.7	9.4
65+	26.2	23.5	29.1	**29.8**	27.0	32.8	**20.6**	18.0	23.4	23.0	20.5	25.7
Total	**47.9**	**45.4**	**50.3**	**29.1**	**26.9**	**31.4**	**17.1**	**15.5**	**18.9**	**5.8**	**5.1**	**6.5**
People												
18–24	60.1	52.7	67.1	**28.9**	22.7	36.0	11.0	7.3	16.4	**0.0**	.	.
25–34	**47.3**	41.0	53.7	**30.0**	24.6	36.1	**21.8**	16.7	27.8	**0.0**	.	.
35–44	54.2	50.2	58.0	**29.4**	25.9	33.1	**16.1**	13.5	19.1	**	**	**
45–54	**43.4**	39.9	46.8	**33.1**	29.9	36.4	**21.0**	18.2	24.1	2.3	1.4	3.6
55–64	37.6	34.6	40.8	**31.2**	28.3	34.2	23.9	21.4	26.7	**7.2**	5.8	9.0
65+	26.6	24.5	28.8	**30.1**	27.9	32.4	**21.5**	19.4	23.6	21.4	19.5	23.4
Total	**44.4**	**42.5**	**46.4**	**30.5**	**28.8**	**32.2**	**19.5**	**18.0**	**21.0**	**5.3**	**4.8**	**5.8**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Self-reported dental health status, by departmental region and sex, is presented in Table 5.2, and is adjusted for age.

Self-rated dental health was similar between people who lived in rural and metropolitan regions. However, a significantly *higher* proportion of women and people residing in rural Victoria as a whole, and Gippsland Region in particular, had dentures or no natural teeth compared with their metropolitan counterparts, as well as all Victorian women and people, respectively.

Table 5.2: Self-rated dental health, by Department of Health and Human Services region and sex, Victoria, 2012

	Excellent or very good			Good			Fair or Poor			Has dentures, no natural teeth		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males												
Eastern Metropolitan	**44.8**	38.2	51.5	**36.0**	29.8	42.8	**14.1**	10.8	18.1	**5.0**	3.4	7.2
North & West Metropolitan	**39.2**	33.8	44.7	**29.9**	25.2	35.1	**23.2**	19.1	27.8	**6.5**	4.9	8.4
Southern Metropolitan	**43.5**	36.8	50.5	**30.8**	25.5	36.6	**22.1**	16.9	28.4	**3.0**	2.0	4.5
Total	**42.0**	38.4	45.6	**31.6**	28.4	35.0	**20.7**	17.9	23.7	**4.9**	4.0	5.9
Rural males												
Barwon-South Western	**40.8**	32.3	49.9	**33.5**	25.7	42.3	**19.1**	13.4	26.6	**6.3**	4.8	8.1
Gippsland	**37.6**	31.3	44.4	**31.8**	25.7	38.5	**23.4**	18.3	29.3	**7.0**	5.3	9.3
Grampians	**36.4**	29.2	44.2	**32.0**	25.1	39.8	**26.1**	20.1	33.1	**5.5**	4.1	7.5
Hume	**39.9**	30.6	50.1	**28.6**	23.4	34.3	**26.2**	18.4	35.9	**5.1**	3.8	6.9
Loddon Mallee	**34.0**	27.3	41.4	**35.1**	28.0	42.9	**25.5**	19.6	32.6	**5.3**	3.9	7.3
Total	**37.8**	34.1	41.7	**32.6**	29.1	36.3	**23.4**	20.3	26.9	**6.0**	5.2	6.8
All males												
Total	**40.8**	**37.9**	**43.8**	**31.9**	**29.3**	**34.6**	**21.3**	**19.1**	**23.8**	**5.2**	**4.6**	**6.0**
Metropolitan females												
Eastern Metropolitan	**54.0**	48.5	59.4	**26.0**	21.5	31.0	**16.1**	12.5	20.5	**3.7**	2.8	4.9
North & West Metropolitan	**49.2**	44.5	53.8	**26.5**	22.4	31.2	**18.2**	15.4	21.5	**6.0**	4.7	7.8
Southern Metropolitan	**44.9**	39.4	50.4	**34.8**	29.4	40.7	**16.1**	12.5	20.6	**4.2**	3.1	5.6
Total	**49.1**	45.9	52.3	**29.2**	26.3	32.2	**16.9**	14.8	19.2	**4.8**	4.0	5.6
Rural females												
Barwon-South Western	**51.3**	45.7	56.8	**26.6**	21.9	31.9	**14.5**	10.8	19.0	**7.5**	6.1	9.0
Gippsland	**41.8**	35.8	48.1	**29.5**	23.1	36.9	**18.5**	13.0	25.6	**10.0**	8.1	12.2
Grampians	**42.1**	36.3	48.1	**33.5**	28.0	39.4	**17.4**	13.7	21.7	**7.1**	5.6	8.9
Hume	**47.5**	41.9	53.2	**29.9**	24.8	35.6	**16.2**	13.1	19.9	**6.2**	4.9	7.8
Loddon Mallee	**47.7**	42.9	52.5	**28.4**	24.2	33.0	**15.8**	12.5	19.7	**7.5**	5.9	9.3
Total	**46.4**	43.7	49.2	**29.3**	26.9	31.9	**16.3**	14.3	18.5	**7.7**	7.0	8.5
All females												
Total	**48.3**	**45.8**	**50.8**	**29.3**	**27.0**	**31.8**	**16.7**	**15.0**	**18.5**	**5.6**	**5.0**	**6.2**
Metropolitan people												
Eastern Metropolitan	**49.5**	45.2	53.9	**30.9**	26.9	35.1	**15.0**	12.5	17.9	**4.4**	3.4	5.6
North & West Metropolitan	**44.1**	40.5	47.8	**28.2**	24.9	31.6	**20.7**	18.1	23.5	**6.3**	5.2	7.6
Southern Metropolitan	**44.1**	39.6	48.7	**32.9**	28.8	37.3	**19.1**	15.8	22.8	**3.7**	2.9	4.6
Total	**45.6**	43.2	48.1	**30.3**	28.2	32.6	**18.7**	17.0	20.6	**4.8**	4.2	5.5
Rural people												
Barwon-South Western	**45.8**	40.7	51.1	**30.6**	25.9	35.7	**16.4**	13.1	20.4	**6.9**	5.9	8.1
Gippsland	**39.2**	34.1	44.5	**30.6**	26.0	35.6	**21.3**	17.1	26.3	**8.7**	7.4	10.3
Grampians	**39.4**	34.8	44.3	**32.8**	28.3	37.6	**21.4**	17.9	25.4	**6.4**	5.3	7.7
Hume	**43.6**	37.6	49.7	**29.2**	25.2	33.6	**21.3**	16.0	27.7	**5.8**	4.8	6.9
Loddon Mallee	**40.6**	36.2	45.2	**31.9**	27.6	36.6	**20.6**	17.1	24.6	**6.5**	5.3	7.8
Total	**42.1**	39.8	44.5	**31.0**	28.8	33.2	**19.8**	17.8	21.9	**6.9**	6.4	7.5
All people												
Total	**44.6**	**42.7**	**46.6**	**30.6**	**28.8**	**32.4**	**19.0**	**17.5**	**20.5**	**5.5**	**5.0**	**5.9**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 5.3 shows self-rated dental health by selected socioeconomic determinants, modifiable risk factors, health status and sex, adjusted for age.

5.1.1 Excellent or very good self-reported dental health

When compared with the prevalence in all Victorian men and women, a significantly *higher* prevalence of 'excellent or very good' dental health was reported by men and women with the following characteristics:

- total annual household income of $100,000 or more
- excellent or very good self-reported health status.

When compared with the prevalence in all Victorian men, a significantly *higher* prevalence of **'**excellent or very good' dental health was reported by men with the following characteristic:

- complied with both or vegetable only consumption guidelines.

When compared with the prevalence in all Victorian women, a significantly *higher* prevalence of **'**excellent or very good' dental health was reported by women with the following characteristics:

- employed
- met fruit consumption guidelines only
- underweight.

When compared with the prevalence in all Victorian men and women, a significantly *lower* prevalence of 'excellent or very good' dental health was reported by men and women with the following characteristics:

- primary or no education
- total annual household income of less than $40,000
- very high levels of psychological distress
- sedentary
- current smoker
- good, fair or poor self-reported health.

When compared with the prevalence in all Victorian men, a significantly *lower* prevalence of 'excellent or very good' dental health was reported by men with the following characteristics:

- secondary education only
- moderate levels of psychological distress
- underweight
- diagnosed with diabetes.

When compared with the prevalence in all Victorian women, a significantly *lower* prevalence of 'excellent or very good' dental health was reported by women with the following characteristics:

- born overseas
- spoke a language other than English at home
- unemployed
- high levels of psychological distress
- did not comply with guidelines for either fruit or vegetable consumption
- obese.

5.1.2 Fair or poor self-reported dental health

When compared with the prevalence in all Victorian men and women, a significantly *higher* prevalence of 'fair or poor' dental health was reported by men and women with the following characteristics:

- total annual household income of less than $40,000
- high or very high levels of psychological distress
- current smoker
- fair or poor self-reported health status.

When compared with the prevalence in all Victorian men, a significantly *higher* prevalence of 'fair or poor' dental health was reported by men with the following characteristics:

- secondary education only
- sedentary.

When compared with the prevalence in all Victorian women, a significantly *higher* prevalence of 'fair or poor' dental health was reported by women with the following characteristics:

- born overseas
- spoke a language other than English at home
- abstained from the consumption of alcohol
- good self-reported health
- diagnosed with depression.

Table 5.3 (revised): Self-rated dental health, by selected socioeconomic determinants, modifiable risk factors, health status and sex, Victoria, 2012

	Males						Females					
	Excellent or very good			Fair or Poor			Excellent or very good			Fair or Poor		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Victoria	**40.8**	**37.9**	**43.8**	**21.3**	**19.1**	**23.8**	**48.3**	**45.8**	**50.8**	**16.7**	**15.0**	**18.5**
Country of birth												
Australia	**42.2**	38.9	45.6	**19.2**	16.7	21.8	**52.9**	50.2	55.6	**13.7**	12.1	15.5
Overseas	**39.2**	33.0	45.7	**25.3**	20.5	30.7	36.1	30.6	42.0	24.0	19.7	28.8
Language spoken at home												
English only	**41.3**	38.1	44.6	**19.3**	16.9	21.9	**53.2**	50.5	55.9	**13.6**	12.1	15.3
Language other than English	**38.8**	33.0	44.9	**25.7**	20.7	31.3	36.3	31.2	41.6	25.9	21.9	30.4
Metro-Rural regions												
Rural	**37.8**	34.1	41.7	**23.4**	20.3	26.9	**46.4**	43.7	49.2	**16.3**	14.3	18.5
Metropolitan	**42.0**	38.4	45.6	**20.7**	17.9	23.7	**49.1**	45.9	52.3	**16.9**	14.8	19.2
Level of education												
None or Primary	25.6	25.0	26.3	9.3	5.9	14.4	22.6	20.1	25.4	**16.8**	11.6	23.8
Secondary	31.5	26.6	36.8	29.6	24.6	35.1	**45.2**	40.3	50.1	**20.9**	17.1	25.3
TAFE or Tertiary	**43.4**	39.6	47.2	**17.5**	15.1	20.1	**51.6**	48.3	54.9	**14.5**	12.4	16.8
Employment status (<65 years)												
Employed	**46.4**	42.5	50.3	**19.7**	17.0	22.7	56.2	52.4	60.0	**14.0**	11.9	16.4
Unemployed	**37.6**	27.8	48.5	**24.6**	15.0	37.6	33.5	24.5	43.9	**19.9**	13.1	29.1
Not in labour force	**28.2**	19.6	38.7	**26.7**	18.4	37.1	**50.5**	44.9	56.0	**20.4**	16.3	25.2
Total annual household income ($)												
<40,000	21.1	14.8	29.2	43.4	35.8	51.2	34.3	29.9	39.1	24.4	19.9	29.6
40,000 to <100,000	**41.7**	36.9	46.5	**20.9**	17.9	24.2	**50.9**	46.4	55.3	**14.4**	11.6	17.6
100,000, or more	50.0	44.7	55.4	**14.8**	11.3	19.1	64.8	59.3	70.0	7.4	5.2	10.5
Psychological distress (K10 score) [a]												
Low (K10 score <16)	**46.0**	42.2	49.9	**18.1**	15.4	21.1	**53.7**	50.4	57.0	12.4	10.8	14.2
Moderate (K10 score 16 to 21)	32.1	26.9	37.8	**25.8**	21.3	30.9	**44.7**	39.7	49.8	**21.2**	17.7	25.1
High (K10 score 22 to 29)	**32.3**	24.8	40.9	33.6	26.1	42.0	36.1	29.7	43.1	24.1	18.8	30.5
Very high (K10 score ≥30)	16.0*	8.9	27.2	39.3	30.1	49.2	17.1	11.4	24.6	46.2	36.4	56.3
Physical activity level [b]												
Sedentary	20.1	13.2	29.6	39.7	29.9	50.5	33.2	23.9	44.1	**18.0**	13.6	23.5
Insufficient	**40.8**	35.1	46.7	**24.1**	19.5	29.4	**43.8**	38.9	48.9	**20.0**	16.6	23.9
Sufficient	**43.6**	40.1	47.2	**18.2**	15.7	20.9	**52.5**	49.5	55.6	**14.6**	12.5	16.9
Compliance with fruit & vegetable consumption guidelines [c]												
Both	57.9	48.4	66.9	**11.6***	6.4	20.2	**57.6**	49.7	65.2	**17.9**	12.3	25.4
Vegetable only [d]	66.2	57.7	73.7	10.4*	6.1	17.4	**57.7**	50.5	64.6	**17.1**	11.6	24.4
Fruit only [d]	**43.4**	38.8	48.2	**19.2**	15.5	23.5	54.9	51.6	58.1	**14.2**	12.2	16.5
Neither	**38.8**	35.0	42.7	**23.1**	20.3	26.1	41.3	37.8	44.9	**19.0**	16.4	21.9
Smoking status												
Current smoker	26.1	20.8	32.3	34.5	28.8	40.7	33.8	27.4	40.8	26.0	21.5	31.0
Ex-smoker	**37.3**	31.2	43.8	**28.0**	21.9	35.0	**53.9**	48.5	59.3	12.1	10.1	14.3
Non-smoker	**45.8**	41.8	49.8	15.6	13.0	18.5	**51.1**	48.0	54.2	**14.7**	12.9	16.7
Lifetime risk of alcohol related harm (2009) [e]												
Abstainer / no longer drinks alcohol	**34.6**	28.4	41.4	**26.4**	19.4	34.8	**41.3**	36.0	46.8	22.8	18.6	27.7
Reduced risk	**42.8**	34.2	51.7	**17.4**	13.0	22.9	**53.0**	47.0	59.0	**18.6**	14.1	24.1
Increased risk	**41.8**	38.5	45.2	**21.0**	18.4	23.8	50.2	46.9	53.6	**13.9**	12.0	16.0
Self-reported health												
Excellent / Very Good	58.7	54.7	62.6	9.1	7.3	11.3	64.9	62.0	67.7	6.7	5.6	8.1
Good	30.4	25.9	35.3	**21.3**	18.0	25.0	35.2	31.3	39.4	22.2	18.8	26.0
Fair / Poor	15.6	11.1	21.6	55.0	48.2	61.7	21.5	15.6	28.9	37.2	30.7	44.2
BMI category [f]												
Underweight	23.8	18.1	30.6	**21.8**	16.7	28.0	62.6	52.1	72.0	7.8*	4.4	13.5
Normal	**43.1**	38.4	48.0	**19.4**	15.7	23.7	**54.3**	50.8	57.7	**13.6**	11.6	16.0
Overweight	**41.3**	36.7	46.1	**20.6**	17.3	24.4	**42.9**	37.3	48.6	**18.4**	14.4	23.2
Obese	**34.3**	27.2	42.2	**26.1**	20.5	32.5	32.9	27.8	38.3	**23.4**	17.0	31.3
Diabetes												
No diabetes	**41.5**	38.5	44.5	**21.0**	18.7	23.4	**48.7**	46.1	51.2	**16.4**	14.7	18.2
Diabetes	20.5	13.8	29.3	**22.2**	16.0	30.0	**37.7**	27.5	49.1	**26.8**	18.4	37.3
Depression												
Yes	**33.7**	27.9	40.0	**26.6**	22.0	31.6	**44.0**	39.4	48.7	23.4	19.6	27.8
No	**42.2**	38.9	45.5	**20.7**	18.1	23.6	**49.8**	46.9	52.8	**14.5**	12.7	16.5

a Based on the Kessler 10 scale for psychological distress.
c Based on NHMRC (2003) guidelines.
d Includes those meeting both guidelines.
e NHMRC (2009) guidelines.
f Based on Body Mass Index (BMI).
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.

5.2 Visits to a dental professional

The proportion of the population visiting a dental professional, by duration of time since the respondent's last visit, age group and sex, is presented in Table 5.4, with 'Total' not adjusted for age.

Almost 60 per cent of people reported visiting a dental professional within the preceding 12 months. A further 17.6 per cent of people reported visiting a dental professional between 12 months and two years prior to the survey. Another 13.2 per cent of people reported that it was two to five years since they last visited a dental professional, while 8.6 per cent reported it was five years or more and 0.5 per cent reported that they had never visited a dental professional.

A significantly *higher* proportion of men, women and people aged 65 years or older reported that they last visited a dental professional five years or more ago compared with the proportion in all Victorian men, women and people, respectively.

Table 5.4: Proportion (%) visiting a dental professional, by duration of time since last visit, age group and sex, Victoria, 2012

	Duration since last visit to a dental professional (years)														
	<1			1 to <2			2 to <5			5, or more ago			Never		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL		LL	UL		LL	UL		LL	UL
Males															
18–24	**56.9**	46.7	66.5	**27.5**	19.5	37.2	**11.0***	5.8	20.1	**3.8***	1.5	9.2	**	**	**
25–34	**52.7**	42.9	62.4	**16.7**	10.6	25.3	**14.2**	8.8	22.3	**13.6**	8.3	21.3	**	**	**
35–44	**49.8**	43.7	56.0	**22.1**	17.0	28.2	**16.4**	12.5	21.2	**11.6**	8.3	16.0	**	**	**
45–54	**56.4**	50.8	61.8	**16.2**	12.7	20.5	**18.3**	14.1	23.4	**8.0**	5.7	11.1	**	**	**
55–64	**59.1**	54.3	63.7	**16.1**	12.9	20.0	**14.0**	11.1	17.5	**9.8**	7.7	12.4	**	**	**
65+	**53.4**	49.6	57.2	**17.1**	14.3	20.3	**13.6**	11.3	16.3	**14.9**	12.6	17.6	**0.4***	0.2	0.9
Total	**54.4**	**51.5**	**57.3**	**19.1**	**16.8**	**21.5**	**14.8**	**12.8**	**16.9**	**10.6**	**9.0**	**12.4**	**0.6***	**0.3**	**1.5**
Females															
18–24	**71.9**	61.2	80.6	**14.3***	8.3	23.5	**9.8***	5.1	17.9	**	**	**	**	**	**
25–34	**57.7**	49.7	65.4	**21.7**	15.7	29.3	**13.3**	9.1	18.9	**6.9***	3.9	11.8	**	**	**
35–44	**68.1**	63.6	72.4	**15.0**	12.1	18.6	**11.5**	8.7	15.0	**4.5**	2.9	6.7	**	**	**
45–54	**70.3**	66.3	73.9	**15.5**	12.7	18.6	**9.7**	7.5	12.6	**4.4**	3.1	6.2	**0.0**	.	.
55–64	**68.3**	64.4	72.0	**15.7**	12.8	19.0	**10.1**	8.0	12.7	**5.8**	4.3	7.8	**0.0**	.	.
65+	**56.5**	53.3	59.6	**14.8**	12.8	17.2	**14.2**	12.2	16.5	**13.0**	11.1	15.1	**	**	**
Total	**64.8**	**62.5**	**67.1**	**16.3**	**14.5**	**18.3**	**11.6**	**10.2**	**13.2**	**6.6**	**5.6**	**7.8**	**0.3***	**0.1**	**0.6**
People															
18–24	**64.2**	56.9	71.0	**21.0**	15.7	27.6	**10.4**	6.6	16.1	**3.7***	1.6	8.1	**	**	**
25–34	**55.2**	48.8	61.4	**19.2**	14.7	24.7	**13.8**	10.1	18.4	**10.3**	7.1	14.6	**	**	**
35–44	**59.1**	55.2	62.9	**18.5**	15.4	22.0	**13.9**	11.5	16.8	**8.0**	6.1	10.4	**	**	**
45–54	**63.4**	60.0	66.8	**15.8**	13.5	18.4	**13.9**	11.5	16.8	**6.2**	4.8	7.9	**	**	**
55–64	**63.8**	60.7	66.7	**15.9**	13.7	18.4	**12.0**	10.2	14.1	**7.8**	6.4	9.4	**	**	**
65+	**55.1**	52.6	57.5	**15.9**	14.1	17.8	**14.0**	12.4	15.7	**13.9**	12.4	15.5	**0.2***	0.1	0.4
Total	**59.7**	**57.8**	**61.6**	**17.6**	**16.2**	**19.2**	**13.2**	**12.0**	**14.5**	**8.6**	**7.6**	**9.6**	**0.5***	**0.2**	**0.9**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 5.5 shows the proportion of the population visiting a dental professional, by duration of time since the respondent's last visit, departmental region and sex, adjusted for age.

The proportion of women and people who visited a dental professional in the previous 12 months was significantly *lower* in rural regions as a whole compared with all Victorian women and people, respectively. There were significantly *higher* proportions of men and women who lived in metropolitan regions who had visited a dental professional within the previous 12 months compared with their rural counterparts.

By contrast, there were significantly *higher* proportions of men and people residing in rural regions as a whole who had not visited a dental professional in the previous five years or more compared with all Victorian men and people, respectively. This was also true of men and people residing in Loddon Mallee Region and people residing in Grampians Region.

Table 5.5: Proportion (%) visiting a dental professional, by duration of time since last visit, Department of Health and Human Services region and sex, Victoria, 2012

	Duration since last visit to a dental professional (years)														
	<1			1 to <2			2 to <5			5, or more ago			Never		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males															
Eastern Metropolitan	**59.5**	52.8	65.8	**23.0**	17.6	29.5	**8.0**	5.5	11.6	**9.0**	6.4	12.5	**	**	**
North & West Metropolitan	**55.0**	49.5	60.5	**16.1**	12.5	20.5	**17.4**	13.5	22.1	**9.7**	6.8	13.7	**	**	**
Southern Metropolitan	**56.3**	49.4	63.0	**20.3**	15.4	26.4	**13.3**	9.9	17.6	**8.6***	5.0	14.2	**	**	**
Total	**56.3**	52.5	59.9	**19.1**	16.4	22.2	**13.9**	11.7	16.5	**9.2**	7.2	11.7	**	**	**
Rural males															
Barwon-South Western	**48.3**	41.7	55.0	**18.7**	12.3	27.4	**17.7**	11.7	25.7	**14.3**	9.4	21.3	**	**	**
Gippsland	**46.2**	39.4	53.1	**21.4**	16.0	28.0	**15.0**	10.8	20.3	**16.1**	12.0	21.4	**	**	**
Grampians	**43.9**	36.6	51.4	**18.5**	13.6	24.7	**20.6**	14.9	27.7	**16.6**	12.7	21.6	**	**	**
Hume	**49.9**	40.0	59.8	**21.7**	14.6	30.9	**15.4**	10.3	22.3	**12.9**	9.3	17.7	**	**	**
Loddon Mallee	**46.9**	39.7	54.3	**15.5**	10.7	21.8	**17.0**	12.4	23.0	**20.4**	15.3	26.8	**	**	**
Total	**47.7**	44.0	51.4	**19.0**	15.9	22.7	**16.4**	13.8	19.3	**16.3**	13.8	19.2	**0.4***	0.2	1.1
All males															
Total	**53.9**	**50.9**	**56.8**	**19.1**	**16.8**	**21.6**	**14.6**	**12.8**	**16.7**	**11.2**	**9.5**	**13.1**	**0.6***	**0.3**	**1.5**
Metropolitan females															
Eastern Metropolitan	**63.9**	58.2	69.2	**16.5**	12.6	21.3	**13.2**	10.1	17.1	**5.5***	3.3	8.9	**	**	**
North & West Metropolitan	**69.4**	64.6	73.8	**16.5**	12.9	20.9	**7.9**	5.9	10.4	**5.8**	4.0	8.4	**	**	**
Southern Metropolitan	**66.5**	60.7	71.9	**15.0**	11.5	19.4	**11.7**	8.3	16.2	**6.1**	4.0	9.4	**	**	**
Total	**67.2**	64.1	70.1	**16.1**	13.7	18.7	**10.2**	8.5	12.1	**6.0**	4.7	7.6	**	**	**
Rural females															
Barwon-South Western	**60.1**	54.6	65.5	**14.8**	11.2	19.3	**15.8**	12.0	20.6	**8.8**	6.1	12.7	**	**	**
Gippsland	**62.1**	56.7	67.3	**14.7**	11.2	19.0	**15.9**	12.2	20.4	**7.3**	5.3	9.8	**0.0**	.	.
Grampians	**57.1**	51.3	62.8	**19.2**	15.0	24.2	**12.8**	9.6	16.9	**8.9**	6.9	11.5	**	**	**
Hume	**59.7**	53.8	65.4	**18.2**	13.9	23.6	**13.6**	10.3	17.7	**7.9**	6.0	10.5	**	**	**
Loddon Mallee	**57.8**	52.4	63.1	**17.7**	13.9	22.3	**17.2**	13.3	21.9	**6.7**	5.0	8.9	**0.0**	.	.
Total	**59.0**	56.3	61.6	**16.9**	15.0	19.0	**15.3**	13.5	17.4	**8.1**	6.8	9.6	**	**	**
All females															
Total	**64.9**	**62.4**	**67.3**	**16.3**	**14.5**	**18.4**	**11.5**	**10.1**	**13.1**	**6.6**	**5.5**	**7.9**	**0.3***	**0.1**	**0.7**
Metropolitan people															
Eastern Metropolitan	**61.7**	57.3	65.9	**19.7**	16.2	23.8	**10.7**	8.5	13.3	**7.2**	5.4	9.5	**	**	**
North & West Metropolitan	**62.1**	58.3	65.8	**16.2**	13.6	19.3	**12.6**	10.3	15.3	**7.9**	6.1	10.3	**	**	**
Southern Metropolitan	**61.2**	56.7	65.6	**17.9**	14.6	21.7	**12.3**	9.8	15.4	**7.4**	5.2	10.3	**	**	**
Total	**61.7**	59.3	64.1	**17.6**	15.7	19.6	**12.0**	10.5	13.6	**7.6**	6.4	9.1	**0.5***	0.2	1.0
Rural people															
Barwon-South Western	**54.6**	49.8	59.2	**16.8**	13.0	21.4	**16.5**	13.0	20.9	**11.4**	8.6	15.1	**	**	**
Gippsland	**53.6**	49.0	58.2	**18.3**	14.8	22.3	**15.4**	12.6	18.8	**12.2**	9.4	15.5	**	**	**
Grampians	**50.4**	45.5	55.2	**19.4**	15.6	23.8	**16.4**	13.0	20.3	**12.7**	10.4	15.5	**	**	**
Hume	**54.6**	48.3	60.7	**20.1**	15.3	26.0	**14.3**	11.3	18.0	**10.7**	8.4	13.5	**	**	**
Loddon Mallee	**52.4**	47.6	57.1	**16.4**	13.2	20.1	**17.0**	13.8	20.7	**13.9**	10.7	17.8	**	**	**
Total	**53.2**	50.9	55.6	**18.0**	16.1	20.1	**15.9**	14.3	17.7	**12.2**	10.7	13.8	**0.4***	0.2	0.8
All people															
Total	**59.4**	**57.4**	**61.3**	**17.7**	**16.2**	**19.3**	**13.0**	**11.8**	**14.3**	**8.9**	**7.9**	**10.1**	**0.4***	**0.2**	**0.9**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

5.3 Prevalence of missing natural teeth

The prevalence of missing natural teeth, by age group and sex, is presented in Table 5.6, with 'Total' not adjusted for age.

Just over half the population reported missing some (48.9 per cent) or all (2.0 per cent) of their natural teeth, the proportion being significantly *higher* in men, women and people aged 45 years or older compared with the proportion in all Victorian men, women and people, respectively. In contrast, the proportion who reported no missing teeth was significantly *higher* in men, women and people aged less than 45 years compared with all Victorian men, women and people, respectively.

A significantly *higher* proportion of men, women and people aged 65 years or older reported missing all their natural teeth compared with the proportion in all Victorian men, women and people, respectively.

Table 5.6: Prevalence (%) of missing natural teeth, by age group and sex, Victoria, 2012

Age group (years)	Some natural teeth missing			ALL natural teeth missing			No missing teeth		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Males									
18–24	12.2*	7.3	19.7	**	**	**	87.5	79.9	92.4
25–34	29.1	21.1	38.6	**	**	**	69.8	60.2	77.8
35–44	41.4	35.6	47.4	**	**	**	58.2	52.1	64.0
45–54	61.7	56.0	67.1	**	**	**	36.5	31.3	42.1
55–64	77.2	72.6	81.2	2.0*	1.2	3.4	20.7	16.8	25.3
65+	83.9	80.5	86.8	5.0	3.6	6.8	11.1	8.6	14.3
Total	**49.3**	**46.3**	**52.4**	**1.6**	**1.1**	**2.4**	**49.0**	**45.9**	**52.1**
Females									
18–24	10.7*	6.2	18.0	0.0	.	.	89.3	82.0	93.8
25–34	23.7	17.7	31.0	**	**	**	73.9	66.4	80.2
35–44	37.7	33.1	42.5	**	**	**	61.6	56.8	66.2
45–54	62.1	57.9	66.1	1.1*	0.5	2.4	36.7	32.7	40.9
55–64	77.4	73.5	80.8	1.8*	1.0	3.1	20.8	17.4	24.6
65+	81.9	78.9	84.5	7.9	6.3	9.9	9.5	7.5	12.0
Total	**48.4**	**45.9**	**51.0**	**2.3**	**1.7**	**3.0**	**49.1**	**46.5**	**51.8**
People									
18–24	11.5	7.9	16.4	**	**	**	88.3	83.4	91.9
25–34	26.4	21.3	32.3	1.8*	0.7	4.3	71.8	65.8	77.1
35–44	39.5	35.8	43.3	**	**	**	59.9	56.1	63.7
45–54	61.9	58.4	65.3	1.4*	0.6	3.4	36.6	33.3	40.0
55–64	77.3	74.3	80.0	1.9	1.3	2.8	20.7	18.1	23.6
65+	82.8	80.6	84.8	6.6	5.4	7.9	10.2	8.6	12.2
Total	**48.9**	**46.9**	**50.9**	**2.0**	**1.6**	**2.5**	**49.1**	**47.0**	**51.1**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

The prevalence of missing natural teeth, by departmental region and sex, is presented in Table 5.7, adjusted for age.

A significantly *higher* proportion of the following cohorts reported missing some of their natural teeth compared with all Victorian men, women and people, respectively:

- men residing in Gippsland and Loddon Mallee regions
- women and people residing in rural regions as a whole
- women and people residing in Gippsland and Grampians regions in particular.

Table 5.7: Prevalence (%) of missing natural teeth, by Department of Health and Human Services region and sex, Victoria, 2012

	Some natural teeth missing			ALL natural teeth missing			No missing teeth		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Metropolitan males									
Eastern Metropolitan	**47.0**	41.8	52.2	**0.9***	0.4	2.0	**52.1**	47.0	57.2
North & West Metropolitan	**50.1**	45.7	54.4	**1.7***	0.8	3.7	**48.2**	43.9	52.6
Southern Metropolitan	**52.6**	46.2	59.0	**1.2***	0.6	2.6	**46.1**	39.7	52.5
Total	**50.0**	46.9	53.1	**1.4***	0.8	2.3	**48.6**	45.5	51.6
Rural males									
Barwon-South Western	**48.2**	40.4	56.2	**2.8**	1.7	4.4	**48.7**	40.9	56.6
Gippsland	**60.5**	54.0	66.6	**3.7***	1.7	7.9	**35.8**	29.6	42.5
Grampians	**58.0**	50.7	65.0	**3.2***	1.9	5.4	**38.8**	32.0	46.0
Hume	**57.0**	47.3	66.1	**1.7***	0.9	3.1	**41.3**	32.3	51.1
Loddon Mallee	**61.1**	54.3	67.5	**4.1***	1.9	8.8	**34.8**	28.8	41.2
Total	**56.4**	52.8	59.9	**3.0**	2.2	4.0	**40.5**	37.0	44.1
All males									
Total	**51.4**	**48.9**	**53.9**	**1.8**	**1.3**	**2.5**	**46.7**	**44.2**	**49.2**
Metropolitan females									
Eastern Metropolitan	**44.4**	40.4	48.5	**1.9***	1.0	3.4	**53.6**	49.6	57.6
North & West Metropolitan	**48.9**	45.2	52.7	**2.8**	1.8	4.4	**47.8**	44.3	51.5
Southern Metropolitan	**48.0**	43.5	52.7	**1.9***	1.0	3.8	**50.0**	45.3	54.7
Total	**47.7**	45.2	50.1	**2.2**	1.6	3.0	**50.0**	47.5	52.4
Rural females									
Barwon-South Western	**50.0**	44.9	55.0	**4.1**	2.7	6.1	**45.8**	40.9	50.9
Gippsland	**61.6**	54.0	68.8	**2.4***	1.4	4.2	**36.0**	29.0	43.6
Grampians	**58.9**	53.8	63.7	**2.8**	1.8	4.3	**38.4**	33.6	43.3
Hume	**55.8**	50.2	61.3	**2.2**	1.4	3.6	**42.0**	36.6	47.5
Loddon Mallee	**49.9**	45.2	54.5	**3.7**	2.6	5.4	**46.4**	41.9	51.0
Total	**54.3**	51.8	56.9	**3.2**	2.6	3.9	**42.4**	39.9	45.0
All females									
Total	**49.2**	**47.1**	**51.2**	**2.5**	**2.0**	**3.1**	**48.2**	**46.3**	**50.2**
Metropolitan people									
Eastern Metropolitan	**45.7**	42.4	48.9	**1.4**	0.9	2.3	**52.9**	49.6	56.1
North & West Metropolitan	**49.6**	46.7	52.5	**2.4**	1.5	3.6	**47.8**	45.0	50.7
Southern Metropolitan	**50.3**	46.4	54.3	**1.5***	0.9	2.5	**48.1**	44.2	52.0
Total	**48.8**	46.9	50.8	**1.8**	1.4	2.4	**49.2**	47.3	51.2
Rural people									
Barwon-South Western	**49.0**	44.4	53.6	**3.4**	2.5	4.6	**47.4**	42.8	52.0
Gippsland	**60.8**	55.7	65.7	**3.0***	1.7	5.2	**36.2**	31.4	41.3
Grampians	**58.6**	54.2	62.9	**3.0**	2.1	4.3	**38.3**	34.2	42.7
Hume	**56.6**	50.6	62.4	**2.0**	1.3	2.9	**41.4**	35.7	47.4
Loddon Mallee	**55.4**	51.2	59.4	**3.7**	2.4	5.8	**40.9**	37.0	44.9
Total	**55.3**	53.1	57.5	**3.1**	2.5	3.7	**41.6**	39.4	43.8
All people									
Total	**50.3**	**48.7**	**51.9**	**2.2**	**1.8**	**2.6**	**47.4**	**45.8**	**49.0**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

5.4 Prevalence of toothache during previous year

The prevalence of toothache during the previous year, by frequency, age group and sex, is presented in Table 5.8, with 'Total' not adjusted for age.

Overall, 62.4 per cent of people reported never having a toothache in the previous year, the proportion being similar in men (61.1 per cent) and women (63.6 per cent). The proportion was significantly *higher* in men and women aged 65 years or older and people aged 55 years or older compared with the proportion in all Victorian men, women and people, respectively.

Table 5.8: Prevalence (%) of toothache during previous year, by frequency, age group and sex, Victoria, 2012

Age group (years)	Often/very often			Sometimes			Hardly ever			Never		
	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL
Males												
18–24	**	**	**	**14.2***	8.3	23.3	**33.0**	24.2	43.1	**50.6**	40.7	60.6
25–34	**7.1***	3.1	15.5	**10.1***	5.5	17.6	**31.2**	22.5	41.5	**51.6**	41.6	61.4
35–44	**3.3***	1.8	6.1	**7.9**	5.3	11.6	**22.8**	18.2	28.2	**65.9**	60.0	71.3
45–54	**2.7***	1.2	5.8	**11.5**	8.1	16.1	**25.4**	21.1	30.3	**60.3**	54.7	65.6
55–64	**2.1***	1.1	4.0	**6.3**	4.1	9.4	**24.3**	20.1	29.0	**66.7**	61.6	71.5
65+	**1.6***	0.8	3.4	**5.7**	4.0	8.2	**17.4**	14.3	20.9	**75.0**	71.0	78.6
Total	**3.4**	**2.3**	**5.1**	**9.4**	**7.6**	**11.5**	**25.9**	**23.2**	**28.9**	**61.1**	**57.9**	**64.2**
Females												
18–24	**5.2***	2.1	12.3	**4.2***	2.0	8.7	**30.4**	21.2	41.5	**60.1**	49.2	70.2
25–34	**3.2***	1.4	7.3	**11.3**	6.9	17.8	**31.8**	24.6	40.0	**53.7**	45.5	61.7
35–44	**3.8***	2.3	6.2	**11.1**	8.4	14.5	**22.3**	18.5	26.7	**62.8**	58.0	67.4
45–54	**3.5**	2.2	5.5	**7.7**	5.7	10.4	**26.5**	22.8	30.5	**62.3**	58.0	66.4
55–64	**2.4***	1.5	4.0	**7.2**	5.2	9.9	**20.2**	17.0	23.8	**70.0**	66.0	73.8
65+	**2.1***	1.1	3.9	**4.6**	3.2	6.8	**16.3**	13.8	19.2	**76.5**	73.1	79.6
Total	**3.4**	**2.5**	**4.5**	**8.1**	**6.8**	**9.6**	**24.8**	**22.5**	**27.3**	**63.6**	**61.0**	**66.2**
People												
18–24	**3.7***	1.8	7.3	**9.3**	5.9	14.5	**31.7**	25.2	39.1	**55.3**	47.8	62.5
25–34	**5.2***	2.8	9.6	**10.7**	7.3	15.3	**31.5**	25.7	38.0	**52.6**	46.1	59.1
35–44	**3.6**	2.4	5.2	**9.5**	7.6	11.9	**22.6**	19.5	26.0	**64.3**	60.6	67.9
45–54	**3.1**	2.0	4.7	**9.6**	7.5	12.1	**26.0**	23.1	29.1	**61.3**	57.8	64.7
55–64	**2.3**	1.5	3.4	**6.7**	5.2	8.7	**22.2**	19.5	25.1	**68.4**	65.2	71.5
65+	**1.9**	1.2	3.0	**5.2**	4.0	6.7	**16.8**	14.8	19.0	**75.8**	73.2	78.2
Total	**3.4**	**2.6**	**4.4**	**8.7**	**7.6**	**10.0**	**25.4**	**23.5**	**27.3**	**62.4**	**60.3**	**64.4**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

The prevalence of toothache during the previous year, by frequency, departmental region and sex, is presented in Table 5.9, adjusted for age.

The proportion of people residing in the Hume Region who reported having a toothache often or very often was significantly *lower* compared with the proportion in all Victorian people. There were no other significant differences in the prevalence of toothache by frequency in men, women and people residing in the various departmental regions compared with the prevalence in all Victorian men, women and people, respectively.

Table 5.9: Prevalence (%) of toothache during previous year, by frequency, Department of Health and Human Services region and sex, Victoria, 2012

	Often/very often			Sometimes			Hardly ever			Never		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males												
Eastern Metropolitan	**4.3***	1.7	10.4	**9.0**	6.2	12.9	**25.6**	20.0	32.1	**61.2**	54.3	67.6
North & West Metropolitan	**3.3***	1.6	6.7	**10.3**	7.4	14.2	**24.8**	20.1	30.1	**61.2**	55.7	66.4
Southern Metropolitan	**3.9***	1.6	9.1	**8.9***	5.4	14.3	**26.8**	20.6	34.0	**60.4**	53.8	66.6
Total	**3.8**	2.4	6.1	**9.6**	7.6	12.1	**25.6**	22.4	29.1	**60.9**	57.1	64.5
Rural males												
Barwon-South Western	**	**	**	**5.1**	3.2	8.2	**21.0**	14.3	29.6	**72.7**	64.1	79.9
Gippsland	**2.7***	1.3	5.6	**6.0***	3.3	10.6	**23.6**	18.1	30.3	**67.7**	60.7	74.0
Grampians	**4.2***	2.0	8.7	**6.4***	3.1	12.7	**24.0**	18.6	30.5	**65.3**	57.7	72.2
Hume	**	**	**	**9.4***	5.2	16.5	**25.6**	18.1	34.9	**64.5**	54.1	73.7
Loddon Mallee	**3.9***	1.6	9.2	**7.6***	3.8	14.6	**25.0**	19.1	32.1	**62.9**	54.9	70.3
Total	**2.4**	1.5	3.8	**6.8**	5.1	9.0	**23.6**	20.3	27.3	**66.9**	63.0	70.6
All males												
Total	**3.5**	**2.3**	**5.3**	**8.9**	**7.3**	**10.8**	**25.2**	**22.6**	**28.1**	**62.2**	**59.2**	**65.1**
Metropolitan females												
Eastern Metropolitan	**2.6***	1.5	4.7	**4.9**	3.4	7.1	**21.8**	17.6	26.5	**70.7**	65.7	75.3
North & West Metropolitan	**3.4***	1.9	5.8	**10.2**	7.8	13.3	**21.3**	17.0	26.2	**65.0**	59.7	69.9
Southern Metropolitan	**3.3***	1.7	6.3	**6.9**	4.8	9.9	**27.6**	22.8	32.9	**62.1**	56.7	67.3
Total	**3.2**	2.2	4.6	**8.0**	6.5	9.6	**23.8**	20.9	26.9	**65.0**	61.7	68.1
Rural females												
Barwon-South Western	**2.8***	1.3	6.2	**5.1***	3.0	8.6	**29.2**	23.9	35.3	**62.2**	56.3	67.8
Gippsland	**6.4***	3.1	12.9	**5.7***	3.3	9.5	**21.3**	16.4	27.4	**66.6**	59.2	73.2
Grampians	**5.5***	3.0	10.1	**7.3***	4.4	11.7	**28.5**	23.1	34.5	**58.8**	52.9	64.4
Hume	**2.4***	1.3	4.4	**7.7**	5.0	11.8	**28.7**	23.2	34.9	**60.9**	54.4	67.1
Loddon Mallee	**1.7***	0.8	3.5	**7.2**	4.7	10.9	**29.2**	24.2	34.6	**61.9**	56.4	67.2
Total	**3.6**	2.5	5.2	**6.5**	5.2	8.1	**27.8**	25.2	30.6	**61.9**	59.0	64.7
All females												
Total	**3.3**	**2.5**	**4.4**	**7.6**	**6.4**	**8.9**	**24.7**	**22.4**	**27.2**	**64.3**	**61.7**	**66.8**
Metropolitan people												
Eastern Metropolitan	**3.6***	1.9	6.9	**6.8**	5.2	9.0	**23.6**	19.9	27.7	**65.9**	61.4	70.2
North & West Metropolitan	**3.5**	2.2	5.4	**10.3**	8.3	12.7	**22.8**	19.6	26.4	**63.2**	59.4	66.8
Southern Metropolitan	**3.5***	2.0	6.1	**7.9**	5.7	10.8	**27.2**	23.3	31.5	**61.3**	57.0	65.4
Total	**3.5**	2.6	4.8	**8.8**	7.5	10.2	**24.7**	22.5	27.0	**62.9**	60.4	65.3
Rural people												
Barwon-South Western	**2.0***	0.9	4.1	**5.2**	3.6	7.5	**25.2**	20.7	30.3	**67.2**	61.9	72.0
Gippsland	**4.7***	2.7	8.2	**6.0**	3.9	8.9	**22.4**	18.6	26.9	**66.9**	61.8	71.6
Grampians	**5.0**	3.1	8.0	**6.7**	4.4	10.0	**26.6**	22.4	31.4	**61.7**	56.7	66.4
Hume	**1.4***	0.8	2.5	**8.3**	5.5	12.2	**27.6**	22.2	33.8	**62.5**	56.2	68.4
Loddon Mallee	**2.8***	1.4	5.5	**7.4**	5.0	10.9	**26.9**	23.0	31.3	**62.5**	57.7	67.1
Total	**3.0**	2.3	4.0	**6.6**	5.5	7.9	**25.7**	23.6	28.0	**64.4**	62.0	66.8
All people												
Total	**3.4**	**2.6**	**4.4**	**8.2**	**7.2**	**9.4**	**24.9**	**23.2**	**26.8**	**63.3**	**61.3**	**65.2**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

5.5 Frequency of daily teeth brushing

The prevalence of brushing teeth each day, by frequency, age group and sex, is presented in Table 5.10, with 'Total' not adjusted for age.

The proportion of people who reported brushing their teeth at least twice each day was 72.3 per cent; the proportion was significantly *higher* in women (81.7 per cent) compared with men (62.5 per cent). A further 22.8 per cent of people reported brushing their teeth once a day, the proportion being significantly *higher* in men (30.5 per cent) compared with women (15.4 per cent). Overall, only 2.0 per cent of people reported that did not brush their teeth every day; the proportion was 3.8 per cent in men and too small to estimate in women.

The proportion of people who brushed their teeth at least twice each day was significantly lower in men, women and people aged 65 years or older but significantly *higher* in people aged 18–24 years compared with all Victorian men, women and people, respectively.

Table 5.10: Prevalence (%) of brushing teeth each day, by frequency, age group and sex, Victoria, 2012

	Frequency of brushing teeth each day														
	Twice, or more			Once			Less than once			Never			NA (dentures/toothless)		
Age group (years)	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL
Males															
18–24	**74.6**	65.1	82.3	**17.9**	11.8	26.3	**6.4***	2.6	14.6	**0.0**	.	.	**0.0**	.	.
25–34	**63.9**	53.9	72.8	**29.6**	21.4	39.4	**6.3***	2.8	13.4	**	**	**	**0.0**	.	.
35–44	**67.3**	61.4	72.6	**30.3**	25.1	36.1	**1.9***	0.8	4.4	**	**	**	**0.0**	.	.
45–54	**62.8**	57.2	68.0	**30.5**	25.8	35.7	**3.4***	1.7	6.6	**	**	**	**3.3***	1.4	7.5
55–64	**56.0**	51.2	60.8	**37.6**	33.0	42.5	**1.8***	1.1	3.1	**	**	**	**4.1**	2.8	6.1
65+	**51.3**	47.5	55.1	**35.7**	32.1	39.4	**3.3**	2.3	4.8	**0.6***	0.2	1.3	**9.1**	7.2	11.4
Total	**62.5**	**59.7**	**65.3**	**30.5**	**27.9**	**33.2**	**3.8**	**2.7**	**5.4**	**0.3***	**0.1**	**0.5**	**2.7**	**2.1**	**3.4**
Females															
18–24	**91.1**	83.3	95.4	**7.7***	3.8	15.2	**	**	**	**0.0**	.	.	**0.0**	.	.
25–34	**85.1**	78.5	90.0	**14.6**	9.8	21.3	**	**	**	**0.0**	.	.	**0.0**	.	.
35–44	**84.9**	81.3	87.9	**14.8**	11.8	18.4	**	**	**	**0.0**	.	.	**	**	**
45–54	**81.0**	77.5	84.2	**17.5**	14.5	21.0	**	**	**	**0.0**	.	.	**1.4***	0.8	2.4
55–64	**81.6**	78.4	84.5	**15.1**	12.5	18.1	**0.0**	.	.	**	**	**	**3.0**	2.0	4.6
65+	**69.9**	67.0	72.7	**19.9**	17.5	22.5	**0.3***	0.1	0.7	**	**	**	**9.5**	7.9	11.3
Total	**81.7**	**79.9**	**83.3**	**15.4**	**13.8**	**17.1**	**	**	**	**	**	**	**2.5**	**2.1**	**3.0**
People															
18–24	**82.7**	76.6	87.4	**12.9**	9.0	18.3	**3.8***	1.7	8.4	**0.0**	.	.	**0.0**	.	.
25–34	**74.4**	68.3	79.8	**22.2**	17.2	28.1	**3.3***	1.5	7.0	**	**	**	**0.0**	.	.
35–44	**76.2**	72.8	79.4	**22.5**	19.4	25.9	**1.0***	0.4	2.2	**	**	**	**	**	**
45–54	**72.0**	68.7	75.1	**23.9**	21.1	27.0	**1.7***	0.8	3.3	**	**	**	**2.3***	1.3	4.3
55–64	**69.1**	66.1	72.0	**26.1**	23.4	29.1	**0.9***	0.5	1.5	**	**	**	**3.6**	2.7	4.7
65+	**61.5**	59.1	63.8	**27.0**	24.9	29.3	**1.7**	1.2	2.4	**0.3***	0.1	0.6	**9.3**	8.1	10.7
Total	**72.3**	**70.6**	**74.0**	**22.8**	**21.3**	**24.4**	**2.0**	**1.4**	**2.8**	**0.1***	**0.1**	**0.3**	**2.6**	**2.2**	**3.0**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

The prevalence of brushing teeth each day, by frequency, departmental region and sex, is presented in Table 5.11, adjusted for age.

A significantly *lower* proportion of the following people reported brushing their teeth at least twice each day compared with all Victorian men, women and people, respectively:

- men residing in Hume Region
- women residing in rural regions as a whole and Loddon Mallee Region in particular
- people residing in rural regions as a whole and Gippsland and Hume regions in particular.

Table 5.11: Prevalence (%) of brushing teeth each day, by frequency, Department of Health and Human Services region and sex, Victoria, 2012

	Twice or more			Once			Less than once			Never			NA (dentures/ toothless)		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males															
Eastern Metropolitan	**67.9**	61.5	73.6	**26.9**	21.4	33.1	**2.8***	1.4	5.5	**0.0**	.	.	**2.5***	1.4	4.3
North & West Metropolitan	**61.1**	55.6	66.3	**30.8**	26.1	35.8	**4.2***	2.1	8.2	**	**	**	**3.5**	2.2	5.5
Southern Metropolitan	**65.0**	58.6	70.8	**30.3**	24.9	36.4	**3.1***	1.3	7.0	**	**	**	**1.4***	0.8	2.5
Total	**63.9**	60.4	67.3	**29.7**	26.6	33.0	**3.5**	2.2	5.5	**	**	**	**2.6**	1.9	3.5
Rural males															
Barwon-South Western	**62.6**	54.8	69.8	**28.8**	22.1	36.6	**3.4***	1.6	7.0	**	**	**	**4.2**	2.9	5.9
Gippsland	**56.1**	49.3	62.8	**34.9**	28.7	41.7	**4.8***	2.1	10.3	**0.0**	.	.	**4.2**	2.8	6.1
Grampians	**61.5**	54.2	68.4	**29.0**	22.7	36.3	**3.9***	1.9	8.0	**	**	**	**3.4**	2.2	5.1
Hume	**49.4**	40.9	57.9	**34.9**	28.5	41.9	**13.4***	6.7	24.9	**	**	**	**2.0**	1.2	3.3
Loddon Mallee	**58.5**	50.8	65.8	**36.8**	29.7	44.6	**1.5***	0.7	3.2	**	**	**	**2.6**	1.6	4.3
Total	**57.6**	53.9	61.3	**32.9**	29.7	36.3	**5.3***	3.2	8.6	**0.6***	0.3	1.4	**3.3**	2.8	4.0
All males															
Total	**62.4**	**59.6**	**65.1**	**30.4**	**27.9**	**33.1**	**3.9**	**2.8**	**5.5**	**0.2***	**0.1**	**0.4**	**2.8**	**2.3**	**3.5**
Metropolitan females															
Eastern Metropolitan	**85.5**	81.9	**88.5**	**12.2**	**9.6**	15.4	**	**	**	**0.0**	.	.	**1.5**	1.0	2.3
North & West Metropolitan	**82.1**	78.4	85.3	**15.0**	11.9	18.6	**0.0**	.	.	**	**	**	**2.8**	1.9	4.1
Southern Metropolitan	**83.2**	78.6	87.0	**14.7**	11.0	19.3	**	**	**	**0.0**	.	.	**1.7**	1.0	2.7
Total	**83.6**	81.3	85.6	**14.1**	12.1	16.3	**	**	**	**	**	**	**2.0**	1.5	2.5
Rural females															
Barwon-South Western	**78.6**	74.0	82.5	**16.4**	12.9	20.6	**	**	**	**	**	**	**3.8**	2.8	5.1
Gippsland	**77.5**	73.1	81.3	**17.8**	14.1	22.1	**	**	**	**0.0**	.	.	**4.5**	3.3	6.0
Grampians	**79.1**	75.2	82.6	**16.6**	13.3	20.4	**	**	**	**0.0**	.	.	**3.9**	2.8	5.6
Hume	**76.8**	71.3	81.6	**20.1**	15.5	25.7	**	**	**	**	**	**	**2.9**	2.0	4.2
Loddon Mallee	**73.7**	68.8	78.1	**22.1**	17.9	26.9	**	**	**	**0.0**	.	.	**3.8**	2.6	5.5
Total	**76.9**	74.7	78.9	**18.8**	16.8	20.8	**	**	**	**	**	**	**3.8**	3.3	4.4
All females															
Total	**81.9**	**80.0**	**83.5**	**15.2**	**13.6**	**17.0**	**	**	**	**	**	**	**2.5**	**2.2**	**2.9**
Metropolitan people															
Eastern Metropolitan	**77.0**	73.1	80.4	**19.4**	16.2	23.1	**1.6***	0.8	3.3	**0.0**	.	.	**2.0**	1.3	2.9
North & West Metropolitan	**71.6**	68.2	74.9	**22.8**	19.9	26.0	**2.1***	1.1	4.3	**	**	**	**3.1**	2.3	4.3
Southern Metropolitan	**74.5**	70.6	78.0	**22.2**	18.8	26.0	**1.5***	0.7	3.3	**	**	**	**1.6**	1.1	2.3
Total	**74.0**	71.8	76.0	**21.7**	19.8	23.7	**1.9**	1.2	2.9	**	**	**	**2.3**	1.8	2.8
Rural people															
Barwon-South Western	**70.5**	66.0	74.6	**22.5**	18.8	26.8	**2.4***	1.1	5.2	**	**	**	**4.0**	3.1	5.0
Gippsland	**65.8**	61.2	70.2	**27.1**	23.1	31.5	**2.7***	1.1	6.2	**0.0**	.	.	**4.4**	3.4	5.6
Grampians	**70.3**	65.9	74.3	**22.8**	19.1	26.9	**2.1***	1.0	4.2	**	**	**	**3.7**	2.8	4.8
Hume	**63.2**	56.8	69.1	**27.2**	23.1	31.7	**7.0***	3.1	14.9	**	**	**	**2.5**	1.9	3.4
Loddon Mallee	**66.4**	61.8	70.7	**29.2**	24.9	33.8	**0.9***	0.4	1.8	**	**	**	**3.2**	2.4	4.3
Total	**67.3**	65.0	69.5	**25.8**	23.9	27.8	**2.9**	1.8	4.7	**0.4***	0.2	0.7	**3.6**	3.2	4.0
All people															
Total	**72.3**	**70.6**	**74.0**	**22.6**	**21.1**	**24.2**	**2.1**	**1.5**	**2.9**	**0.1***	**0.1**	**0.3**	**2.7**	**2.3**	**3.1**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

5.6 Avoidance of some foods due to a dental condition

The proportion of the population who had to avoid eating some foods due to a dental condition in the previous year, by frequency, age group and sex, is presented in Table 5.12, with 'Total' not adjusted for age.

Overall, 75.9 per cent of people did not have to avoid any food, the proportion being significantly *higher* in men (79.3 per cent) compared with women (72.6 per cent). In contrast, 3.5 per cent of people had to often or very often avoid some foods, the proportion being similar in men (2.9 per cent) and women (4.0 per cent).

Table 5.12: Prevalence (%) of avoiding some food due to dental condition during previous year, by frequency, age group and sex, Victoria, 2012

Age group (years)	Often/very often			Sometimes			Hardly ever			Never		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Males												
18–24	**	**	**	**4.4***	1.9	9.6	**12.1***	6.9	20.3	**81.0**	72.0	87.6
25–34	**	**	**	**5.1***	2.3	11.1	**17.0**	11.0	25.5	**72.6**	63.0	80.4
35–44	**2.4***	1.2	5.1	**4.2***	2.4	7.2	**10.4**	7.1	15.0	**82.6**	77.3	86.8
45–54	**2.7***	1.5	5.0	**6.0***	3.4	10.3	**10.9**	8.0	14.6	**80.3**	75.3	84.5
55–64	**2.3***	1.4	3.8	**4.3**	2.7	6.7	**13.0**	10.1	16.6	**80.0**	75.9	83.5
65+	**2.5**	1.6	4.0	**4.0**	2.7	5.8	**12.4**	10.1	15.1	**80.8**	77.6	83.6
Total	**2.9**	**2.0**	**4.2**	**4.7**	**3.6**	**6.1**	**12.7**	**10.8**	**14.9**	**79.3**	**76.8**	**81.7**
Females												
18–24	**	**	**	**7.9***	3.9	15.4	**19.2**	11.5	30.2	**72.7**	61.7	81.6
25–34	**3.0***	1.2	6.9	**8.1***	4.5	14.0	**17.8**	12.0	25.4	**71.2**	63.0	78.2
35–44	**3.4**	2.1	5.4	**8.0**	5.7	11.2	**13.1**	10.2	16.7	**74.8**	70.4	78.8
45–54	**6.3**	4.4	8.8	**6.6**	4.8	9.0	**17.8**	14.6	21.4	**69.4**	65.3	73.2
55–64	**5.7**	4.1	8.0	**4.8**	3.4	6.7	**14.6**	11.9	17.9	**74.6**	70.8	78.0
65+	**4.8**	3.6	6.4	**7.5**	5.8	9.6	**14.1**	12.1	16.4	**73.2**	70.3	75.9
Total	**4.0**	**3.3**	**4.9**	**7.2**	**6.0**	**8.6**	**15.9**	**14.1**	**18.0**	**72.6**	**70.3**	**74.8**
People												
18–24	**	**	**	**6.1***	3.6	10.3	**15.5**	10.7	22.1	**77.0**	70.0	82.7
25–34	**3.7***	1.8	7.2	**6.6**	4.1	10.4	**17.4**	13.0	22.9	**71.9**	65.7	77.3
35–44	**2.9**	1.9	4.4	**6.1**	4.5	8.2	**11.8**	9.5	14.5	**78.6**	75.3	81.6
45–54	**4.5**	3.3	6.1	**6.3**	4.6	8.5	**14.4**	12.2	16.9	**74.8**	71.6	77.7
55–64	**4.1**	3.1	5.4	**4.5**	3.4	6.0	**13.8**	11.8	16.2	**77.2**	74.5	79.7
65+	**3.8**	3.0	4.8	**5.9**	4.8	7.3	**13.3**	11.8	15.1	**76.6**	74.5	78.6
Total	**3.5**	**2.9**	**4.2**	**6.0**	**5.1**	**6.9**	**14.4**	**13.0**	**15.8**	**75.9**	**74.2**	**77.5**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

The proportion of the population who had to avoid some foods, due to a dental condition in the previous year, by frequency, departmental region and sex, is presented in Table 5.13, adjusted for age.

A significantly *higher* proportion of people resident in the North & West Metropolitan Region reported sometimes having to avoid foods due to a dental condition during the previous year, as compared with the proportion in all Victorian people. There was no significant difference in the proportion (by frequency and sex) in any of the other regions compared with the corresponding proportion for all Victorians.

Table 5.13: Prevalence (%) of avoiding some food due to dental condition during previous year, by frequency, Department of Health and Human Services region and sex, Victoria, 2012

	Often/very often			Sometimes			Hardly ever			Never		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males												
Eastern Metropolitan	**3.5***	1.8	6.8	**3.4***	2.0	5.8	**11.0**	7.5	15.8	**81.8**	76.5	86.1
North & West Metropolitan	**3.2***	1.5	6.7	**6.9**	4.7	10.2	**11.0**	8.0	14.8	**78.6**	73.6	82.9
Southern Metropolitan	**2.0***	1.0	3.7	**3.0***	1.5	5.8	**15.9**	11.2	22.1	**77.9**	71.3	83.4
Total	**3.0**	1.9	4.7	**4.8**	3.5	6.5	**12.4**	10.2	15.1	**79.3**	76.1	82.1
Rural males												
Barwon-South Western	**1.0***	0.4	2.4	**2.5***	1.2	4.9	**15.2**	10.4	21.8	**81.2**	74.6	86.4
Gippsland	**4.9***	2.4	9.7	**3.7***	2.0	6.7	**12.5**	8.9	17.4	**78.8**	72.6	83.8
Grampians	**	**	**	**5.5***	2.7	10.8	**10.1**	7.0	14.3	**84.0**	78.2	88.4
Hume	**1.9***	0.9	4.3	**7.7***	3.2	17.6	**10.0***	5.8	16.6	**80.2**	70.2	87.5
Loddon Mallee	**4.2***	1.9	8.8	**3.1***	1.4	6.6	**12.3**	7.9	18.7	**80.3**	73.1	85.8
Total	**2.7**	1.7	4.2	**4.4***	2.6	7.4	**12.3**	10.0	15.0	**80.5**	76.9	83.7
All males												
Total	**3.0**	**2.0**	**4.3**	**4.6**	**3.5**	**6.1**	**12.5**	**10.6**	**14.6**	**79.5**	**77.0**	**81.9**
Metropolitan females												
Eastern Metropolitan	**2.9**	1.9	4.4	**5.5***	3.3	9.0	**14.1**	10.4	18.9	**77.5**	72.1	82.1
North & West Metropolitan	**4.3**	2.9	6.2	**10.4**	7.8	13.8	**16.9**	13.2	21.5	**68.2**	63.2	72.7
Southern Metropolitan	**5.1**	3.2	8.0	**4.4**	2.7	7.1	**16.1**	12.2	21.1	**73.9**	68.6	78.5
Total	**4.2**	3.3	5.5	**7.2**	5.8	9.0	**16.2**	13.8	19.0	**72.1**	69.0	75.0
Rural females												
Barwon-South Western	**2.9**	1.8	4.5	**8.2**	5.2	12.8	**11.5**	8.7	15.0	**77.3**	72.1	81.8
Gippsland	**5.4**	3.6	8.0	**5.4***	2.4	11.6	**11.2**	8.3	14.9	**77.9**	71.8	83.0
Grampians	**4.4***	2.7	7.1	**5.9***	3.4	9.9	**15.4**	11.9	19.6	**74.4**	69.0	79.1
Hume	**3.6**	2.3	5.7	**5.7**	4.1	8.0	**16.7**	12.7	21.6	**73.7**	68.6	78.2
Loddon Mallee	**3.0**	1.9	4.7	**5.7**	3.8	8.3	**18.4**	14.5	23.0	**72.8**	68.0	77.1
Total	**3.8**	3.1	4.6	**6.3**	5.0	8.1	**14.5**	12.8	16.3	**75.3**	72.9	77.5
All females												
Total	**4.1**	**3.3**	**5.0**	**7.0**	**5.8**	**8.5**	**15.9**	**13.9**	**18.1**	**72.8**	**70.3**	**75.1**
Metropolitan people												
Eastern Metropolitan	**3.2**	2.1	4.9	**4.4**	3.0	6.4	**12.6**	9.9	15.9	**79.6**	75.9	82.8
North & West Metropolitan	**3.8**	2.6	5.6	**8.8**	6.9	11.0	**14.0**	11.5	16.9	**73.2**	69.7	76.5
Southern Metropolitan	**3.6**	2.5	5.4	**3.8**	2.5	5.6	**16.0**	12.8	19.7	**75.8**	71.7	79.5
Total	**3.6**	2.8	4.6	**6.1**	5.0	7.3	**14.3**	12.6	16.2	**75.6**	73.4	77.7
Rural people												
Barwon-South Western	**2.0**	1.3	3.0	**5.3**	3.5	8.0	**13.7**	10.6	17.5	**78.9**	74.6	82.6
Gippsland	**5.4**	3.4	8.5	**4.6***	2.7	7.8	**11.7**	9.3	14.5	**78.1**	73.8	81.9
Grampians	**2.5**	1.5	4.1	**5.8**	3.7	8.9	**12.8**	10.3	15.8	**78.9**	74.9	82.4
Hume	**2.8**	1.9	4.2	**7.1***	3.6	13.5	**13.2**	10.2	17.0	**76.7**	70.5	81.9
Loddon Mallee	**3.6***	2.2	6.0	**4.5**	3.1	6.5	**15.5**	12.4	19.2	**76.3**	72.1	80.0
Total	**3.2**	2.6	4.0	**5.4**	4.1	7.0	**13.4**	12.0	15.0	**77.8**	75.7	79.8
All people												
Total	**3.5**	**2.9**	**4.3**	**5.9**	**5.0**	**6.8**	**14.2**	**12.8**	**15.7**	**76.1**	**74.3**	**77.7**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

5.7 Avoidance or delaying a visit to a dental professional due to cost

Table 5.14 shows the proportion of the population who avoided or delayed visiting a dental professional due to cost, by age group and sex, with 'Total' not adjusted for age.

Overall, 29.1 per cent of people avoided or delayed visiting a dental professional due to the cost. This proportion was significantly *higher* in women (31.9 per cent) compared with men (26.2 per cent).

There were significantly *higher* proportions of women and people aged 25–34 years who had avoided or delayed visiting a dental professional due to the cost compared with all Victorian women and people, respectively. In contrast, a significantly *lower* proportion of men, women and people aged 65 years or older avoided or delayed visiting a dental professional due to the cost compared with all Victorian men, women and people, respectively.

Table 5.14: Proportion (%) who avoided or delayed visiting a dental professional due to cost, by age group and sex, Victoria, 2012

	Yes			No		
	%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL
Males						
18–24	**20.0**	13.4	28.8	**80.0**	71.2	86.6
25–34	**37.7**	28.6	47.8	**62.3**	52.2	71.4
35–44	**28.3**	22.9	34.5	**71.2**	65.1	76.7
45–54	**29.0**	24.3	34.3	**70.8**	65.6	75.6
55–64	**24.0**	20.1	28.4	**76.0**	71.6	79.9
65+	**14.1**	11.7	17.0	**85.6**	82.7	88.1
Total	**26.2**	**23.5**	**29.0**	**73.7**	**70.9**	**76.3**
Females						
18–24	**22.5**	14.7	32.9	**77.5**	67.1	85.3
25–34	**44.9**	37.0	53.1	**55.1**	46.9	63.0
35–44	**35.4**	30.9	40.2	**64.2**	59.4	68.7
45–54	**36.5**	32.5	40.7	**63.3**	59.1	67.3
55–64	**29.0**	25.4	32.8	**71.0**	67.2	74.5
65+	**20.5**	18.0	23.2	**79.2**	76.4	81.7
Total	**31.9**	**29.6**	**34.4**	**67.9**	**65.5**	**70.2**
People						
18–24	**21.2**	15.9	27.8	**78.8**	72.2	84.1
25–34	**41.3**	35.1	47.8	**58.7**	52.2	64.9
35–44	**31.9**	28.3	35.7	**67.7**	63.8	71.3
45–54	**32.8**	29.7	36.2	**67.0**	63.7	70.2
55–64	**26.5**	23.9	29.4	**73.4**	70.6	76.1
65+	**17.6**	15.8	19.5	**82.1**	80.1	83.9
Total	**29.1**	**27.4**	**30.9**	**70.7**	**68.9**	**72.5**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 5.15 shows the proportion of the population who avoided or delayed visiting a dental professional due to cost, by departmental region and sex, adjusted for age.

There were no significant differences in the proportion of men, women and people residing in the various departmental regions who had avoided or delayed visiting a dental professional due to cost compared with the proportion in all Victorian men, women and people, respectively.

Table 5.15: Proportion (%) who avoided or delayed visiting a dental professional because of the cost, by Department of Health and Human Services region and sex, Victoria, 2011–12

	Yes			No		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Metropolitan males						
Eastern Metropolitan	**23.1**	18.2	28.8	**76.9**	71.2	81.8
North & West Metropolitan	**26.2**	21.7	31.3	**73.6**	68.5	78.2
Southern Metropolitan	**27.8**	21.9	34.5	**71.9**	65.2	77.8
Total	**25.9**	22.7	29.4	**74.0**	70.5	77.2
Rural males						
Barwon-South Western	**21.6**	15.4	29.4	**78.1**	70.3	84.4
Gippsland	**28.9**	22.6	36.2	**71.1**	63.8	77.4
Grampians	**26.5**	20.3	33.7	**73.3**	66.0	79.5
Hume	**23.9**	17.8	31.5	**76.1**	68.5	82.2
Loddon Mallee	**28.6**	22.0	36.1	**71.4**	63.9	78.0
Total	**25.7**	22.5	29.1	**74.2**	70.7	77.3
All males						
Total	**25.8**	**23.2**	**28.6**	**74.0**	**71.2**	**76.6**
Metropolitan females						
Eastern Metropolitan	**29.0**	24.3	34.3	**70.9**	65.6	75.6
North & West Metropolitan	**30.8**	26.3	35.8	**69.0**	64.1	73.6
Southern Metropolitan	**35.7**	30.5	41.3	**64.1**	58.5	69.3
Total	**31.9**	28.9	34.9	**68.0**	64.9	70.9
Rural females						
Barwon-South Western	**30.7**	25.4	36.5	**69.0**	63.2	74.3
Gippsland	**35.1**	28.9	41.9	**64.5**	57.7	70.7
Grampians	**32.4**	27.2	38.1	**67.4**	61.7	72.6
Hume	**32.0**	26.7	37.9	**67.8**	61.9	73.2
Loddon Mallee	**30.8**	26.1	35.9	**69.2**	64.1	73.9
Total	**32.1**	29.4	34.9	**67.7**	64.9	70.4
All females						
Total	**31.9**	**29.6**	**34.4**	**67.9**	**65.4**	**70.3**
Metropolitan people						
Eastern Metropolitan	**25.9**	22.2	30.1	**74.0**	69.9	77.8
North & West Metropolitan	**28.7**	25.4	32.2	**71.2**	67.6	74.4
Southern Metropolitan	**31.9**	27.9	36.2	**67.9**	63.5	71.9
Total	**28.9**	26.7	31.3	**70.9**	68.6	73.1
Rural people						
Barwon-South Western	**26.2**	22.0	30.8	**73.5**	68.8	77.7
Gippsland	**32.4**	27.7	37.6	**67.3**	62.2	72.1
Grampians	**29.5**	25.3	34.1	**70.3**	65.8	74.5
Hume	**27.9**	23.7	32.5	**72.0**	67.4	76.3
Loddon Mallee	**29.6**	25.5	34.1	**70.4**	65.9	74.5
Total	**28.9**	26.8	31.1	**70.9**	68.7	73.0
All people						
Total	**28.9**	**27.2**	**30.8**	**70.9**	**69.0**	**72.7**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

5.8 Private insurance cover for dental expenses

Table 5.16 shows the proportion of the population with private insurance cover for dental expenses, by age group and sex, with 'Total' not adjusted for age.

A significantly *higher* proportion of men and people aged 55–64 years reported having private health insurance cover for dental expenses compared with the proportion in all Victorian men and people, respectively. In contrast, a significantly *lower* proportion of women and people aged 65 years or older reported having private health insurance cover for dental expenses compared with the proportion in all Victorian women and people, respectively.

Table 5.16: Proportion (%) with private insurance cover for dental expenses, by age group and sex, Victoria, 2012

	Yes			No		
	%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL
Males						
18–24	**47.8**	37.9	57.8	**44.0**	34.4	54.0
25–34	**39.6**	30.4	49.7	**60.4**	50.3	69.6
35–44	**51.4**	45.3	57.5	**47.9**	41.8	54.0
45–54	**51.3**	45.8	56.8	**47.3**	41.8	52.8
55–64	58.3	53.5	62.9	40.6	36.0	45.4
65+	**41.2**	37.5	45.0	57.8	54.0	61.5
Total	**47.9**	**45.0**	**50.9**	**50.3**	**47.3**	**53.2**
Females						
18–24	**52.5**	41.7	63.1	**40.9**	30.8	51.8
25–34	**46.7**	38.8	54.8	**53.3**	45.2	61.2
35–44	**53.2**	48.3	58.0	**45.6**	40.8	50.5
45–54	**53.2**	49.0	57.4	**46.0**	41.8	50.2
55–64	**55.1**	51.0	59.2	**44.5**	40.4	48.6
65+	38.4	35.3	41.6	60.6	57.4	63.7
Total	**49.4**	**46.9**	**51.8**	**49.2**	**46.7**	**51.7**
People						
18–24	**50.1**	42.7	57.4	**42.5**	35.4	49.9
25–34	**43.2**	37.0	49.6	**56.8**	50.4	63.0
35–44	**52.3**	48.4	56.2	**46.7**	42.9	50.6
45–54	**52.3**	48.8	55.7	**46.6**	43.2	50.1
55–64	56.7	53.5	59.8	42.6	39.5	45.7
65+	39.7	37.3	42.1	59.3	56.9	61.7
Total	**48.6**	**46.7**	**50.6**	**49.7**	**47.8**	**51.6**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 5.17 shows the proportion of the population with private insurance cover for dental expenses, by departmental region and sex, adjusted for age.

A significantly *higher* proportion of men, women and people resident in Eastern Metropolitan Region reported having private health insurance cover for dental expenses compared with the proportion in all Victorian men, women and people, respectively.

In contrast, a significantly *lower* proportion of men, women and people residing in rural regions as a whole, in particular men residing in Gippsland, Hume and Loddon Mallee regions, women residing in Gippsland, Grampians and Hume regions and people residing in Gippsland, Hume and Loddon Mallee regions, had private insurance cover for dental expenses compared with the corresponding proportion in all Victorian men, women and people, respectively.

Table 5.17: Proportion (%) with private insurance cover for dental expenses, by Department of Health and Human Services region and sex, Victoria, 2012

	Yes			No		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Metropolitan males						
Eastern Metropolitan	60.2	53.6	66.5	38.6	32.4	45.3
North & West Metropolitan	**41.3**	36.0	46.7	**56.8**	51.4	62.0
Southern Metropolitan	**51.9**	46.2	57.6	**45.9**	40.3	51.7
Total	**49.8**	46.2	53.3	**48.5**	45.0	52.1
Rural males						
Barwon-South Western	**49.5**	41.8	57.2	**48.1**	40.2	56.0
Gippsland	32.6	26.8	38.9	66.2	59.8	71.9
Grampians	**46.2**	38.9	53.6	**51.1**	43.8	58.3
Hume	31.3	25.8	37.3	67.1	61.0	72.6
Loddon Mallee	37.0	30.3	44.3	**60.9**	53.6	67.7
Total	39.6	36.1	43.3	58.3	54.6	61.9
All males						
Total	**47.2**	**44.4**	**50.1**	**51.0**	**48.1**	**53.8**
Metropolitan females						
Eastern Metropolitan	59.7	54.0	65.2	38.2	32.8	43.8
North & West Metropolitan	**47.0**	41.9	52.2	**51.4**	46.3	56.4
Southern Metropolitan	**51.4**	45.5	57.2	**47.3**	41.6	53.2
Total	**51.6**	48.4	54.9	**46.7**	43.5	50.0
Rural females						
Barwon-South Western	**49.5**	43.7	55.2	**49.5**	43.8	55.2
Gippsland	36.3	29.3	43.9	63.2	55.6	70.2
Grampians	40.7	35.1	46.6	**56.3**	50.5	62.0
Hume	37.3	31.4	43.6	62.3	55.9	68.2
Loddon Mallee	**44.5**	39.1	50.0	**55.3**	49.8	60.7
Total	42.2	39.4	45.0	56.8	54.0	59.6
All females						
Total	**49.4**	**46.8**	**52.0**	**49.2**	**46.6**	**51.7**
Metropolitan people						
Eastern Metropolitan	60.1	55.7	64.4	38.3	34.1	42.7
North & West Metropolitan	**43.9**	40.2	47.6	**54.4**	50.7	58.1
Southern Metropolitan	**51.9**	47.6	56.1	**46.4**	42.2	50.7
Total	**50.6**	48.2	53.0	**47.7**	45.3	50.1
Rural people						
Barwon-South Western	**49.2**	44.2	54.2	**49.1**	44.0	54.2
Gippsland	33.6	29.1	38.5	65.5	60.6	70.1
Grampians	**43.2**	38.5	48.1	**54.0**	49.3	58.7
Hume	33.9	29.4	38.8	65.0	60.2	69.6
Loddon Mallee	40.9	36.4	45.6	57.9	53.2	62.4
Total	40.9	38.6	43.2	57.6	55.3	59.9
All people						
Total	**48.2**	**46.3**	**50.2**	**50.1**	**48.2**	**52.1**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

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6.Self-reported health and selected chronic diseases

6. Self-reported health and selected chronic diseases

Self-reported health status has been shown to be a reliable predictor of ill-health, future health care use and premature mortality, independent of other medical, behavioural or psychosocial risk factors (Burstrom & Fredlund 2001; Idler & Benyamini 1997; Miilunpalo et al. 1997). Survey respondents were asked about satisfaction with their life overall and to state their perception of their current health status by indicating whether, in general, they would say their health was excellent, very good, good, fair or poor.

Respondents were also asked whether they had at any time in their life been told by a doctor that they had any of the following conditions: heart disease, stroke, cancer, osteoporosis, arthritis and systemic lupus erythematosus (SLE). If respondents indicated that they had been told by a doctor that they had arthritis, they were then asked about the type of arthritis they had.

6.1 Self-reported health

Table 6.1 shows self-reported health status, by sex, with 'Total' not adjusted for age. Overall, 48.4 per cent of people reported their health status as being 'excellent' or 'very good'; 36.0 per cent reported their health status as 'good', while 15.3 per cent reported their health status as 'fair' or 'poor'. There were no significant differences between the sexes.

A significantly *higher* proportion of men, women and people aged 65 years or older reported fair or poor health compared with the proportion in all Victorian men, women and people, respectively. In contrast, a significantly *lower* proportion of people aged 18–24 years reported fair or poor health compared with the proportion of all Victorian people.

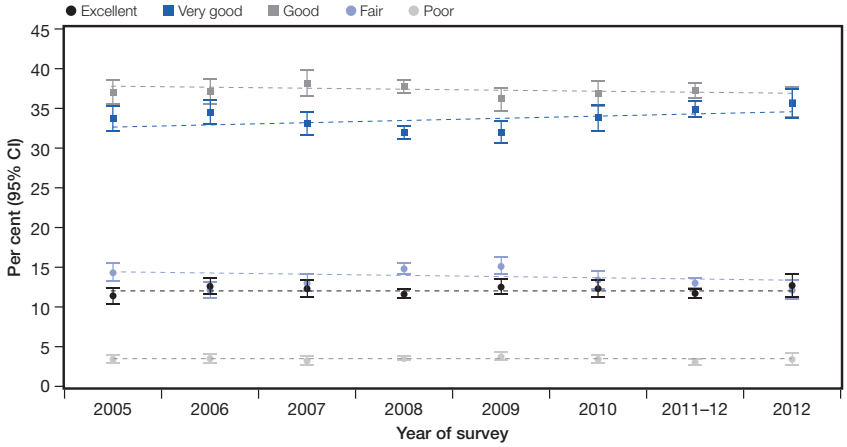
Table 6.1: Self-reported health status, by sex, Victoria, 2012

Age group (years)	Excellent/Very Good			Good			Fair/Poor		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Males									
18–24	60.9	50.8	70.1	**29.9**	21.5	39.9	**9.2***	5.0	16.3
25–34	**40.2**	30.9	50.3	**38.5**	29.6	48.3	**19.6**	12.6	29.2
35–44	**49.4**	43.3	55.5	**38.6**	32.8	44.7	**11.6**	8.4	15.8
45–54	**45.1**	39.6	50.6	**37.7**	32.5	43.3	**17.1**	13.1	22.0
55–64	**48.6**	43.7	53.4	**35.5**	31.0	40.3	**15.7**	12.7	19.3
65+	**40.7**	37.0	44.5	**35.3**	31.7	39.0	23.7	20.6	27.1
Total	**46.8**	**43.9**	**49.8**	**36.3**	**33.5**	**39.1**	**16.4**	**14.3**	**18.7**
Females									
18–24	**59.5**	48.7	69.5	**31.7**	22.7	42.4	**8.8***	4.4	16.6
25–34	**47.5**	39.6	55.5	**43.3**	35.5	51.5	**9.2***	5.5	14.8
35–44	**53.3**	48.3	58.1	**34.2**	29.7	39.0	**12.4**	9.2	16.6
45–54	**48.1**	43.9	52.4	**35.9**	31.9	40.0	**15.5**	12.6	18.9
55–64	**49.7**	45.6	53.8	**32.9**	29.2	36.9	**17.3**	14.2	20.8
65+	**44.2**	41.1	47.4	**34.3**	31.4	37.4	21.3	18.7	24.1
Total	**49.8**	**47.4**	**52.3**	**35.7**	**33.3**	**38.1**	**14.3**	**12.8**	**16.0**
People									
18–24	60.2	52.8	67.1	**30.8**	24.5	38.0	9.0	5.7	13.9
25–34	**43.8**	37.6	50.3	**40.9**	34.8	47.3	**14.4**	10.2	19.9
35–44	**51.3**	47.4	55.2	**36.4**	32.7	40.2	**12.0**	9.6	14.9
45–54	**46.6**	43.2	50.1	**36.8**	33.5	40.2	**16.3**	13.8	19.2
55–64	**49.1**	46.0	52.3	**34.2**	31.3	37.3	**16.5**	14.3	19.0
65+	42.6	40.2	45.1	**34.7**	32.4	37.1	22.4	20.4	24.5
Total	**48.4**	**46.5**	**50.3**	**36.0**	**34.1**	**37.8**	**15.3**	**14.0**	**16.7**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

The trend over time of age-adjusted self-reported health status is presented in Table 6.2 and Figure 6.1. Self-reported health status, regardless of category, remained constant in Victoria from 2005 to 2012, with the exception of the proportion of women reporting very good health increasing significantly during this period.

Figure 6.1: Self-reported health status, Victoria, 2005–2012



Data were age-standardised to the 2011 Victorian population.
Ordinary least squares regression was used to test for trends over time (NS).

Table 6.2: Self-reported health status trends, by sex, Victoria, 2005–2012

	Excellent			Very good			Good			Fair			Poor		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL		LL	UL
Males															
2005	**11.2**	9.7	12.9	**33.1**	30.8	35.5	**37.2**	34.9	39.6	**14.9**	13.2	16.7	**3.6**	2.8	4.6
2006	**12.5**	10.9	14.2	**34.6**	32.1	37.1	**36.3**	33.9	38.8	**13.2**	11.7	14.9	**3.2**	2.4	4.1
2007	**11.1**	9.6	12.8	**32.5**	30.2	34.9	**40.3**	37.7	42.9	**12.6**	11.1	14.3	**3.3**	2.5	4.4
2008	**11.2**	10.4	12.1	**30.1**	28.9	31.4	**39.2**	37.9	40.5	**15.8**	14.9	16.8	**3.4**	3.0	3.9
2009	**12.7**	11.2	14.3	**30.1**	28.0	32.3	**37.6**	35.4	39.9	**15.4**	13.8	17.2	**3.7**	2.9	4.5
2010	**12.6**	11.0	14.5	**32.6**	30.2	35.0	**37.3**	34.9	39.8	**14.0**	12.3	15.8	**3.1**	2.5	3.9
2011–12	**11.7**	10.8	12.7	**33.7**	32.2	35.2	**38.1**	36.6	39.6	**13.6**	12.7	14.7	**2.7**	2.2	3.3
2012	**12.1**	**10.1**	**14.6**	**34.4**	**31.8**	**37.2**	**36.1**	**33.4**	**39.0**	**13.5**	**11.7**	**15.6**	**3.1**	**2.2**	**4.4**
Females															
2005	**11.5**	10.3	12.7	**34.3**	32.4	36.2	**37.0**	35.1	39.0	**13.7**	12.4	15.2	**3.3**	2.6	4.0
2006	**12.7**	11.5	14.1	**34.5**	32.6	36.4	**37.8**	35.9	39.8	**11.0**	9.8	12.3	**3.8**	3.0	4.7
2007	**13.5**	12.1	15.0	**33.7**	31.8	35.6	**36.1**	34.1	38.2	**13.4**	12.1	14.9	**3.1**	2.5	3.7
2008	**12.0**	11.3	12.7	**33.8**	32.8	34.8	**36.4**	35.4	37.5	**13.9**	13.2	14.7	**3.7**	3.3	4.1
2009	**12.3**	11.2	13.6	**33.8**	32.1	35.7	**34.9**	33.1	36.8	**14.8**	13.5	16.2	**3.8**	3.2	4.6
2010	**11.9**	10.7	13.2	**34.8**	32.8	36.8	**36.7**	34.7	38.7	**12.7**	11.4	14.1	**3.7**	3.0	4.6
2011–12	**11.5**	10.8	12.2	**36.1**	34.9	37.4	**36.5**	35.3	37.8	**12.3**	11.5	13.1	**3.4**	3.0	3.8
2012	**13.2**	**11.5**	**15.2**	**36.7**	**34.3**	**39.2**	**35.6**	**33.1**	**38.1**	**10.8**	**9.4**	**12.2**	**3.6**	**2.7**	**4.7**
Persons															
2005	**11.4**	10.4	12.4	**33.7**	32.2	35.3	**37.0**	35.5	38.6	**14.3**	13.3	15.5	**3.4**	2.9	4.0
2006	**12.6**	11.6	13.7	**34.5**	33.0	36.1	**37.1**	35.5	38.7	**12.1**	11.1	13.1	**3.5**	2.9	4.1
2007	**12.3**	11.3	13.4	**33.1**	31.6	34.6	**38.1**	36.5	39.8	**13.0**	12.0	14.2	**3.2**	2.7	3.8
2008	**11.6**	11.1	12.2	**32.0**	31.2	32.8	**37.8**	36.9	38.6	**14.8**	14.2	15.5	**3.5**	3.3	3.8
2009	**12.5**	11.6	13.5	**32.0**	30.6	33.4	**36.2**	34.7	37.6	**15.1**	14.1	16.3	**3.7**	3.3	4.3
2010	**12.3**	11.2	13.4	**33.8**	32.2	35.4	**36.9**	35.3	38.5	**13.4**	12.3	14.5	**3.4**	2.9	4.0
2011–12	**11.7**	11.1	12.3	**34.9**	33.9	35.9	**37.2**	36.3	38.2	**13.0**	12.4	13.6	**3.0**	2.7	3.4
2012	**12.7**	**11.3**	**14.2**	**35.6**	**33.8**	**37.5**	**35.8**	**33.9**	**37.7**	**12.1**	**11.0**	**13.4**	**3.4**	**2.7**	**4.2**

Data were age-standardised to the 2011 Victorian population
Ordinary least squares regression was used to test for trends over time.

Table 6.3 shows self-reported health status by departmental region and sex, adjusted for age.

There were no significant differences in self-reported health status between men, women or people who lived in rural regions compared with their metropolitan counterparts. However, the proportion of men residing in Hume Region and people residing in Eastern Metropolitan Region who reported fair or poor health was significantly *lower* compared with all Victorian men and people, respectively.

Table 6.3: Self-reported health status, by Department of Health and Human Services region and sex, Victoria, 2012

	Excellent/Very Good			Good			Fair/Poor		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Metropolitan males									
Eastern Metropolitan	**52.8**	46.1	59.4	**36.2**	29.9	43.0	**11.0**	7.9	15.2
North & West Metropolitan	**40.9**	35.7	46.4	**37.5**	32.2	43.0	**20.2**	16.3	24.7
Southern Metropolitan	**50.7**	44.0	57.3	**32.6**	27.7	37.9	**16.5**	11.9	22.5
Total	**46.8**	43.2	50.5	**35.8**	32.4	39.3	**16.7**	14.2	19.6
Rural males									
Barwon-South Western	**47.7**	39.0	56.6	**36.8**	28.9	45.3	**15.3**	10.2	22.4
Gippsland	**47.8**	40.9	54.8	**37.4**	30.7	44.5	**14.7**	10.6	20.0
Grampians	**41.2**	34.2	48.6	**39.3**	32.3	46.8	**19.5**	14.0	26.4
Hume	**48.7**	39.6	57.9	**39.3**	30.5	48.9	**11.1**	8.5	14.5
Loddon Mallee	**41.6**	35.1	48.4	**39.1**	32.8	45.8	**19.3**	14.6	25.0
Total	**45.8**	42.0	49.5	**38.1**	34.4	41.9	**16.0**	13.7	18.5
All males									
Total	**46.5**	**43.6**	**49.5**	**36.1**	**33.4**	**39.0**	**16.7**	**14.6**	**18.9**
Metropolitan females									
Eastern Metropolitan	**52.4**	46.8	57.9	**36.7**	31.5	42.2	**10.9**	8.0	14.7
North & West Metropolitan	**48.6**	43.6	53.7	**35.4**	30.7	40.4	**15.7**	12.9	19.0
Southern Metropolitan	**48.5**	43.0	54.1	**33.9**	28.6	39.6	**17.5**	13.5	22.4
Total	**49.5**	46.3	52.8	**35.4**	32.4	38.6	**14.9**	12.9	17.1
Rural females									
Barwon-South Western	**54.9**	49.1	60.5	**35.1**	29.7	40.9	**9.9**	7.6	12.9
Gippsland	**51.6**	44.1	58.9	**33.6**	28.0	39.6	**14.9**	9.8	21.9
Grampians	**56.0**	50.0	61.7	**31.8**	26.6	37.5	**12.2**	9.0	16.4
Hume	**48.7**	42.7	54.7	**37.4**	31.5	43.6	**13.9**	10.4	18.3
Loddon Mallee	**48.0**	42.8	53.3	**35.6**	30.7	40.9	**15.9**	12.7	19.6
Total	**51.6**	48.8	54.4	**35.0**	32.4	37.7	**13.2**	11.5	15.2
All females									
Total	**49.9**	**47.3**	**52.5**	**35.6**	**33.1**	**38.1**	**14.4**	**12.8**	**16.1**
Metropolitan people									
Eastern Metropolitan	**52.6**	48.1	57.0	**36.5**	32.2	40.9	**10.9**	8.7	13.7
North & West Metropolitan	**44.8**	41.1	48.6	**36.3**	32.7	40.0	**18.1**	15.6	20.9
Southern Metropolitan	**49.5**	45.0	54.0	**33.4**	29.4	37.5	**17.0**	13.9	20.7
Total	**48.3**	45.8	50.7	**35.5**	33.2	37.8	**15.8**	14.2	17.6
Rural people									
Barwon-South Western	**51.2**	46.0	56.3	**36.5**	31.6	41.6	**12.2**	9.5	15.6
Gippsland	**49.4**	44.3	54.6	**35.5**	31.0	40.2	**15.0**	11.4	19.5
Grampians	**48.8**	44.0	53.6	**35.5**	31.1	40.1	**15.8**	12.5	19.7
Hume	**48.9**	42.7	55.2	**38.2**	32.2	44.5	**12.5**	10.2	15.2
Loddon Mallee	**44.6**	40.2	49.1	**37.4**	33.1	41.9	**17.8**	14.8	21.3
Total	**48.7**	46.3	51.1	**36.5**	34.3	38.9	**14.5**	13.1	16.1
All people									
Total	**48.3**	**46.4**	**50.3**	**35.8**	**33.9**	**37.7**	**15.5**	**14.2**	**16.9**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 6.4 shows self-reported health status by selected socioeconomic determinants, modifiable risk factors, health status and sex, adjusted for age.

6.1.1 Excellent or very good health

When compared with all Victorian men and women, there was a significantly *higher* proportion of men and women who reported excellent or very good health with the following characteristics:

- total annual household income of $100,000 or more
- low levels of psychological distress
- BMI in the normal weight range.

When compared with all Victorian men, there was a significantly *higher* proportion of men who reported excellent or very good health with the following characteristics:

- complied with both fruit and vegetable consumption guidelines or vegetable guidelines only
- non-smoker.

When compared with all Victorian women, there was a significantly *higher* proportion of women who reported excellent or very good health with the following characteristics:

- reported sufficient physical activity
- complied with fruit consumption guidelines
- underweight.

When compared with all Victorian men and women, there was a significantly *lower* proportion of men and women who reported excellent or very good health with the following characteristics:

- primary or no education
- total annual household income less than $40,000
- moderate, high or very high levels of psychological distress
- sedentary
- current smoker
- obese
- diagnosed with diabetes
- diagnosed with depression.

When compared with all Victorian men, there was a significantly *lower* proportion of men who reported excellent or very good health with the following characteristic:

- secondary education only.

When compared with all Victorian women, there was a significantly *lower* proportion of women who reported excellent or very good health with the following characteristics:

- spoke a language other than English at home
- reported insufficient physical activity
- complied with neither fruit nor vegetable consumption guidelines
- abstained from alcohol consumption.

6.1.2 Fair or poor health

When compared with all Victorian men and women, there was a significantly *higher* proportion of men and women who reported fair or poor health with the following characteristics:

- total annual household income less than $40,000
- high or very high levels of psychological distress
- sedentary
- current smoker
- abstained from alcohol consumption
- obese
- diagnosed with depression.

When compared with all Victorian men, there was a significantly *higher* proportion of men who reported fair or poor health with the following characteristic:

- secondary education only.

When compared with all Victorian women, there was a significantly *higher* proportion of women who reported fair or poor health with the following characteristics:

- spoke a language other than English at home
- primary or no education
- moderate levels of psychological distress
- complied with neither fruit nor vegetable consumption guidelines
- diagnosed with diabetes.

Table 6.4 (revised): Self-reported health status, by selected socioeconomic determinants, modifiable risk factors, health status and sex, Victoria, 2012

	Males: self-reported health status						Females: self-reported health status					
	Excellent/Very Good			Fair/Poor			Excellent/Very Good			Fair/Poor		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Victoria	**46.5**	**43.6**	**49.5**	**16.7**	**14.6**	**18.9**	**49.9**	**47.3**	**52.5**	**14.4**	**12.8**	**16.1**
Country of birth												
Australia	**48.4**	45.0	51.7	**15.2**	13.1	17.6	**53.1**	50.2	55.9	**12.4**	10.7	14.4
Overseas	**42.8**	36.5	49.4	**20.1**	15.4	25.7	**43.0**	37.4	48.8	**18.2**	15.3	21.5
Language spoken at home												
English only	**47.6**	44.4	50.8	**15.9**	13.7	18.4	**53.8**	51.0	56.7	**12.3**	10.6	14.3
Language other than English	**43.3**	37.2	49.7	**18.7**	14.4	24.0	**37.7**	32.5	43.1	**22.3**	18.7	26.4
Metro-Rural regions												
Rural	**45.8**	42.0	49.5	**16.0**	13.7	18.5	**51.6**	48.8	54.4	**13.2**	11.5	15.2
Metropolitan	**46.8**	43.2	50.5	**16.7**	14.2	19.6	**49.5**	46.3	52.8	**14.9**	12.9	17.1
Level of education												
None or Primary	**9.5***	5.5	16.0	**19.1**	15.5	23.2	**16.0**	12.7	19.9	**53.6**	48.9	58.3
Secondary	**36.9**	32.3	41.8	**23.7**	19.1	29.0	**45.3**	40.5	50.2	**17.2**	13.6	21.4
TAFE or Tertiary	**50.8**	46.9	54.7	**13.2**	11.0	15.8	**54.1**	50.7	57.5	**11.9**	9.9	14.3
Employment status (<65 years)												
Employed	**48.8**	44.9	52.8	**13.9**	11.4	16.8	**53.1**	49.2	57.0	**10.2**	7.9	13.0
Unemployed	**37.0**	26.6	48.8	**18.4***	9.5	32.6	**42.5**	31.7	54.1	**21.2**	13.4	31.8
Not in labour force	**35.1**	26.1	45.4	**27.7**	19.7	37.5	**46.0**	40.5	51.5	**17.8**	14.3	22.1
Total annual household income ($)												
<40,000	**31.8**	25.9	38.2	**30.7**	23.6	39.0	**29.2**	24.7	34.2	**27.1**	20.8	34.6
40,000 to <100,000	**45.6**	40.8	50.5	**14.8**	11.8	18.4	**53.7**	49.2	58.2	**11.0**	8.8	13.8
100,000, or more	**60.0**	54.7	65.1	**9.8**	7.0	13.5	**65.8**	60.5	70.8	**5.7***	3.1	10.0
Psychological distress (K10 score) [a]												
Low (K10 score <16)	**53.3**	49.5	57.1	**12.1**	9.9	14.8	**58.8**	55.5	62.1	**8.0**	6.5	9.6
Moderate (K10 score 16 to 21)	**35.2**	29.9	40.8	**22.0**	17.8	26.9	**41.0**	36.1	46.1	**21.4**	17.3	26.1
High (K10 score 22 to 29)	**27.8**	20.1	37.1	**35.7**	29.1	43.0	**24.4**	18.0	32.1	**30.5**	24.7	36.9
Very high (K10 score ≥30)	**22.0**	13.4	34.0	**47.6**	36.5	58.8	**16.2**	10.3	24.6	**43.7**	35.4	52.5
Physical activity level [b]												
Sedentary	**12.9**	8.6	19.1	**40.2**	31.7	49.3	**28.6**	19.9	39.3	**31.1**	21.9	42.2
Insufficient	**39.6**	33.6	45.9	**21.4**	16.8	26.9	**38.7**	33.9	43.6	**17.0**	13.8	20.8
Sufficient	**52.5**	48.9	56.0	**12.2**	10.2	14.6	**58.5**	55.3	61.6	**10.4**	8.7	12.3
Compliance with fruit & vegetable consumption guidelines [c]												
Both	**66.1**	56.6	74.4	**9.5***	5.2	16.9	**59.6**	52.3	66.4	**5.6**	3.9	8.1
Vegetable only [d]	**69.6**	61.2	76.9	**11.3**	7.3	16.9	**58.8**	51.5	65.7	**7.5**	5.4	10.2
Fruit only [d]	**52.7**	48.2	57.2	**13.9**	11.0	17.3	**56.5**	52.9	60.1	**10.3**	8.7	12.0
Neither	**42.2**	38.3	46.1	**18.3**	15.6	21.3	**42.5**	38.9	46.1	**19.0**	16.3	22.1
Smoking status												
Current smoker	**29.4**	24.1	35.3	**28.6**	23.1	34.8	**37.2**	30.4	44.4	**22.6**	17.2	29.0
Ex-smoker	**44.2**	36.8	51.9	**16.2**	11.2	22.7	**54.6**	49.2	59.8	**12.7**	10.0	16.0
Non-smoker	**53.6**	49.6	57.5	**13.4**	11.0	16.2	**52.1**	48.9	55.2	**12.8**	11.0	14.9
Lifetime risk of alcohol related harm (2009) [f]												
Abstainer / no longer drinks alcohol	**43.5**	35.4	52.1	**25.5**	19.3	32.9	**38.4**	32.8	44.4	**22.6**	18.9	26.8
Reduced risk	**49.5**	40.7	58.2	**17.0**	11.9	23.7	**49.6**	42.9	56.4	**13.3**	9.9	17.6
Increased risk	**46.2**	42.9	49.6	**15.3**	13.0	17.9	**55.6**	52.1	58.9	**10.6**	8.6	13.0
BMI category [f]												
Underweight	**35.1**	25.7	45.8	**9.7***	4.3	20.3	**64.7**	53.9	74.2	**7.0***	3.6	13.1
Normal	**59.6**	54.8	64.2	**13.0**	9.8	17.0	**63.8**	60.2	67.2	**8.7**	7.1	10.7
Overweight	**45.2**	40.5	50.1	**12.9**	10.3	16.1	**43.9**	38.7	49.3	**14.1**	10.4	18.8
Obese	**20.4**	16.3	25.3	**30.7**	24.1	38.1	**23.4**	17.9	30.1	**28.1**	23.1	33.7
Diabetes												
No diabetes	**48.3**	45.3	51.4	**15.7**	13.6	18.0	**51.2**	48.5	53.8	**13.2**	11.6	14.9
Diabetes	**28.6**	22.6	35.4	**21.8**	15.2	30.2	**22.5**	14.0	34.2	**39.7**	30.5	49.8
Depression												
Yes	**35.6**	29.8	41.8	**27.1**	22.0	32.9	**38.5**	33.6	43.7	**23.3**	19.5	27.5
No	**48.3**	45.0	51.7	**15.3**	12.9	17.9	**54.0**	51.0	57.0	**11.5**	9.9	13.4

a Based on the Kessler 10 scale for psychological distress.
b Based on DoHA (1999) guidelines.
c Based on NHMRC (2003) guidelines.
d Includes those meeting both guidelines.
e NHMRC (2009) guidelines.
f Based on Body Mass Index (BMI).

Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: **above**/**below** Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.

Table 6.5 shows the prevalence of self-reported health status by total annual household income and sex, adjusted for age.

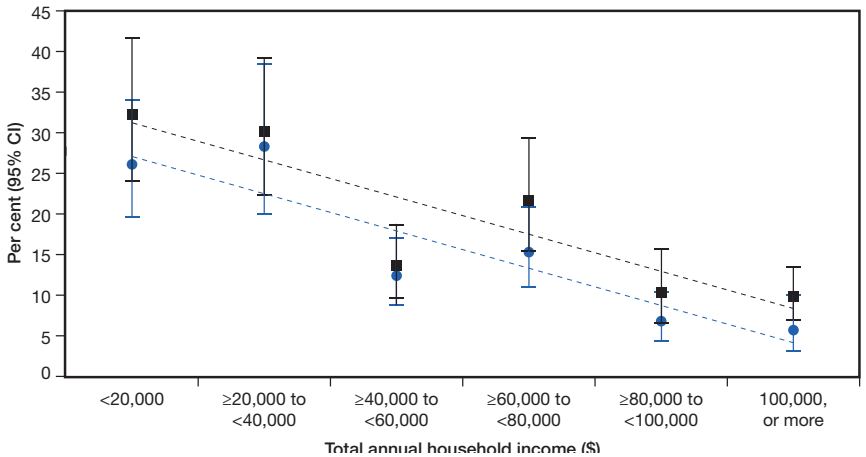
There was a significant *increase* in the proportion of men, women and people reporting excellent or very good health with increasing total household income; in contrast there was a significant *decline* in the proportion of men, women and people reporting fair or poor health with increasing total household income (Figure 6.2). There was also a significant *decline* in the proportion of women reporting good health with increasing total annual household income.

Table 6.5: Prevalence (%) of self-reported health status, by total annual household income group and sex, Victoria, 2012

	Excellent/Very good			Good			Fair/Poor		
	%	95% CI		%	95% CI		%	95% CI	
Total annual household income ($)		LL	UL		LL	UL		LL	UL
Males									
<20,000	27.8	22.6	33.7	**39.9**	32.8	47.5	32.2	24.0	41.7
≥20,000 to <40,000	34.3	27.0	42.5	**31.5**	23.0	41.5	30.1	22.3	39.2
≥40,000 to <60,000	**47.0**	40.7	53.4	**39.1**	32.7	45.8	**13.6**	9.7	18.7
≥60,000 to <80,000	**42.3**	34.8	50.1	**36.1**	30.2	42.4	**21.6**	15.4	29.3
≥80,000 to <100,000	**44.5**	37.4	51.8	**45.2**	37.9	52.7	**10.3**	6.6	15.7
100,000, or more	60.0	54.7	65.1	**30.2**	25.6	35.2	9.8	7.0	13.5
Do not know/Refused to answer	**45.0**	37.7	52.5	**35.6**	28.7	43.1	**16.4**	12.4	21.4
Total	**46.5**	**43.6**	**49.5**	**36.1**	**33.4**	**39.0**	**16.7**	**14.6**	**18.9**
Females									
<20,000	30.4	22.6	39.4	**43.4**	35.6	51.6	26.1	19.6	34.0
≥20,000 to <40,000	29.8	24.5	35.8	**41.3**	32.9	50.3	28.3	20.0	38.5
≥40,000 to <60,000	**50.0**	43.2	56.8	**37.7**	31.1	44.8	**12.4**	8.8	17.1
≥60,000 to <80,000	**52.1**	45.0	59.1	**32.6**	26.0	40.0	**15.3**	11.0	20.9
≥80,000 to <100,000	**55.6**	47.8	63.1	**31.6**	24.2	40.1	6.8	4.4	10.4
100,000, or more	65.8	60.5	70.8	23.3	19.3	27.8	5.7*	3.1	10.0
Do not know/Refused to answer	**44.5**	39.2	49.9	**40.5**	35.2	45.9	**15.0**	12.1	18.5
Total	**49.9**	**47.3**	**52.5**	**35.6**	**33.1**	**38.1**	**14.4**	**12.8**	**16.1**
Persons									
<20,000	28.6	21.8	36.6	**43.0**	35.6	50.7	28.3	22.1	35.4
≥20,000 to <40,000	32.8	26.9	39.2	**36.9**	30.9	43.3	29.0	22.9	36.0
≥40,000 to <60,000	**47.0**	42.0	52.1	**39.6**	34.5	44.9	**13.2**	10.4	16.6
≥60,000 to <80,000	**47.8**	42.3	53.3	**35.2**	29.9	40.8	**17.0**	13.1	21.9
≥80,000 to <100,000	**50.2**	43.7	56.7	**41.1**	34.7	47.8	8.6	6.1	12.1
100,000, or more	64.0	60.0	67.8	28.2	24.7	32.1	7.7	5.8	10.2
Do not know/Refused to answer	**44.8**	40.4	49.3	**37.5**	33.2	42.1	**16.3**	13.7	19.4
Total	**48.3**	**46.4**	**50.3**	**35.8**	**33.9**	**37.7**	**15.5**	**14.2**	**16.9**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Figure 6.2: Prevalence (%) of fair or poor self-reported health, by total annual household income group and sex, Victoria, 2012



Data were age-standardised to the 2011 Victorian population.
95% CI = 95 per cent confidence interval.

Table 6.6 shows the prevalence of satisfaction with life overall, by age group and sex, with 'Total' not adjusted for age.

Overall, 40.3 per cent of people were very satisfied, 53.5 per cent were satisfied, 4.0 per cent were dissatisfied and 1.2 per cent were very dissatisfied with life overall. The proportions in all categories were similar in men and women.

Table 6.6: Prevalence (%) of satisfaction with life overall, by level of satisfaction, age groups and sex, Victoria, 2012

Age group (years)	In general, how satisfied are you with your life overall?											
	Very satisfied			Satisfied			Dissatisfied			Very dissatisfied		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Males												
18–24	**43.7**	34.1	53.8	**50.5**	40.5	60.4	**4.9***	1.9	11.9	**0.0**	.	.
25–34	**38.1**	28.8	48.2	**51.8**	41.9	61.6	**6.2***	2.6	13.9	**	**	**
35–44	**38.0**	32.4	44.1	**55.6**	49.4	61.5	**3.6***	1.9	6.7	**	**	**
45–54	**37.1**	31.8	42.6	**55.7**	50.1	61.2	**4.2***	2.4	7.3	**	**	**
55–64	**42.9**	38.1	47.8	**52.6**	47.7	57.4	**3.0***	1.8	4.9	**1.1***	0.5	2.6
65+	**44.0**	40.2	47.9	**51.5**	47.7	55.3	**2.6**	1.6	4.1	**0.9***	0.4	1.9
Total	**40.3**	**37.5**	**43.3**	**53.1**	**50.1**	**56.0**	**4.1**	**3.0**	**5.7**	**1.0***	**0.5**	**1.8**
Females												
18–24	**46.3**	35.8	57.2	**52.6**	41.7	63.2	**	**	**	**0.0**	.	.
25–34	**34.4**	27.4	42.3	**61.1**	53.1	68.5	**3.7***	1.4	9.0	**	**	**
35–44	**39.5**	34.8	44.3	**55.1**	50.3	59.9	**3.4***	2.0	5.8	**1.2***	0.6	2.7
45–54	**39.8**	35.7	44.1	**52.9**	48.7	57.1	**4.9**	3.4	7.1	**1.9***	1.1	3.5
55–64	**41.9**	37.9	46.0	**50.2**	46.0	54.3	**4.9**	3.4	7.1	**2.2***	1.3	3.7
65+	**42.0**	38.9	45.2	**50.2**	47.0	53.4	**4.0**	3.0	5.4	**1.6***	0.9	2.8
Total	**40.3**	**37.9**	**42.7**	**53.9**	**51.4**	**56.3**	**3.8**	**3.0**	**4.7**	**1.3**	**1.0**	**1.9**
People												
18–24	**45.0**	37.7	52.4	**51.5**	44.1	58.8	**3.1***	1.4	6.6	**0.0**	.	.
25–34	**36.3**	30.3	42.7	**56.4**	49.9	62.7	**4.9***	2.6	9.2	**1.6***	0.6	4.0
35–44	**38.8**	35.1	42.6	**55.3**	51.5	59.2	**3.5**	2.3	5.3	**1.1***	0.6	2.0
45–54	**38.5**	35.1	41.9	**54.3**	50.8	57.7	**4.6**	3.3	6.3	**1.2***	0.7	2.0
55–64	**42.4**	39.3	45.6	**51.4**	48.2	54.5	**4.0**	3.0	5.3	**1.7**	1.1	2.6
65+	**42.9**	40.5	45.4	**50.8**	48.3	53.3	**3.4**	2.6	4.4	**1.3**	0.8	2.0
Total	**40.3**	**38.4**	**42.2**	**53.5**	**51.6**	**55.4**	**4.0**	**3.2**	**4.8**	**1.2**	**0.9**	**1.6**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 6.7 shows the prevalence of satisfaction with life overall, by departmental region and sex, adjusted for age. There were no significant differences in the any of the proportions in any of the regions compared with the corresponding proportion in all Victorian men, women and people, respectively.

Table 6.7: Prevalence (%) of satisfaction with life overall, by level of satisfaction, Department of Health and Human Services region and sex, Victoria, 2012

	Very satisfied			Satisfied			Dissatisfied			Very dissatisfied		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males												
Eastern Metropolitan	**39.8**	33.8	46.2	**54.6**	48.2	60.8	**3.3***	1.8	6.0	**	**	**
North & West Metropolitan	**36.9**	31.7	42.4	**55.0**	49.4	60.5	**4.4***	2.5	7.7	**	**	**
Southern Metropolitan	**44.4**	37.8	51.4	**49.8**	43.0	56.7	**3.4***	2.0	5.9	**	**	**
Total	**40.1**	36.5	43.8	**53.0**	49.2	56.6	**4.0***	2.8	5.7	**1.1***	0.5	2.3
Rural males												
Barwon-South Western	**40.3**	32.3	48.8	**56.1**	47.7	64.2	**2.9***	1.3	6.6	**	**	**
Gippsland	**38.8**	32.1	45.9	**55.2**	48.2	62.1	**4.4***	2.0	9.5	**	**	**
Grampians	**43.2**	36.3	50.4	**51.9**	44.5	59.2	**3.1***	1.3	7.3	**	**	**
Hume	**43.7**	34.1	53.8	**51.1**	41.2	60.8	**2.6***	1.3	5.0	**1.6***	0.7	3.8
Loddon Mallee	**34.3**	27.5	41.8	**60.1**	52.5	67.2	**4.1***	2.0	8.5	**	**	**
Total	**40.2**	36.4	44.0	**54.8**	50.9	58.6	**3.5**	2.4	5.3	**0.8***	0.4	1.4
All males												
Total	**40.1**	**37.2**	**43.1**	**53.3**	**50.3**	**56.3**	**3.9**	**2.9**	**5.2**	**1.0***	**0.6**	**1.9**
Metropolitan females												
Eastern Metropolitan	**35.9**	30.9	41.3	**58.7**	53.4	63.9	**2.6**	1.7	3.9	**1.9***	1.0	3.5
North & West Metropolitan	**40.1**	35.2	45.3	**54.3**	49.1	59.3	**3.7**	2.3	6.0	**1.4***	0.8	2.4
Southern Metropolitan	**40.2**	34.8	45.9	**52.6**	46.9	58.3	**4.8***	2.9	7.9	**1.3***	0.6	2.8
Total	**39.2**	36.1	42.4	**54.7**	51.4	57.8	**3.9**	2.8	5.2	**1.5**	1.0	2.1
Rural females												
Barwon-South Western	**43.0**	37.6	48.5	**53.0**	47.5	58.4	**2.8***	1.5	5.1	**0.8***	0.4	1.7
Gippsland	**40.0**	33.8	46.5	**54.5**	48.1	60.8	**3.9**	2.4	6.3	**1.0***	0.4	2.5
Grampians	**46.9**	40.9	52.9	**50.1**	44.1	56.1	**2.0***	1.1	3.6	**0.7***	0.3	1.7
Hume	**47.7**	41.5	53.9	**47.5**	41.3	53.9	**4.0***	1.8	8.5	**0.6***	0.2	1.6
Loddon Mallee	**42.2**	37.0	47.6	**51.4**	46.2	56.6	**4.9***	2.9	8.2	**0.6***	0.3	1.5
Total	**43.6**	40.8	46.3	**51.7**	48.9	54.4	**3.5**	2.7	4.7	**0.8**	0.5	1.2
All females												
Total	**40.3**	**37.8**	**42.8**	**54.0**	**51.4**	**56.6**	**3.7**	**2.9**	**4.8**	**1.3**	**0.9**	**1.7**
Metropolitan people												
Eastern Metropolitan	**37.9**	33.8	42.1	**56.6**	52.3	60.7	**3.0**	2.0	4.3	**1.5***	0.7	3.0
North & West Metropolitan	**38.6**	35.0	42.4	**54.5**	50.6	58.3	**4.1**	2.8	5.9	**1.4***	0.8	2.4
Southern Metropolitan	**42.1**	37.7	46.7	**51.4**	46.8	55.9	**4.2**	2.8	6.2	**1.1***	0.6	2.1
Total	**39.6**	37.3	42.1	**53.8**	51.3	56.2	**3.9**	3.1	5.0	**1.3**	0.9	1.9
Rural people												
Barwon-South Western	**41.5**	36.7	46.5	**54.6**	49.7	59.5	**2.9***	1.7	4.9	**0.5***	0.3	1.0
Gippsland	**39.3**	34.5	44.2	**54.5**	49.5	59.5	**4.5***	2.6	7.7	**1.0***	0.5	2.0
Grampians	**45.1**	40.4	49.8	**50.9**	46.1	55.7	**2.6***	1.5	4.7	**	**	**
Hume	**45.7**	39.8	51.7	**49.4**	43.4	55.4	**3.2***	1.9	5.5	**1.1***	0.6	2.2
Loddon Mallee	**38.2**	33.7	42.9	**55.8**	51.1	60.4	**4.6**	2.9	7.1	**0.6***	0.3	1.1
Total	**41.8**	39.5	44.2	**53.3**	50.9	55.6	**3.5**	2.8	4.5	**0.8**	0.5	1.1
All people												
Total	**40.2**	**38.2**	**42.1**	**53.7**	**51.7**	**55.6**	**3.8**	**3.1**	**4.6**	**1.2**	**0.8**	**1.6**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

6.1.3 Very satisfied with life overall

Table 6.8 shows the prevalence of satisfaction with life overall, by selected socioeconomic determinants, modifiable risk factor, health status and sex, adjusted for age.

When compared with all Victorian men and women, there was a significantly *higher* proportion of men and women who reported being very satisfied with life overall with the following characteristics:

- total annual household income of $100,000 or more
- low levels of psychological distress
- excellent or very good self-reported health.

When compared with all Victorian men, there was a significantly *higher* proportion of men who reported being very satisfied with life overall with the following characteristic:

- complied with vegetable consumption guidelines only.

When compared with all Victorian women, there was a significantly *higher* proportion of women who reported being very satisfied with life overall with the following characteristics:

- reported sufficient physical activity
- underweight.

When compared with all Victorian men and women, there was a significantly *lower* proportion of men and women who reported being very satisfied with life overall with the following characteristics:

- moderate or high levels of psychological distress
- good, fair or poor self-reported health
- diagnosed with depression.

When compared with all Victorian men, there was a significantly *lower* proportion of men who reported being very satisfied with life overall with the following characteristics:

- primary or no education
- secondary education only
- not in the labour force
- sedentary
- obese.

When compared with all Victorian women, there was a significantly *lower* proportion of women who reported being very satisfied with life overall with the following characteristics:

- spoke a language other than English at home
- total annual household income of less than $40,000
- very high levels of psychological distress
- reported insufficient physical activity.

6.1.4 Very dissatisfied with life overall

When compared with all Victorian men and women, there was a significantly *higher* proportion of men and women who reported being very dissatisfied with life overall with the following characteristic:

- very high levels of psychological distress.

When compared with all Victorian men, there was a significantly *higher* proportion of men who reported being very dissatisfied with life overall with the following characteristic:

- not in the labour force.

When compared with all Victorian women, there was a significantly *higher* proportion of women who reported being very dissatisfied with life overall with the following characteristics:

- fair or poor health
- diagnosed with depression.

Table 6.8 (revised): Prevalence (%) of satisfaction with life overall, by level of satisfaction and selected risk factors and sex, Victoria, 2012

	In general, how satisfied are you with your life overall?											
	Males						Females					
	Very satisfied			Very dissatisfied			Very satisfied			Very dissatisfied		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Victoria	**40.1**	**37.2**	**43.1**	**1.0**	**0.6**	**1.9**	**40.3**	**37.8**	**42.8**	**1.3**	**0.9**	**1.7**
Country of birth												
Australia	**41.5**	38.2	44.9	**1.0**	0.5	2.0	**43.0**	40.2	45.8	**1.3**	0.9	1.9
Overseas	**38.9**	32.6	45.6	**0.8**	0.3	1.9	**33.1**	27.6	39.1	**1.3**	0.7	2.2
Language spoken at home												
English only	**40.3**	37.3	43.5	**1.1**	0.5	2.1	**43.7**	40.9	46.6	**1.2**	0.8	1.7
Language other than English	**38.5**	32.4	45.0	**0.8**	0.2	2.6	**29.9**	25.0	35.3	**1.7**	1.0	3.1
Metro-Rural regions												
Rural	**40.2**	36.4	44.0	**0.8**	0.4	1.4	**43.6**	40.8	46.3	**0.8**	0.5	1.2
Metropolitan	**40.1**	36.5	43.8	**1.1**	0.5	2.3	**39.2**	36.1	42.4	**1.5**	1.0	2.1
Level of education												
None or Primary	**23.4**	21.0	26.0	**0.0**	.	.	**36.9**	34.7	39.2	**2.1**	0.9	4.9
Secondary	**32.3**	27.8	37.0	**1.1**	0.6	2.3	**40.8**	36.0	45.8	**1.1**	0.7	1.8
TAFE or Tertiary	**43.0**	39.2	46.9	**1.0**	0.4	2.2	**41.2**	37.9	44.6	**1.2**	0.8	1.9
Employment status (<65 years)												
Employed	**40.7**	36.8	44.7	**0.6**	0.3	1.6	**41.6**	37.8	45.6	**0.8**	0.5	1.4
Unemployed	**29.1**	18.5	42.6	**1.4**	0.2	8.1	**28.3**	17.8	41.7	**4.2**	1.5	11.1
Not in labour force	**26.0**	18.3	35.5	**6.5**	2.3	17.1	**36.7**	31.8	42.0	**1.7**	0.9	3.1
Total annual household income ($)												
<40,000	**33.1**	25.5	41.7	**1.1**	0.4	2.6	**24.9**	20.9	29.4	**2.4**	1.4	4.0
40,000 to <100,000	**38.4**	34.0	43.0	**0.5**	0.2	0.9	**43.6**	39.2	48.1	**0.8**	0.4	1.4
100,000, or more	**49.9**	44.6	55.2	**0.3**	0.0	2.2	**52.9**	47.1	58.6	**0.9**	0.3	2.2
Psychological distress (K10 score) [a]												
Low (K10 score <16)	**48.8**	44.9	52.7	**0.1**	0.0	0.3	**50.1**	46.7	53.5	**0.8**	0.4	1.4
Moderate (K10 score 16 to 21)	**28.2**	23.2	33.6	**1.8**	0.6	5.1	**30.3**	25.6	35.4	**0.4**	0.2	0.9
High (K10 score 22 to 29)	**12.4**	7.7	19.5	**0.8**	0.3	2.4	**13.7**	8.9	20.3	**1.4**	0.6	3.2
Very high (K10 score ≥30)	**	**	**	**14.6**	7.9	25.3	**9.9***	4.6	20.0	**15.6**	10.9	21.7
Physical activity level [b]												
Sedentary	**25.4**	18.3	34.2	**1.2**	0.4	3.9	**36.0**	30.8	41.4	**3.3**	1.4	7.6
Insufficient	**38.3**	32.5	44.4	**0.4**	0.2	1.2	**32.0**	27.6	36.8	**1.1**	0.7	1.9
Sufficient	**42.3**	38.9	45.8	**1.4**	0.7	2.8	**46.0**	42.8	49.3	**1.0**	0.6	1.6
Compliance with fruit & vegetable consumption guidelines [c]												
Both	**49.0**	37.6	60.5	**0.0**	.	.	**44.4**	37.4	51.7	**0.9**	0.3	3.0
Vegetable only [d]	**57.3**	46.7	67.3	**0.0**	.	.	**45.6**	38.1	53.3	**0.7**	0.2	2.4
Fruit only [d]	**46.6**	41.9	51.4	**1.4**	0.5	4.1	**44.8**	41.2	48.6	**0.9**	0.6	1.5
Neither	**35.6**	31.9	39.5	**0.9**	0.5	1.6	**34.9**	31.5	38.4	**1.8**	1.2	2.7
Smoking status												
Current smoker	**33.5**	27.8	39.8	**1.6**	0.7	3.7	**31.2**	24.8	38.5	**2.2**	1.1	4.6
Ex-smoker	**35.7**	30.2	41.7	**1.0**	0.3	3.6	**47.9**	41.6	54.3	**0.9**	0.5	1.6
Non-smoker	**42.3**	38.3	46.4	**0.9**	0.3	2.5	**40.5**	37.5	43.5	**1.2**	0.8	1.8
Lifetime risk of alcohol related harm (2009) [e]												
Abstainer / no longer drinks alcohol	**36.9**	28.9	45.7	**	**	**	**37.8**	32.3	43.7	**1.7***	1.0	2.8
Reduced risk	**37.8**	30.1	46.1	**	**	**	**38.2**	32.2	44.7	**0.4***	0.2	0.9
Increased risk	**41.9**	38.6	45.3	**0.8***	0.4	1.8	**43.8**	40.4	47.2	**1.3**	0.8	2.2
Self-reported health												
Excellent / Very Good	**56.4**	52.1	60.6	**1.2**	0.4	3.3	**58.9**	55.4	62.4	**1.0**	0.5	1.8
Good	**31.7**	27.5	36.3	**0.3**	0.1	1.0	**26.3**	22.9	29.9	**0.6**	0.3	1.1
Fair / Poor	**12.2**	8.9	16.6	**2.3**	1.1	4.7	**11.1**	7.4	16.4	**3.4**	2.2	5.1
BMI category [f]												
Underweight	**45.6**	40.2	51.2	**0.0**	.	.	**54.9**	43.4	66.0	**2.9**	0.9	8.9
Normal	**43.4**	38.7	48.2	**2.2**	1.0	4.8	**44.4**	40.8	48.0	**0.9**	0.5	1.5
Overweight	**40.0**	35.4	44.7	**0.6**	0.2	1.9	**35.5**	31.7	39.4	**1.1**	0.6	1.9
Obese	**29.7**	24.4	35.5	**0.3**	0.1	0.9	**32.4**	25.7	39.9	**1.3**	0.7	2.3
Diabetes												
No diabetes	**40.3**	37.4	43.4	**1.1**	0.6	2.0	**41.0**	38.5	43.6	**1.3**	0.9	1.7
Diabetes	**34.1**	26.0	43.3	**0.3**	0.1	1.1	**26.1**	16.8	38.0	**0.9**	0.3	2.6
Depression												
Yes	**28.7**	22.8	35.5	**2.2**	1.1	4.3	**27.7**	23.1	32.8	**2.9**	1.9	4.2
No	**42.4**	39.1	45.8	**0.8**	0.3	2.0	**44.5**	41.6	47.4	**0.8**	0.5	1.2

a Based on the Kessler 10 scale for psychological distress.
b Based on DoHA (1999) guidelines.
d Includes those meeting both guidelines.
e NHMRC (2009) guidelines.
f Based on Body Mass Index (BMI).

Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: **above**/**below** Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.

6.2 Selected chronic diseases

Respondents were asked whether they had, at any time in their life, been told by a doctor that they had any of the following conditions: heart disease, stroke, cancer, SLE, osteoporosis or arthritis. If respondents indicated that they had been told by a doctor that they had arthritis, they were then asked about the type of arthritis that they had.

Table 6.9 shows the lifetime prevalence of self-reported doctor-diagnosed heart disease, stroke, cancer, osteoporosis, SLE and arthritis, by age group and sex, with 'Total' not adjusted for age. Overall, the prevalence of heart disease in Victorian people was 6.9 per cent, with stroke was 2.3 per cent, cancer 7.0 per cent, depression 20.3 per cent, SLE 0.5 per cent, osteoporosis 5.1 per cent and arthritis 20.3 per cent.

Table 6.9: Prevalence of selected chronic diseases, by age group and sex, Victoria, 2011–12

Age group (years)	Heart disease			Stroke			Cancer			Lupus			Osteoporosis			Arthritis		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL		LL	UL		LL	UL
Males																		
18–24	**	**	**	**0.0**	.	.	**0.0**	.	.	**0.0**	.	.	**0.0**	.	.	**	**	**
25–34	**	**	**	**0.0**	.	.	**	**	**	**0.0**	.	.	**	**	**	2.6*	1.0	6.7
35–44	2.1*	1.0	4.3	**	**	**	2.8*	1.4	5.3	**0.0**	.	.	**	**	**	7.5*	4.2	13.0
45–54	**5.2**	3.2	8.3	**1.6***	0.7	3.6	**6.0**	3.8	9.1	**	**	**	**2.1***	1.1	4.3	**12.5**	9.5	16.3
55–64	13.1	10.2	16.6	**2.8***	1.7	4.6	12.0	9.3	15.4	**	**	**	6.1	4.2	8.9	25.0	21.2	29.2
65+	28.2	24.9	31.7	11.9*	9.6	14.7	20.9	17.9	24.2	**1.1***	0.5	2.4	6.8	5.1	9.1	43.5	39.7	47.3
Total	**8.1**	**7.1**	**9.2**	**2.8**	**2.3**	**3.5**	**7.0**	**6.0**	**8.1**	**0.3***	**0.2**	**0.5**	**2.5**	**2.0**	**3.1**	**15.1**	**13.6**	**16.8**
Females																		
18–24	**	**	**	**0.0**	.	.	**0.0**	.	.	**	**	**	**	**	**	**	**	**
25–34	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	4.4*	2.2	8.7
35–44	**3.5***	2.1	5.8	**1.8***	0.9	3.5	2.9*	1.6	5.2	**	**	**	2.4*	1.2	4.9	12.4	9.5	16.0
45–54	3.0	1.9	4.8	**1.4***	0.7	2.8	**7.7**	5.7	10.4	**	**	**	4.2	2.7	6.5	**22.9**	19.5	26.6
55–64	**6.6**	4.9	8.9	**1.4***	0.8	2.5	12.3	9.8	15.3	**0.4***	0.2	0.9	11.0	8.7	13.8	42.7	38.7	46.8
65+	18.5	16.2	21.0	5.9	4.6	7.5	17.1	14.9	19.6	**1.3***	0.8	2.3	24.8	22.2	27.6	62.2	59.0	65.2
Total	**5.7**	**5.0**	**6.5**	**1.9**	**1.5**	**2.4**	**7.0**	**6.2**	**7.9**	**0.7**	**0.5**	**1.1**	**7.5**	**6.7**	**8.5**	**25.3**	**23.7**	**27.1**
People																		
18–24	**	**	**	**0.0**	.	.	**0.0**	.	.	**	**	**	**	**	**	**	**	**
25–34	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	3.5*	2.0	6.1
35–44	2.8	1.8	4.2	**1.3***	0.7	2.3	2.9	1.8	4.4	**	**	**	1.2*	0.6	2.5	10.0	7.7	13.0
45–54	4.1	2.9	5.8	**1.5***	0.9	2.6	**6.8**	5.3	8.8	**0.6***	0.2	1.2	**3.2**	2.2	4.6	**17.8**	15.4	20.4
55–64	9.8	8.1	11.8	**2.1**	1.4	3.1	12.2	10.3	14.4	**0.4***	0.2	0.8	8.6	7.0	10.5	34.0	31.2	37.1
65+	22.9	20.9	25.0	8.6	7.3	10.1	18.8	17.0	20.9	1.2	0.8	1.9	16.6	14.9	18.5	53.7	51.2	56.1
Total	**6.9**	**6.3**	**7.6**	**2.3**	**2.0**	**2.7**	**7.0**	**6.4**	**7.7**	**0.5**	**0.4**	**0.7**	**5.1**	**4.6**	**5.6**	**20.3**	**19.2**	**21.5**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

6.2.1 Heart disease

The prevalence of heart disease was significantly *higher* in men compared with women. There was also an age-related increase in the prevalence of heart disease, with men and people aged 55 years or older and women aged 65 years or older having a significantly *higher* prevalence compared with all Victorian men, people and women, respectively.

6.2.2 Stroke

Overall, the prevalence of stroke was not significantly different between the sexes. However, there was a significantly *higher* prevalence of stroke in men aged 65 years or older compared with women aged 65 years or older. Stroke was rarely reported in men and women aged 18–44 years but increasingly reported with increasing age thereafter. There was a significantly *higher* prevalence of stroke in men, women and people aged 65 years or older compared with all Victorian men, women and people, respectively.

6.2.3 Cancer

The prevalence of cancer was not significantly different between the sexes. There was an age-related increase in the prevalence of cancer in both men and women, with men, women and people aged 55 years or older having a significantly *higher* prevalence compared with all Victorian men, women and people, respectively.

6.2.4 Systemic lupus erythematosus

The prevalence of SLE was not significantly higher in women compared with men. There was a significantly *higher* prevalence of SLE in people aged 65 years or older compared with all Victorian people.

6.2.5 Osteoporosis

The prevalence of osteoporosis was significantly *higher* in men, women and people aged 55 years or older compared with the prevalence in all Victorian men, women and people, respectively. In contrast, the prevalence was significantly *lower* in women aged 35–54 years and people aged 35–44 years compared with the prevalence in all Victorian women and people, respectively.

6.2.6 Arthritis

The prevalence of arthritis was significantly *higher* in women compared with men. There was an age-related increase in the prevalence of arthritis, with men, women and people aged 55 years or older having a significantly *higher* prevalence compared with all Victorian men, women and people, respectively. In contrast, the prevalence was significantly *lower* in men, women and people aged 25–44 years compared with the prevalence in all Victorian men, women and people, respectively.

6.2.7 Trend over time

Table 6.10 shows the age-adjusted prevalence over time (2003–2012) of heart disease (Figure 6.3), stroke (Figure 6.4), cancer (Figure 6.5), osteoporosis (Figure 6.6) and arthritis (Figure 6.7).

Table 6.10: Prevalence of selected chronic diseases, 2003–2012, by sex, Victoria

	Heart disease			Stroke			Cancer			Osteoporosis [a]			Arthritis		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
Survey year		LL	UL		LL	UL		LL	UL		LL	UL		LL	UL
Males															
2003	**8.6**	7.4	10.0	**1.7**	1.2	2.3	6.9	5.8	8.3	**1.4**	0.9	2.0	**17.0**	15.4	18.6
2004	**8.0**	7.0	9.3	**3.2**	2.4	4.3	5.7	4.7	6.9	**1.9**	1.4	2.6	**17.6**	16.1	19.2
2005	**8.6**	7.6	9.8	**2.6**	2.0	3.3	6.9	5.9	8.0	**1.9**	1.4	2.6	**16.0**	14.7	17.5
2006	**8.9**	7.8	10.1	**2.4**	1.8	3.1	5.9	5.0	6.9	**1.8**	1.3	2.4	**15.7**	14.2	17.4
2007	**8.9**	7.8	10.1	**2.4**	1.8	3.1	6.7	5.8	7.7	**1.9**	1.5	2.6	**16.4**	15.0	17.8
2008	**8.5**	8.0	9.1	**2.9**	2.6	3.3	6.3	5.8	6.8	**2.2**	1.9	2.5	**17.0**	16.2	17.7
2009	**9.3**	8.3	10.3	**3.2**	2.6	4.0	6.7	5.9	7.7	**1.9**	1.5	2.5	**16.6**	15.3	18.0
2010	**8.6**	7.7	9.6	**2.6**	2.1	3.2	7.3	6.3	8.3	**2.5**	1.9	3.2	**14.7**	13.4	16.0
2011–12	**8.7**	8.2	9.3	**2.6**	2.3	2.9	6.7	6.2	7.3	**2.4**	2.1	2.7	**15.6**	14.8	16.5
2012	**8.6**	**7.7**	**9.7**	**3.1**	**2.5**	**3.7**	**7.3**	**6.4**	**8.4**	**2.6**	**2.1**	**3.2**	**15.7**	**14.3**	**17.2**
Females															
2003	**4.9**	4.1	5.7	**1.8**	1.4	2.3	6.6	5.8	7.6	**6.8**	5.9	7.9	**24.0**	22.6	25.4
2004	**4.2**	3.5	5.0	**2.3**	1.8	2.9	6.4	5.6	7.4	**6.8**	6.0	7.8	**23.7**	22.3	25.1
2005	**6.1**	5.3	7.1	**1.8**	1.4	2.2	6.8	6.0	7.7	**7.0**	6.2	7.9	**24.1**	22.8	25.4
2006	**5.8**	5.1	6.7	**2.0**	1.5	2.5	7.1	6.2	8.1	**7.1**	6.2	8.1	**24.4**	23.1	25.7
2007	**5.4**	4.7	6.2	**1.5**	1.2	2.0	6.8	6.0	7.7	**7.0**	6.2	7.8	**25.0**	23.6	26.4
2008	**5.4**	5.0	5.8	**2.3**	2.1	2.6	7.1	6.7	7.6	**7.2**	6.8	7.6	**24.0**	23.3	24.6
2009	**4.8**	4.2	5.4	**2.1**	1.7	2.6	7.2	6.5	8.1	**6.9**	6.2	7.6	**23.9**	22.8	25.0
2010	**5.5**	4.9	6.2	**1.8**	1.4	2.2	7.2	6.5	8.1	**7.5**	6.8	8.2	**23.3**	22.1	24.6
2011–12	**5.5**	5.1	5.9	**2.2**	2.0	2.5	7.3	6.7	7.8	**8.0**	7.6	8.4	**23.7**	23.1	24.4
2012	**5.7**	**5.0**	**6.4**	**1.9**	**1.5**	**2.3**	**6.7**	**6.0**	**7.5**	**7.3**	**6.6**	**8.1**	**24.8**	**23.4**	**26.2**
Persons															
2003	**6.5**	5.8	7.3	**1.7**	1.4	2.1	6.7	5.9	7.5	**4.4**	3.8	5.1	**20.7**	19.7	21.8
2004	**5.9**	5.2	6.6	**2.7**	2.2	3.3	6.0	5.3	6.7	**4.7**	4.1	5.3	**20.9**	19.9	22.0
2005	**7.3**	6.6	8.1	**2.1**	1.8	2.5	6.8	6.1	7.5	**4.7**	4.2	5.2	**20.3**	19.3	21.2
2006	**7.3**	6.6	8.0	**2.1**	1.8	2.6	6.4	5.8	7.1	**4.6**	4.1	5.2	**20.3**	19.3	21.4
2007	**7.0**	6.4	7.7	**1.9**	1.6	2.3	6.7	6.1	7.4	**4.6**	4.1	5.2	**20.9**	19.9	21.9
2008	**6.8**	6.5	7.2	**2.6**	2.4	2.8	6.7	6.4	7.0	**4.9**	4.6	5.2	**20.6**	20.1	21.2
2009	**6.9**	6.4	7.5	**2.6**	2.3	3.0	7.0	6.4	7.6	**4.6**	4.2	5.1	**20.4**	19.6	21.3
2010	**6.9**	6.4	7.5	**2.1**	1.8	2.5	7.2	6.6	7.9	**5.1**	4.7	5.7	**19.2**	18.4	20.2
2011–12	**7.0**	6.7	7.3	**2.4**	2.2	2.6	7.0	6.6	7.4	**5.3**	5.1	5.6	**19.9**	19.4	20.5
2012	**7.1**	**6.5**	**7.7**	**2.4**	**2.1**	**2.8**	**7.0**	**6.4**	**7.6**	**5.2**	**4.7**	**5.7**	**20.4**	**19.4**	**21.5**

Data are age standardised to the 2011 Victorian population
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
a Ordinary least squares regression was used to test for trends over time, statistically significant increase prevalence observed in both males and females.

Heart disease

The lifetime prevalence of self-reported doctor-diagnosed heart disease remained constant among men and women between 2003 and 2012.

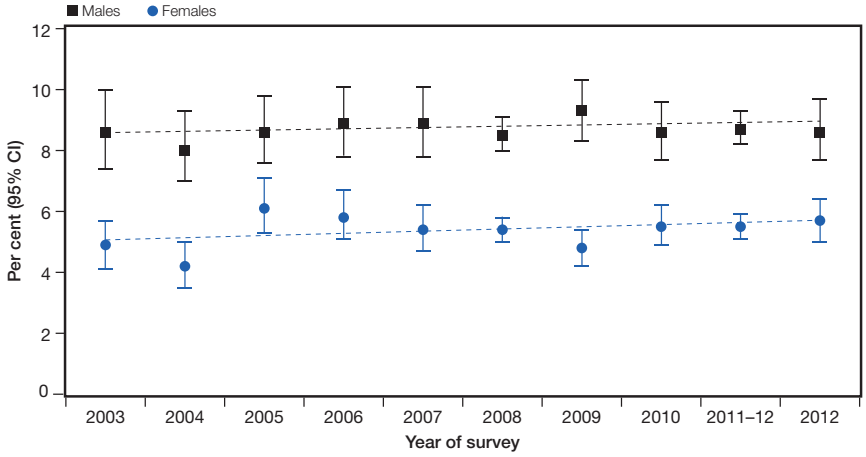
Stroke

The lifetime prevalence of self-reported doctor-diagnosed stroke remained constant among men and women between 2003 and 2012.

Cancer

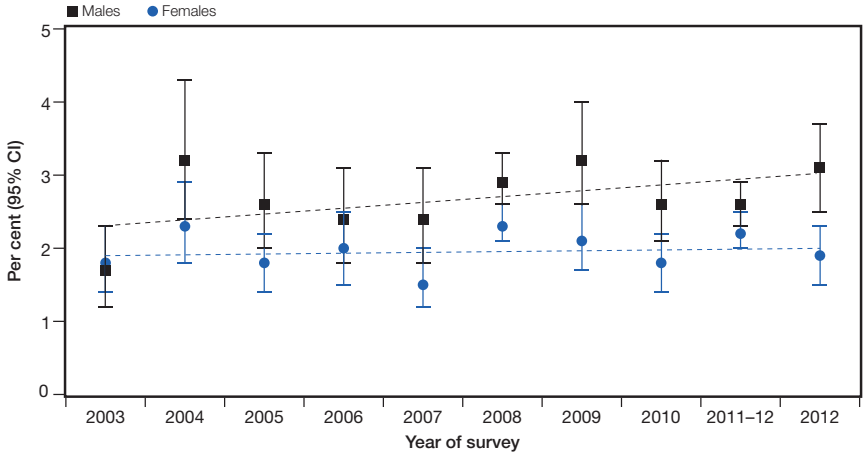
The lifetime prevalence of self-reported doctor-diagnosed cancer remained constant among men and women.

Figure 6.3 Prevalence of heart disease, Victoria, 2003–2012



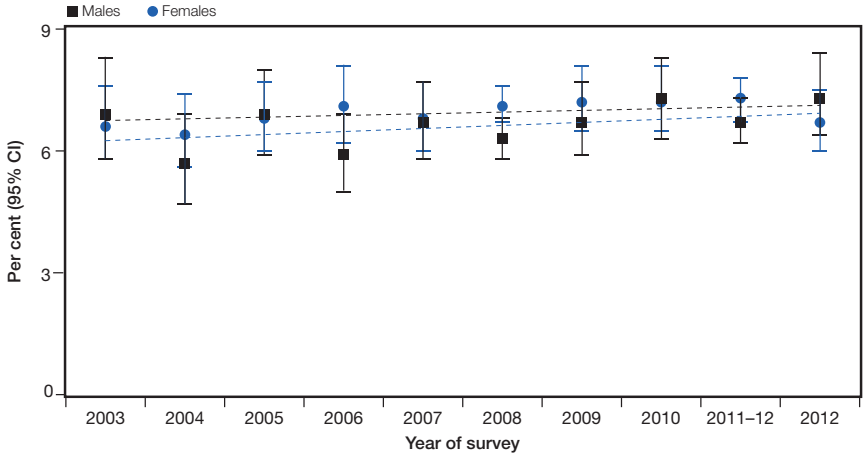
Data were age-standardised to the 2011 Victorian population.
Ordinary least squares regression was used to test for trends over time (NS in both males and females).

Figure 6.4: Prevalence of stroke, Victoria, 2003–2012



Data were age-standardised to the 2011 Victorian population.
Ordinary least squares regression was used to test for trends over time (NS in both males and females).

Figure 6.5: Prevalence of cancer, Victoria, 2003–2012



Data were age-standardised to the 2011 Victorian population.
Ordinary least squares regression was used to test for trends over time (NS in both males and females).

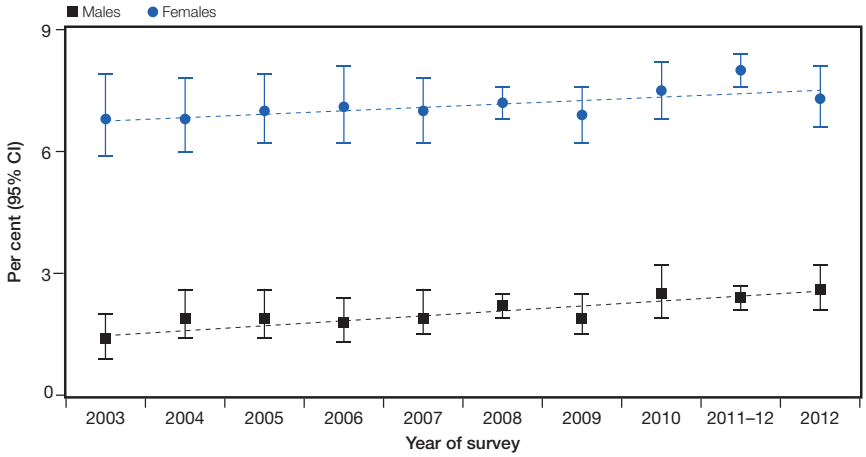
Osteoporosis

The lifetime prevalence of self-reported doctor-diagnosed osteoporosis significantly increased among men and women.

Arthritis

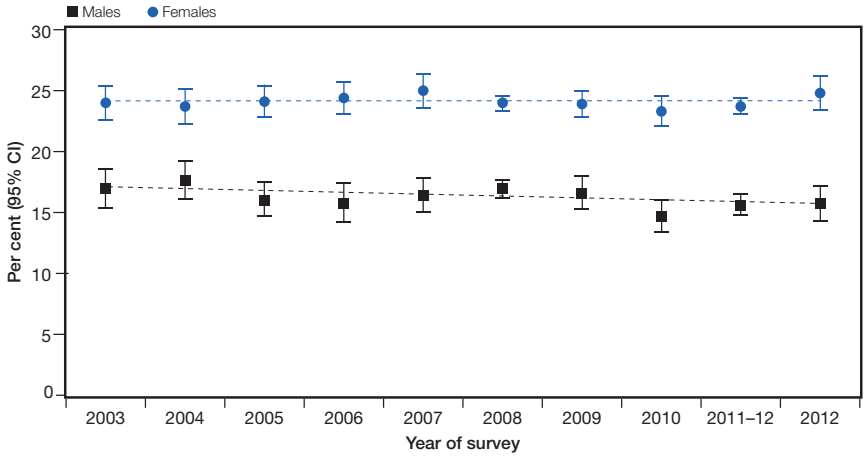
The lifetime prevalence of self-reported doctor-diagnosed arthritis remained constant among men and women.

Figure 6.6: Prevalence of osteoporosis, Victoria, 2003–2012



Data were age-standardised to the 2011 Victorian population.
Ordinary least squares regression was used to test for trends over time, statistically significant increase prevalence observed in both males and females.

Figure 6.7: Prevalence of arthritis, Victoria, 2003–2012



Data were age-standardised to the 2011 Victorian population.
Ordinary least squares regression was used to test for trends over time (NS in both males and females).

Table 6.11 shows the lifetime prevalence of self-reported doctor-diagnosed heart disease, stroke, cancer, osteoporosis, SLE and arthritis, by departmental region and sex, adjusted for age.

Heart disease

There were no significant differences in the prevalence of heart disease in men and women resident in rural regions compared with metropolitan regions. Similarly, there were no significant regional differences in the prevalence of heart disease in men and women compared with the prevalence in all Victorian men and women, respectively.

Stroke

There were no significant differences in the prevalence of stroke in men and women who lived in rural regions compared with metropolitan regions. Similarly, there were no significant regional differences in the prevalence of stroke in men, and women compared with the prevalence in all Victorian men and women, respectively.

Cancer

There were no significant differences in the prevalence of cancer in men and women residing in rural regions compared with metropolitan regions. There were also no significant regional differences in the prevalence of cancer in men, women and people compared with the prevalence in all Victorian men, women and people, respectively, the exceptions being a significantly *higher* prevalence in women residing in Hume Region and a significantly *lower* prevalence in people residing in Eastern Metropolitan Region.

Systemic lupus erythematosus

There were no significant differences in the prevalence of SLE in men or women who lived in rural regions compared with metropolitan regions. Similarly, there were no significant regional differences in the prevalence of SLE in men, women and people compared with the prevalence in all Victorian men, women and people, respectively.

Osteoporosis

There were no significant differences in the prevalence of osteoporosis in men or women who lived in rural regions compared with metropolitan regions. Similarly, there were no significant regional differences in the prevalence of osteoporosis in men, women and people compared with the prevalence in all Victorian men, women and people, respectively.

Arthritis

There were no a significant differences in the prevalence of arthritis in men, women and people who resided in rural regions compared with metropolitan regions. Similarly, there were no significant regional differences in the prevalence of osteoporosis in men, women and people compared with the prevalence in all Victorian men, women and people, respectively; the only exception was a significantly *lower* prevalence in men residing in Eastern Metropolitan Region compared with all Victorian men.

Table 6.11: Prevalence of selected chronic diseases, by Department of Health and Human Services region and sex, Victoria, 2012

	Heart disease			Stroke			Cancer			Lupus			Osteoporosis			Arthritis		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males																		
Eastern Metropolitan	**8.7**	6.7	11.1	**3.2**	2.0	5.0	**5.6**	4.0	7.6	**	**	**	**2.1***	1.2	3.5	**11.4**	9.2	13.9
North & West Metropolitan	**8.3**	6.4	10.6	**2.8**	1.8	4.4	**7.2**	5.3	9.9	**	**	**	**3.8**	2.5	5.7	**15.8**	13.4	18.6
Southern Metropolitan	**8.3**	6.3	10.8	**3.6**	2.4	5.4	**8.5**	6.5	11.1	**0.5***	0.2	1.4	**1.9***	1.1	3.3	**17.8**	14.2	21.9
Total	**8.5**	7.3	9.9	**3.2**	2.4	4.1	**7.3**	6.1	8.7	**0.4***	0.2	0.8	**2.7**	2.0	3.6	**15.2**	13.5	17.2
Rural males																		
Barwon-South Western	**8.9**	7.0	11.2	**2.4**	1.5	3.9	**7.8**	5.8	10.3	**0.0**	.	.	**1.7***	0.9	3.0	**14.7**	11.7	18.3
Gippsland	**8.5**	6.6	10.8	**2.9**	1.9	4.3	**7.4**	5.5	9.8	**	**	**	**1.2***	0.6	2.4	**18.8**	15.3	22.8
Grampians	**8.4**	6.5	10.8	**2.3***	1.3	4.0	**10.6**	7.2	15.4	**	**	**	**2.2***	1.3	3.8	**13.7**	11.4	16.5
Hume	**10.4**	7.5	14.3	**3.8**	2.5	6.0	**6.8**	4.8	9.5	**	**	**	**2.6**	1.7	4.1	**18.6**	15.6	21.9
Loddon Mallee	**8.9**	6.7	11.9	**2.5***	1.3	4.5	**5.9**	4.3	8.0	**	**	**	**4.5**	2.7	7.2	**17.5**	14.5	21.0
Total	**9.0**	7.9	10.2	**2.8**	2.2	3.4	**7.5**	6.5	8.6	**0.2***	0.1	0.5	**2.4**	1.9	3.2	**16.7**	15.2	18.3
All males																		
Total	**8.6**	**7.7**	**9.7**	**3.1**	**2.5**	**3.7**	**7.3**	**6.4**	**8.4**	**0.3***	**0.2**	**0.6**	**2.6**	**2.1**	**3.2**	**15.7**	**14.3**	**17.2**
Metropolitan females																		
Eastern Metropolitan	**5.3**	4.0	7.0	**1.5***	0.9	2.6	**4.6**	3.5	6.1	**0.7***	0.3	1.6	**6.2**	4.9	7.9	**25.7**	22.6	29.0
North & West Metropolitan	**5.4**	4.1	7.2	**0.9***	0.5	1.8	**6.6**	5.1	8.5	**0.8***	0.3	2.0	**8.6**	7.0	10.5	**24.6**	21.7	27.8
Southern Metropolitan	**5.9**	4.4	7.9	**2.4**	1.5	3.8	**7.5**	5.9	9.6	**	**	**	**6.8**	5.2	8.8	**23.5**	20.7	26.7
Total	**5.5**	4.6	6.5	**1.6**	1.2	2.2	**6.4**	5.5	7.5	**0.6***	0.3	1.1	**7.3**	6.4	8.3	**24.4**	22.6	26.3
Rural females																		
Barwon-South Western	**4.9**	3.8	6.5	**2.7**	1.7	4.1	**6.4**	4.8	8.6	**0.0**	.	.	**7.9**	6.2	9.9	**29.1**	25.2	33.4
Gippsland	**5.9**	4.4	7.9	**2.4***	1.4	4.0	**8.6**	6.4	11.6	**1.7***	1.0	2.9	**7.5**	6.0	9.4	**23.5**	20.7	26.6
Grampians	**5.1**	3.7	6.9	**2.6**	1.7	4.1	**4.8**	3.6	6.5	**	**	**	**6.6**	5.1	8.5	**24.6**	21.1	28.5
Hume	**7.7**	5.6	10.6	**3.6***	2.2	5.9	**9.7**	7.5	12.3	**	**	**	**8.1**	6.4	10.2	**25.2**	22.5	28.1
Loddon Mallee	**7.2**	5.8	9.0	**1.6***	1.0	2.8	**8.9**	6.9	11.5	**1.2***	0.5	2.8	**7.4**	5.7	9.6	**24.6**	21.9	27.5
Total	**6.1**	5.4	7.0	**2.6**	2.1	3.3	**7.8**	6.8	8.8	**1.0**	0.6	1.5	**7.5**	6.7	8.4	**25.7**	24.1	27.4
All females																		
Total	**5.7**	**5.0**	**6.4**	**1.9**	**1.5**	**2.3**	**6.7**	**6.0**	**7.5**	**0.7**	**0.5**	**1.0**	**7.3**	**6.6**	**8.1**	**24.8**	**23.4**	**26.2**
Metropolitan people																		
Eastern Metropolitan	**6.8**	5.6	8.2	**2.2**	1.5	3.2	**5.1**	4.1	6.3	**0.4***	0.2	0.9	**4.4**	3.5	5.5	**18.9**	16.9	21.1
North & West Metropolitan	**6.8**	5.6	8.2	**1.8**	1.2	2.7	**6.9**	5.6	8.4	**0.6***	0.3	1.4	**6.4**	5.2	7.7	**20.4**	18.5	22.5
Southern Metropolitan	**7.1**	5.8	8.7	**2.8**	2.1	3.9	**8.0**	6.6	9.7	**0.3***	0.2	0.7	**4.6**	3.6	5.8	**20.8**	18.3	23.4
Total	**6.9**	6.1	7.7	**2.3**	1.9	2.8	**6.8**	6.1	7.7	**0.5**	0.3	0.8	**5.2**	4.6	5.9	**20.0**	18.7	21.3
Rural people																		
Barwon-South Western	**6.7**	5.6	8.1	**2.5**	1.8	3.5	**6.9**	5.6	8.5	**0.0**	.	.	**4.9**	4.0	6.0	**22.1**	19.4	25.0
Gippsland	**7.1**	5.9	8.6	**2.7**	1.9	3.8	**7.8**	6.2	9.6	**1.1***	0.7	1.8	**4.6**	3.7	5.8	**21.2**	18.9	23.6
Grampians	**6.7**	5.4	8.2	**2.4**	1.7	3.5	**7.5**	5.8	9.7	**0.3***	0.1	0.7	**4.5**	3.5	5.7	**19.4**	17.2	21.9
Hume	**9.0**	7.1	11.4	**3.7**	2.6	5.1	**8.3**	6.8	10.2	**0.9***	0.4	2.3	**5.4**	4.4	6.7	**22.0**	20.0	24.3
Loddon Mallee	**8.2**	6.7	9.9	**2.1**	1.3	3.2	**7.4**	6.1	9.0	**0.8***	0.4	1.8	**6.1**	4.7	7.7	**21.3**	19.1	23.6
Total	**7.5**	6.9	8.3	**2.7**	2.3	3.1	**7.5**	6.8	8.3	**0.6**	0.4	0.9	**5.1**	4.6	5.7	**21.3**	20.2	22.5
All people																		
Total	**7.1**	**6.5**	**7.7**	**2.4**	**2.1**	**2.8**	**7.0**	**6.4**	**7.6**	**0.5**	**0.4**	**0.7**	**5.2**	**4.7**	**5.7**	**20.4**	**19.4**	**21.5**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

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7. Asthma




7. Asthma

Introduction

Asthma is a common, chronic disorder affecting the airways of the lungs. Narrowing of these air passages (caused by the inflammation and swelling of the airway lining and the overproduction of mucus) results in airway obstruction and difficulty with breathing, which may be reversed either spontaneously or with medical treatment. There is evidence that environmental and lifestyle factors (viral infections, exercise, exposure to irritants and air pollutants), as well as genetic factors such as an allergic tendency, increase the risk of developing asthma (ACAM 2011). The disease affects all age groups but particularly young people, and ranges in severity from intermittent, mild symptoms to a severe, incapacitating and life-threatening disorder.

The Victorian Population Health Survey examined the prevalence of doctor-diagnosed self-reported asthma, both lifetime and current. Respondents were asked whether they had ever been diagnosed with asthma by a doctor and those who responded 'yes' were included in the estimate of the lifetime prevalence of asthma (sometimes referred to as 'asthma ever').

Respondents who indicated that they had been diagnosed with asthma were subsequently asked if they had experienced symptoms of asthma (wheezing, coughing, shortness of breath, chest tightness) in the previous 12 months. Those who indicated that they had were classified as having 'current' asthma. In addition, respondents who indicated that they were taking concurrent medication to manage asthma but had not experienced symptoms in the previous 12 months were also included in the estimate of the prevalence of 'current' asthma. This aligns with the definitions recommended by the Australian Centre for Asthma Monitoring (ACAM) for the purposes of estimating the prevalence of asthma (ACAM 2007).

7.1 Lifetime prevalence of asthma

Table 7.1 shows the lifetime prevalence of asthma in Victoria, by age group and sex, with 'Total' not adjusted for age. Overall, 21.0 per cent of men, 22.5 per cent of women and 21.8 per cent of people reported having been diagnosed, by a doctor, with asthma. While there was no significant difference in prevalence between the sexes, women aged 65 years or older had a significantly *higher* lifetime prevalence of asthma compared with their male counterparts.

The lifetime prevalence of asthma declined with age. Men and people aged 55 years or older had a significantly *lower* lifetime prevalence of asthma compared with all Victorian men and people, respectively. In contrast, men and people aged 18–24 years had a significantly *higher* lifetime prevalence of asthma compared with all men and people, respectively.

Table 7.1: Lifetime prevalence (%) of asthma, by age group and sex, Victoria, 2012

	Never had asthma			Has had asthma		
	%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL
Males						
18–24	60.7	50.3	70.1	39.3	29.9	49.7
25–34	**72.5**	63.5	80.0	**27.5**	20.0	36.5
35–44	**81.6**	75.9	86.2	**18.0**	13.4	23.6
45–54	**82.4**	77.7	86.3	**17.2**	13.3	21.9
55–64	85.6	82.0	88.6	14.1	11.2	17.7
65+	88.1	85.5	90.3	11.8	9.6	14.4
Total	**78.8**	**76.1**	**81.3**	**21.0**	**18.5**	**23.7**
Females						
18–24	**75.5**	65.6	83.2	**24.5**	16.8	34.4
25–34	**72.1**	64.2	78.7	**27.9**	21.3	35.8
35–44	**76.8**	72.5	80.7	**23.1**	19.2	27.5
45–54	**80.7**	77.1	83.8	**19.3**	16.2	22.9
55–64	**79.2**	75.6	82.4	**20.7**	17.5	24.4
65+	**80.2**	77.5	82.7	**19.7**	17.3	22.4
Total	**77.4**	**75.3**	**79.5**	**22.5**	**20.5**	**24.7**
People						
18–24	67.9	60.6	74.4	32.1	25.6	39.4
25–34	**72.3**	66.4	77.5	**27.7**	22.5	33.6
35–44	**79.2**	75.7	82.3	**20.6**	17.5	24.0
45–54	**81.5**	78.6	84.1	**18.3**	15.7	21.2
55–64	82.3	79.8	84.6	17.5	15.3	20.0
65+	83.8	81.9	85.5	16.1	14.4	18.0
Total	**78.1**	**76.4**	**79.7**	**21.8**	**20.2**	**23.5**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

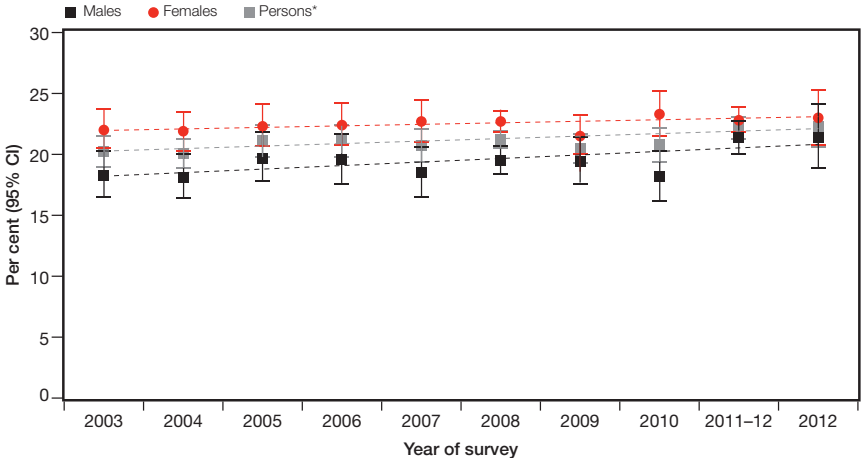
Table 7.2 shows the age-adjusted lifetime prevalence of asthma from 2003 to 2012. During that time the lifetime prevalence of asthma increased significantly in Victorian men and people but not in women (Figure 7.1).

Table 7.2: Lifetime prevalence (%) of asthma,[a] Victoria, 2003–2012

	Males*			Females			Persons*		
	%	95% CI		%	95% CI		95% CI		
Year of survey		LL	UL		LL	UL		LL	UL
2003	**18.3**	16.5	20.3	**22.0**	20.5	23.7	**20.2**	19.0	21.5
2004	**18.1**	16.4	20.0	**21.9**	20.3	23.5	**20.1**	18.9	21.3
2005	**19.7**	17.8	21.8	**22.3**	20.7	24.1	**21.1**	19.8	22.4
2006	**19.6**	17.6	21.7	**22.4**	20.8	24.2	**21.1**	19.8	22.4
2007	**18.5**	16.5	20.6	**22.7**	21.0	24.5	**20.7**	19.4	22.1
2008	**19.5**	18.4	20.7	**22.7**	21.8	23.6	**21.2**	20.5	21.9
2009	**19.4**	17.6	21.4	**21.5**	20.0	23.2	**20.5**	19.3	21.7
2010	**18.2**	16.2	20.3	**23.3**	21.5	25.2	**20.8**	19.4	22.2
2011–12	**21.4**	20.0	22.7	**22.8**	21.8	23.9	**22.2**	21.3	23.1
2012	**21.4**	**18.9**	**24.1**	**23.0**	**20.8**	**25.3**	**22.3**	**20.6**	**24.1**

a Reported ever having been diagnosed with asthma by a doctor.
LL/UL 95% CI = lower/upper limit of 95% confidence interval.
Data were age-standardised to the 2011 Victorian population.
Ordinary least squares linear regression was used to test for trends over time.
* Statistically significant increase in prevalence over time

Figure 7.1: Lifetime prevalence of asthma,[a] by sex, Victoria, 2003–2012



a Reported ever having been diagnosed with asthma by a doctor.
LL/UL 95% CI = lower/upper limit of 95% confidence interval.
Data were age-standardised to the 2011 Victorian population.
Ordinary least squares linear regression was used to test for trends over time.
* Statistically significant increase in prevalence over time

Table 7.3 shows the lifetime prevalence of asthma, by departmental region and sex, adjusted for age.

There were no significant differences in the lifetime prevalence of asthma between those who lived in rural compared with metropolitan regions. Moreover, there were no significant regional differences among men, women or people compared with all Victorian men, women and people, respectively.

Table 7.3: Lifetime prevalence (%) of asthma, by Department of Health and Human Services region and sex, Victoria, 2012

	Never had asthma			Has had asthma		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Metropolitan males						
Eastern Metropolitan	**78.5**	72.1	83.8	**21.3**	16.0	27.7
North & West Metropolitan	**80.4**	75.6	84.5	**19.3**	15.3	24.1
Southern Metropolitan	**76.7**	69.6	82.5	**23.0**	17.2	30.1
Total	**78.9**	75.5	81.8	**20.9**	17.9	24.2
Rural males						
Barwon-South Western	**82.1**	74.1	88.1	**17.9**	11.9	25.9
Gippsland	**79.3**	73.1	84.5	**20.7**	15.5	26.9
Grampians	**75.7**	68.4	81.8	**24.1**	18.0	31.5
Hume	**75.1**	64.7	83.3	**24.8**	16.6	35.2
Loddon Mallee	**74.2**	67.5	79.9	**25.7**	20.0	32.4
Total	**77.0**	73.4	80.3	**22.9**	19.6	26.6
All males						
Total	**78.4**	**75.7**	**80.9**	**21.4**	**18.9**	**24.1**
Metropolitan females						
Eastern Metropolitan	**78.7**	73.0	83.4	**21.3**	16.6	27.0
North & West Metropolitan	**80.3**	75.7	84.2	**19.7**	15.8	24.3
Southern Metropolitan	**74.5**	69.0	79.3	**25.4**	20.6	30.9
Total	**78.0**	75.1	80.7	**21.9**	19.3	24.9
Rural females						
Barwon-South Western	**75.7**	70.5	80.3	**24.3**	19.7	29.5
Gippsland	**72.2**	64.5	78.9	**27.8**	21.1	35.5
Grampians	**71.6**	65.7	76.8	**28.2**	23.0	34.1
Hume	**75.1**	68.9	80.5	**24.5**	19.2	30.8
Loddon Mallee	**70.7**	65.3	75.6	**29.3**	24.4	34.7
Total	**73.3**	70.6	75.8	**26.6**	24.1	29.3
All females						
Total	**77.0**	**74.7**	**79.2**	**23.0**	**20.8**	**25.3**
Metropolitan people						
Eastern Metropolitan	**78.4**	74.2	82.1	**21.5**	17.8	25.7
North & West Metropolitan	**80.3**	77.0	83.2	**19.6**	16.7	22.9
Southern Metropolitan	**75.5**	71.1	79.4	**24.4**	20.5	28.7
Total	**78.3**	76.1	80.4	**21.5**	19.5	23.8
Rural people						
Barwon-South Western	**78.9**	74.5	82.7	**21.1**	17.3	25.5
Gippsland	**75.3**	70.4	79.7	**24.7**	20.3	29.6
Grampians	**73.1**	68.4	77.4	**26.7**	22.5	31.5
Hume	**75.2**	69.0	80.5	**24.6**	19.3	30.8
Loddon Mallee	**72.0**	67.6	76.1	**27.9**	23.8	32.4
Total	**75.1**	72.8	77.2	**24.8**	22.7	27.1
All people						
Total	**77.6**	**75.8**	**79.3**	**22.3**	**20.6**	**24.1**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

7.2 Prevalence of current asthma

Table 7.4 shows the prevalence of current asthma, by age group and sex, with 'Total' not adjusted for age.

Overall, 11.2 per cent of people had experienced symptoms of asthma, or taken treatment for asthma, in the preceding 12 months. The prevalence of current asthma was similar in women (11.9 per cent) and men (10.5 per cent).

Table 7.4: Prevalence (%) of current asthma,[a] by age group and sex, Victoria, 2012

Age group (years)	None			Current asthma			Past asthma, not current		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Males									
18–24	60.7	50.3	70.1	14.8*	8.4	24.7	24.6	16.9	34.2
25–34	72.5	63.5	80.0	14.9	9.4	22.7	12.6	7.8	19.8
35–44	81.6	75.9	86.2	8.3	5.8	11.8	9.7	6.0	15.2
45–54	82.4	77.7	86.3	10.3	7.2	14.5	6.9	4.7	10.1
55–64	85.6	82.0	88.6	7.9	5.7	10.9	6.2	4.4	8.8
65+	88.1	85.5	90.3	6.7	5.1	8.7	5.0	3.6	7.0
Total	78.8	76.1	81.3	10.5	8.7	12.6	10.5	8.7	12.7
Females									
18–24	75.5	65.6	83.2	7.3*	4.1	12.8	17.2	10.5	26.9
25–34	72.1	64.2	78.7	14.5	9.5	21.5	13.5	9.0	19.7
35–44	76.8	72.5	80.7	12.9	10.0	16.6	10.1	7.5	13.5
45–54	80.7	77.1	83.8	9.8	7.6	12.4	9.5	7.2	12.4
55–64	79.2	75.6	82.4	12.8	10.1	16.1	7.9	6.1	10.2
65+	80.2	77.5	82.7	12.4	10.4	14.7	7.3	5.8	9.1
Total	77.4	75.3	79.5	11.9	10.4	13.5	10.6	9.1	12.4
People									
18–24	67.9	60.6	74.4	11.1	7.2	16.8	21.0	15.6	27.6
25–34	72.3	66.4	77.5	14.7	10.8	19.7	13.0	9.6	17.6
35–44	79.2	75.7	82.3	10.7	8.6	13.1	9.9	7.5	12.9
45–54	81.5	78.6	84.1	10.0	8.1	12.4	8.2	6.5	10.3
55–64	82.3	79.8	84.6	10.4	8.6	12.6	7.1	5.7	8.7
65+	83.8	81.9	85.5	9.8	8.5	11.3	6.3	5.2	7.5
Total	78.1	76.4	79.7	11.2	10.0	12.5	10.6	9.4	11.9

a Reported ever having been diagnosed with asthma by a doctor and have experienced symptoms of asthma or taken treatment for asthma in the last 12 months.

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria

LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.

* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.

Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 7.5 shows the prevalence of current asthma for the period 2003–2012. The prevalence of current asthma did not change significantly in Victorian men, women or people (Figure 7.2).

Table 7.5: Prevalence (%) of current asthma,[a] Victoria, 2003–2012

	Males			Females			Persons		
	%	95% CI		%	95% CI		%	95% CI	
Year of survey		LL	UL		LL	UL		LL	UL
2003	**9.4**	8.2	10.9	**13.7**	12.4	15.1	**11.6**	10.7	12.6
2004	**8.6**	7.4	10.0	**12.1**	10.9	13.4	**10.4**	9.5	11.3
2005	**9.5**	8.1	11.2	**13.1**	11.8	14.6	**11.3**	10.3	12.4
2006	**9.2**	7.7	10.9	**11.9**	10.6	13.3	**10.6**	9.6	11.7
2007	**8.7**	7.3	10.2	**12.1**	10.8	13.6	**10.4**	9.4	11.5
2008	**8.9**	8.1	9.7	**12.3**	11.6	13.1	**10.7**	10.1	11.2
2009	**8.7**	7.4	10.1	**10.7**	9.6	11.9	**9.8**	8.9	10.7
2010	**7.2**	6.0	8.5	**11.1**	9.8	12.5	**9.2**	8.3	10.1
2011–12	**9.4**	8.5	10.3	**12.3**	11.5	13.2	**10.9**	10.3	11.5
2012	**10.7**	**8.8**	**12.8**	**12.2**	**10.6**	**14.0**	**11.5**	**10.2**	**12.9**

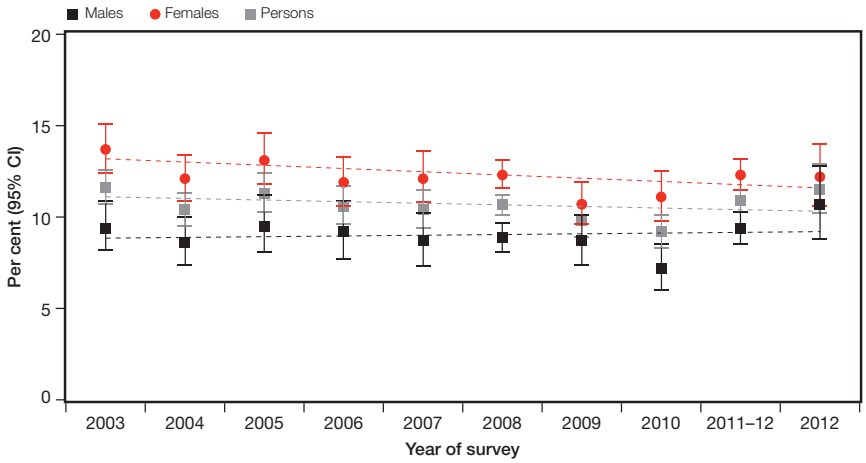
a Reported having been diagnosed with asthma by a doctor and have experienced symptoms of asthma or taken treatment for asthma in the last 12 months.

LL/UL 95% CI = lower/upper limit of 95% confidence interval.

Data were age-standardised to the 2011 Victorian population.

Ordinary least squares linear regression was used to test for trends over time (NS for males, females and persons).

Figure 7.2: Prevalence of current asthma,[a] Victoria, 2003–2012



a Reported ever having been diagnosed with asthma by a doctor and have experienced symptoms of asthma or taken treatment for asthma in the last 12 months.

95% CI = 95% confidence interval.

Data were age-standardised to the 2011 Victorian population.

Ordinary least squares linear regression was used to test for trends over time (NS for males, females and persons).

Table 7.6 shows the prevalence of current asthma, by departmental region and sex, adjusted for age.

There were no significant differences in the prevalence of current asthma between those who lived in rural compared with metropolitan regions. Moreover, there were no significant regional differences in prevalence in men, women or people compared with the prevalence in all Victorian men, women and people, respectively.

Table 7.6: Prevalence (%) of current asthma,[a] by Department of Health and Human Services region and sex, Victoria, 2012

	None			Current asthma			Past asthma, not current		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Metropolitan males									
Eastern Metropolitan	**78.5**	72.1	83.8	**9.4**	5.9	14.8	**11.7**	7.7	17.5
North & West Metropolitan	**80.4**	75.6	84.5	**10.6**	7.5	14.8	**8.7**	5.9	12.7
Southern Metropolitan	**76.7**	69.6	82.5	**11.4**	7.1	17.6	**11.7**	7.8	17.1
Total	**78.9**	75.5	81.8	**10.5**	8.3	13.3	**10.4**	8.2	13.1
Rural males									
Barwon-South Western	**82.1**	74.1	88.1	**9.2**	6.1	13.8	**8.6***	4.2	16.9
Gippsland	**79.3**	73.1	84.5	**9.4**	6.3	14.0	**11.2**	7.4	16.7
Grampians	**75.7**	68.4	81.8	**13.8**	9.0	20.5	**10.3**	6.5	16.0
Hume	**75.1**	64.7	83.3	**10.2***	5.8	17.3	**14.6***	7.7	26.0
Loddon Mallee	**74.2**	67.5	79.9	**13.0**	8.6	19.0	**12.7**	8.1	19.4
Total	**77.0**	73.4	80.3	**11.2**	9.0	13.9	**11.7**	9.1	15.0
All males									
Total	**78.4**	**75.7**	**80.9**	**10.7**	**8.8**	**12.8**	**10.7**	**8.8**	**12.9**
Metropolitan females									
Eastern Metropolitan	**78.7**	73.0	83.4	**11.0**	7.8	15.3	**10.3**	6.6	15.6
North & West Metropolitan	**80.3**	75.7	84.2	**11.0**	8.2	14.6	**8.7**	6.2	12.3
Southern Metropolitan	**74.5**	69.0	79.3	**12.7**	9.2	17.3	**12.7**	9.2	17.3
Total	**78.0**	75.1	80.7	**11.7**	9.7	14.0	**10.2**	8.3	12.6
Rural females									
Barwon-South Western	**75.7**	70.5	80.3	**12.6**	9.4	16.7	**11.7**	8.4	16.0
Gippsland	**72.2**	64.5	78.9	**17.9**	12.2	25.4	**9.8**	6.4	14.9
Grampians	**71.6**	65.7	76.8	**13.9**	10.4	18.3	**14.4**	10.2	20.0
Hume	**75.1**	68.9	80.5	**13.0**	9.2	18.1	**11.2**	7.5	16.4
Loddon Mallee	**70.7**	65.3	75.6	**13.0**	9.7	17.1	**16.3**	12.3	21.3
Total	**73.3**	70.6	75.8	**13.8**	11.9	15.9	**12.8**	10.9	15.0
All females									
Total	**77.0**	**74.7**	**79.2**	**12.2**	**10.6**	**14.0**	**10.8**	**9.2**	**12.6**
Metropolitan people									
Eastern Metropolitan	**78.4**	74.2	82.1	**10.4**	7.8	13.6	**11.1**	8.2	14.8
North & West Metropolitan	**80.3**	77.0	83.2	**10.9**	8.7	13.7	**8.7**	6.7	11.2
Southern Metropolitan	**75.5**	71.1	79.4	**12.0**	9.1	15.6	**12.4**	9.6	15.8
Total	**78.3**	76.1	80.4	**11.2**	9.6	13.0	**10.4**	8.8	12.1
Rural people									
Barwon-South Western	**78.9**	74.5	82.7	**11.1**	8.6	14.3	**10.0**	7.1	13.8
Gippsland	**75.3**	70.4	79.7	**13.1**	9.8	17.2	**11.6**	8.4	15.8
Grampians	**73.1**	68.4	77.4	**14.0**	10.9	17.9	**12.7**	9.5	16.8
Hume	**75.2**	69.0	80.5	**11.4**	8.3	15.5	**13.1**	8.7	19.1
Loddon Mallee	**72.0**	67.6	76.1	**13.4**	10.3	17.3	**14.5**	11.2	18.6
Total	**75.1**	72.8	77.2	**12.5**	11.0	14.2	**12.3**	10.6	14.2
All people									
Total	**77.6**	**75.8**	**79.3**	**11.5**	**10.2**	**12.9**	**10.8**	**9.5**	**12.2**

a Reported ever having been diagnosed with asthma by a doctor and have experienced symptoms of asthma or taken treatment for asthma in the last 12 months.

Data were age-standardised to the 2011 Victorian population.

LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.

Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 7.7 shows the age-adjusted prevalence of current and past asthma, by selected socioeconomic determinants, modifiable risk factors, health status and sex.

7.2.1 Current asthma

When compared with all Victorian women, a significantly *higher* prevalence of current asthma was reported among women with the following characteristics:

- very high levels of psychological distress
- fair or poor self-reported health
- diagnosed with depression.

When compared with all Victorian men, a significantly *lower* prevalence of current asthma was reported among men with the following characteristic:

- underweight.

7.2.2 Past asthma

When compared with all Victorian men, a significantly *higher* prevalence of past asthma was reported among men with the following characteristic:

- underweight.

When compared with all Victorian women, a significantly *higher* prevalence of past asthma was reported among women with the following characteristic:

- primary or no education.

When compared with all Victorian men, a significantly *lower* prevalence of past asthma was reported among men with the following characteristic:

- diagnosed with diabetes.

When compared with all Victorian women, a significantly *lower* prevalence of past asthma was reported among women with the following characteristic:

- abstained from alcohol consumption.

Table 7.7 (revised): Prevalence (%) of current asthma,# by selected socioeconomic determinants, modifiable risk factors and health status, Victoria, 2012

	Males						Females					
	Current asthma			Past asthma, not current			Current asthma			Past asthma, not current		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Victoria	**10.7**	**8.8**	**12.8**	**10.7**	**8.8**	**12.9**	**12.2**	**10.6**	**14.0**	**10.8**	**9.2**	**12.6**
Country of birth												
Australia	**12.3**	10.1	14.9	**12.4**	10.1	15.1	**13.5**	11.6	15.6	**11.3**	9.5	13.4
Overseas	**8.0***	4.5	14.0	**6.8***	4.0	11.4	**8.4**	5.7	12.3	**8.8**	5.6	13.4
Language spoken at home												
English only	**11.6**	9.5	14.2	**12.4**	10.1	15.2	**13.1**	11.2	15.2	**11.6**	9.7	13.8
Language other than English	**8.4***	5.0	13.6	**7.1**	4.5	11.2	**9.6**	6.7	13.4	**8.1**	5.3	12.1
Metro-Rural regions												
Rural	**11.2**	9.0	13.9	**11.7**	9.1	15.0	**13.8**	11.9	15.9	**12.8**	10.9	15.0
Metropolitan	**10.5**	8.3	13.3	**10.4**	8.2	13.1	**11.7**	9.7	14.0	**10.2**	8.3	12.6
Level of education												
None or Primary	**4.7***	2.2	9.8	**	**	**	**7.1***	3.8	12.8	**14.6**	13.3	16.1
Secondary	**8.4**	5.6	12.2	**11.0**	7.7	15.7	**13.6**	10.1	18.2	**9.9**	7.5	13.1
TAFE or Tertiary	**11.8**	9.2	14.9	**11.1**	8.6	14.2	**12.3**	10.2	14.7	**11.6**	9.3	14.4
Employment status (<65 years)												
Employed	**12.1**	9.5	15.4	**11.5**	9.0	14.6	**12.3**	9.8	15.2	**10.7**	8.4	13.5
Unemployed	**12.5***	5.3	26.8	**	**	**	**7.9***	3.2	18.0	**12.7***	6.5	23.2
Not in labour force	**14.1***	8.4	22.8	**12.7***	6.8	22.4	**12.3**	9.5	15.6	**14.4**	10.6	19.2
Total annual household income ($)												
<40,000	**9.0**	5.9	13.4	**14.6**	9.4	22.1	**18.3**	13.9	23.8	**15.2**	9.7	23.1
40,000 to <100,000	**10.3**	7.3	14.4	**12.3**	9.1	16.4	**9.2**	7.1	11.7	**11.4**	8.8	14.7
100,000, or more	**11.1**	7.9	15.3	**9.3**	6.6	13.0	**11.5**	8.5	15.5	**8.3**	5.5	12.5
Psychological distress (K10 score) [a]												
Low (K10 score <16)	**9.8**	7.5	12.8	**10.9**	8.5	14.0	**9.8**	7.8	12.2	**9.9**	8.1	12.1
Moderate (K10 score 16 to 21)	**13.3**	9.6	18.1	**10.6**	7.5	14.7	**17.5**	13.6	22.2	**10.3**	7.6	13.9
High (K10 score 22 to 29)	**11.0***	6.1	18.9	**9.9***	5.0	18.8	**15.0**	10.5	21.0	**12.8**	8.3	19.3
Very high (K10 score ≥30)	**17.8**	11.0	27.3	**8.6***	3.4	20.2	**21.8**	15.3	30.0	**17.7**	11.9	25.4
Physical activity level [b]												
Sedentary	**5.7***	3.0	10.5	**13.1***	7.6	21.6	**15.7**	10.5	22.7	**9.0***	3.3	22.0
Insufficient	**9.7**	6.3	14.6	**9.8**	6.8	13.8	**12.6**	9.6	16.3	**9.2**	6.5	13.0
Sufficient	**11.0**	8.8	13.6	**10.8**	8.5	13.6	**11.1**	9.3	13.2	**11.6**	9.6	14.0
Compliance with fruit & vegetable consumption guidelines [c]												
Both	**	**	**	**	**	**	**14.8**	9.6	22.0	**6.5***	3.7	11.0
Vegetable only [d]	**9.5***	4.2	20.3	**12.3***	5.9	23.7	**13.2**	8.5	19.8	**10.6***	6.3	17.1
Fruit only [d]	**11.8**	8.7	15.9	**9.0**	6.7	12.2	**10.5**	8.5	12.7	**10.0**	8.0	12.6
Neither	**10.1**	8.0	12.6	**11.8**	9.3	15.0	**14.1**	11.5	17.2	**11.2**	8.8	14.1
Smoking status												
Current smoker	**13.0**	9.0	18.4	**9.9**	6.4	15.1	**12.0**	8.0	17.7	**14.7**	9.8	21.3
Ex-smoker	**9.3**	6.1	13.8	**12.6**	7.6	20.1	**14.6**	10.5	20.0	**10.8**	7.0	16.5
Non-smoker	**10.2**	7.8	13.1	**9.6**	7.5	12.2	**12.0**	10.1	14.2	**10.0**	8.2	12.1
Lifetime risk of alcohol related harm (2009) [e]												
Abstainer / no longer drinks alcohol	**7.3***	3.1	16.3	**11.7**	7.3	18.3	**13.5**	10.0	17.8	**6.5**	4.7	9.0
Reduced risk	**14.0***	7.9	23.5	**17.5**	11.6	25.6	**9.4**	6.9	12.6	**12.4**	8.3	18.0
Increased risk	**11.5**	9.3	14.0	**10.2**	8.2	12.7	**13.5**	11.2	16.2	**11.2**	9.0	14.0
Self-reported health												
Excellent / Very Good	**7.7**	5.7	10.4	**11.6**	8.7	15.4	**8.8**	7.1	10.9	**10.5**	8.4	13.0
Good	**12.4**	9.2	16.5	**8.8**	6.4	12.0	**13.4**	10.7	16.8	**9.8**	7.4	13.0
Fair / Poor	**16.1**	11.2	22.5	**14.2**	9.6	20.6	**19.6**	14.8	25.3	**15.0**	9.8	22.3
BMI category [f]												
Underweight	**2.4***	1.3	4.6	**15.6**	15.6	15.6	**12.3***	7.4	19.8	**12.5***	6.9	21.7
Normal	**9.6**	6.7	13.7	**9.6**	6.9	13.2	**9.7**	7.6	12.4	**9.7**	7.7	12.1
Overweight	**11.3**	8.4	15.1	**9.7**	6.9	13.5	**9.9**	7.4	13.1	**12.5**	8.5	18.1
Obese	**14.0**	9.6	19.9	**16.6**	11.6	23.1	**16.0**	12.6	20.0	**13.4***	7.9	21.9
Diabetes												
No diabetes	**10.5**	8.6	12.7	**10.8**	8.9	13.1	**12.2**	10.5	14.1	**10.7**	9.1	12.6
Diabetes	**11.0***	6.3	18.4	**3.6***	1.7	7.2	**17.4***	9.4	30.1	**11.2***	5.7	21.0
Depression												
Yes	**12.8**	8.7	18.5	**15.9**	11.4	21.8	**19.0**	15.4	23.2	**15.9**	11.7	21.1
No	**10.5**	8.3	13.1	**9.4**	7.6	11.6	**10.2**	8.4	12.3	**8.9**	7.4	10.7

Reported ever having been diagnosed with asthma by a doctor and have experienced symptoms of asthma or taken treatment for asthma in the last 12 months.

a Based on the Kessler 10 scale for psychological distress. b Based on DoHA (1999) guidelines. c Based on NHMRC (2003) guidelines.

d Includes those meeting both guidelines. e NHMRC (2009) guidelines. f Based on Body Mass Index (BMI).

Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Data were age-standardised to the 2011 Victorian population.

LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.

* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.

** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.

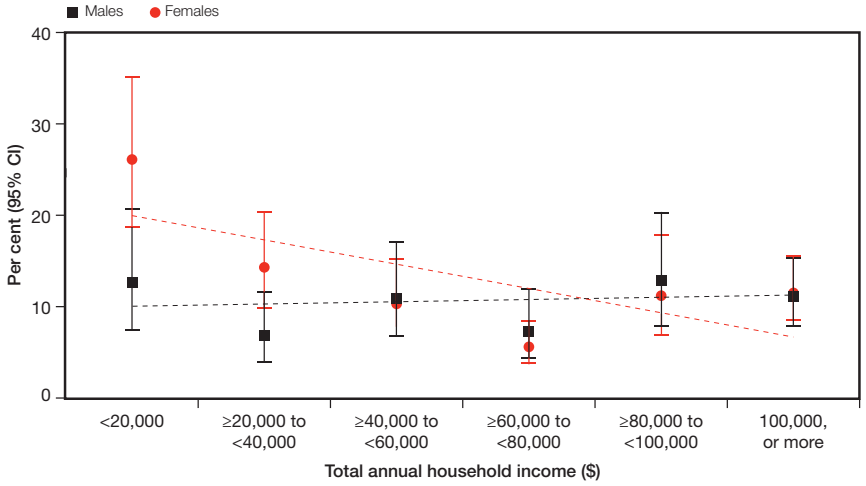
The relationship between SES and the age-adjusted prevalence of current asthma in men, women and people, using total annual household income as a measure of SES, is presented in Table 7.8 and Figure 7.3. The prevalence of current asthma was not significantly related to total annual household income in men, women and people.

Table 7.8: Prevalence (%) of current asthma,[a] by total annual household income and sex, Victoria, 2011–12

	Current asthma		
	%	95% CI	
		LL	UL
Males			
<20,000	**12.6***	7.4	20.7
≥20,000 to <40,000	**6.8***	3.9	11.6
≥40,000 to <60,000	**10.9**	6.8	17.1
≥60,000 to <80,000	**7.3***	4.4	11.9
≥80,000 to <100,000	**12.9**	7.9	20.3
100,000, or more	**11.1**	7.9	15.3
Do not know/refused	**10.0**	6.6	14.8
Total	**10.7**	**8.8**	**12.8**
Females			
<20,000	**26.1**	18.7	35.1
≥20,000 to <40,000	**14.3**	9.8	20.4
≥40,000 to <60,000	**10.3**	6.8	15.2
≥60,000 to <80,000	**5.6**	3.8	8.4
≥80,000 to <100,000	**11.2**	6.9	17.8
100,000, or more	**11.5**	8.5	15.5
Do not know/refused	**11.5**	8.0	16.2
Total	**12.2**	**10.6**	**14.0**
Persons			
<20,000	**20.9**	15.2	28.2
≥20,000 to <40,000	**11.3**	8.2	15.3
≥40,000 to <60,000	**10.5**	7.6	14.3
≥60,000 to <80,000	**6.2**	4.6	8.5
≥80,000 to <100,000	**11.4**	7.8	16.4
100,000, or more	**11.4**	8.9	14.4
Do not know/refused	**10.8**	7.9	14.6
Total	**11.5**	**10.2**	**12.9**

a Reported ever having been diagnosed with asthma by a doctor and have experienced symptoms of asthma or taken tre atment for asthma in the last 12 months.
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Figure 7.3: Prevalence (%) of current asthma,[a] by total annual household income and sex, Victoria, 2011–12



a Reported ever having been diagnosed with asthma by a doctor and have experienced symptoms of asthma or taken treatment for asthma in the last 12 months.
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

Table 7.9 shows the proportion of people who reported having an asthma action plan, by age group and sex, with 'Total' not adjusted for age.

Overall, 48.2 per cent of people reported having an asthma action plan, the proportion being not significantly different in men (41.6 per cent) and women (53.8 per cent). The proportion of women and people aged 55–64 years who reported having an asthma action plan was significantly *higher* than the proportion in all Victorian women and people, respectively.

Table 7.9: Proportion (%) who reported having an asthma[a] action plan, by age group and sex, Victoria, 2012

	No			Yes		
	%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL
Males						
18–24	**61.7***	30.9	85.3	**38.3***	14.7	69.1
25–34	**65.1**	41.0	83.4	**34.9***	16.6	59.0
35–44	**57.5**	39.4	73.9	**42.5**	26.1	60.6
45–54	**53.2**	34.7	70.9	**46.8**	29.1	65.3
55–64	**45.6**	29.6	62.4	**53.4**	36.7	69.5
65+	**54.7**	40.8	67.9	**43.4**	30.3	57.4
Total	**58.1**	**48.1**	**67.4**	**41.6**	**32.3**	**51.6**
Females						
18–24	**47.8***	22.1	74.7	**52.2***	25.3	77.9
25–34	**47.1**	26.4	68.8	**46.4**	26.1	67.9
35–44	**54.9**	41.6	67.6	**43.9**	31.4	57.2
45–54	**38.7**	27.4	51.4	**61.3**	48.6	72.6
55–64	**27.0**	18.4	37.8	**73.0**	62.2	81.6
65+	**44.6**	35.6	54.1	**52.4**	43.0	61.6
Total	**43.9**	**37.0**	**51.0**	**53.8**	**46.8**	**60.7**
People						
18–24	**57.2**	34.9	77.0	**42.8***	23.0	65.1
25–34	**56.3**	40.1	71.2	**40.5**	26.0	56.9
35–44	**55.9**	45.1	66.2	**43.3**	33.1	54.2
45–54	**46.1**	35.1	57.4	**53.9**	42.6	64.9
55–64	**33.9**	25.3	43.6	**65.8**	56.0	74.3
65+	**47.7**	40.1	55.5	**49.6**	41.9	57.3
Total	**50.4**	**44.5**	**56.3**	**48.2**	**42.4**	**54.1**

a Reported ever having been diagnosed with asthma by a doctor and have experienced symptoms of asthma or taken treatment for asthma in the last 12 months.

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria

LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.

* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.

Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 7.10 shows the proportion of people who reported having an asthma action plan, by departmental region and sex, adjusted for age.

A significantly *lower* proportion of men residing in Eastern Metropolitan Region reported having an asthma action plan compared with all Victorian men.

Table 7.10: Proportion (%) who reported having an asthma[a] action plan, by Department of Health and Human Services region and sex, Victoria, 2012

	No			Yes		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Metropolitan males						
Eastern Metropolitan	75.5	64.7	83.8	15.3*	7.9	27.4
North & West Metropolitan	**53.6**	40.1	66.7	**46.4**	33.3	59.9
Southern Metropolitan	**57.6**	47.2	67.3	**30.8**	21.6	41.8
Total	**61.0**	50.8	70.4	**39.0**	29.6	49.2
Rural males						
Barwon-South Western	**36.9**	26.2	49.1	**37.1**	26.4	49.3
Gippsland	37.3	28.6	46.9	**34.5**	25.4	44.9
Grampians	**60.3**	47.2	72.1	**29.5**	18.5	43.4
Hume	34.1	24.5	45.2	**43.1**	33.1	53.8
Loddon Mallee	32.3	22.9	43.4	**55.7**	45.2	65.7
Total	**46.5**	35.6	57.8	**51.9**	40.7	62.9
All males						
Total	**56.2**	**48.2**	**63.9**	**43.1**	**35.4**	**51.1**
Metropolitan females						
Eastern Metropolitan	**39.3**	26.4	53.9	**60.0**	45.5	72.9
North & West Metropolitan	**50.4**	41.5	59.3	**43.3**	33.4	53.7
Southern Metropolitan	**40.1**	30.5	50.5	**46.4**	36.6	56.4
Total	**47.0**	37.6	56.5	**50.9**	41.4	60.3
Rural females						
Barwon-South Western	25.6	16.9	37.0	**55.4**	45.1	65.1
Gippsland	**49.9**	38.3	61.5	**50.1**	38.5	61.7
Grampians	**39.7**	28.6	52.0	**60.3**	48.0	71.4
Hume	**46.7**	34.9	58.8	**44.3**	32.7	56.5
Loddon Mallee	60.8	52.8	68.3	**39.2**	31.7	47.2
Total	**42.0**	35.3	48.9	**56.2**	49.4	62.9
All females						
Total	**44.4**	**37.7**	**51.3**	**53.7**	**46.8**	**60.4**
Metropolitan people						
Eastern Metropolitan	**58.0**	46.1	68.9	**41.6**	30.6	53.5
North & West Metropolitan	**48.5**	39.1	58.0	**49.1**	39.3	58.9
Southern Metropolitan	**56.5**	47.8	64.8	**43.0**	34.8	51.6
Total	**52.1**	45.4	58.7	**46.7**	40.0	53.4
Rural people						
Barwon-South Western	33.2	24.5	43.2	**56.6**	47.0	65.6
Gippsland	**47.8**	36.6	59.1	**51.4**	40.1	62.5
Grampians	**48.7**	38.0	59.5	**50.5**	39.7	61.2
Hume	**52.9**	41.5	63.9	**47.1**	36.1	58.5
Loddon Mallee	**51.0**	39.3	62.5	**48.8**	37.2	60.4
Total	**44.5**	38.4	50.7	**54.0**	47.7	60.1
All people						
Total	**50.0**	**44.7**	**55.2**	**48.7**	**43.5**	**54.0**

a Reported ever having been diagnosed with asthma by a doctor and have experienced symptoms of asthma or taken treatment for asthma in the last 12 months.

Data were age-standardised to the 2011 Victorian population.

LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.

* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.

Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 7.11 shows the proportion of people using an asthma action plan in the past 12 months, by frequency, age group and sex, with 'Total' not adjusted for age.

Overall, 31.6 per cent of people reported using an asthma action plan 'frequently', 22.9 per cent reported using a plan 'sometimes', 19.5 per cent reported 'rarely' using a plan and 25.6 per cent reported 'never' using a plan. The proportions for the various frequencies were not significantly different in men and women.

Table 7.11: Proportion (%) who had used an asthma[a] action plan in past 12 months, by age group and sex, Victoria, 2012

Age group (years)	Never			Rarely			Sometimes			Frequently		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Males												
18–24	**	**	**	**	**	**	**	**	**	**	**	**
25–34	**73.1**	32.3	93.9	**0.0**	.	.	**	**	**	**	**	**
35–44	**0.0**	.	.	**26.4***	9.5	55.1	**33.8***	13.1	63.3	**35.6***	15.4	62.6
45–54	**29.5***	12.4	55.3	**	**	**	**24.4***	9.2	50.7	**43.3***	17.6	73.2
55–64	**23.2***	9.0	48.1	**24.7***	9.5	50.4	**	**	**	**38.7***	19.5	62.2
65+	**	**	**	**17.5***	7.2	36.9	**10.8***	3.9	26.6	**55.4**	34.0	75.0
Total	**34.4**	**20.4**	**51.8**	**15.3***	**7.6**	**28.3**	**19.6***	**10.6**	**33.3**	**30.0**	**18.7**	**44.4**
Females												
18–24	**0.0**	.	.	**	**	**	**54.5***	22.2	83.4	**39.6***	13.3	73.6
25–34	**29.4***	9.4	62.5	**	**	**	**30.2***	11.0	60.1	**	**	**
35–44	**16.9***	6.1	39.0	**23.1***	11.2	41.8	**33.6***	18.9	52.5	**26.3***	12.4	47.3
45–54	**16.9***	7.6	33.4	**23.3***	12.7	38.8	**15.8***	7.7	29.5	**44.0**	28.4	61.0
55–64	**22.0***	13.0	34.7	**29.6**	18.0	44.7	8.8*	4.5	16.6	**39.6**	24.7	56.7
65+	**20.1***	11.4	33.0	**18.4***	10.4	30.4	**27.0**	17.5	39.3	**32.9**	23.0	44.7
Total	**19.8**	**13.4**	**28.2**	**22.3**	**15.6**	**30.7**	**25.0**	**18.3**	**33.2**	**32.6**	**25.0**	**41.1**
People												
18–24	**	**	**	**	**	**	**37.1***	12.6	70.7	**	**	**
25–34	**48.5***	25.7	72.0	**	**	**	**21.0***	8.5	43.1	**	**	**
35–44	**	**	**	**24.4***	13.5	39.9	**33.7**	20.6	49.9	**29.8***	17.4	46.2
45–54	**22.4***	12.8	36.3	**14.4***	7.8	24.9	**19.5***	10.7	32.9	**43.7**	28.2	60.5
55–64	**22.3**	14.1	33.6	**28.1**	18.2	40.7	**10.2***	5.7	17.7	**39.4**	26.9	53.4
65+	**18.9**	11.4	29.6	**18.1**	11.2	28.0	**22.7**	15.0	32.7	**39.0**	29.0	50.1
Total	**25.6**	**18.2**	**34.5**	**19.5**	**14.1**	**26.5**	**22.9**	**17.1**	**29.9**	**31.6**	**24.9**	**39.1**

a Reported ever having been diagnosed with asthma by a doctor and have experienced symptoms of asthma or taken treatment for asthma in the last 12 months.
Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 7.12 shows the proportion of people who reported having an asthma action plan, by frequency, departmental region and sex, adjusted for age.

A significantly *lower* proportion of men residing in Grampians Region and women residing in Hume and Loddon Mallee regions reported using an asthma action plan frequently compared with all Victorian men and women, respectively.

Table 7.12: Proportion (%) who had used an asthma[a] action plan in past 12 months, by Department of Health and Human Services region and sex, Victoria, 2012

	Never			Rarely			Sometimes			Frequently		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males												
Eastern Metropolitan	12.2	8.7	16.8	**0.0**	.	.	**	**	**	**24.6**	17.7	33.0
North & West Metropolitan	**32.2**	22.6	43.5	**13.9***	8.3	22.2	**15.4***	8.1	27.5	**25.2**	16.9	35.9
Southern Metropolitan	**15.8***	8.1	28.7	**9.3***	4.4	18.4	**	**	**	**28.9**	19.9	40.0
Total	**33.6**	22.8	46.3	**19.0**	11.9	28.8	**17.7***	9.5	30.7	**29.7**	19.7	42.1
Rural males												
Barwon-South Western	12.3	8.5	17.6	**27.3**	21.6	33.9	**	**	**	**21.7**	16.8	27.6
Gippsland	11.8*	7.1	19.0	**17.5**	12.9	23.3	**13.9**	11.0	17.4	**	**	**
Grampians	13.2	13.2	13.2	**24.5**	18.7	31.4	**	**	**	8.1*	3.9	16.0
Hume	**	**	**	**21.4**	13.4	32.5	**23.6**	14.9	35.3	**13.6***	6.3	27.1
Loddon Mallee	**19.5**	14.4	25.8	**5.3***	2.2	12.1	**16.3**	11.2	23.0	**39.0**	31.6	46.9
Total	**20.9**	16.6	26.1	**22.9**	13.7	35.7	**25.9**	19.8	33.1	**27.5**	17.5	40.3
All males												
Total	**31.1**	**22.3**	**41.5**	**16.9**	**10.3**	**26.4**	**19.5**	**12.1**	**29.7**	**30.3**	**22.4**	**39.6**
Metropolitan females												
Eastern Metropolitan	**27.7**	19.5	37.8	**30.8**	24.1	38.4	**18.3**	14.2	23.2	**20.8***	12.0	33.6
North & West Metropolitan	**27.0**	18.5	37.6	**15.5***	8.2	27.3	**12.1***	5.7	24.1	**26.8**	17.0	39.4
Southern Metropolitan	**8.5***	4.4	15.8	**10.0***	5.0	18.9	**23.6**	17.2	31.5	**35.9**	26.9	46.0
Total	**21.2**	14.4	30.0	**19.5**	13.4	27.4	**29.6**	23.4	36.7	**29.4**	21.4	38.9
Rural females												
Barwon-South Western	**8.7***	3.7	18.9	**31.2**	21.6	42.7	**16.0***	8.6	27.8	**22.4**	14.8	32.4
Gippsland	**15.3**	12.9	18.1	**13.1***	6.5	24.6	**38.3**	26.9	51.1	**23.3***	13.0	38.3
Grampians	**13.1**	8.1	20.4	**22.9**	16.4	31.1	**35.3**	26.9	44.8	**28.7**	22.8	35.3
Hume	**10.9***	5.6	20.1	**17.8**	11.1	27.5	**35.7**	28.6	43.6	12.9	7.9	20.2
Loddon Mallee	**9.1***	4.6	17.3	**15.8**	10.9	22.4	**26.3**	19.7	34.2	17.2	12.1	23.8
Total	**13.4**	9.5	18.6	**24.9**	17.6	34.0	**36.7**	28.1	46.2	**24.9**	19.1	31.7
All females												
Total	**19.2**	**13.5**	**26.5**	**20.9**	**15.2**	**28.0**	**28.0**	**21.1**	**36.0**	**31.7**	**24.2**	**40.3**
Metropolitan people												
Eastern Metropolitan	**29.6**	22.5	37.8	**27.5**	20.9	35.4	**20.5**	15.8	26.1	**19.9***	11.5	32.4
North & West Metropolitan	**31.0**	20.7	43.7	**18.1***	9.6	31.3	**18.1***	10.6	29.2	**29.8**	20.7	40.9
Southern Metropolitan	**12.0***	6.2	21.9	**13.1***	7.3	22.4	**16.1***	9.4	26.1	**36.8**	27.0	47.8
Total	**28.2**	19.7	38.7	**20.3**	13.6	29.2	**21.1**	13.9	30.6	**30.1**	23.2	38.1
Rural people												
Barwon-South Western	**12.9***	7.5	21.3	**24.8**	15.7	36.8	**17.7***	9.8	29.8	**32.1**	24.1	41.4
Gippsland	**20.0**	14.8	26.4	**21.0**	13.4	31.4	**32.6**	21.2	46.3	**18.1***	9.2	32.4
Grampians	**18.2**	12.5	25.8	**23.2***	13.5	37.1	**30.6**	21.2	42.0	**26.7**	17.6	38.3
Hume	9.5*	4.9	17.4	**22.4**	14.7	32.5	**32.1**	23.8	41.7	**16.7***	9.8	26.8
Loddon Mallee	**18.3**	13.8	24.0	**11.6***	6.8	18.9	**34.0**	28.5	39.9	**36.1**	28.7	44.3
Total	**18.0**	13.7	23.5	**20.9**	15.6	27.5	**33.0**	26.5	40.4	**26.8**	21.1	33.4
All people												
Total	**25.5**	**19.0**	**33.3**	**19.8**	**14.6**	**26.2**	**24.0**	**18.3**	**30.7**	**30.1**	**24.4**	**36.4**

a Reported ever having been diagnosed with asthma by a doctor and have experienced symptoms of asthma or taken treatment for asthma in the last 12 months.
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 7.13 shows the proportion of people who reported that their asthma action plan was useful for managing an acute asthma attack, age group and sex, with 'Total' not adjusted for age.

Overall, 78.8 per cent of people reported that their asthma action plan was useful for managing an acute asthma attack; the proportion was not significantly different in men (80.5 per cent) and women (77.9 per cent).

Table 7.13: Proportion (%) who reported that the action plan was useful for managing an acute asthma[a] attack, by age group and sex, Victoria, 2012

	No			Yes		
	%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL
Males						
18–24	**	**	**	**	**	**
25–34	**0.0**	.	.	**65.4***	10.6	96.8
35–44	**0.0**	.	.	**93.3**	75.4	98.5
45–54	**0.0**	.	.	**96.2**	75.4	99.5
55–64	**	**	**	**78.5**	55.7	91.4
65+	**	**	**	**85.6**	62.3	95.6
Total	**	**	**	**80.5**	**62.5**	**91.1**
Females						
18–24	**	**	**	**83.1**	37.3	97.6
25–34	**0.0**	.	.	**88.3**	57.6	97.7
35–44	**20.2***	7.4	44.5	**63.1**	41.5	80.5
45–54	**	**	**	**84.0**	66.2	93.4
55–64	**5.3***	2.3	11.8	**71.1**	51.8	84.9
65+	**8.2***	3.2	19.6	**81.3**	66.3	90.6
Total	**8.1***	**4.4**	**14.6**	**77.9**	**69.4**	**84.6**
People						
18–24	**	**	**	**66.8***	29.3	90.7
25–34	**0.0**	.	.	**83.1**	53.9	95.4
35–44	**	**	**	**75.5**	58.6	87.0
45–54	**	**	**	**88.9**	75.9	95.3
55–64	**6.5***	2.8	14.3	**73.3**	58.1	84.5
65+	**7.6***	3.4	16.1	**82.6**	70.4	90.4
Total	**9.0***	**4.7**	**16.6**	**78.8**	**70.9**	**85.0**

a Reported ever having been diagnosed with asthma by a doctor and have experienced symptoms of asthma or taken treatment for asthma in the last 12 months.

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria

LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.

** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.

Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 7.14 shows the proportion of people who reported that their asthma action plan was useful for knowing when to seek medical advice for an asthma attack, by age group and sex, with 'Total' not adjusted for age.

Overall, 92.3 per cent of people reported that their asthma action plan was useful for knowing when to seek medical advice for an asthma attack; the proportion was not significantly different in men (85.7 per cent) and women (95.8 per cent).

Table 7.14: Proportion (%) who reported that the action plan was useful for knowing when to seek medical advice for an asthma[a] attack, by age group and sex, Victoria, 2012

	No			Yes		
	%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL
Males						
18–24	**	**	**	**	**	**
25–34	**0.0**	.	.	**65.4***	10.6	96.8
35–44	**	**	**	**96.3**	77.1	99.5
45–54	**0.0**	.	.	**100.0**	.	.
55–64	**0.0**	.	.	**100.0**	.	.
65+	**	**	**	**86.9**	63.8	96.1
Total	**	**	**	**85.7**	**65.4**	**95.0**
Females						
18–24	**	**	**	**87.3**	45.4	98.3
25–34	**0.0**	.	.	**100.0**	.	.
35–44	**0.0**	.	.	**100.0**	.	.
45–54	**	**	**	**88.2**	69.5	96.1
55–64	**	**	**	**97.9**	92.7	99.4
65+	**	**	**	**96.8**	90.5	99.0
Total	**3.6***	**1.5**	**8.6**	**95.8**	**91.0**	**98.1**
People						
18–24	**	**	**	**69.0***	30.6	91.8
25–34	**0.0**	.	.	**92.1**	59.1	98.9
35–44	**	**	**	**98.5**	89.8	99.8
45–54	**	**	**	**92.9**	79.6	97.7
55–64	**	**	**	**98.5**	94.9	99.6
65+	**4.9***	1.9	12.3	**94.0**	86.5	97.5
Total	**6.2***	**2.6**	**14.0**	**92.3**	**84.4**	**96.3**

a Reported ever having been diagnosed with asthma by a doctor and have experienced symptoms of asthma or taken treatment for asthma in the last 12 months.

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria

LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.

** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.

Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 7.15 shows the proportion of people who reported that their asthma action plan was helping with day-to-day management of asthma, by age group and sex, with 'Total' not adjusted for age.

Overall, 93.4 per cent of people reported that their asthma action plan was helping with day-to-day management of asthma. The proportion was not significantly different in men (91.0 per cent) and women (94.6 per cent).

References

ACAM (Australian Centre for Asthma Monitoring) 2007, *Australian asthma indicators: Five year review of asthma monitoring in Australia,* Australian Institute of Health and Welfare (AIHW), Canberra.

ACAM (Australian Centre for Asthma Monitoring) 2011, *Asthma in Australia 2011*, Australian Institute of Health and Welfare (AIHW), Canberra.

Table 7.15: Proportion (%) who reported that the action plan was helping with day-to-day management of asthma,[a] by age group and sex, Victoria, 2012

	No			Yes		
	%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL
Males						
18–24	**	**	**	**	**	**
25–34	**0.0**	.	.	**100.0**	.	.
35–44	**0.0**	.	.	**100.0**	.	.
45–54	**	**	**	**97.2**	87.0	99.5
55–64	**0.0**	.	.	**100.0**	.	.
65+	**	**	**	**99.0**	93.1	99.9
Total	**	**	**	**91.0**	**67.2**	**98.0**
Females						
18–24	**	**	**	**70.4**	31.6	92.4
25–34	**0.0**	.	.	**100.0**	.	.
35–44	**	**	**	**98.5**	89.6	99.8
45–54	**	**	**	**95.2**	84.0	98.7
55–64	**	**	**	**96.2**	90.1	98.6
65+	**	**	**	**96.0**	89.6	98.5
Total	**5.0***	**2.2**	**10.9**	**94.6**	**88.8**	**97.5**
People						
18–24	**39.7***	13.2	73.9	**60.3***	26.1	86.8
25–34	**0.0**	.	.	**100.0**	.	.
35–44	**	**	**	**99.1**	93.7	99.9
45–54	**	**	**	**96.0**	89.2	98.6
55–64	**	**	**	**97.3**	93.1	99.0
65+	**2.0***	0.8	5.3	**96.9**	92.3	98.8
Total	**6.4***	**2.7**	**14.3**	**93.4**	**85.6**	**97.1**

a Reported ever having been diagnosed with asthma by a doctor and have experienced symptoms of asthma or taken treatment for asthma in the last 12 months.

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria

LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.

** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.

Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not r eported here.

8. Diabetes




8. Diabetes

Introduction

Diabetes mellitus is a common chronic condition characterised by high blood glucose (sugar) levels. The two main types of diabetes mellitus are type 1 (insulin-dependent) diabetes and type 2 diabetes. Gestational diabetes is another form of the condition that affects women during pregnancy, with no prior diagnosis of diabetes. This condition usually abates after birth but is a risk factor for developing type 2 diabetes later in life.

Type 1 diabetes is an autoimmune disease in which the body's immune system destroys the insulin-producing cells of the pancreas rendering the individual unable to produce enough of the hormone insulin, which is essential for the control of glucose levels in the blood. It most commonly occurs in people under the age of 30 years and may be referred to as juvenile-onset diabetes. People with type 1 diabetes require replacement insulin injections (usually several times a day) for life. Unlike type 2 diabetes, it is not caused by lifestyle factors. Type 1 diabetes accounts for 10–15 per cent of diabetes mellitus and, while a great deal of research is being carried out, at this stage nothing can be done to prevent or cure type 1 diabetes.

Type 2 diabetes is the most common form of diabetes, which occurs mostly in people aged 50 years or older. Risk factors for type 2 diabetes include being overweight or obese and having a family history of the condition. Type 2 diabetes accounts for around 85 per cent of all cases of diabetes mellitus. It is caused by insufficient production of insulin and/or the body becoming resistant to high glucose levels in the blood. In many cases, appropriate diet and exercise can control type 2 diabetes. More severe cases require treatment with oral glucose-lowering drugs or insulin injections, or a combination of these. Left untreated, diabetes mellitus can cause kidney, eye and nerve damage, as well as heart disease, stroke and impotence.

Survey respondents were asked 'Have you ever been told by a doctor that you have diabetes?' If they responded that they had, they were then asked to indicate the type of diabetes they had been diagnosed with.

8.1 Diabetes type

Table 8.1 shows the diabetes status, by type, age group and sex, with 'Total' not adjusted for age. Overall, 0.6 per cent of Victorians reported having been diagnosed with type 1 diabetes and there was no significant difference in prevalence between the sexes.

In contrast, the overall prevalence of type 2 diabetes was 5.4 per cent, with the prevalence significantly *higher* in men (6.5 per cent) compared with women (4.3 per cent). The prevalence was significantly *higher* in men, women and people aged 55 years or older compared with the prevalence in all Victorian men, women and people.

Table 8.1: Diabetes status, by type, age group and sex, Victoria, 2012

Age group (years)	No diabetes			Type 1 diabetes			Type 2 diabetes			Gestational diabetes		
	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL
Males												
18–24	**100.0**	.	.	**0.0**	.	.	**0.0**	.	.			
25–34	**98.0**	93.6	99.4	**	**	**	**	**	**			
35–44	**97.2**	94.4	98.6	**	**	**	**1.8***	0.7	4.6			
45–54	**91.6**	87.5	94.5	**	**	**	**8.3**	5.5	12.4			
55–64	**87.3**	83.5	90.4	**	**	**	**12.1**	9.1	15.9			
65+	**82.2**	79.2	84.8	**0.7***	0.3	1.6	**16.5**	14.0	19.4			
Total	**92.8**	**91.6**	**93.9**	**0.6***	**0.3**	**1.1**	**6.5**	**5.5**	**7.6**			
Females												
18–24	**98.6**	93.8	99.7	**	**	**	**0.0**	.	.	**0.0**	.	.
25–34	**96.2**	92.2	98.2	**	**	**	**	**	**	**	**	**
35–44	**93.1**	90.2	95.2	**	**	**	**1.5***	0.7	3.2	**5.0**	3.3	7.6
45–54	**95.1**	93.0	96.6	**	**	**	**2.4***	1.4	4.0	**2.5***	1.5	4.1
55–64	**91.5**	88.7	93.7	**	**	**	**7.3**	5.3	10.0	**0.7***	0.3	1.7
65+	**85.1**	82.6	87.3	**1.1***	0.6	2.1	**13.0**	10.9	15.3	**	**	**
Total	**92.9**	**91.9**	**93.9**	**0.6***	**0.3**	**1.0**	**4.3**	**3.7**	**5.0**	**1.8**	**1.3**	**2.5**
People												
18–24	**99.3**	96.9	99.8	**	**	**	**0.0**	.	.			
25–34	**97.1**	94.6	98.5	**	**	**	**	**	**			
35–44	**95.1**	93.3	96.5	**0.6***	0.3	1.5	**1.7***	0.9	3.1			
45–54	**93.4**	91.2	95.1	**	**	**	**5.3**	3.7	7.4			
55–64	**89.5**	87.2	91.4	**0.4***	0.2	0.9	**9.7**	7.8	11.9			
65+	**83.8**	81.9	85.5	**0.9**	0.6	1.5	**14.6**	12.9	16.4			
Total	**92.9**	**92.1**	**93.6**	**0.6**	**0.4**	**0.9**	**5.4**	**4.8**	**6.0**			

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

The prevalence of gestational diabetes was 1.8 per cent, the prevalence being significantly *higher* in women aged 35–44 years compared with all pregnant women.

Table 8.2 shows diabetes status, by type, departmental region and sex, adjusted for age.

There was no significant difference in the prevalence of type 1 or type 2 diabetes in men or women whether they lived in rural or metropolitan regions. No significant regional differences in the prevalence of type 1 or type 2 diabetes in men, women and people were apparent compared with the prevalence in all Victorian men, women and people.

Table 8.2: Diabetes status, by type, Department of Health and Human Services region and sex, Victoria, 2012

	No diabetes			Type 1 diabetes			Type 2 diabetes					Gestational diabetes		
	%	95% CI		%	95% CI		%	95% CI		SE	RSE	%	95% CI	
		LL	UL		LL	UL		LL	UL				LL	UL
Metropolitan males														
Eastern Metropolitan	**92.7**	90.1	94.7	**	**	**	**7.2**	5.2	9.8	1.2	16.3			
North & West Metropolitan	**90.6**	87.8	92.8	**	**	**	**8.3**	6.4	10.8	1.1	13.6			
Southern Metropolitan	**94.1**	91.7	95.8	**	**	**	**5.3**	3.7	7.6	1.0	18.0			
Total	**92.3**	90.8	93.6	**	**	**	**7.0**	5.8	8.3	0.6	9.1			
Rural males														
Barwon-South Western	**94.8**	93.0	96.1	**0.0**	.	.	**5.1**	3.8	6.9	0.8	15.2			
Gippsland	**93.4**	90.6	95.4	**2.1***	1.0	4.6	**4.4**	3.0	6.3	0.8	19.0			
Grampians	**93.4**	90.9	95.3	**1.3***	0.5	3.2	**5.2**	3.7	7.4	0.9	18.1			
Hume	**93.3**	90.9	95.1	**	**	**	**6.0**	4.4	8.2	1.0	15.9			
Loddon Mallee	**93.2**	88.8	95.9	**	**	**	**5.1**	3.5	7.6	1.0	20.1			
Total	**93.6**	92.3	94.7	**1.1***	0.5	2.5	**5.2**	4.4	6.0	0.4	8.0			
All males														
Total	**92.7**	**91.5**	**93.7**	**0.7***	**0.3**	**1.4**	**6.5**	**5.6**	**7.5**	**0.5**	**7.3**			
Metropolitan females														
Eastern Metropolitan	**93.2**	90.7	95.1	**	**	**	**3.3**	2.3	4.7	0.6	17.9	**3.1***	1.8	5.5
North & West Metropolitan	**92.1**	89.6	94.0	**0.7***	0.3	1.8	**5.1**	3.7	6.9	0.8	15.4	**1.7***	0.8	3.9
Southern Metropolitan	**93.4**	90.0	95.7	**	**	**	**3.5**	2.4	5.1	0.7	19.5	**1.5***	0.7	3.1
Total	**92.9**	91.4	94.2	**0.5***	0.2	1.1	**4.0**	3.3	4.9	0.4	10.1	**2.0**	1.3	3.0
Rural females														
Barwon-South Western	**94.0**	91.1	96.0	**0.7***	0.3	1.5	**3.5**	2.2	5.6	0.8	23.8	**1.8***	0.7	4.5
Gippsland	**92.7**	89.9	94.8	**	**	**	**4.5**	3.1	6.6	0.9	19.5	**1.9***	1.0	3.8
Grampians	**92.3**	89.2	94.6	**1.6***	0.6	4.0	**4.3**	2.9	6.3	0.8	19.6	**1.7***	0.6	4.2
Hume	**93.0**	90.4	94.9	**	**	**	**4.3**	3.1	5.9	0.7	16.8	**2.5***	1.3	5.0
Loddon Mallee	**92.0**	88.7	94.4	**	**	**	**4.5**	3.3	6.1	0.7	16.1	**1.7***	0.8	3.5
Total	**92.7**	91.4	93.9	**0.9***	0.5	1.6	**4.3**	3.6	5.2	0.4	9.3	**1.9**	1.3	2.7
All females														
Total	**92.9**	**91.8**	**93.9**	**0.6***	**0.3**	**1.0**	**4.1**	**3.5**	**4.8**	**0.3**	**7.6**	**2.0**	**1.4**	**2.8**
Metropolitan people														
Eastern Metropolitan	**93.1**	91.3	94.5	**	**	**	**5.1**	4.0	6.6	0.7	12.8			
North & West Metropolitan	**91.4**	89.6	92.9	**0.7***	0.3	1.9	**6.6**	5.4	8.1	0.7	10.4			
Southern Metropolitan	**93.7**	91.7	95.3	**	**	**	**4.3**	3.3	5.6	0.6	13.4			
Total	**92.7**	91.6	93.6	**0.5***	0.2	1.0	**5.5**	4.8	6.3	0.4	6.9			
Rural people														
Barwon-South Western	**94.6**	92.9	95.9	**0.4***	0.2	0.8	**4.3**	3.2	5.7	0.6	14.6			
Gippsland	**93.1**	91.2	94.6	**1.1***	0.5	2.4	**4.4**	3.4	5.7	0.6	13.6			
Grampians	**92.7**	90.7	94.3	**1.4***	0.7	2.7	**4.9**	3.7	6.3	0.6	13.3			
Hume	**93.2**	91.5	94.7	**	**	**	**5.0**	4.0	6.3	0.6	11.9			
Loddon Mallee	**92.5**	89.9	94.6	**	**	**	**4.8**	3.7	6.2	0.6	13.2			
Total	**93.3**	92.4	94.1	**1.0***	0.6	1.7	**4.7**	4.2	5.3	0.3	6.1			
All people														
Total	**92.9**	**92.1**	**93.6**	**0.6**	**0.4**	**1.0**	**5.3**	**4.7**	**5.8**	**0.3**	**5.4**			

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

8.2 High blood sugar concentration

People who indicated never having been told by a doctor that they had diabetes, or that they did not know, were asked if they had ever been told by a doctor that they had high blood sugar concentrations. A further 4.5 per cent of people, in addition to those who reported a previous diagnosis of type 2 diabetes, reported having been told by a doctor that they had high blood sugar levels, the prevalence being not significantly different in men and women (Table 8.3). The prevalence of ever being diagnosed with a high blood sugar concentration was significantly *higher* in people aged 55–64 years compared with the prevalence in all Victorian people.

Table 8.3: Prevalence of ever being diagnosed with a high blood sugar concentration, by age group and sex, Victoria, 2012

	No			Yes			Has or had diabetes or gestational diabetes		
Age group (years)	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL
Males									
18–24	97.5	90.3	99.4	**	**	**	0.0	.	.
25–34	91.4	84.4	95.4	6.6*	3.1	13.4	**	**	**
35–44	95.5	92.0	97.5	**	**	**	2.8*	1.4	5.6
45–54	87.2	82.8	90.7	4.4*	2.7	7.2	8.4	5.5	12.5
55–64	78.2	73.8	82.1	8.7	6.3	11.9	12.7	9.6	16.5
65+	75.8	72.4	78.8	5.9	4.3	8.1	17.8	15.2	20.8
Total	87.7	86.0	89.3	4.9	3.7	6.3	7.2	6.1	8.4
Females									
18–24	97.3	93.1	99.0	**	**	**	**	**	**
25–34	93.2	88.7	96.0	3.0*	1.5	6.2	3.8*	1.8	7.8
35–44	88.1	84.6	90.9	4.8	3.1	7.4	6.9	4.8	9.8
45–54	88.9	86.0	91.3	5.8	4.1	8.1	4.9	3.4	7.0
55–64	85.1	81.9	87.9	6.0	4.3	8.2	8.5	6.3	11.3
65+	80.3	77.6	82.8	4.4	3.3	5.9	14.9	12.7	17.4
Total	88.4	87.1	89.6	4.2	3.5	5.1	7.1	6.1	8.1
People									
18–24	97.4	94.1	98.9	**	**	**	**	**	**
25–34	92.3	88.4	95.0	4.8*	2.8	8.3	2.9*	1.5	5.4
35–44	91.7	89.4	93.6	3.1	2.0	4.7	4.9	3.5	6.7
45–54	88.1	85.5	90.3	5.1	3.8	6.8	6.6	4.9	8.8
55–64	81.8	79.1	84.2	7.3	5.8	9.2	10.5	8.6	12.8
65+	78.3	76.2	80.2	5.1	4.1	6.3	16.2	14.5	18.1
Total	88.1	87.0	89.1	4.5	3.9	5.3	7.1	6.4	7.9

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 8.4 shows the prevalence of ever being diagnosed with a high blood sugar concentration, by departmental region and sex, adjusted for age.

There was no significant difference in the proportion of ever being diagnosed with a high blood sugar concentration in men, women or people, whether they lived in rural or metropolitan regions. There were also no significant differences in men, women and people by individual region compared with the prevalence in all Victorian men, women and people.

Table 8.4: Proportion (%) of high blood sugar concentration by Department of Health and Human Services region and sex, Victoria, 2012

	No			Yes			Has or had diabetes or gestational diabetes		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Metropolitan males									
Eastern Metropolitan	**88.1**	84.4	90.9	**4.6***	2.7	7.7	**7.3**	5.3	9.9
North & West Metropolitan	**85.3**	81.7	88.3	**5.0**	3.1	7.8	**9.4**	7.2	12.2
Southern Metropolitan	**89.1**	86.0	91.6	**4.7**	3.0	7.4	**5.9**	4.2	8.3
Total	**87.2**	85.1	89.0	**4.9**	3.7	6.5	**7.7**	6.4	9.2
Rural males									
Barwon-South Western	**90.6**	87.2	93.1	**4.2***	2.3	7.6	**5.2**	3.9	7.0
Gippsland	**88.5**	84.5	91.6	**4.7***	2.6	8.3	**6.6**	4.6	9.4
Grampians	**90.8**	88.1	93.0	**2.3***	1.3	3.9	**6.6**	4.7	9.1
Hume	**90.6**	88.0	92.7	**2.5***	1.5	4.2	**6.7**	4.9	9.1
Loddon Mallee	**90.5**	86.1	93.7	**2.5***	1.3	4.8	**6.8***	4.1	11.2
Total	**90.1**	88.4	91.6	**3.4**	2.5	4.6	**6.4**	5.3	7.7
All males									
Total	**87.9**	**86.3**	**89.3**	**4.5**	**3.6**	**5.8**	**7.3**	**6.3**	**8.5**
Metropolitan females									
Eastern Metropolitan	**88.9**	85.9	91.3	**3.7**	2.4	5.6	**6.8**	4.9	9.3
North & West Metropolitan	**89.0**	86.3	91.2	**2.9**	1.9	4.5	**7.9**	6.0	10.4
Southern Metropolitan	**88.2**	84.4	91.1	**5.2**	3.5	7.6	**6.6**	4.3	10.0
Total	**88.9**	87.1	90.4	**3.8**	3.0	4.9	**7.1**	5.8	8.6
Rural females									
Barwon-South Western	**88.4**	84.2	91.5	**5.5***	3.2	9.1	**6.0**	4.0	8.9
Gippsland	**85.6**	79.9	89.8	**4.2**	2.9	6.2	**7.3**	5.2	10.1
Grampians	**86.6**	82.6	89.7	**5.6**	3.5	8.8	**7.7**	5.4	10.8
Hume	**87.4**	83.9	90.2	**5.6**	3.7	8.4	**7.0**	5.1	9.6
Loddon Mallee	**87.6**	83.6	90.7	**4.2***	2.5	7.1	**8.0**	5.6	11.3
Total	**87.0**	85.1	88.7	**5.1**	4.0	6.4	**7.3**	6.1	8.6
All females									
Total	**88.5**	**87.1**	**89.7**	**4.1**	**3.4**	**4.9**	**7.1**	**6.1**	**8.2**
Metropolitan people									
Eastern Metropolitan	**88.5**	86.2	90.5	**4.1**	2.9	5.8	**6.9**	5.5	8.7
North & West Metropolitan	**87.2**	85.0	89.1	**4.0**	2.9	5.5	**8.6**	7.1	10.4
Southern Metropolitan	**88.7**	86.2	90.7	**4.9**	3.7	6.6	**6.3**	4.7	8.3
Total	**88.1**	86.7	89.3	**4.4**	3.6	5.3	**7.3**	6.4	8.4
Rural people									
Barwon-South Western	**89.5**	86.7	91.8	**4.9**	3.2	7.5	**5.4**	4.1	7.1
Gippsland	**87.1**	83.8	89.9	**4.4**	3.1	6.3	**6.9**	5.4	8.8
Grampians	**88.6**	86.0	90.7	**4.0**	2.7	5.8	**7.3**	5.7	9.3
Hume	**89.0**	86.8	91.0	**4.1**	2.9	5.7	**6.8**	5.3	8.5
Loddon Mallee	**89.0**	86.0	91.4	**3.4**	2.2	5.1	**7.5**	5.4	10.1
Total	**88.7**	87.4	89.8	**4.2**	3.5	5.1	**6.7**	5.9	7.6
All people									
Total	**88.3**	**87.2**	**89.2**	**4.3**	**3.7**	**5.0**	**7.1**	**6.4**	**7.9**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

8.3 Type 2 diabetes

Table 8.5 and Figure 8.1 show the prevalence of type 2 diabetes between 2003 and 2012, adjusted for age. During this period the prevalence of type 2 diabetes increased significantly in men, women and people.

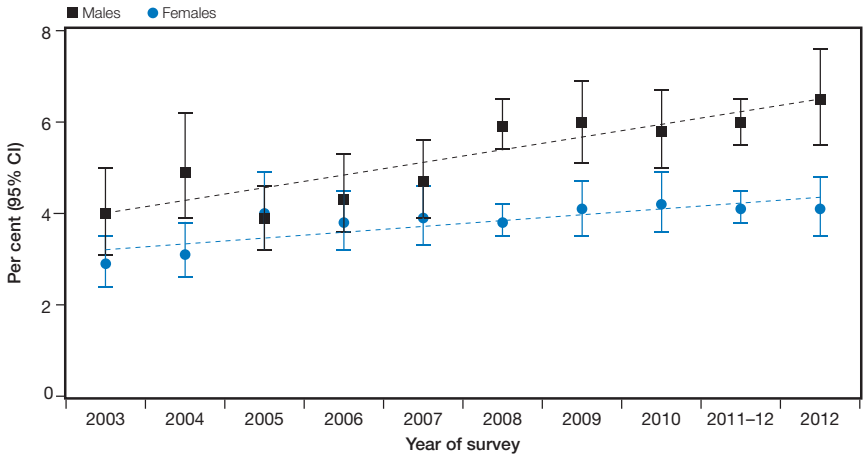
Table 8.6 shows the median age at initiation of insulin treatment in 2012. The median age at initiation of insulin treatment was 56 years (IQR: 46–68 years).

Table 8.5: Prevalence of type 2 diabetes,[a] by sex, Victoria, 2003–2012

	Males			Females			Persons		
	%	95% CI		%	95% CI		%	95% CI	
Survey year		LL	UL		LL	UL		LL	UL
2003	**4.0**	3.1	5.0	**2.9**	2.4	3.5	**3.4**	2.9	4.0
2004	**4.9**	3.9	6.2	**3.1**	2.6	3.8	**3.9**	3.4	4.6
2005	**3.9**	3.2	4.6	**4.0**	3.2	4.9	**4.0**	3.4	4.6
2006	**4.3**	3.6	5.3	**3.8**	3.2	4.5	**4.1**	3.6	4.7
2007	**4.7**	3.9	5.6	**3.9**	3.3	4.6	**4.2**	3.7	4.8
2008	**5.9**	5.4	6.5	**3.8**	3.5	4.2	**4.8**	4.6	5.2
2009	**6.0**	5.1	6.9	**4.1**	3.5	4.7	**5.0**	4.5	5.5
2010	**5.8**	5.0	6.7	**4.2**	3.6	4.9	**4.9**	4.4	5.5
2011–12	**6.0**	5.5	6.5	**4.1**	3.8	4.5	**5.0**	4.7	5.3
2012	**6.5**	**5.5**	**7.6**	**4.1**	**3.5**	**4.8**	**5.3**	**4.7**	**5.8**

a Self-reported doctor-diagnosed type 2 diabetes.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Data are age-standardised to the 2011 Victorian population.
Ordinary least squares regression was used to test for trends over time.
Statistically significant increase in prevalence in males, females and people over time

Figure 8.1: Prevalence of type 2 diabetes,[a] by sex, Victoria, 2003–2012



a Self-reported doctor-diagnosed type 2 diabetes.
Data are age-standardised to the 2011 Victorian population.
Ordinary least squares regression was used to test for trends over time.
Statistically significant increase in prevalence in males, females and people over time
95% CI = 95 per cent confidence interval.

Table 8.6: Median (IQR) age at initiation of insulin treatment, by sex, Victoria, 2012

	Median	Percentile	
		25th	75th
Males	55	45	68
Females	61	47	68
Persons	**56**	**46**	**68**

a Weighted median computed based on 2012 age distributions

Table 8.7 shows the age-adjusted prevalence of type 2 diabetes, by selected socioeconomic determinants, modifiable risk factors, health status and sex.

When compared with all Victorian men and women, a significantly *higher* prevalence of type 2 diabetes was reported among men and women with the following characteristics:

- fair or poor self-reported health status
- obesity.

When compared with all Victorian women, a significantly *higher* prevalence of type 2 diabetes was reported among women with the following characteristic:

- abstinence from alcohol consumption.

When compared with all Victorian men and women, a significantly *lower* prevalence of type 2 diabetes was reported among men and women with the following characteristics:

- employed
- excellent or very good self-reported health.

When compared with all Victorian men, a significantly *lower* prevalence of type 2 diabetes was reported among men with the following characteristic:

- normal weight.

When compared with all Victorian women, a significantly *lower* prevalence of type 2 diabetes was reported among women with the following characteristic:

- underweight.
- at increased risk of alcohol-related harm in the lifetime

Table 8.7 (revised): Prevalence of type 2 diabetes,# by selected socioeconomic determinants, modifiable risk factors, health status and sex, Victoria, 2012

	Type 2 diabetes					
	Males			Females		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Victoria	**6.5**	**5.6**	**7.5**	**4.1**	**3.5**	**4.8**
Country of birth						
Australia	**5.4**	4.5	6.3	**3.4**	2.9	4.1
Overseas	**9.2**	7.2	11.8	**5.7**	4.5	7.4
Language spoken at home						
English only	**5.6**	4.8	6.5	**3.7**	3.1	4.4
Language other than English	**9.7**	7.2	13.0	**5.7**	4.2	7.8
Metro-Rural regions						
Rural	**5.2**	4.4	6.0	**4.3**	3.6	5.2
Metropolitan	**7.0**	5.8	8.3	**4.0**	3.3	4.9
Level of education						
None or Primary	**6.5***	3.8	10.9	**3.1***	1.8	5.1
Secondary	**7.9**	6.2	10.1	**4.1**	3.3	5.0
TAFE or Tertiary	**5.8**	4.8	7.0	**3.7**	2.9	4.7
Employment status (<65 years)						
Employed	**3.9**	2.9	5.1	**1.7**	1.2	2.5
Unemployed	**	**	**	**	**	**
Not in labour force	**6.8**	4.4	10.4	**3.1**	2.1	4.6
Total annual household income ($)						
<40,000	**8.4**	6.4	11.0	**4.4**	3.5	5.4
40,000 to <100,000	**6.2**	4.7	8.1	**2.5**	1.8	3.7
100,000, or more	**3.5**	2.2	5.7	**3.5***	1.5	8.2
Psychological distress (K10 score) [a]						
Low (K10 score <16)	**6.2**	5.2	7.5	**3.9**	3.2	4.8
Moderate (K10 score 16 to 21)	**7.7**	5.7	10.4	**4.1**	2.9	5.8
High (K10 score 22 to 29)	**7.0**	4.5	10.6	**5.2**	3.6	7.4
Very high (K10 score ≥30)	**6.3***	3.1	12.6	**5.5***	3.1	9.5
Physical activity level [b]						
Sedentary	**10.3**	6.8	15.2	**6.0**	3.8	9.4
Insufficient	**7.5**	5.8	9.7	**4.0**	3.1	5.1
Sufficient	**6.1**	5.0	7.4	**3.5**	2.8	4.5
Compliance with fruit & vegetable consumption guidelines [c]						
Both	**4.8***	2.5	9.0	**2.4***	1.4	4.0
Vegetable only [d]	**6.7***	3.8	11.7	**2.4**	1.6	3.6
Fruit only [d]	**6.9**	5.6	8.4	**3.8**	3.1	4.7
Neither	**6.3**	5.1	7.7	**4.7**	3.8	5.8
Smoking status						
Current smoker	**5.8**	3.8	8.8	**4.1***	2.4	7.0
Ex-smoker	**7.3**	5.9	9.2	**4.8**	3.6	6.2
Non-smoker	**5.5**	4.4	7.0	**3.7**	3.0	4.5
Lifetime risk of alcohol related harm (2009) [e]						
Abstainer / no longer drinks alcohol	**9.9**	7.3	13.3	**7.0**	5.6	8.8
Reduced risk	**7.8**	5.6	10.8	**3.4**	2.5	4.6
Increased risk	**5.6**	4.6	6.8	**2.2**	1.6	3.0
Self-reported health						
Excellent / Very Good	**3.6**	2.6	4.9	**2.4**	1.7	3.3
Good	**8.1**	6.6	9.9	**4.5**	3.6	5.6
Fair / Poor	**11.1**	8.7	14.2	**8.1**	6.2	10.6
BMI category [f]						
Underweight	**0.0**	.	.	**1.5***	0.6	3.5
Normal	**3.8**	2.6	5.5	**2.9**	2.0	4.0
Overweight	**6.3**	5.0	7.9	**3.7**	2.8	4.9
Obese	**11.5**	9.3	14.3	**6.7**	5.2	8.6
Depression						
Yes	**7.4**	5.4	10.2	**4.9**	3.8	6.3
No	**6.3**	5.4	7.4	**3.8**	3.2	4.5

Reported having been diagnosed with type 2 diabetes by a doctor .
a Based on the Kessler 10 scale for psychological distress.
b Based on DoHA (1999) guidelines.
c Based on NHMRC (2003) guidelines.
d Includes those meeting both guidelines.
e NHMRC (2009) guidelines.
f Based on Body Mass Index (BMI).
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: **above**/**below** Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.

Table 8.8 and Figure 8.2 show diabetes status by total annual household income by sex, with 'Total' not adjusted for age. There was no significant relationship of the prevalence of diabetes with total annual household income in men, women or people.

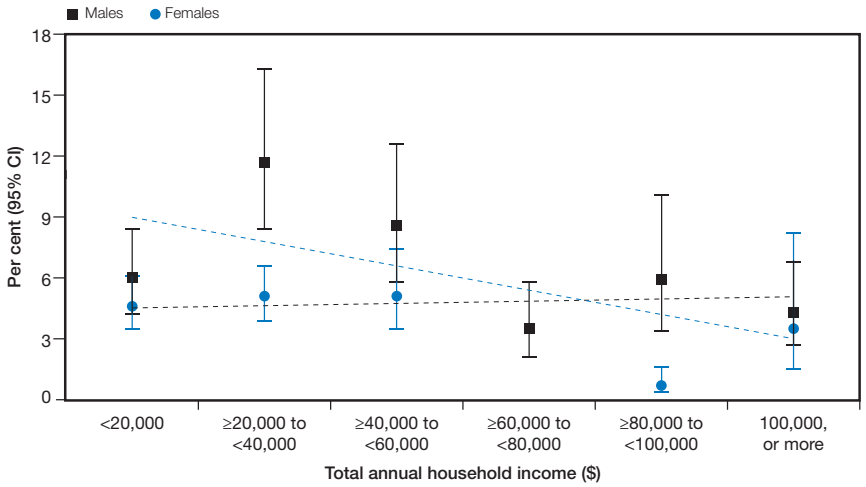
Excess body weight is a major risk factor for the development of type 2 diabetes. Respondents reported their height and weight, and their body mass index (BMI) was then calculated. Body weight status was categorised using the WHO recommended ranges. Respondents were classified as underweight if they had a BMI of less than 18.5 kg/m^2, normal weight if their BMI was in the range of 18.5–24.9 kg/m^2, overweight if their BMI was in the range of 25.0–29.9 kg/m^2 and obese if their BMI was 30 kg/m^2 or more.

Table 8.8: Diabetes status,[a] by total annual household income group and sex, Victoria, 2012

	No diabetes			Diabetes		
	%	95% CI		%	95% CI	
Total annual household income ($)		LL	UL		LL	UL
Males						
<20,000	**94.0**	91.6	95.8	**6.0**	4.2	8.4
≥20,000 to <40,000	**88.1**	83.6	91.5	**11.7**	8.4	16.3
≥40,000 to <60,000	**91.4**	87.4	94.2	**8.6**	5.8	12.6
≥60,000 to <80,000	**96.5**	94.2	97.9	**3.5***	2.1	5.8
≥80,000 to <100,000	**94.1**	89.9	96.6	**5.9***	3.4	10.1
100,000, or more	**95.4**	92.9	97.0	**4.3**	2.7	6.8
Do not know/Refused to answer	**92.9**	90.2	94.9	**6.6**	4.6	9.4
Total	**92.7**	**91.5**	**93.7**	**7.2**	**6.2**	**8.3**
Females						
<20,000	**95.3**	93.9	96.4	**4.6**	3.5	6.1
≥20,000 to <40,000	**94.9**	93.4	96.1	**5.1**	3.9	6.6
≥40,000 to <60,000	**94.8**	92.6	96.4	**5.1**	3.5	7.4
≥60,000 to <80,000	**96.0**	89.0	98.6	**	**	**
≥80,000 to <100,000	**93.5**	92.9	94.1	**0.7***	0.4	1.6
100,000, or more	**91.4**	87.8	94.0	**3.5***	1.5	8.2
Do not know/Refused to answer	**94.7**	93.0	96.1	**5.0**	3.7	6.7
Total	**94.9**	**94.0**	**95.7**	**5.0**	**4.2**	**5.9**
Persons						
<20,000	**94.9**	93.7	95.9	**5.0**	4.0	6.3
≥20,000 to <40,000	**92.3**	90.2	93.9	**7.7**	6.0	9.7
≥40,000 to <60,000	**92.8**	90.5	94.5	**7.2**	5.4	9.5
≥60,000 to <80,000	**95.3**	91.0	97.6	**4.7***	2.4	9.0
≥80,000 to <100,000	**96.0**	93.6	97.6	**4.0**	2.4	6.4
100,000, or more	**96.0**	94.0	97.3	**3.8**	2.5	5.8
Do not know/Refused to answer	**94.2**	92.7	95.4	**5.5**	4.3	6.9
Total	**93.8**	**93.1**	**94.5**	**6.0**	**5.4**	**6.7**

a Excludes gestational diabetes
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Figure 8.2: Prevalence (%) of diabetes,[a] by total annual household income group and sex, Victoria, 2012



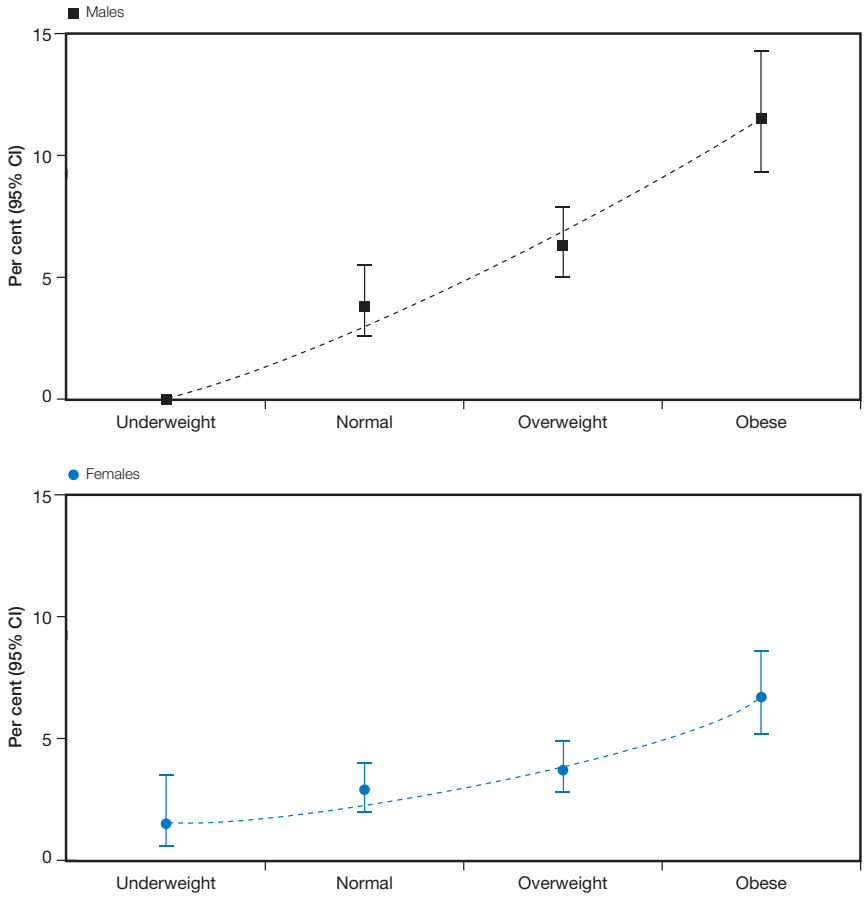
a Excludes gestational diabates
Data were age-standardised to the 2011 Victorian population.
95% CI = 95 per cent confidence interval.

Figure 8.3 shows the relationship between body weight and the prevalence of type 2 diabetes. In men, the prevalence of type 2 diabetes increased with increasing body weight and was highest in those categorised as obese. A similar pattern was observed for women.

Table 8.9 shows the predominant type of treatments employed for managing type 2 diabetes, by sex, with 'Total' not adjusted for age.

Overall, 37.8 per cent of people reported using diet to control their diabetes, 65.2 per cent reported using tablets and 15.6 per cent reported using insulin. There was no significant difference between the sexes for any of the treatment modalities.

Figure 8.3: Prevalence of type 2 diabetes, by body mass index category[a] and sex, Victoria, 2012



a Based on self-reported height and weight.
Data were age-standardised to the 2011 Victorian population.
95% CI = 95 per cent confidence interval.

Table 8.9: Type of treatment(s)[a] employed for the management of type 2 diabetes, by sex, Victoria, 2012

	Diet			Tablets			Insulin		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Male	**36.7**	29.4	44.7	**66.6**	59.0	73.3	**16.3**	11.3	22.9
Female	**39.3**	32.2	46.9	**63.4**	55.5	70.6	**14.5**	10.0	20.6
Total	**37.8**	**32.5**	**43.4**	**65.2**	**59.8**	**70.3**	**15.6**	**11.9**	**20.0**

a Treatments are not mutually exclusive categories
Data are not age standardised
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

References

DoHA (Department of Health and Ageing) 1999, *National physical activity guidelines for adults*, DoHA, Canberra.

NHMRC (National Health and Medical Research Council) 2003, *Dietary guidelines for Australian adults*, NHMRC, Canberra.

9. Mental health




9. Mental health

Introduction

The World Health Organization (WHO) defines health as a state of 'complete physical, mental and social well-being, and not merely the absence of disease or infirmity' (WHO 2013). WHO reports that more than 450 million people across the world suffer from mental disorders and many more suffer from mental health problems. Mental health includes emotional, psychological and social wellbeing and it affects how we think, feel and act as we cope with life. It also helps determine how we handle stress, relate to others, and make choices. Wellbeing, or positive mental health, improves the quality of lives in many ways including: better physical health; faster recovery from illness; fewer limitations in daily life; higher educational attainment; greater likelihood of employment and earnings; and better relationships.

Poor mental health can have a significant negative impact on physical health. There is a significant gap in life expectancy between people with mental illness and those who do not have mental illness (Lawrence, Hancock & Kisely 2013). Researchers have observed that this gap in life expectancy increased in psychiatric patients in Western Australia from 13.5 and 10.4 years in 1985 to 15.9 and 12.0 years in 2005 for males and females, respectively (Lawrence et al. 2013). Physical disease accounted for 77.7 per cent of excess deaths, including cardiovascular disease (29.9 per cent) and cancer (13.5 per cent), while 13.9 per cent of excess deaths were due to suicide.

The Victorian Population Health Survey collects selected data on mental health disorders and primarily focuses on the affective disorders of depression and anxiety. These disorders were selected because they are the most common mental disorders, with depression being the leading cause of disability in both males and females. At its worst it leads to suicide (DHS 2005). In Victoria in 2001, suicide was the third highest cause of death in men and 10th highest cause of death in women (DHS 2005). Moreover, there is strong and consistent evidence of an association between depression and anxiety and the National Health Priority Area conditions of heart disease, stroke, diabetes, asthma, cancer, arthritis and osteoporosis (Clarke 2009; Clarke & Currie 2009). Depression is also associated with poorer health outcomes in those with physical disease. While depression and anxiety are, for the most part, highly treatable disorders, continuing social stigma about mental illness often prevents people from seeking the help that they need.

The Victorian Population Health Survey also collects data on levels of psychological distress using the Kessler 10 Psychological Distress Scale (K10). Psychological distress is an important risk factor, particularly for affective disorders such as depression and anxiety. The K10 measures the level of psychological distress that an individual has been experiencing in the four weeks prior to completing the K10 scale. Psychological distress can be ameliorated through psychological and/or pharmaceutical intervention and is therefore considered to be potentially modifiable. The data for measuring psychological distress is presented in section 1.

9.1 Lifetime prevalence of depression and anxiety

Respondents were asked if they had ever been diagnosed with depression or anxiety by a doctor. This is a measure of the lifetime prevalence of these two disorders and does not necessarily mean that the respondent was experiencing symptoms at the time of interview. It should be noted that depression and anxiety are two separate conditions; however, the results that are presented in this section are a combination of both disorders.

Table 9.1 shows the lifetime prevalence of depression and anxiety, by age group and sex. The lifetime prevalence of depression and anxiety was significantly *higher* in women compared with men. However, the prevalence was significantly *lower* in women and people aged 65 years or older compared with all Victorian women and people, respectively.

Table 9.2 shows the lifetime prevalence of depression and anxiety, by departmental region and sex. There were no significant differences in the lifetime prevalence of depression in men, women and people who lived in rural regions compared with metropolitan regions.

Table 9.1: Lifetime prevalence of depression and anxiety,[a] by age group and sex, Victoria, 2012

Age group (years)	Males			Females			Persons		
		95% CI			95% CI			95% CI	
	%	LL	UL	%	LL	UL	%	LL	UL
18–24	**11.3***	6.5	19.0	**20.2**	12.9	30.1	**15.7**	11.1	21.7
25–34	**17.9**	11.9	25.9	**29.5**	22.8	37.3	**23.7**	18.9	29.2
35–44	**15.3**	11.6	19.9	**31.3**	26.8	36.1	**23.4**	20.4	26.8
45–54	**16.3**	12.9	20.4	**23.7**	20.5	27.3	**20.1**	17.7	22.7
55–64	**17.0**	13.8	20.8	**26.5**	23.0	30.3	**21.9**	19.4	24.5
65+	**13.3**	10.9	16.0	**17.7**	15.4	20.2	**15.7**	14.0	17.5
Total	**15.3**	**13.5**	**17.4**	**25.0**	**22.9**	**27.2**	**20.3**	**18.8**	**21.8**

a Self-reported doctor-diagnosed depression or anxiety.
Data are age-specific estimates, except for 'Total', which represent the estimates for Victoria and have been age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.

Table 9.2: Prevalence of depression and anxiety,[a] by Department of Health and Human Services region and sex, Victoria, 2012

Region	Males			Females			Persons		
		95% CI			95% CI			95% CI	
	%	LL	UL	%	LL	UL	%	LL	UL
Eastern Metropolitan	**15.5**	11.2	21.1	**20.7**	16.3	25.9	**18.2**	14.9	21.9
North & West Metropolitan	**15.3**	11.7	19.8	**24.4**	20.4	29.0	**20.1**	17.2	23.3
Southern Metropolitan	**13.6**	10.1	18.2	**26.3**	22.0	31.2	**19.8**	16.8	23.1
Metropolitan	**14.8**	12.4	17.5	**23.9**	21.3	26.7	**19.4**	17.6	21.4
Barwon-South Western	**16.2**	10.9	23.2	**27.9**	23.3	33.2	**21.9**	18.2	26.1
Gippsland	**17.3**	12.9	22.8	**24.8**	20.1	30.2	**20.8**	17.5	24.7
Grampians	**20.7**	14.8	28.1	**29.9**	24.8	35.6	**25.2**	21.2	29.7
Hume	**16.6**	11.1	24.3	**24.3**	19.3	30.2	**20.3**	16.4	24.9
Loddon Mallee	**22.2**	16.5	29.2	**24.4**	20.0	29.3	**23.3**	19.4	27.7
Rural	**18.0**	15.3	21.1	**26.4**	24.0	28.8	**22.2**	20.4	24.2
Total	**15.5**	**13.6**	**17.7**	**24.6**	**22.5**	**26.8**	**20.1**	**18.6**	**21.7**

a Self-reported doctor-diagnosed depression or anxiety.
Data were age-standardised to the 2011 Victorian population.
Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

Table 9.3 shows the lifetime prevalence of depression and anxiety by selected socioeconomic determinants, modifiable risk factors, health status and sex, adjusted for age.

When compared with all Victorian men and women, there was a significantly *higher* proportion of men and women diagnosed with lifetime depression and anxiety with the following characteristics:

- not in the labour force
- moderate, high or very high levels of psychological distress
- fair or poor self-reported health
- diagnosed with diabetes.

When compared with all Victorian women, there was a significantly *higher* proportion of women diagnosed with lifetime depression and anxiety with the following characteristics:

- unemployed
- total annual household income less than $40,000
- sedentary
- complied with both fruit and vegetable, or vegetable only, consumption guidelines
- current or ex-smoker.

When compared with all Victorian men and women, there was a significantly *lower* proportion of men and women diagnosed with lifetime depression and anxiety with the following characteristics:

- primary or no education
- low levels of psychological distress.

Table 9.3 (revised): Lifetime prevalence of depression and anxiety (%), by selected risk factors and sex, Victoria, 2012

	Diagnosed with depression					
	Males			Females		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Victoria	**15.5**	**13.6**	**17.7**	**24.6**	**22.5**	**26.8**
Country of birth						
Australia	**17.6**	15.2	20.4	**26.0**	23.5	28.6
Overseas	**10.6**	7.9	14.1	**20.3**	16.4	24.7
Language spoken at home						
English only	**18.1**	15.7	20.9	**26.9**	24.4	29.6
Language other than English	**9.9**	7.1	13.6	18.1	14.6	22.2
Metro-Rural regions						
Rural	**18.0**	15.3	21.1	**26.4**	24.0	28.8
Metropolitan	**14.8**	12.4	17.5	**23.9**	21.3	26.7
Level of education						
None or Primary	5.1*	2.5	10.3	12.3*	7.4	20.0
Secondary	**14.3**	11.1	18.3	**25.3**	21.2	29.8
TAFE or Tertiary	**16.6**	14.0	19.6	**25.0**	22.1	28.2
Employment status (<65 years)						
Employed	**15.4**	12.8	18.4	**23.9**	20.8	27.3
Unemployed	**10.4***	5.5	18.8	43.2	31.6	55.6
Not in labour force	30.6	21.2	42.0	32.2	27.4	37.4
Total annual household income ($)						
<40,000	**19.5**	14.6	25.5	40.1	33.5	47.1
40,000 to <100,000	**20.2**	16.4	24.5	**26.7**	23.1	30.7
100,000, or more	**10.3**	7.5	14.1	**21.7**	16.9	27.5
Psychological distress (K10 score) [a]						
Low (K10 score <16)	9.5	7.6	11.8	14.7	12.4	17.3
Moderate (K10 score 16 to 21)	24.5	20.1	29.5	34.9	30.6	39.4
High (K10 score 22 to 29)	29.5	22.5	37.5	52.7	45.0	60.2
Very high (K10 score ≥30)	67.0	59.3	73.9	72.2	64.8	78.6
Physical activity level [b]						
Sedentary	5.6	3.6	8.6	34.9	28.8	41.4
Insufficient	**14.3**	11.2	18.1	**21.5**	18.3	25.1
Sufficient	**16.5**	14.0	19.4	**25.0**	22.3	27.9
Compliance with fruit & vegetable consumption guidelines [c]						
Both	**9.5***	5.1	17.2	38.2	30.1	47.0
Vegetable only [d]	**20.0**	12.3	30.9	40.4	34.0	47.2
Fruit only [d]	**15.1**	12.0	18.7	**20.4**	17.9	23.1
Neither	**15.4**	12.9	18.3	**27.7**	24.5	31.1
Smoking status						
Current smoker	**22.0**	17.2	27.7	35.6	30.0	41.7
Ex-smoker	**21.7**	15.7	29.2	33.6	27.5	40.3
Non-smoker	**11.4**	9.3	13.8	**21.0**	18.5	23.6
Lifetime risk of alcohol related harm (2009) [e]						
Abstainer / no longer drinks alcohol	**14.0**	10.1	19.1	**21.2**	17.6	25.2
Reduced risk	**17.4**	11.6	25.3	**26.1**	20.4	32.7
Increased risk	**15.7**	13.5	18.3	**26.3**	23.3	29.4
Self-reported health						
Excellent / Very Good	**12.9**	10.1	16.3	18.7	16.0	21.7
Good	**15.9**	12.7	19.8	**26.6**	23.4	30.1
Fair / Poor	25.3	20.1	31.5	38.6	31.7	45.9
BMI category [f]						
Underweight	**17.9**	13.3	23.6	**23.8**	15.0	35.5
Normal	**16.2**	12.9	20.3	**20.7**	17.9	23.9
Overweight	**14.3**	11.5	17.7	**26.7**	21.8	32.3
Obese	**15.4**	11.5	20.2	**30.6**	25.3	36.5
Diabetes						
No diabetes	**15.4**	13.4	17.7	**24.2**	22.1	26.5
Diabetes	22.5	18.0	27.7	40.7	31.6	50.4

a Based on the Kessler 10 scale for psychological distress.
b Based on DoHA (1999) guidelines.
c Based on NHMRC (2003) guidelines.
d Includes those meeting both guidelines.
e NHMRC (2009) guidelines.
f Based on Body Mass Index (BMI).

Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Data were age-standardised to the 2011 Victorian population.

LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.

* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.

When compared with all Victorian men, there was a significantly *lower* proportion of men diagnosed with lifetime depression and anxiety with the following characteristic:

- sedentary.

When compared with all Victorian women, there were significantly *lower* proportions of women diagnosed with lifetime depression and anxiety with the following characteristics:

- spoke a language other than English at home
- excellent or very good health.

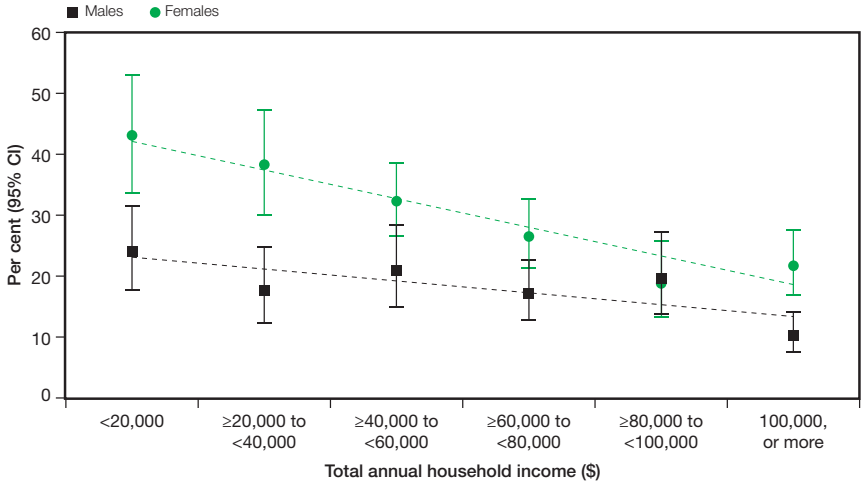
Table 9.4 and Figure 9.1 show the age-adjusted lifetime prevalence of depression and anxiety, by total annual household income and sex. The lifetime prevalence of depression and anxiety significantly *decreased* with increasing total annual household income in women and people, but not in men.

Table 9.4: Lifetime prevalence of depression and anxiety[a] (%), by total annual household income group and sex, Victoria, 2012

	Yes			No		
	%	95% CI		%	95% CI	
Total annual household income ($)		LL	UL		LL	UL
Males						
<20,000	24.0	17.7	31.5	75.7	68.2	81.9
≥20,000 to <40,000	17.7	12.3	24.7	82.3	75.3	87.7
≥40,000 to <60,000	20.9	15.0	28.4	79.1	71.6	85.0
≥60,000 to <80,000	17.2	12.8	22.7	82.8	77.3	87.2
≥80,000 to <100,000	19.6	13.7	27.3	80.4	72.7	86.3
100,000, or more	10.3	7.5	14.1	89.6	85.9	92.5
Do not know/Refused to answer	13.3	9.2	18.9	82.8	76.0	88.1
Total	15.5	13.6	17.7	83.9	81.6	85.9
Females						
<20,000	43.1	33.7	53.0	56.8	46.9	66.2
≥20,000 to <40,000	38.3	30.0	47.3	61.7	52.7	69.9
≥40,000 to <60,000	32.3	26.6	38.5	67.7	61.5	73.3
≥60,000 to <80,000	26.5	21.3	32.6	73.5	67.4	78.7
≥80,000 to <100,000	18.8	13.3	25.8	75.5	68.7	81.2
100,000, or more	21.7	16.9	27.5	73.1	67.5	78.1
Do not know/Refused to answer	18.1	13.9	23.3	81.3	76.1	85.6
Total	24.6	22.5	26.8	75.3	73.0	77.4
Persons						
<20,000	34.9	27.8	42.7	64.9	57.1	72.0
≥20,000 to <40,000	30.4	24.6	36.9	69.6	63.1	75.4
≥40,000 to <60,000	25.3	20.9	30.4	74.6	69.6	79.1
≥60,000 to <80,000	22.0	18.3	26.1	78.0	73.9	81.7
≥80,000 to <100,000	19.0	14.8	24.1	81.0	75.9	85.2
100,000, or more	14.3	11.7	17.4	85.6	82.5	88.2
Do not know/Refused to answer	15.9	12.8	19.5	82.1	78.0	85.6
Total	20.1	18.6	21.7	79.5	77.9	81.0

a Doctor diagnosed
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Figure 9.1: Lifetime prevalence of depression and anxiety[a] (%), by total annual household income group and sex, Victoria, 2012



a Doctor diagnosed
Data were age-standardised to the 2011 Victorian population.
95% CI = 95 per cent confidence interval.

9.2 Sought professional help for a mental health related problem

Survey respondents were asked 'In the last year, have you sought professional help for a mental health related problem?'

Table 9.5 shows the proportion of men and women who had sought professional help for a mental health related problem in the year prior to the survey, by age group and sex, with 'Total' not adjusted for age.

Overall, 11.6 per cent of people had sought professional help for a mental health related problem in the year prior to the survey. The proportion was significantly *higher* in women (14.4 per cent) compared with men (8.6 per cent).

Significantly *lower* proportions of men, women and people aged 65 years or older sought professional help compared with all Victorian men and women, respectively.

Table 6.5: Proportion (%) of the population who sought professional help for a mental health related problem in the previous year, by age group and sex, Victoria, 2012

	Yes			No		
	%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL
Males						
18–24	**8.3***	4.4	15.3	**91.7**	84.7	95.6
25–34	**10.7***	6.0	18.3	**88.4**	80.6	93.3
35–44	**9.9**	7.0	13.7	**90.0**	86.1	92.8
45–54	**9.2**	6.7	12.6	**90.8**	87.4	93.3
55–64	**10.0**	7.5	13.3	**89.9**	86.6	92.4
65+	**3.1**	2.1	4.7	**96.8**	95.2	97.9
Total	**8.6**	**7.1**	**10.4**	**91.2**	**89.3**	**92.7**
Females						
18–24	**15.8**	9.9	24.3	**83.2**	74.5	89.3
25–34	**18.4**	12.9	25.6	**81.5**	74.3	87.0
35–44	**18.7**	15.0	22.9	**80.7**	76.3	84.4
45–54	**16.3**	13.6	19.5	**83.0**	79.8	85.9
55–64	**12.2**	9.9	15.0	**87.7**	84.9	90.0
65+	**5.5**	4.2	7.2	**94.5**	92.8	95.8
Total	**14.4**	**12.7**	**16.3**	**85.2**	**83.3**	**86.9**
People						
18–24	**12.0**	8.2	17.2	**87.5**	82.3	91.4
25–34	**14.5**	10.7	19.5	**84.9**	79.9	88.9
35–44	**14.3**	11.9	17.2	**85.2**	82.4	87.7
45–54	**12.8**	10.9	15.1	**86.8**	84.6	88.8
55–64	**11.1**	9.4	13.2	**88.7**	86.7	90.5
65+	**4.4**	3.5	5.5	**95.5**	94.4	96.4
Total	**11.6**	**10.4**	**12.8**	**88.1**	**86.8**	**89.3**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: **above**/**below** Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 9.6 shows the proportions of men and women who had sought professional help for a mental health related problem in the 12 months prior to the survey, by departmental region and sex, adjusted for age.

There were no significant differences in the proportions of men, women and people who had sought professional help for a mental health related problem in the 12 months prior to the survey between rural or metropolitan regions compared with the proportion in all Victorian men, women and people, respectively.

Table 9.6: Proportion (%) who sought professional help for a mental health related problem in the previous year, by Department of Health and Human Services region and sex, Victoria, 2012

	Yes			No		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Metropolitan males						
Eastern Metropolitan	**6.9**	4.4	10.5	**93.1**	89.5	95.6
North & West Metropolitan	**9.0**	6.1	13.1	**91.0**	86.9	93.9
Southern Metropolitan	**8.4**	5.8	12.0	**91.1**	87.4	93.8
Total	**8.4**	6.6	10.8	**91.4**	89.1	93.3
Rural males						
Barwon-South Western	**10.9***	6.2	18.5	**88.8**	81.3	93.6
Gippsland	**8.9**	5.8	13.3	**91.1**	86.7	94.2
Grampians	**11.1**	6.9	17.4	**88.4**	82.1	92.7
Hume	**8.1**	5.0	13.0	**91.4**	86.5	94.6
Loddon Mallee	**7.8**	5.1	12.0	**92.2**	88.0	94.9
Total	**9.0**	7.1	11.2	**90.8**	88.6	92.7
All males						
Total	**8.6**	**7.1**	**10.5**	**91.2**	**89.3**	**92.8**
Metropolitan females						
Eastern Metropolitan	**13.6**	9.6	18.8	**86.3**	81.1	90.3
North & West Metropolitan	**12.9**	10.1	16.3	**86.8**	83.3	89.6
Southern Metropolitan	**16.2**	12.4	20.9	**82.9**	78.1	86.9
Total	**14.1**	12.0	16.5	**85.4**	83.0	87.6
Rural females						
Barwon-South Western	**15.9**	12.0	20.8	**83.7**	78.8	87.6
Gippsland	**14.7**	10.4	20.2	**85.3**	79.8	89.6
Grampians	**15.3**	11.4	20.1	**84.7**	79.8	88.5
Hume	**10.1**	7.2	14.1	**89.4**	85.3	92.5
Loddon Mallee	**14.6**	11.0	19.2	**84.4**	79.8	88.1
Total	**14.3**	12.4	16.4	**85.3**	83.2	87.2
All females						
Total	**14.2**	**12.5**	**16.1**	**85.4**	**83.5**	**87.1**
Metropolitan people						
Eastern Metropolitan	**10.2**	7.8	13.3	**89.7**	86.6	92.2
North & West Metropolitan	**11.2**	9.0	13.9	**88.6**	85.9	90.9
Southern Metropolitan	**12.2**	9.8	15.1	**87.1**	84.1	89.6
Total	**11.3**	9.9	13.0	**88.4**	86.7	89.9
Rural people						
Barwon-South Western	**13.0**	9.8	16.9	**86.7**	82.8	89.8
Gippsland	**11.6**	9.0	15.0	**88.4**	85.0	91.0
Grampians	**13.0**	10.1	16.7	**86.7**	83.0	89.7
Hume	**9.2**	6.8	12.2	**90.4**	87.3	92.8
Loddon Mallee	**11.3**	8.8	14.3	**88.2**	85.2	90.7
Total	**11.6**	10.3	13.1	**88.1**	86.5	89.4
All people						
Total	**11.4**	**10.2**	**12.7**	**88.3**	**87.0**	**89.5**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

9.2 Source of help for mental health related problem

Survey respondents who had sought professional help for a mental health related problem were asked from whom they had sought help. Table 9.7 shows their responses by sex. Overall, 68.0 per cent reported seeking help from a general practitioner, 39.5 per cent obtained help from a private counselling service or psychologist and 18.5 per cent reported seeking help from a private psychiatrist. There were no significant differences in the proportions by sex.

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Table 9.7: Source of help for mental health related problem, by sex, Victoria, 2012

	Males			Females			Total		
	%	95% CI		%	95% CI		%	95% CI	
Sought help from:		**LL**	**UL**		**LL**	**UL**		**LL**	**UL**
General practitioner	**67.3**	59.5	74.3	**71.0**	65.7	75.8	**68.0**	62.8	72.7
Community health service	**6.0***	3.0	11.7	**2.3***	1.3	4.3	**4.6***	2.4	8.8
Private counselling service/psychologist	**40.8**	33.3	48.8	**38.5**	33.3	44.1	**39.5**	34.9	44.2
Private psychiatrist	**23.1**	16.7	31.1	**16.8**	11.6	23.6	**18.5**	14.5	23.3
Private hospital emergency department	**	**	**	**	**	**	**	**	**
Private hospital inpatient service	**	**	**	**	**	**	**	**	**
Public hospital emergency department	**	**	**	**	**	**	**	**	**
Public hospital inpatient service	**	**	**	**0.8***	0.3	2.1	**0.7***	0.3	1.6
Public mental health service community service	**7.8***	4.1	14.4	**4.0***	2.1	7.8	**5.2***	2.9	9.1
Public mental health service crisis service	**	**	**	**	**	**	**	**	**
Public mental health service inpatient service	**0.0**	.	.	**	**	**	**	**	**
Other	**2.7***	1.3	5.6	**3.6***	1.9	6.7	**3.1***	1.9	5.0

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.

10. Social capital




10. Social capital

There is no universally agreed definition of social capital. The origins of the concept of social capital come from the field of sociology and can be traced back to the seminal work of Pierre Bourdieu and James Coleman in the late 1980s and early 1990s. Bourdieu defined social capital as 'the aggregate of actual or potential resources linked to possession of a durable network' (Bird et al. 2010). Bourdieu's definition is described as the 'network approach' and posits that social capital is made up of social obligations and connections that are convertible, in certain conditions, to economic capital that can be accumulated by the individual. By contrast, Coleman defined social capital by its function, citing the trustworthiness of the social environment that makes possible reciprocity exchanges, norms and sanctions. Coleman's definition is described as the 'social cohesion approach' (Bird et al. 2010). Within the field of population health, Coleman's social cohesion approach is dominant.

In 1993 Robert Putnam broadened Coleman's original definition to a different social and geographic level because he was interested in explaining regional and national differences in economic and political developments that were occurring in the United States at that time. Putnam further defined social capital by dividing it into two subtypes: bonding and bridging (Szreter & Woolcock 2004). Putnam defined bonding social capital as trusting cooperative relationships between members of a network who see themselves as similar – that is, relations between relatively homogenous groups such as families and ethnic groups.

Bridging social capital is defined as trusting cooperative relationships between members of a network who do not see themselves as similar; for example, they might differ by age, SES or ethnicity, such as friends and colleagues. Szreter and Woolcock introduced a third subtype: 'linking social capital', defined as trusting cooperative relationships and norms of reciprocity between people who are interacting across explicit, formal or institutionalised power or authority gradients in society – that is, ties across social strata. This thereby brought into the social capital framework, state–society relations and considerations of power, with social capital viewed as the property of a group or network rather than the individual (Szreter & Woolcock 2004).

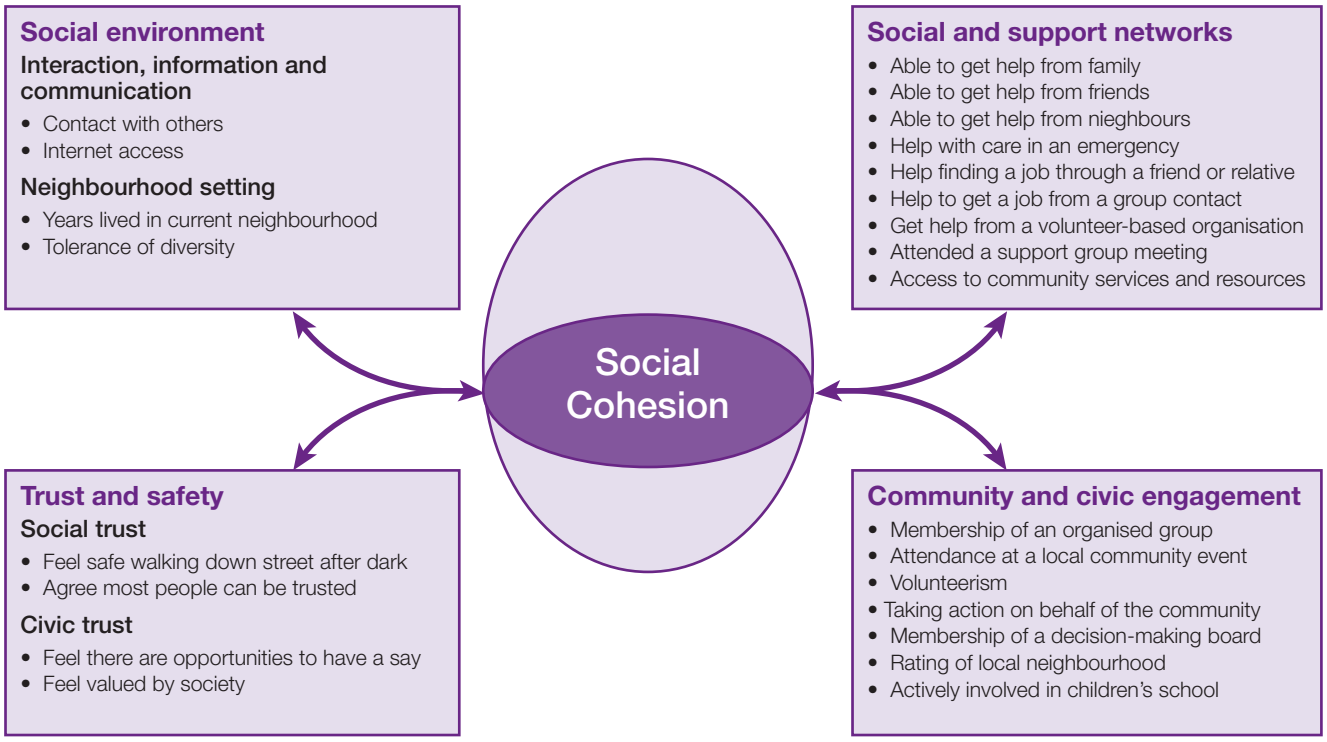
Social capital can be both beneficial and harmful as it can function in a socially exclusive manner, having positive effects for some and negative effects for others. Negative effects can include the exclusion of outsiders, excessive claims on group members, restrictions on the freedom of individuals and the downward levelling of social norms. Moreover societies that are high in bonding social capital but low in bridging and linking social capital are often troubled and segregated, as cooperation is fostered and potentially maximised by the presence of social networks that cross social cleavages (Szreter & Woolcock 2004).

Social capital is thought to impact on health in four ways: more cohesive groups are better placed to take collective action; groups can enforce and maintain social norms; reciprocity of exchanges; and the diffusion of information across social networks (Steptoe et al. 2010). There are two competing models of how social capital influences health; the first is referred to as the 'main effects' model, which theorises that social relationships are beneficial regardless of the presence or absence of stress, while the 'stress-buffering' model states that social capital only influences health in individuals who are under stress. While not mutually exclusive, the overall consensus is that social networks operate through the main effects model while social support is acquired under stressful circumstances. Berkman and Kawachi proposed that the main effects model acts through social influence on health-related behaviours, social engagement, exchange of emotional, physical and financial support as well as information and advice, and by the provision of access to material resources (Berkman & Kawachi 2000).

Many studies have been conducted to investigate the impact of different levels of social capital on various diseases and their outcomes (Steptoe et al. 2010). Stronger social networks have consistently been shown to be associated with a lower incidence and mortality due to cardiovascular disease, as well as a better prognosis when survival is the endpoint being considered. There is also strong evidence of a protective effect of social networks on cognitive decline. The findings with cancer are mixed, however, with some studies showing a protective effect and others not. Overall, a dose–response relationship between all-cause mortality and the degree of social connectedness has been observed.

The Victorian Population Health Survey includes a series of questions on social capital and these are reported in this section. The make-up of questions has evolved since the first survey in 2001, but a core set of questions on social capital have been retained and are reported annually. The survey measures social capital using a cohesion-based approach and the indicators used are described in Figure 10.1.

Figure 10.1: Selected indicators of social cohesion



10.1 Contact with others

Communication is central to developing and maintaining social ties, sharing knowledge and information, and staying in touch with events. There are many ways to stay in touch, apart from meeting face to face or speaking on the telephone. Computer and internet technology is increasingly being used as a means of finding information and of becoming, and staying, informed.

The Victorian Population Health Survey collected information on the number of people with whom a respondent spoke, either face to face or on the telephone, on the day before they were interviewed. The number of contacts on an average day does not necessarily reflect social isolation or detachment, but a lack of social contact may imply some vulnerability from not being in touch with people or events.

Table 10.1 provides data on the number of people with whom an individual spoke the previous day, by age group and sex, with 'Total' not adjusted for age. Over half of all people (50.6 per cent) had spoken to 10 or more people the previous day. A small percentage of people (2.0 per cent) reported they had not spoken to anyone the previous day.

Of the people who reported having spoken with 10 or more people the previous day, the proportion declined with age, from 63.5 per cent of those aged 18–24 years, to 34.8 per cent of those aged 65 years or older. Overall, a significantly *higher* proportion of men compared with women had spoken with 10 or more people.

Table 10.1: Proportion (%) who had contact with others, by number of people spoken with on the previous day, age group and sex, Victoria, 2012

Age group (years)	Number of people (n) spoken to yesterday											
	None			1 to 4			5 to 9			10 or more		
	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL
Males												
18–24	**	**	**	8.0*	4.2	14.9	**22.5**	15.2	32.1	**68.5**	58.6	77.0
25–34	**	**	**	**14.3***	8.6	22.8	**23.6**	16.4	32.6	**56.0**	46.1	65.6
35–44	**	**	**	**11.8**	8.5	16.3	**25.1**	20.2	30.6	**61.9**	55.9	67.6
45–54	**2.7***	1.1	6.4	**22.1**	17.7	27.1	**22.9**	18.7	27.7	**52.1**	46.6	57.6
55–64	**0.8***	0.3	2.0	**19.6**	16.1	23.8	**28.2**	23.9	32.9	**51.3**	46.4	56.1
65+	**2.2***	1.2	3.9	30.5	27.1	34.1	**31.0**	27.6	34.6	36.2	32.6	39.9
Total	**2.0**	**1.2**	**3.2**	**17.8**	**15.8**	**20.0**	**25.5**	**23.1**	**28.1**	**54.1**	**51.2**	**57.1**
Females												
18–24	**	**	**	8.2*	4.3	15.0	**30.8**	21.9	41.5	**58.2**	47.2	68.4
25–34	**	**	**	30.6	23.5	38.8	**28.1**	21.4	36.1	**39.3**	31.9	47.2
35–44	**1.6***	0.7	3.7	13.1	10.2	16.8	**29.7**	25.3	34.4	55.0	50.1	59.8
45–54	**1.2***	0.6	2.7	**15.2**	12.4	18.5	**27.0**	23.5	30.9	56.3	52.1	60.4
55–64	**2.1***	1.1	3.8	**19.2**	16.4	22.4	**33.1**	29.3	37.1	**45.6**	41.5	49.8
65+	**2.6**	1.8	3.9	**30.7**	27.8	33.8	**32.6**	29.7	35.6	33.6	30.7	36.7
Total	**2.0**	**1.3**	**3.0**	**20.4**	**18.5**	**22.4**	**30.1**	**27.9**	**32.4**	**47.2**	**44.8**	**49.7**
People												
18–24	**	**	**	8.1	5.2	12.5	**26.6**	20.6	33.6	63.5	56.1	70.2
25–34	**2.7***	1.2	6.0	**22.4**	17.5	28.2	**25.8**	20.7	31.7	**47.7**	41.4	54.1
35–44	**1.4***	0.7	2.7	12.5	10.2	15.3	**27.4**	24.1	31.0	58.4	54.5	62.2
45–54	**2.0***	1.0	3.7	**18.6**	16.0	21.6	**25.0**	22.2	28.0	**54.2**	50.8	57.7
55–64	**1.5***	0.9	2.5	**19.4**	17.1	22.0	**30.7**	27.8	33.7	**48.4**	45.2	51.6
65+	**2.4**	1.7	3.4	30.6	28.4	33.0	**31.9**	29.6	34.2	34.8	32.5	37.1
Total	**2.0**	**1.4**	**2.7**	**19.1**	**17.7**	**20.6**	**27.9**	**26.2**	**29.6**	**50.6**	**48.7**	**52.5**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

In contrast, the proportions of people who had spoken with fewer than five people the previous day increased with age, but the proportion was not significantly different between the sexes. Of those who reported not having spoken to anyone on the previous day, there was no significant difference in the proportion between the sexes, or by age.

Table 10.2 shows the number of people with whom an individual had spoken on the previous day, by departmental region and sex, adjusted for age.

A significantly *higher* proportion of people who lived in metropolitan compared with rural regions reported they had not spoken to anyone on the previous day.

There were no significant differences across the departmental regions, with the exception that a significantly *higher* proportion of men and people residing in Hume Region reported having spoken with 10 or more people on the previous day compared with all Victorian men and people.

Table 10.2: Proportion (%) who had contact with others, by number of people spoken with on the previous day, Department of Health and Human Services region and sex, Victoria, 2012

	Number of people (n) spoken to yesterday											
	None			1 to 4			5 to 9			10 or more		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males												
Eastern Metropolitan	**1.8***	0.8	3.7	**18.2**	13.9	23.6	**30.7**	24.7	37.5	**49.0**	42.5	55.6
North & West Metropolitan	**2.2***	0.9	5.2	**20.2**	16.4	24.7	**26.5**	22.0	31.5	**50.0**	44.5	55.5
Southern Metropolitan	**4.3***	1.7	10.3	**16.6**	13.3	20.5	**24.8**	19.5	30.9	**53.9**	47.1	60.5
Total	**2.7***	1.6	4.7	**18.6**	16.3	21.3	**26.6**	23.6	29.9	**51.2**	47.6	54.8
Rural males												
Barwon-South Western	**1.1***	0.5	2.7	**16.1**	11.9	21.4	**24.8**	18.8	32.0	**57.7**	50.0	65.1
Gippsland	**2.0***	0.8	4.7	**17.8**	13.6	23.0	**23.5**	18.3	29.6	**56.8**	50.1	63.2
Grampians	**	**	**	**19.8**	14.5	26.3	**27.6**	21.5	34.7	**52.2**	45.2	59.1
Hume	**	**	**	**14.7**	11.1	19.3	**17.7**	13.5	23.0	**67.2**	61.4	72.6
Loddon Mallee	**0.6***	0.2	1.4	**14.9**	10.9	20.1	**22.8**	17.0	29.9	**61.4**	54.0	68.4
Total	**0.9***	0.5	1.4	**16.4**	14.3	18.7	**23.2**	20.4	26.3	**59.4**	56.0	62.8
All males												
Total	**2.3***	**1.4**	**3.8**	**18.0**	**16.1**	**20.1**	**25.9**	**23.4**	**28.5**	**53.1**	**50.2**	**56.0**
Metropolitan females												
Eastern Metropolitan	**2.3***	1.3	4.2	**19.7**	15.7	24.4	**28.1**	24.0	32.7	**49.6**	43.9	55.2
North & West Metropolitan	**2.6***	1.2	5.8	**22.7**	18.9	26.9	**30.9**	26.3	35.8	**43.8**	38.9	48.9
Southern Metropolitan	**1.9***	0.8	4.3	**20.6**	16.9	24.9	**27.7**	22.8	33.1	**49.4**	43.9	54.9
Total	**2.3***	1.4	3.8	**21.3**	18.9	23.9	**29.4**	26.5	32.5	**46.7**	43.6	49.9
Rural females												
Barwon-South Western	**	**	**	**15.5**	11.9	19.8	**31.0**	25.9	36.6	**51.4**	45.6	57.2
Gippsland	**1.3***	0.6	2.7	**18.2**	14.4	22.9	**35.2**	30.0	40.7	**45.0**	39.1	51.0
Grampians	**0.8***	0.3	1.7	**21.4**	16.9	26.6	**29.7**	24.4	35.7	**48.2**	42.3	54.0
Hume	**0.7***	0.3	1.6	**15.0**	11.7	19.0	**29.5**	24.0	35.7	**54.2**	48.0	60.3
Loddon Mallee	**1.1***	0.5	2.1	**17.2**	13.8	21.3	**34.9**	29.8	40.3	**46.8**	41.4	52.3
Total	**1.2***	0.7	2.2	**17.1**	15.3	19.1	**32.1**	29.5	34.9	**49.3**	46.5	52.1
All females												
Total	**2.0**	**1.3**	**3.2**	**20.3**	**18.4**	**22.4**	**29.9**	**27.6**	**32.4**	**47.5**	**44.9**	**50.0**
Metropolitan people												
Eastern Metropolitan	**2.0**	1.3	3.2	**18.8**	15.6	22.4	**29.7**	25.7	34.0	**49.3**	44.9	53.6
North & West Metropolitan	**2.4***	1.3	4.5	**21.2**	18.4	24.3	**28.8**	25.5	32.3	**47.0**	43.2	50.8
Southern Metropolitan	**3.0***	1.6	5.8	**18.6**	16.1	21.5	**26.1**	22.4	30.2	**51.8**	47.4	56.1
Total	**2.5**	1.7	3.7	**19.9**	18.1	21.7	**28.1**	26.0	30.3	**49.0**	46.6	51.4
Rural people												
Barwon-South Western	**1.7***	0.7	3.7	**15.9**	12.9	19.4	**27.8**	23.7	32.2	**54.4**	49.5	59.3
Gippsland	**1.6***	0.8	2.9	**17.6**	14.7	20.9	**29.3**	24.6	34.6	**51.3**	46.2	56.5
Grampians	**0.6***	0.3	1.2	**20.3**	16.8	24.3	**28.1**	23.9	32.7	**51.0**	46.2	55.8
Hume	**0.5***	0.2	1.0	**15.0**	12.3	18.0	**23.4**	19.4	27.9	**60.9**	55.8	65.7
Loddon Mallee	**0.8***	0.5	1.4	**16.0**	13.3	19.1	**28.9**	24.8	33.3	**54.2**	49.5	58.8
Total	**1.1**	0.7	1.6	**16.7**	15.3	18.2	**27.6**	25.6	29.7	**54.5**	52.2	56.8
All people												
Total	**2.2**	**1.5**	**3.1**	**19.1**	**17.7**	**20.6**	**27.9**	**26.2**	**29.7**	**50.3**	**48.4**	**52.3**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

10.2 Neighbourhood setting: years lived in current neighbourhood

Neighbourhoods or local areas are an important unit in society. One indicator of the stability of neighbourhoods is the number of years that a person has lived in their current neighbourhood.

Table 10.3 shows the proportion of people who reported having lived in their neighbourhood (local area/suburb/town) for intervals ranging from less than a year to more than 10 years, by age group and sex, with 'Total' not adjusted for age.

Overall, more than half (60.0 per cent) of Victorian people had lived in their neighbourhood for more than 10 years. Of the remainder, only 2.2 per cent of people had lived in their current neighbourhood for less than a year, 17.1 per cent for one to four years and 20.3 per cent for five to 10 years. Note, due to the change in sampling frame (2010 survey onwards) and the increasing prevalence of 'mobile phone only' households, the estimate for those who have only lived in their neighbourhood for less than a year is probably an underestimate.

With the exception of people aged 18–24 years, the proportion of people who had lived in their current neighbourhood for 10 years or longer increased with age. It is possible that the high proportion of people aged 18–24 years who had lived in their neighbourhood for 10 years or more are people who have not yet left home to live independently. In contrast, the proportion of people who had only lived in their neighbourhood for less than a year tended to be *higher* in the younger age groups.

Table 10.3: Neighbourhood tenure, by age group and sex, Victoria, 2012

Age group (years)	Length of time lived in current neighbourhood (years)											
	≤1 year			>1 & ≤5 years			>5 & ≤10 years			>10 years		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Males												
18–24	**	**	**	**9.3***	5.0	16.9	**22.8**	15.6	32.1	**66.1**	56.2	74.8
25–34	**3.6***	1.6	8.3	34.9	26.4	44.6	**31.7**	23.0	41.9	28.8	20.4	38.9
35–44	**2.9***	1.3	6.5	**22.7**	18.2	28.0	35.2	29.4	41.4	38.4	32.6	44.4
45–54	**1.8***	0.8	4.1	**13.2**	10.0	17.2	**23.2**	18.7	28.4	**61.5**	56.0	66.8
55–64	**	**	**	9.1	6.8	12.0	9.0	6.8	11.8	81.0	77.2	84.3
65+	**0.5***	0.2	1.4	6.7	5.0	8.8	9.5	7.6	11.9	82.9	79.9	85.6
Total	**2.0**	**1.3**	**3.0**	**17.0**	**14.7**	**19.5**	**22.7**	**20.1**	**25.5**	**57.9**	**54.9**	**60.9**
Females												
18–24	**	**	**	**14.4**	8.7	23.0	**14.9***	8.7	24.2	**67.2**	56.6	76.3
25–34	6.9*	3.7	12.4	36.0	28.8	43.9	**23.7**	17.7	30.9	33.5	26.0	41.8
35–44	**1.5***	0.7	3.1	24.6	20.6	29.1	27.5	23.4	32.1	46.0	41.1	50.9
45–54	**1.9***	1.0	3.4	11.1	8.8	13.9	**18.4**	15.4	21.9	**68.2**	64.2	72.0
55–64	**1.1***	0.6	1.9	7.5	5.8	9.6	11.9	9.5	14.8	79.3	76.0	82.3
65+	0.4*	0.2	0.7	7.3	5.9	9.1	9.7	8.1	11.6	82.7	80.3	84.8
Total	**2.5**	**1.7**	**3.7**	**17.3**	**15.4**	**19.4**	**18.0**	**16.2**	**20.0**	**62.0**	**59.5**	**64.4**
People												
18–24	**2.6***	1.1	6.0	**11.8**	8.0	17.1	**18.9**	13.9	25.2	**66.6**	59.5	73.1
25–34	5.2*	3.2	8.5	35.4	29.7	41.6	27.7	22.3	33.9	31.1	25.3	37.6
35–44	**2.2***	1.2	3.9	23.7	20.6	27.1	31.3	27.7	35.1	42.2	38.4	46.1
45–54	**1.8***	1.1	3.0	12.1	10.1	14.5	**20.8**	18.0	23.8	**64.9**	61.5	68.2
55–64	0.8*	0.5	1.3	8.3	6.8	10.0	10.5	8.8	12.4	80.1	77.7	82.4
65+	0.4*	0.2	0.8	7.0	5.9	8.3	9.6	8.3	11.1	82.8	80.9	84.5
Total	**2.2**	**1.7**	**3.0**	**17.1**	**15.7**	**18.7**	**20.3**	**18.7**	**22.0**	**60.0**	**58.0**	**61.9**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 10.4 shows neighbourhood tenure, by duration, departmental region and sex, adjusted for age. There was no significant difference in neighbourhood tenure between metropolitan and rural regions. A significantly *higher* proportion of people residing in Gippsland Region had lived in their neighbourhood for between one and five years compared with all Victorian people.

Table 10.4: Neighbourhood tenure, by Department of Health and Human Services region and sex, Victoria, 2012

	Length of time lived in current neighbourhood (years)											
	≤1 year			>1 & ≤5 years			>5 & ≤10 years			>10 years		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males												
Eastern Metropolitan	**	**	**	**13.2**	9.5	17.9	**20.9**	16.5	26.2	**63.2**	57.5	68.5
North & West Metropolitan	**1.8***	0.7	4.2	**16.7**	12.9	21.2	**19.7**	15.7	24.4	**60.8**	55.6	65.8
Southern Metropolitan	**1.5***	0.6	3.8	**17.5**	12.9	23.4	**26.8**	20.9	33.8	**53.7**	47.7	59.5
Total	**1.9***	1.1	3.4	**16.1**	13.6	19.1	**22.2**	19.2	25.6	**59.1**	55.7	62.5
Rural males												
Barwon-South Western	**	**	**	**18.8**	13.2	26.1	**13.1**	9.4	18.1	**63.1**	54.7	70.8
Gippsland	**	**	**	**24.1**	18.6	30.6	**18.5**	14.2	23.8	**55.0**	48.5	61.3
Grampians	**	**	**	**15.2**	10.3	21.9	**20.0**	14.5	26.9	**63.7**	56.5	70.3
Hume	**	**	**	**13.2**	8.4	20.3	**29.4**	22.8	37.1	**56.1**	48.6	63.3
Loddon Mallee	**	**	**	**16.3**	10.9	23.5	**29.6**	22.8	37.4	**51.2**	44.6	57.8
Total	**2.6***	1.3	5.1	**17.6**	14.8	20.8	**21.8**	18.5	25.4	**57.9**	54.5	61.3
All males												
Total	**2.1**	**1.3**	**3.2**	**16.5**	**14.4**	**18.8**	**22.2**	**19.7**	**25.0**	**58.7**	**56.0**	**61.5**
Metropolitan females												
Eastern Metropolitan	**1.8***	0.9	3.7	**17.0**	13.1	21.7	**17.5**	13.6	22.2	**63.6**	58.2	68.6
North & West Metropolitan	**2.8***	1.3	5.7	**18.1**	14.3	22.6	**17.1**	13.7	21.1	**62.0**	57.3	66.5
Southern Metropolitan	**3.2***	1.3	7.5	**15.3**	11.5	20.0	**21.1**	16.6	26.4	**60.1**	54.3	65.7
Total	**2.7***	1.6	4.4	**17.0**	14.7	19.7	**18.2**	15.9	20.8	**61.9**	58.9	64.9
Rural females												
Barwon-South Western	**3.7***	1.6	8.3	**17.5**	13.6	22.1	**15.4**	11.7	19.9	**63.3**	57.9	68.5
Gippsland	**1.7***	0.7	4.1	**21.7**	16.4	28.0	**23.3**	17.6	30.2	**52.8**	46.0	59.6
Grampians	**3.4***	1.6	7.1	**21.5**	16.8	27.0	**12.7**	9.8	16.3	**62.3**	56.7	67.5
Hume	**	**	**	**21.3**	16.3	27.4	**16.3**	12.7	20.8	**61.2**	55.1	66.9
Loddon Mallee	**3.2***	1.5	6.7	**17.2**	13.5	21.7	**20.3**	16.2	25.0	**59.2**	54.1	64.1
Total	**2.9**	1.9	4.5	**19.0**	16.9	21.3	**17.7**	15.6	20.1	**60.2**	57.5	62.9
All females												
Total	**2.8**	**1.9**	**4.1**	**17.5**	**15.6**	**19.6**	**18.1**	**16.2**	**20.2**	**61.4**	**59.0**	**63.9**
Metropolitan people												
Eastern Metropolitan	**2.3***	1.2	4.5	**15.0**	12.3	18.2	**19.0**	15.9	22.4	**63.6**	59.7	67.4
North & West Metropolitan	**2.3***	1.3	3.9	**17.3**	14.6	20.4	**18.4**	15.6	21.4	**61.6**	58.1	65.0
Southern Metropolitan	**2.3***	1.2	4.7	**16.6**	13.5	20.3	**23.9**	19.9	28.3	**56.7**	52.5	60.9
Total	**2.3**	1.6	3.3	**16.5**	14.8	18.5	**20.2**	18.3	22.4	**60.6**	58.3	62.8
Rural people												
Barwon-South Western	**4.1***	2.0	8.2	**17.8**	14.4	21.7	**14.5**	11.7	17.9	**63.4**	58.6	67.9
Gippsland	**2.1***	1.0	4.2	**22.8**	18.9	27.3	**20.7**	16.8	25.3	**54.1**	49.2	58.9
Grampians	**2.4***	1.2	4.5	**18.0**	14.5	22.2	**16.0**	12.9	19.8	**63.5**	58.9	67.8
Hume	**1.3***	0.5	3.1	**17.0**	13.1	21.7	**23.3**	18.6	28.9	**58.4**	53.5	63.1
Loddon Mallee	**3.1***	1.4	6.9	**16.6**	13.2	20.7	**25.1**	21.0	29.7	**55.0**	50.8	59.2
Total	**2.8**	1.8	4.1	**18.2**	16.5	20.2	**19.8**	17.8	22.0	**59.1**	56.8	61.2
All people												
Total	**2.4**	**1.8**	**3.2**	**17.0**	**15.5**	**18.5**	**20.2**	**18.6**	**21.9**	**60.1**	**58.3**	**61.9**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

10.3 Tolerance of diversity

Tolerance of diversity, or an ability to get along with individuals of different cultural and social backgrounds, is a key aspect of social cohesion and may give an indication of the level of bridging social capital. The 2012 survey asked respondents whether they thought multiculturalism (as a general concept) made life in their area better.

Table 10.5 shows tolerance of diversity, by age group and sex, with 'Total' not adjusted for age. Almost half (49.4 per cent) of Victorian people thought multiculturalism made life in their area better, and a further 27.9 per cent thought it made life in their area better sometimes. However, 8.0 per cent of the population thought multiculturalism was not applicable to their area, and 10.9 per cent thought multiculturalism did not make life better in their area.

Significantly *higher* proportions of men, women and people aged 65 years or older did not think that multiculturalism made life in their area better compared with all Victorian men, women and people, respectively.

Table 10.6 shows tolerance of diversity, by departmental region and sex, adjusted for age.

A significantly *higher* proportion of men, women and people residing in metropolitan regions thought multiculturalism made life better in their area compared with men, women and people residing in rural regions, respectively. This difference may be partly explained by a significantly *higher* proportion of people from rural regions (15.3 per cent) reporting that multiculturalism

Table 10.5: Tolerance of diversity, by age group and sex, Victoria, 2012

Age group (years)	Feel multiculturalism makes life better											
	No or not often			Sometimes			Yes			Not applicable		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Males												
18–24	**5.8***	2.7	12.1	**36.9**	27.7	47.1	**50.4**	40.5	60.3	**5.7***	2.6	12.1
25–34	**14.4***	8.6	23.0	**25.2**	17.7	34.5	**55.6**	45.7	65.1	**3.7***	1.8	7.6
35–44	**6.6**	4.5	9.7	**25.7**	20.7	31.3	**58.2**	52.0	64.1	**7.0***	3.9	12.1
45–54	**10.7**	7.5	14.9	**30.1**	25.2	35.5	**48.0**	42.5	53.5	**9.0**	6.5	12.3
55–64	**16.5**	13.1	20.6	**23.1**	19.4	27.4	**48.1**	43.3	53.0	**8.3**	6.5	10.7
65+	**17.7**	15.0	20.8	**20.9**	18.0	24.2	**40.0**	36.3	43.8	**11.5**	9.6	13.6
Total	**12.0**	**10.3**	**14.0**	**26.7**	**24.2**	**29.4**	**50.4**	**47.4**	**53.3**	**7.5**	**6.3**	**8.8**
Females												
18–24	**4.0***	1.7	8.9	**24.5**	16.4	34.8	**66.0**	55.4	75.3	**	**	**
25–34	**7.4***	4.1	12.9	**35.8**	28.4	44.0	**50.4**	42.4	58.5	**4.9***	2.7	8.9
35–44	**9.8**	7.0	13.5	**27.2**	23.2	31.6	**53.8**	48.9	58.6	**6.8**	4.9	9.2
45–54	**11.9**	9.3	15.1	**28.7**	25.1	32.6	**47.0**	42.8	51.3	**7.9**	6.1	10.1
55–64	**10.6**	8.4	13.4	**31.0**	27.3	34.9	**43.3**	39.3	47.4	**11.4**	9.0	14.2
65+	**13.4**	11.4	15.8	**25.9**	23.2	28.8	**35.3**	32.3	38.4	**15.8**	13.8	18.0
Total	**9.8**	**8.6**	**11.2**	**29.0**	**26.8**	**31.3**	**48.5**	**46.0**	**50.9**	**8.5**	**7.6**	**9.6**
People												
18–24	**4.9***	2.8	8.5	**30.8**	24.4	38.1	**58.0**	50.7	65.1	**4.3***	2.3	8.0
25–34	**10.9**	7.4	15.8	**30.5**	25.0	36.6	**53.0**	46.6	59.4	**4.3**	2.7	6.8
35–44	**8.2**	6.4	10.6	**26.5**	23.2	30.0	**56.0**	52.1	59.8	**6.9**	5.0	9.4
45–54	**11.3**	9.1	13.8	**29.4**	26.3	32.7	**47.5**	44.0	51.0	**8.4**	6.8	10.3
55–64	**13.5**	11.4	15.9	**27.1**	24.5	30.0	**45.7**	42.5	48.9	**9.9**	8.3	11.7
65+	**15.4**	13.7	17.3	**23.6**	21.6	25.8	**37.4**	35.1	39.8	**13.8**	12.4	15.3
Total	**10.9**	**9.8**	**12.1**	**27.9**	**26.2**	**29.7**	**49.4**	**47.5**	**51.3**	**8.0**	**7.2**	**8.8**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

was not applicable to their area compared with those living in metropolitan regions (5.4 per cent).

There was a significantly *higher* proportion of men, women and people who lived in rural regions who reported that multiculturalism was not applicable to their area, with the exception of men residing in Hume Region and women residing in Barwon-South Western Region compared with all Victorian men women and people, respectively.

There were significantly *lower* proportions of men and people who lived in Gippsland and Loddon Mallee regions and women who lived in Loddon Mallee Region who thought that multiculturalism made life in their area better. By contrast, the proportion of men and people who lived in Eastern Metropolitan Region who thought that multiculturalism made life in their area better was significantly *higher* compared with all Victorian men and people, respectively.

Table 10.6: Tolerance of diversity, by Department of Health and Human Services region and sex, Victoria, 2012

	Feel multiculturalism makes life better											
	No or not often			Sometimes			Yes			Not applicable		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males												
Eastern Metropolitan	**8.7**	6.0	12.4	**21.0**	16.6	26.2	**61.7**	55.7	67.3	**5.7**	3.6	8.7
North & West Metropolitan	**13.6**	10.1	18.2	**30.9**	25.9	36.3	**49.0**	43.5	54.6	**2.0***	1.0	4.1
Southern Metropolitan	**10.5**	6.8	15.7	**25.2**	20.0	31.3	**53.2**	46.1	60.1	**7.4**	4.6	11.7
Total	**11.5**	9.3	14.1	**26.6**	23.5	29.9	**53.3**	49.6	57.0	**4.8**	3.5	6.6
Rural males												
Barwon-South Western	**12.9**	9.4	17.6	**25.9**	18.3	35.3	**41.0**	33.1	49.5	**15.3**	10.2	22.3
Gippsland	**17.1**	12.1	23.5	**28.2**	22.3	35.0	**35.7**	29.2	42.7	**17.0**	12.5	22.8
Grampians	**12.2**	7.9	18.4	**25.0**	18.9	32.3	**44.6**	37.7	51.8	**15.4**	10.9	21.2
Hume	**19.4**	13.7	26.7	**27.2**	20.5	35.0	**41.6**	34.5	49.0	**9.3**	6.5	13.2
Loddon Mallee	**15.2**	11.0	20.5	**28.2**	21.4	36.0	**37.0**	29.9	44.7	**18.0**	13.9	23.1
Total	**15.3**	13.1	17.8	**26.7**	23.3	30.4	**40.1**	36.3	44.0	**14.9**	12.8	17.3
All males												
Total	**12.4**	**10.6**	**14.4**	**26.6**	**24.1**	**29.2**	**50.0**	**47.0**	**52.9**	**7.6**	**6.4**	**9.0**
Metropolitan females												
Eastern Metropolitan	**6.8**	5.0	9.2	**29.6**	24.6	35.0	**51.4**	45.9	56.8	**7.9**	5.2	11.7
North & West Metropolitan	**9.0**	7.1	11.4	**30.6**	25.9	35.7	**52.2**	47.1	57.3	**3.4**	2.2	5.4
Southern Metropolitan	**13.1**	9.9	17.2	**27.7**	23.0	33.0	**47.2**	41.6	52.9	**7.7**	5.6	10.5
Total	**9.6**	8.1	11.3	**29.7**	26.8	32.8	**50.4**	47.3	53.6	**5.9**	4.7	7.3
Rural females												
Barwon-South Western	**7.9**	5.7	10.8	**25.0**	20.6	30.0	**51.7**	46.1	57.3	**12.0**	9.2	15.5
Gippsland	**14.1**	9.1	21.1	**27.1**	22.5	32.3	**39.8**	32.9	47.0	**15.8**	11.7	21.1
Grampians	**10.4**	7.5	14.1	**27.3**	22.1	33.1	**42.4**	36.6	48.4	**16.5**	13.2	20.3
Hume	**10.9**	7.7	15.2	**30.2**	25.1	35.8	**43.2**	37.4	49.2	**13.8**	11.1	17.0
Loddon Mallee	**9.5**	6.8	13.1	**31.8**	26.9	37.0	**35.3**	30.2	40.7	**20.3**	16.4	24.8
Total	**10.2**	8.6	12.0	**28.1**	25.8	30.6	**42.9**	40.1	45.7	**15.7**	14.0	17.5
All females												
Total	**9.7**	**8.4**	**11.0**	**29.3**	**27.0**	**31.8**	**48.5**	**46.0**	**51.1**	**8.5**	**7.5**	**9.6**
Metropolitan people												
Eastern Metropolitan	**7.7**	6.0	9.8	**25.3**	21.8	29.2	**56.6**	52.3	60.7	**6.8**	5.0	9.2
North & West Metropolitan	**11.5**	9.3	14.2	**30.7**	27.2	34.4	**50.5**	46.7	54.3	**2.7**	1.8	4.0
Southern Metropolitan	**11.5**	9.0	14.6	**26.5**	22.9	30.6	**50.1**	45.6	54.6	**7.7**	5.8	10.3
Total	**10.5**	9.1	12.1	**28.2**	26.0	30.4	**51.8**	49.3	54.2	**5.4**	4.5	6.5
Rural people												
Barwon-South Western	**10.6**	8.3	13.5	**25.3**	20.8	30.5	**46.0**	40.9	51.2	**13.7**	10.8	17.2
Gippsland	**15.7**	12.0	20.4	**27.8**	23.7	32.3	**37.4**	32.6	42.5	**16.3**	13.2	20.1
Grampians	**11.2**	8.6	14.6	**25.8**	21.7	30.2	**43.9**	39.2	48.8	**15.8**	13.1	19.0
Hume	**14.8**	11.5	18.9	**28.8**	24.3	33.8	**42.3**	37.5	47.3	**11.9**	9.7	14.5
Loddon Mallee	**12.1**	9.6	15.1	**29.8**	25.6	34.5	**36.3**	31.8	41.1	**19.3**	16.3	22.7
Total	**12.7**	11.3	14.2	**27.5**	25.4	29.7	**41.4**	39.1	43.8	**15.3**	14.0	16.8
All people												
Total	**11.0**	**9.8**	**12.2**	**28.0**	**26.2**	**29.8**	**49.2**	**47.2**	**51.1**	**8.1**	**7.3**	**9.0**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

10.4 Social and support networks

Families, friends and neighbours are among the more immediate sources of care and support for individuals if they need help with everyday activities or unforeseen emergencies. They are part of the social environment in which people spend a large part of each day and in which children grow and develop. Social and support networks refer to informal relationships that individuals have with family, friends, neighbours and other members of their community. These networks often serve as a resource, providing individuals with information or emotional, practical and financial support. These resources are often provided to an individual without obligation, except for a norm of reciprocity. At a social level, social and support networks provide individuals with a sense of belonging.

Another layer of support within the community is provided by volunteer-based organisations and support groups from which many individuals receive their help. Volunteer-based organisations provide a vehicle for individuals or groups to address human, environmental and social needs. Support groups provide an opportunity for people to share experiences with others with similar backgrounds or experiences.

10.4.1 Able to get help from family, friends and neighbours

The survey asked respondents whether they were able to get help from family, friends and neighbours when needed. Table 10.7 shows the ability of people to get help from family, by age group and sex, with 'Total' not adjusted for age. The majority of people (80.9 per cent) reported they could definitely get help from family. A further 12.5 per cent reported that they could sometimes get help, while 5.8 per cent reported that they could not or not often get help from family. There was no significant difference between the sexes.

Significantly *higher* proportions of women and people aged 18–24 years reported they could get help from family compared with all Victorian women and people, respectively. By contrast, a significantly *lower* proportion of women aged 35–44 years and people aged 45–54 years reported they could get help from family compared with all Victorian women and people, respectively.

Table 10.7: Able to get help from family, by age group and sex, Victoria, 2012

	Can get help from family when needed								
	No or not often			Sometimes			Yes, definitely		
Age group (years)	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL
Males									
18–24	**	**	**	**8.8***	4.3	16.9	**87.5**	78.8	93.0
25–34	**4.8***	1.9	11.6	**19.9**	13.2	28.8	**73.6**	64.0	81.3
35–44	**5.5**	3.4	8.6	**12.7**	9.1	17.4	**81.9**	76.7	86.1
45–54	**4.3**	2.8	6.6	**18.0**	13.9	22.9	**75.4**	70.1	80.1
55–64	**5.3**	3.7	7.6	**10.5**	7.7	14.2	**83.8**	79.9	87.2
65+	**7.7**	6.0	9.9	**10.1**	8.1	12.6	**80.9**	77.8	83.7
Total	**5.3**	**4.2**	**6.6**	**13.7**	**11.7**	**16.0**	**80.0**	**77.5**	**82.3**
Females									
18–24	**	**	**	**3.6***	1.3	9.3	**93.0**	86.1	96.6
25–34	**6.5***	3.3	12.3	**10.7**	6.8	16.5	**82.8**	75.9	88.1
35–44	**7.9**	5.8	10.8	**15.3**	12.1	19.0	**75.9**	71.6	79.7
45–54	**8.1**	6.2	10.5	**14.1**	11.5	17.2	**77.0**	73.3	80.2
55–64	**4.7**	3.4	6.4	**11.9**	9.6	14.8	**83.0**	79.8	85.7
65+	**6.6**	5.3	8.1	**10.1**	8.3	12.3	**82.7**	80.2	84.9
Total	**6.4**	**5.3**	**7.6**	**11.3**	**10.0**	**12.8**	**81.8**	**80.0**	**83.5**
People									
18–24	**3.6***	1.7	7.4	**6.3***	3.5	10.9	**90.2**	84.9	93.8
25–34	**5.6***	3.2	9.6	**15.3**	11.2	20.5	**78.2**	72.4	83.0
35–44	**6.7**	5.1	8.7	**14.0**	11.5	16.9	**78.8**	75.6	81.7
45–54	**6.2**	5.0	7.8	**16.0**	13.5	18.9	**76.2**	73.0	79.1
55–64	**5.0**	3.9	6.3	**11.2**	9.3	13.5	**83.4**	80.9	85.6
65+	**7.1**	6.0	8.3	**10.1**	8.7	11.7	**81.9**	80.0	83.6
Total	**5.8**	**5.1**	**6.7**	**12.5**	**11.3**	**13.8**	**80.9**	**79.4**	**82.4**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 10.8 shows the ability of people to get help from friends, by age group and sex, with 'Total' not adjusted for age.

The majority of people (79.1 per cent) reported they could definitely get help from friends. A further 15.4 per cent reported that they could sometimes get help, while 4.7 per cent reported that they could not, or not often, get help from friends. However, there was no significant difference between the sexes in the proportion that definitely could, sometimes could or could not get help from friends.

A significantly *higher* proportion of men and people aged 18–24 years reported that they could get help from friends compared with all Victorian men and people. A significantly *higher* proportion of women and people aged 65 years or older were *not* able to get help from friends compared with all Victorian women and people, respectively.

Table 10.8: Able to get help from friends, by age group and sex, Victoria, 2012

	Can get help from friends when needed								
	No or not often			Sometimes			Yes, definitely		
Age group (years)	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL
Males									
18–24	**	**	**	4.6*	1.9	10.9	93.1	86.0	96.7
25–34	4.3*	1.8	10.1	21.9	14.6	31.4	71.2	61.3	79.5
35–44	6.4*	3.8	10.8	17.4	13.2	22.6	75.2	69.3	80.2
45–54	5.2	3.3	8.1	20.1	15.9	25.1	73.6	68.4	78.3
55–64	3.6*	2.2	6.0	13.5	10.5	17.3	82.4	78.3	85.9
65+	8.3	6.3	10.8	15.0	12.4	18.0	74.5	70.9	77.7
Total	**5.2**	**4.1**	**6.5**	**16.1**	**13.9**	**18.4**	**77.5**	**74.9**	**79.9**
Females									
18–24	0.0	.	.	10.4*	5.4	19.0	89.6	81.0	94.6
25–34	**	**	**	19.6	14.1	26.7	78.5	71.1	84.4
35–44	4.3	2.7	6.8	13.4	10.4	17.1	82.0	77.9	85.4
45–54	5.6	3.9	8.0	15.2	12.4	18.4	79.2	75.6	82.5
55–64	4.7	3.3	6.7	15.4	12.4	18.9	79.6	75.9	82.9
65+	7.8	6.3	9.7	13.1	11.0	15.5	77.4	74.5	80.0
Total	**4.3**	**3.5**	**5.2**	**14.7**	**13.0**	**16.5**	**80.6**	**78.6**	**82.4**
People									
18–24	**	**	**	7.4*	4.4	12.3	91.4	86.3	94.7
25–34	3.1*	1.4	6.5	20.8	16.0	26.5	74.8	68.7	80.1
35–44	5.4	3.7	7.7	15.4	12.7	18.5	78.6	75.1	81.8
45–54	5.4	4.1	7.2	17.6	15.0	20.5	76.5	73.3	79.4
55–64	4.2	3.1	5.6	14.5	12.3	17.0	81.0	78.3	83.5
65+	8.0	6.8	9.5	14.0	12.3	15.8	76.0	73.8	78.1
Total	**4.7**	**4.0**	**5.5**	**15.4**	**14.0**	**16.8**	**79.1**	**77.5**	**80.6**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 10.9 shows the ability of people to get help from neighbours, by age group and sex, with 'Total' not adjusted for age. Just under half of all people (49.6 per cent) reported they could definitely get help from neighbours. A further 22.9 per cent reported that they could sometimes get help, while 24.9 per cent reported that they could not, or not often, get help from neighbours.

Being able to get help from neighbours was related to age, with *higher* proportions of those in older age groups reporting they definitely were able to get help. A significantly *higher* proportion of men, women and people aged 65 years or older, and also men and people aged 55–64 years, reported 'yes, definitely' being able to get help from neighbours compared with the proportion of all Victorian men, women and people, respectively.

There was a significant difference between the sexes, with a *greater* proportion of women (52.7 per cent) compared with men (46.4 per cent) who could definitely get help from neighbours.

Table 10.9: Able to get help from neighbours, by age group and sex, Victoria, 2012

Age group (years)	Can get help from neighbours when needed								
	No or not often			Sometimes			Yes, definitely		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Males									
18–24	**29.3**	21.1	39.1	**28.5**	20.1	38.7	**40.6**	31.3	50.7
25–34	**36.5**	27.4	46.8	**29.8**	21.7	39.5	**29.4**	21.6	38.7
35–44	**27.2**	22.0	33.1	**26.1**	21.2	31.8	**44.5**	38.6	50.7
45–54	**23.1**	18.7	28.2	**26.0**	21.3	31.3	**49.3**	43.7	54.8
55–64	**20.8**	17.1	25.1	**21.6**	17.6	26.2	**54.5**	49.6	59.4
65+	**18.6**	15.7	21.8	**14.0**	11.6	16.9	**62.9**	59.1	66.5
Total	**26.2**	**23.5**	**29.1**	**24.5**	**21.9**	**27.2**	**46.4**	**43.5**	**49.3**
Females									
18–24	**29.3**	20.7	39.8	**32.9**	23.1	44.5	**35.7**	26.3	46.4
25–34	**25.7**	19.5	33.1	**21.1**	15.2	28.4	**51.0**	42.9	59.0
35–44	**24.7**	20.6	29.3	**23.0**	19.2	27.4	**51.1**	46.2	56.0
45–54	**23.0**	19.6	26.7	**24.0**	20.5	27.9	**50.6**	46.3	54.8
55–64	**21.7**	18.4	25.3	**18.3**	15.5	21.6	**57.8**	53.7	61.8
65+	**18.7**	16.2	21.4	**13.0**	11.1	15.2	**65.1**	62.0	68.1
Total	**23.6**	**21.5**	**25.8**	**21.5**	**19.3**	**23.7**	**52.7**	**50.3**	**55.2**
People									
18–24	**29.3**	23.2	36.3	**30.6**	24.0	38.2	**38.2**	31.4	45.5
25–34	**31.1**	25.4	37.5	**25.5**	20.3	31.4	**40.1**	34.1	46.4
35–44	**25.9**	22.6	29.6	**24.6**	21.4	28.1	**47.9**	44.0	51.8
45–54	**23.0**	20.2	26.1	**25.0**	22.0	28.2	**49.9**	46.4	53.4
55–64	**21.3**	18.7	24.0	**19.9**	17.4	22.7	**56.2**	53.0	59.3
65+	**18.6**	16.7	20.7	**13.5**	11.9	15.2	**64.1**	61.7	66.4
Total	**24.9**	**23.2**	**26.7**	**22.9**	**21.3**	**24.7**	**49.6**	**47.7**	**51.6**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 10.10 shows the ability of people to get help from family, by departmental region and sex, adjusted for age.

There were no significant differences in the proportion of people able to get help from family between the regions compared with Victoria as a whole.

Table 10.10: Able to get help from family, by Department of Health and Human Services region and sex, Victoria, 2012

	Can get help from family when needed								
	No or not often			Sometimes			Yes, definitely		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Metropolitan males									
Eastern Metropolitan	**3.3***	2.0	5.4	**11.9**	8.5	16.5	**83.9**	79.2	87.7
North & West Metropolitan	**5.5**	3.7	8.0	**14.1**	10.8	18.4	**79.6**	75.1	83.5
Southern Metropolitan	**5.1***	3.0	8.7	**14.3**	10.0	19.8	**79.2**	73.3	84.1
Total	**4.8**	3.7	6.3	**13.6**	11.3	16.3	**80.5**	77.6	83.1
Rural males									
Barwon-South Western	**8.5***	4.1	16.9	**16.7**	10.8	25.1	**74.1**	66.1	80.7
Gippsland	**5.7**	3.6	9.0	**10.2**	6.6	15.4	**83.7**	78.1	88.1
Grampians	**10.1***	6.1	16.2	**8.2***	4.5	14.2	**81.8**	75.2	86.9
Hume	**3.9***	2.2	6.9	**17.3***	10.1	27.9	**78.2**	67.8	85.9
Loddon Mallee	**5.0**	3.1	7.9	**11.9**	7.8	17.8	**82.6**	76.5	87.4
Total	**6.2**	4.5	8.4	**13.4**	10.5	16.9	**80.0**	76.4	83.1
All males									
Total	**5.2**	**4.2**	**6.4**	**13.4**	**11.5**	**15.5**	**80.5**	**78.2**	**82.7**
Metropolitan females									
Eastern Metropolitan	**10.1**	6.7	14.8	**11.4**	8.4	15.3	**77.9**	72.8	82.2
North & West Metropolitan	**5.1**	3.5	7.4	**11.3**	9.0	14.1	**83.2**	79.9	86.0
Southern Metropolitan	**5.7**	4.2	7.8	**9.9**	7.2	13.3	**84.0**	80.3	87.1
Total	**6.6**	5.3	8.2	**10.9**	9.3	12.7	**82.0**	79.7	84.1
Rural females									
Barwon-South Western	**5.1**	3.7	7.1	**11.7**	8.3	16.2	**82.8**	78.2	86.6
Gippsland	**5.5**	3.8	7.8	**13.8**	9.3	20.1	**80.3**	74.1	85.4
Grampians	**6.6**	4.2	10.2	**9.5**	7.2	12.5	**83.4**	79.2	86.9
Hume	**4.4**	3.0	6.4	**13.2**	9.9	17.5	**82.1**	77.8	85.8
Loddon Mallee	**5.8**	4.1	8.2	**12.4**	9.7	15.8	**81.5**	77.8	84.8
Total	**5.4**	4.5	6.4	**12.3**	10.6	14.2	**82.0**	79.9	83.9
All females									
Total	**6.4**	**5.3**	**7.6**	**11.1**	**9.8**	**12.6**	**82.0**	**80.2**	**83.7**
Metropolitan people									
Eastern Metropolitan	**6.6**	4.7	9.3	**11.6**	9.3	14.5	**81.0**	77.5	84.1
North & West Metropolitan	**5.3**	4.0	6.9	**12.9**	10.7	15.4	**81.2**	78.5	83.7
Southern Metropolitan	**5.5**	4.0	7.4	**12.0**	9.5	15.2	**81.6**	78.1	84.6
Total	**5.7**	4.8	6.8	**12.3**	10.9	13.9	**81.2**	79.4	82.9
Rural people									
Barwon-South Western	**6.3**	3.9	10.2	**14.2**	10.7	18.7	**78.9**	74.0	83.1
Gippsland	**5.5**	4.1	7.4	**12.0**	8.9	15.8	**82.2**	78.1	85.6
Grampians	**7.8**	5.5	11.0	**8.8**	6.5	11.8	**83.1**	79.2	86.4
Hume	**4.3**	3.0	5.9	**15.5**	10.7	22.0	**79.8**	73.4	85.0
Loddon Mallee	**5.5**	4.1	7.2	**12.3**	9.5	15.7	**81.9**	78.3	85.0
Total	**5.8**	4.8	7.0	**12.8**	11.1	14.8	**81.0**	78.9	83.0
All people									
Total	**5.8**	**5.0**	**6.6**	**12.3**	**11.1**	**13.6**	**81.3**	**79.8**	**82.7**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 10.11 shows the ability of people to get help from friends, by departmental region and sex, adjusted for age.

A significantly *higher* proportion of people residing in Loddon Mallee Region reported definitely being able to get help from friends compared with all Victorian people.

Table 10.11: Able to get help from friends, by Department of Health and Human Services region and sex, Victoria, 2012

	Can get help from friends when needed								
	No or not often			Sometimes			Yes, definitely		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Metropolitan males									
Eastern Metropolitan	**4.0***	2.3	7.0	**15.3**	11.6	20.0	**79.1**	73.9	83.4
North & West Metropolitan	**7.3**	5.0	10.6	**16.9**	13.1	21.4	**74.0**	68.8	78.5
Southern Metropolitan	**4.7**	2.9	7.5	**17.2**	13.1	22.2	**77.0**	71.7	81.6
Total	**5.6**	4.3	7.4	**16.6**	14.1	19.3	**76.2**	73.0	79.0
Rural males									
Barwon-South Western	**6.2***	3.5	11.0	**14.7***	8.8	23.4	**78.6**	69.7	85.4
Gippsland	**4.0***	2.3	6.8	**13.0**	8.9	18.8	**82.6**	76.7	87.3
Grampians	**5.2***	2.9	8.9	**15.1**	10.2	21.8	**79.5**	72.6	85.0
Hume	**2.7***	1.3	5.9	**16.0**	10.0	24.6	**80.4**	71.7	86.9
Loddon Mallee	**2.8***	1.7	4.6	**11.6**	7.8	16.9	**84.8**	79.4	88.9
Total	**4.3**	3.2	5.8	**13.8**	11.0	17.2	**81.2**	77.7	84.3
All males									
Total	**5.2**	**4.2**	**6.6**	**15.8**	**13.8**	**18.1**	**77.5**	**75.0**	**79.9**
Metropolitan females									
Eastern Metropolitan	**3.2**	2.1	4.9	**13.7**	10.8	17.2	**82.5**	78.9	85.7
North & West Metropolitan	**5.2**	3.9	7.0	**15.5**	12.5	19.1	**79.0**	75.2	82.3
Southern Metropolitan	**4.8**	3.1	7.3	**14.4**	11.0	18.6	**80.4**	76.1	84.1
Total	**4.4**	3.6	5.5	**14.6**	12.7	16.8	**80.5**	78.2	82.6
Rural females									
Barwon-South Western	**3.4**	2.3	4.9	**13.1**	9.5	17.9	**83.0**	78.2	87.0
Gippsland	**4.8**	3.2	7.1	**11.7**	8.6	15.7	**83.3**	79.1	86.9
Grampians	**2.3**	1.4	3.8	**14.0**	10.2	18.9	**83.4**	78.5	87.4
Hume	**2.0***	1.2	3.5	**14.6**	10.7	19.5	**82.8**	77.8	86.8
Loddon Mallee	**4.1**	2.7	6.2	**10.1**	7.3	13.8	**85.7**	81.7	88.9
Total	**3.4**	2.8	4.2	**12.6**	10.9	14.6	**83.7**	81.6	85.5
All females									
Total	**4.1**	**3.5**	**4.9**	**14.1**	**12.6**	**15.9**	**81.3**	**79.5**	**83.0**
Metropolitan people									
Eastern Metropolitan	**3.7**	2.5	5.3	**14.5**	12.0	17.3	**80.9**	77.8	83.6
North & West Metropolitan	**6.2**	4.8	8.0	**16.3**	13.8	19.3	**76.3**	73.0	79.3
Southern Metropolitan	**4.7**	3.4	6.5	**15.7**	13.0	18.9	**78.7**	75.3	81.8
Total	**5.0**	4.2	6.0	**15.6**	14.0	17.3	**78.3**	76.4	80.1
Rural people									
Barwon-South Western	**4.8**	3.1	7.3	**13.9**	10.3	18.5	**80.8**	76.0	84.9
Gippsland	**4.2**	3.0	6.0	**12.4**	9.6	15.8	**83.1**	79.5	86.1
Grampians	**3.8**	2.5	5.8	**14.3**	11.2	18.2	**81.7**	77.6	85.1
Hume	**2.5***	1.5	4.1	**15.4**	11.2	20.9	**81.4**	75.9	85.8
Loddon Mallee	**3.5**	2.5	4.9	**10.8**	8.3	13.8	**85.2**	82.1	87.9
Total	**3.8**	3.2	4.7	**13.3**	11.5	15.2	**82.4**	80.4	84.3
All people									
Total	**4.7**	**4.0**	**5.5**	**15.0**	**13.7**	**16.4**	**79.4**	**77.8**	**80.9**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 10.12 shows the ability of people to get help from neighbours, by departmental region and sex, adjusted for age.

A significantly *higher* proportion of men, women and people residing in rural regions as a whole reported being able to get help from their neighbours compared with the proportion in men, women and people residing in metropolitan regions as a whole.

A significantly *higher* proportion of men residing in Gippsland and Grampians regions, women residing in Hume Region and people residing in Gippsland, Grampians and Hume regions reported being able to get help from their neighbours compared with the proportion in all Victorian men, women and people, respectively.

Table 10.12: Able to get help from neighbours, by Department of Health and Human Services region and sex, Victoria, 2012

	Can get help from neighbours when needed								
	No or not often			Sometimes			Yes, definitely		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Metropolitan males									
Eastern Metropolitan	**24.3**	18.7	31.0	**27.4**	21.7	34.0	**46.4**	40.0	53.0
North & West Metropolitan	**29.0**	24.1	34.4	**26.3**	21.7	31.5	**40.4**	35.3	45.8
Southern Metropolitan	**32.6**	27.1	38.6	**21.2**	16.4	26.9	**43.3**	37.9	48.9
Total	**28.5**	25.2	32.0	**24.9**	21.9	28.2	**43.3**	39.9	46.7
Rural males									
Barwon-South Western	**22.0**	15.6	30.1	**23.2**	16.3	31.7	**52.1**	45.3	58.8
Gippsland	**25.1**	19.4	31.7	**16.7**	12.2	22.5	**57.8**	50.6	64.6
Grampians	**17.5**	12.2	24.4	**17.1**	12.9	22.4	**63.7**	56.5	70.4
Hume	**17.2***	10.0	27.8	**25.9**	17.6	36.4	**55.7**	48.4	62.7
Loddon Mallee	**21.5**	16.0	28.3	**26.0**	19.4	33.9	**51.4**	44.1	58.6
Total	**21.0**	17.9	24.5	**21.9**	18.5	25.7	**55.5**	52.0	59.0
All males									
Total	**26.7**	**24.1**	**29.5**	**24.0**	**21.5**	**26.7**	**46.4**	**43.7**	**49.1**
Metropolitan females									
Eastern Metropolitan	**27.1**	22.5	32.2	**19.8**	15.6	24.7	**51.1**	45.7	56.5
North & West Metropolitan	**22.3**	18.4	26.9	**25.2**	21.2	29.7	**50.8**	45.8	55.8
Southern Metropolitan	**26.6**	21.8	32.1	**19.8**	15.3	25.1	**50.8**	45.2	56.3
Total	**24.7**	22.0	27.6	**22.1**	19.5	25.1	**51.0**	47.8	54.2
Rural females									
Barwon-South Western	**22.6**	17.9	28.1	**20.2**	15.8	25.4	**55.3**	49.5	60.9
Gippsland	**22.3**	16.6	29.2	**15.0**	10.9	20.4	**59.9**	52.4	66.9
Grampians	**22.9**	18.0	28.6	**23.2**	18.3	28.8	**52.0**	46.2	57.7
Hume	**18.0**	14.0	22.8	**18.2**	14.1	23.2	**63.1**	57.3	68.5
Loddon Mallee	**20.0**	16.1	24.5	**17.8**	14.0	22.3	**58.9**	53.4	64.2
Total	**21.5**	19.2	24.1	**18.7**	16.6	20.9	**57.6**	54.8	60.4
All females									
Total	**23.8**	**21.7**	**26.2**	**21.4**	**19.2**	**23.7**	**52.7**	**50.1**	**55.2**
Metropolitan people									
Eastern Metropolitan	**25.9**	22.0	30.1	**23.4**	19.8	27.5	**48.8**	44.4	53.2
North & West Metropolitan	**25.6**	22.3	29.1	**25.8**	22.6	29.2	**45.6**	41.9	49.3
Southern Metropolitan	**29.5**	25.4	34.0	**20.6**	17.1	24.5	**47.1**	42.9	51.3
Total	**26.7**	24.5	29.0	**23.5**	21.5	25.7	**47.1**	44.7	49.5
Rural people									
Barwon-South Western	**22.7**	18.6	27.5	**21.2**	16.8	26.5	**53.8**	49.0	58.5
Gippsland	**23.9**	19.6	29.0	**15.9**	12.7	19.7	**58.6**	53.3	63.7
Grampians	**20.0**	16.3	24.4	**20.4**	16.8	24.5	**57.7**	52.9	62.5
Hume	**17.8**	13.3	23.4	**22.0**	17.0	28.0	**59.2**	54.3	63.9
Loddon Mallee	**21.0**	17.4	25.2	**21.8**	17.8	26.4	**55.0**	50.3	59.6
Total	**21.3**	19.3	23.4	**20.4**	18.3	22.6	**56.5**	54.2	58.8
All people									
Total	**25.3**	**23.6**	**27.2**	**22.7**	**21.0**	**24.5**	**49.5**	**47.6**	**51.4**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

10.4.2 Help with care in an emergency

Table 10.13 shows the proportion of people who could rely on a relative or a friend not living with them to care for them (or their children) in an emergency, by age group and sex, with 'Total' not adjusted for age.

Most people (89.4 per cent) reported having someone outside their household who could provide care in the event of an emergency. By contrast, 8.3 per cent of people reported that they would not be able to get such care in an emergency. There was no difference between the sexes.

In those aged 65 years or older there was a significantly *lower* proportion of men, women and people who had a relative or friend who could care for them (or their children) in an emergency compared with all Victorian men, women and people, respectively.

Table 10.13: Help with care in an emergency, by age group and sex, Victoria, 2012

	Relatives, or friends, could care for you (or your children) in an emergency					
	Yes			No		
	%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL
Males						
18–24	**93.8**	85.7	97.4	**5.7***	2.2	13.9
25–34	**91.6**	84.9	95.5	**6.4***	3.2	12.7
35–44	**91.1**	86.6	94.1	**7.2**	4.4	11.5
45–54	**84.0**	79.2	87.8	**13.1**	9.8	17.4
55–64	**90.6**	87.6	92.9	**7.4**	5.4	10.1
65+	**82.2**	79.0	85.1	**13.4**	10.9	16.3
Total	**88.8**	**86.9**	**90.4**	**8.9**	**7.5**	**10.6**
Females						
18–24	**95.1**	87.0	98.2	**	**	**
25–34	**93.1**	87.6	96.3	**5.6***	2.7	11.1
35–44	**91.0**	87.4	93.6	**7.4**	5.0	10.7
45–54	**88.2**	85.1	90.6	**9.0**	6.9	11.7
55–64	**89.1**	86.4	91.3	**8.6**	6.7	10.9
65+	**85.6**	83.1	87.7	**10.6**	8.8	12.7
Total	**90.1**	**88.6**	**91.4**	**7.6**	**6.5**	**8.9**
People						
18–24	**94.4**	89.4	97.1	**4.5***	2.1	9.2
25–34	**92.4**	88.4	95.1	**6.0***	3.6	9.8
35–44	**91.0**	88.3	93.1	**7.3**	5.4	9.8
45–54	**86.1**	83.4	88.4	**11.0**	9.0	13.5
55–64	**89.8**	87.9	91.5	**8.0**	6.6	9.7
65+	**84.1**	82.1	85.8	**11.8**	10.3	13.6
Total	**89.4**	**88.3**	**90.5**	**8.3**	**7.3**	**9.3**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 10.14 shows the proportion of people who could rely on a relative or a friend not living with them to care for them (or their children) in an emergency, by departmental region and sex, adjusted for age.

A significantly *higher* proportion of people who lived in rural regions (91.7 per cent) had a relative or friend who could care for them (or their children) in an emergency compared with the proportion of those who lived in metropolitan regions (88.6 per cent) or Victoria (89.3 per cent) as a whole.

There were significantly *higher* proportions of men who lived in Hume Region who were able to obtain emergency care compared with all Victorian men.

Table 10.14: Help with care in an emergency, by Department of Health and Human Services region and sex, Victoria, 2012

	Relatives, or friends, could care for you (or your children) in an emergency					
	Yes			No		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Metropolitan males						
Eastern Metropolitan	**88.5**	84.1	91.8	**10.0**	6.8	14.4
North & West Metropolitan	**87.5**	83.8	90.5	**10.0**	7.3	13.6
Southern Metropolitan	**86.9**	82.0	90.7	**9.8**	6.6	14.4
Total	**87.7**	85.3	89.7	**9.8**	8.0	12.0
Rural males						
Barwon-South Western	**90.6**	86.6	93.5	**7.1**	5.2	9.8
Gippsland	**92.1**	88.8	94.5	**6.3**	4.3	9.1
Grampians	**89.3**	83.2	93.3	**9.2***	5.3	15.3
Hume	**93.2**	90.6	95.2	**5.7**	3.9	8.3
Loddon Mallee	**92.3**	89.3	94.5	**5.6**	3.9	8.0
Total	**91.5**	89.9	92.9	**6.7**	5.5	8.0
All males						
Total	**88.6**	**86.8**	**90.2**	**9.1**	**7.7**	**10.8**
Metropolitan females						
Eastern Metropolitan	**90.0**	85.5	93.2	**8.9**	5.8	13.4
North & West Metropolitan	**89.0**	86.0	91.4	**8.4**	6.2	11.2
Southern Metropolitan	**89.2**	85.6	91.9	**7.3**	5.4	9.8
Total	**89.5**	87.6	91.2	**8.0**	6.6	9.8
Rural females						
Barwon-South Western	**91.7**	88.7	93.9	**6.8**	4.8	9.7
Gippsland	**91.3**	87.6	94.0	**7.4**	4.8	11.0
Grampians	**93.7**	91.3	95.5	**4.9**	3.4	7.2
Hume	**89.6**	84.6	93.1	**8.9**	5.6	14.0
Loddon Mallee	**91.8**	88.7	94.1	**6.5**	4.4	9.6
Total	**91.7**	90.3	93.0	**6.8**	5.6	8.1
All females						
Total	**90.1**	**88.6**	**91.4**	**7.7**	**6.5**	**9.0**
Metropolitan people						
Eastern Metropolitan	**89.4**	86.4	91.8	**9.3**	7.0	12.3
North & West Metropolitan	**88.3**	86.0	90.3	**9.2**	7.4	11.4
Southern Metropolitan	**88.0**	85.0	90.4	**8.6**	6.6	11.1
Total	**88.6**	87.1	89.9	**9.0**	7.8	10.4
Rural people						
Barwon-South Western	**91.2**	88.8	93.1	**6.8**	5.4	8.6
Gippsland	**91.9**	89.6	93.7	**6.6**	5.0	8.6
Grampians	**91.6**	88.6	93.8	**6.9**	4.8	9.8
Hume	**91.6**	88.9	93.7	**7.2**	5.2	9.9
Loddon Mallee	**92.0**	90.0	93.7	**6.0**	4.6	7.8
Total	**91.7**	90.6	92.6	**6.6**	5.8	7.6
All people						
Total	**89.3**	**88.2**	**90.4**	**8.4**	**7.5**	**9.5**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

10.4.3 Help to get a job through a relative or friend

Survey respondents aged 18–64 years were asked if they could get help finding a job through a relative or friend, if needed.

Table 10.15 shows the proportion of people who reported that they could get help from a relative or friend in finding a job, by age group and sex, with 'Total' not adjusted for age. Over half (56.4 per cent) of all people aged 18–64 years reported that they could. This proportion was not significantly different in men (57.3 per cent) and women (55.5 per cent).

The ability to get help from a relative or friend in finding a job declined with age from 78.8 per cent in people aged 18–24 years to 39.9 per cent in people aged 55–64 years. A significantly *higher* proportion of men, women and people aged 18–24 years were likely to get help from a relative or friend in finding a job compared with all Victorian men, women and people, respectively.

A significantly *lower* proportion of men aged 55–64 years and women and people aged 45–64 years were likely to get help from a relative or friend in finding a job compared with all Victorian men, women and people, respectively.

Table 10.15: Help from a relative or friend in finding a job, by age group a and sex, Victoria, 2012

	Could get a job through a relative or friend					
	Yes			No		
	%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL
Males						
18–24	77.6	67.9	85.0	19.1	12.1	28.7
25–34	**56.3**	46.3	65.9	**30.0**	21.6	39.9
35–44	**60.5**	54.4	66.3	**32.5**	27.0	38.5
45–54	**49.5**	44.0	55.1	**40.7**	35.4	46.2
55–64	44.8	40.0	49.6	43.0	38.3	47.9
65+						
Total	**57.3**	**53.8**	**60.6**	**33.3**	**30.1**	**36.5**
Females						
18–24	80.1	69.7	87.6	13.4*	7.8	22.0
25–34	**63.0**	54.8	70.5	**31.2**	24.1	39.3
35–44	**56.2**	51.3	61.0	**36.1**	31.5	41.0
45–54	46.0	41.8	50.3	**41.3**	37.2	45.5
55–64	35.3	31.5	39.3	52.2	48.1	56.3
65+						
Total	**55.5**	**52.6**	**58.4**	**35.5**	**32.8**	**38.2**
People						
18–24	78.8	72.0	84.3	16.3	11.5	22.5
25–34	**59.6**	53.1	65.8	**30.6**	24.9	36.9
35–44	**58.3**	54.4	62.1	**34.4**	30.7	38.2
45–54	47.8	44.3	51.3	41.0	37.6	44.4
55–64	39.9	36.9	43.1	47.7	44.5	50.9
65+						
Total	**56.4**	**54.1**	**58.6**	**34.4**	**32.3**	**36.5**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 10.16 shows the proportion of people aged 18–64 years who reported that they could get help from a relative or friend in finding a job, by departmental region and sex, adjusted for age.

A significantly *higher* proportion of men, but not women, who lived in rural regions reported being able to get help from a relative or friend in finding a job compared with their metropolitan counterparts and all Victorian men.

There were significantly *higher* proportions of people who lived in rural regions as a whole, and Grampians and Loddon Mallee regions in particular, who reported that they could to get help from a relative or friend in finding a job compared with all Victorian people aged 18–64 years.

Table 10.16: Help from a relative or friend in finding a job, by Department of Health and Human Services region and sex, Victoria, 2012

	Could get a job through a relative or friend					
	Yes			No		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Metropolitan males						
Eastern Metropolitan	**57.7**	50.6	64.5	**35.2**	28.8	42.2
North & West Metropolitan	**52.8**	46.5	59.1	**36.6**	30.6	43.0
Southern Metropolitan	**57.1**	49.5	64.4	**32.2**	26.5	38.4
Total	**55.1**	50.9	59.2	**35.2**	31.4	39.2
Rural males						
Barwon-South Western	**68.3**	61.0	74.8	**27.4**	21.1	34.8
Gippsland	**65.4**	58.0	72.0	**24.4**	18.8	31.1
Grampians	**68.5**	60.5	75.6	**23.7**	17.3	31.6
Hume	**64.2**	55.2	72.4	20.7	15.7	26.9
Loddon Mallee	**68.8**	60.9	75.6	**23.3**	17.4	30.6
Total	67.1	63.4	70.6	24.3	21.3	27.7
All males						
Total	**57.8**	**54.5**	**61.1**	**32.7**	**29.7**	**35.9**
Metropolitan females						
Eastern Metropolitan	**56.3**	50.3	62.2	**33.1**	27.3	39.4
North & West Metropolitan	**54.0**	48.2	59.7	**36.8**	31.7	42.3
Southern Metropolitan	**52.8**	46.3	59.1	**37.5**	31.6	43.7
Total	**54.0**	50.4	57.6	**36.3**	33.0	39.7
Rural females						
Barwon-South Western	**61.0**	54.8	66.9	**32.3**	26.8	38.5
Gippsland	**50.8**	42.1	59.4	**44.3**	35.8	53.1
Grampians	**61.1**	55.6	66.4	**31.8**	26.7	37.3
Hume	**59.2**	51.8	66.3	**34.4**	27.7	41.6
Loddon Mallee	**59.0**	52.8	65.0	**32.7**	27.1	38.9
Total	**58.3**	55.1	61.5	**34.8**	31.8	38.0
All females						
Total	**55.1**	**52.1**	**57.9**	**35.9**	**33.2**	**38.7**
Metropolitan people						
Eastern Metropolitan	**57.0**	52.3	61.6	**34.1**	29.8	38.8
North & West Metropolitan	**53.6**	49.3	57.9	**36.6**	32.6	40.8
Southern Metropolitan	**54.7**	49.5	59.8	**35.0**	30.5	39.8
Total	**54.6**	51.8	57.3	**35.7**	33.1	38.4
Rural people						
Barwon-South Western	**63.6**	58.5	68.5	**30.8**	26.1	35.9
Gippsland	**57.9**	51.8	63.8	**33.9**	28.4	39.9
Grampians	64.8	60.0	69.3	**27.6**	23.4	32.3
Hume	**62.3**	56.2	68.1	27.3	22.8	32.2
Loddon Mallee	63.8	58.8	68.5	**28.2**	23.9	33.1
Total	62.7	60.2	65.1	29.6	27.4	32.0
All people						
Total	**56.5**	**54.2**	**58.7**	**34.3**	**32.2**	**36.4**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

10.4.4 Received help from a volunteer-based organisation

Many volunteer-based organisations seek to address human, environmental and social needs within the community. Survey respondents were asked whether they currently received any help from a volunteer-based organisation.

Table 10.17 shows the proportion of people who reported receiving help from a volunteer-based organisation, by age group and sex, with 'Total' not adjusted for age. Overall, 4.1 per cent of people were receiving help from a volunteer-based organisation; this proportion was similar in men and women.

Significantly *higher* proportions of men, women and people aged 65 years or older were receiving help from a volunteer-based organisation compared with the proportion in all Victorian men, women and people, respectively.

Table 10.17: Received help from a volunteer-based organisation, by age group and sex, Victoria, 2012

	Currently getting help from any volunteer based organisations					
	Yes			No		
	%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL
Males						
18–24	**	**	**	**96.4**	90.6	98.7
25–34	**	**	**	**96.9**	91.8	98.9
35–44	**2.1***	0.9	4.4	**97.8**	95.5	99.0
45–54	**4.0***	1.9	8.1	**96.0**	91.9	98.1
55–64	**2.7***	1.6	4.6	**97.3**	95.4	98.4
65+	7.3	5.8	9.3	92.5	90.5	94.1
Total	**3.5**	**2.6**	**4.6**	**96.2**	**95.0**	**97.1**
Females						
18–24	**	**	**	98.8	97.0	99.6
25–34	**6.6***	3.5	12.4	**93.4**	87.6	96.5
35–44	**4.2**	2.6	6.8	**95.0**	92.2	96.9
45–54	**3.5**	2.4	5.3	**95.9**	94.0	97.3
55–64	**2.9**	1.9	4.4	**97.0**	95.5	98.0
65+	8.3	6.9	10.0	91.5	89.8	92.9
Total	**4.7**	**3.8**	**5.8**	**95.0**	**93.9**	**95.9**
People						
18–24	**1.8***	0.7	4.5	**97.6**	94.7	98.9
25–34	**4.4***	2.5	7.7	**95.1**	91.7	97.2
35–44	**3.1**	2.1	4.8	**96.4**	94.7	97.6
45–54	**3.8**	2.5	5.7	**96.0**	94.0	97.3
55–64	**2.8**	2.0	3.9	**97.1**	96.0	97.9
65+	7.9	6.8	9.1	92.0	90.7	93.1
Total	**4.1**	**3.5**	**4.9**	**95.6**	**94.8**	**96.2**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 10.18 shows the proportion of Victorian people who had been receiving help from a volunteer-based organisation, by departmental region and sex, adjusted for age.

There were no significant differences in the proportion of men, women or people who had been receiving help from a volunteer-based organisation (by departmental region) compared with the proportion in all Victorian men, women and people, respectively; nor was there a significant difference in the proportion between those who lived in rural regions compared with metropolitan regions.

Table 10.18: Received help from a volunteer-based organisation, by Department of Health and Human Services region and sex, Victoria, 2012

	Currently getting help from any volunteer based organisations					
	Yes			No		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Metropolitan males						
Eastern Metropolitan	**3.0**	1.9	4.9	**96.8**	95.0	98.0
North & West Metropolitan	**3.1***	1.6	5.9	**96.9**	94.1	98.4
Southern Metropolitan	**3.6**	2.2	5.8	**95.4**	92.6	97.1
Total	**3.3**	2.3	4.7	**96.3**	94.9	97.4
Rural males						
Barwon-South Western	**3.7***	1.9	7.0	**96.3**	93.0	98.1
Gippsland	**4.7***	2.8	7.8	**95.3**	92.2	97.2
Grampians	**6.4***	3.6	10.9	**93.6**	89.1	96.4
Hume	**3.4***	2.0	5.6	**96.2**	93.8	97.7
Loddon Mallee	**3.7***	2.3	6.1	**96.3**	93.9	97.7
Total	**4.4**	3.3	5.8	**95.5**	94.1	96.6
All males						
Total	**3.7**	**2.8**	**4.7**	**96.0**	**94.9**	**96.9**
Metropolitan females						
Eastern Metropolitan	**4.1**	2.8	6.0	**95.9**	94.0	97.2
North & West Metropolitan	**4.2**	2.9	6.1	**95.7**	93.8	97.1
Southern Metropolitan	**4.5**	2.9	7.0	**94.7**	92.1	96.4
Total	**4.2**	3.3	5.3	**95.5**	94.3	96.4
Rural females						
Barwon-South Western	**4.7**	2.9	7.6	**95.1**	92.2	96.9
Gippsland	**5.0**	3.6	6.8	**94.6**	92.7	96.1
Grampians	**4.5**	2.9	6.9	**94.6**	91.4	96.7
Hume	**4.7**	3.2	6.8	**95.0**	92.9	96.5
Loddon Mallee	**6.7**	4.6	9.6	**93.2**	90.3	95.3
Total	**5.2**	4.3	6.2	**94.5**	93.4	95.4
All females						
Total	**4.5**	**3.8**	**5.4**	**95.2**	**94.2**	**96.0**
Metropolitan people						
Eastern Metropolitan	**3.6**	2.6	4.8	**96.4**	95.1	97.3
North & West Metropolitan	**3.7**	2.6	5.3	**96.2**	94.6	97.4
Southern Metropolitan	**3.9**	2.8	5.5	**95.1**	93.3	96.4
Total	**3.8**	3.1	4.7	**95.9**	95.0	96.6
Rural people						
Barwon-South Western	**4.3**	2.8	6.4	**95.6**	93.5	97.1
Gippsland	**5.0**	3.6	6.7	**94.9**	93.1	96.2
Grampians	**5.4**	3.6	7.9	**94.2**	91.5	96.1
Hume	**4.0**	3.0	5.4	**95.6**	94.1	96.7
Loddon Mallee	**5.2**	3.9	7.0	**94.7**	92.9	96.1
Total	**4.8**	4.1	5.6	**95.0**	94.1	95.7
All people						
Total	**4.1**	**3.5**	**4.8**	**95.6**	**94.9**	**96.2**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

10.4.5 Attended a support group meeting

There are a range of support groups in which individuals support one another to deal with an issue they have in common, sometimes with the aid of a facilitator, counsellor or other professional. Survey respondents were asked if they had been to any support group meetings over the previous two years.

Table 10.19 shows the proportion of Victorian people who had attended a support group meeting in the previous two years, by age group and sex, with 'Total' not adjusted for age.

Overall, 9.0 per cent of people aged 18 years or older reported having attended a support group meeting in the previous two years. The proportion of women who had attended a support group meeting (11.2 per cent) was significantly *higher* compared with all men (6.7 per cent).

Table 10.19: Support group attendance, by age group and sex, Victoria, 2012

	Attended a support group meetings in the last 2 years					
	Yes			No		
	%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL
Males						
18–24	**7.7***	3.7	15.1	**92.3**	84.9	96.3
25–34	**3.8***	1.5	9.3	**95.2**	89.5	97.9
35–44	**4.9***	2.9	8.3	**95.1**	91.7	97.1
45–54	**5.8**	3.7	8.9	**94.2**	91.1	96.3
55–64	**9.5**	7.0	12.8	**90.5**	87.2	93.0
65+	**9.8**	7.9	12.2	**89.9**	87.6	91.8
Total	**6.7**	**5.5**	**8.2**	**93.1**	**91.6**	**94.3**
Females						
18–24	**	**	**	**95.2**	85.8	98.5
25–34	**17.5**	12.2	24.5	**81.8**	74.7	87.3
35–44	**13.8**	10.6	17.9	**85.9**	81.9	89.2
45–54	**9.8**	7.6	12.7	**90.1**	87.3	92.4
55–64	**8.8**	6.9	11.1	**91.2**	88.9	93.1
65+	**10.0**	8.3	12.0	**89.7**	87.6	91.4
Total	**11.2**	**9.7**	**13.0**	**88.5**	**86.8**	**90.1**
People						
18–24	**6.3***	3.4	11.4	**93.7**	88.6	96.6
25–34	**10.6**	7.5	14.9	**88.6**	84.2	91.8
35–44	**9.5**	7.4	12.0	**90.4**	87.9	92.5
45–54	**7.8**	6.2	9.8	**92.1**	90.1	93.7
55–64	**9.1**	7.5	11.1	**90.9**	88.9	92.5
65+	**9.9**	8.6	11.4	**89.8**	88.3	91.1
Total	**9.0**	**8.0**	**10.1**	**90.7**	**89.6**	**91.8**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 10.20 shows the proportion of Victorian people who had attended a support group meeting in the previous two years, by departmental region and sex, adjusted for age.

The proportion of men, women and people who had attended a support group meeting in the previous two years was not significantly different in any region compared with all Victorian men, women and people, respectively.

Table 10.20: Support group attendance, by Department of Health and Human Services region and sex, Victoria, 2012

	Attended a support group meetings in the last 2 years					
	Yes			No		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Metropolitan males						
Eastern Metropolitan	**6.6***	3.8	11.2	**93.2**	88.5	96.0
North & West Metropolitan	**7.4**	5.1	10.7	**92.6**	89.3	94.9
Southern Metropolitan	**4.8**	2.9	7.6	**94.7**	91.6	96.7
Total	**6.5**	4.9	8.4	**93.3**	91.4	94.9
Rural males						
Barwon-South Western	**5.3**	3.7	7.5	**94.7**	92.5	96.3
Gippsland	**7.2**	4.4	11.6	**92.6**	88.2	95.4
Grampians	**8.2**	5.3	12.7	**91.8**	87.3	94.7
Hume	**11.6***	6.9	18.9	**88.3**	81.0	93.0
Loddon Mallee	**6.9**	4.7	10.2	**93.1**	89.8	95.3
Total	**7.5**	6.1	9.4	**92.4**	90.6	93.9
All males						
Total	**6.8**	**5.6**	**8.3**	**93.0**	**91.5**	**94.3**
Metropolitan females						
Eastern Metropolitan	**9.9**	7.1	13.7	**90.0**	86.2	92.8
North & West Metropolitan	**12.8**	9.5	17.0	**87.2**	83.0	90.5
Southern Metropolitan	**10.8**	7.9	14.5	**88.6**	84.8	91.5
Total	**11.3**	9.4	13.7	**88.4**	86.1	90.4
Rural females						
Barwon-South Western	**9.6**	7.2	12.7	**90.1**	87.0	92.5
Gippsland	**11.3**	8.2	15.3	**88.5**	84.5	91.6
Grampians	**10.8**	8.0	14.3	**89.2**	85.7	92.0
Hume	**11.1**	8.0	15.2	**88.9**	84.8	92.0
Loddon Mallee	**10.9**	8.3	14.1	**89.0**	85.9	91.6
Total	**10.5**	9.2	11.9	**89.4**	87.9	90.7
All females						
Total	**11.3**	**9.7**	**13.1**	**88.5**	**86.7**	**90.1**
Metropolitan people						
Eastern Metropolitan	**8.4**	6.2	11.4	**91.4**	88.5	93.7
North & West Metropolitan	**10.1**	7.9	12.7	**89.9**	87.3	92.1
Southern Metropolitan	**7.7**	5.9	10.0	**91.8**	89.4	93.7
Total	**8.9**	7.6	10.4	**90.9**	89.4	92.2
Rural people						
Barwon-South Western	**7.4**	5.9	9.1	**92.5**	90.7	94.0
Gippsland	**9.0**	6.7	11.8	**90.8**	88.0	93.1
Grampians	**9.5**	7.3	12.3	**90.5**	87.7	92.7
Hume	**11.2**	8.2	15.1	**88.8**	84.8	91.8
Loddon Mallee	**8.9**	7.1	11.2	**91.0**	88.8	92.8
Total	**9.0**	8.0	10.1	**90.9**	89.8	91.9
All people						
Total	**9.1**	**8.0**	**10.2**	**90.7**	**89.6**	**91.8**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

10.4.6 Access to community services and resources

Survey respondents were asked if they could get access to community services or resources, such as libraries, maternal and child health centres and neighbourhood centres, when needed.

Table 10.21 shows access to community services and resources, by age group and sex, with 'Total' not adjusted for age.

The majority of Victorian people (86.5 per cent) were able to access community services and resources when needed. An additional 7.0 per cent reported that they could 'sometimes' access community services and resources, while only 3.9 per cent reported that they could not.

A significantly *higher* proportion of women (89.5 per cent) responded 'yes, definitely' compared with men (83.3 per cent). However, a significantly *higher* proportion of men (8.6 per cent) responded 'sometimes' compared with women (5.4 per cent). There was no significant difference in the proportion who responded 'no' or 'not often' between the sexes.

A significantly *lower* proportion of women aged 65 years or older reported that they could definitely access community services and resources compared with the proportion in all Victorian women.

Table 10.21: Access to community services and resources, by age group and sex, Victoria, 2012

	Access to community services or resources								
	No or not often			Sometimes			Yes, definitely		
Age group (years)	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL
Males									
18–24	**8.5***	3.9	17.6	**9.1***	4.6	17.2	**81.3**	71.3	88.4
25–34	**	**	**	**12.7***	6.9	22.1	**79.2**	69.6	86.4
35–44	**5.0***	2.9	8.4	**8.9**	5.9	13.2	**83.0**	77.9	87.2
45–54	**3.4***	1.9	6.1	**8.4**	5.6	12.3	**83.8**	78.9	87.8
55–64	**4.4**	2.8	7.0	**5.0**	3.3	7.5	**88.1**	84.7	90.9
65+	**5.4**	3.9	7.5	**6.6**	4.9	8.8	**85.3**	82.3	87.8
Total	**4.6**	**3.5**	**6.0**	**8.6**	**6.9**	**10.8**	**83.3**	**80.8**	**85.6**
Females									
18–24	**	**	**	**5.8***	2.7	12.0	**92.4**	85.6	96.1
25–34	**5.1***	2.1	11.8	**4.8***	2.4	9.5	**88.5**	81.6	93.0
35–44	**2.0***	1.0	4.0	**4.5**	2.8	6.9	**92.2**	89.2	94.4
45–54	**3.3**	2.1	5.2	**5.6**	4.0	7.8	**89.9**	87.2	92.1
55–64	**2.1***	1.2	3.4	**4.9**	3.5	6.8	**90.6**	88.0	92.6
65+	**4.2**	3.1	5.7	**6.9**	5.3	8.9	**85.0**	82.5	87.2
Total	**3.2**	**2.4**	**4.4**	**5.4**	**4.5**	**6.6**	**89.5**	**87.9**	**90.9**
People									
18–24	**5.2***	2.6	10.3	**7.5***	4.5	12.2	**86.7**	80.7	91.0
25–34	**3.5***	1.7	7.0	**8.8**	5.4	13.9	**83.8**	78.1	88.3
35–44	**3.5**	2.2	5.3	**6.7**	4.9	9.0	**87.7**	84.8	90.1
45–54	**3.4**	2.3	4.9	**7.0**	5.3	9.1	**86.9**	84.2	89.2
55–64	**3.2**	2.3	4.6	**5.0**	3.8	6.5	**89.4**	87.3	91.1
65+	**4.7**	3.8	5.9	**6.7**	5.5	8.2	**85.1**	83.2	86.8
Total	**3.9**	**3.2**	**4.8**	**7.0**	**6.0**	**8.2**	**86.5**	**85.0**	**87.8**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 10.22 shows access to community services and resources, by departmental region and sex, adjusted for age.

Overall, 86.5 per cent of people responded 'yes, definitely' in regard to access to community services and resources, the proportion being significantly *higher* in women (89.6 per cent) compared with men (83.3 per cent). However, the proportion responding 'sometimes' was 7.0 per cent overall, and significantly *higher* in men (8.7 per cent) compared with women (5.4 per cent). A further 3.9 per cent either responded 'no' or 'not often'. There was no significant difference in the proportion between the sexes.

There were significantly *higher* proportions of people residing in Grampians Region who reported 'yes, definitely' to having access to community services and resources compared with all Victorian people.

In contrast, there was a significantly *lower* proportion of people residing in Loddon Mallee Region who did not, or did not often, have access to community services and resources compared with all Victorian people.

Table 10.22: Access to community services and resources, by Department of Health and Human Services region and sex, Victoria, 2012

	Access to community services or resources								
	No or not often			Sometimes			Yes, definitely		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Metropolitan males									
Eastern Metropolitan	**5.8***	3.5	9.5	**7.2***	4.2	12.1	**83.9**	78.2	88.4
North & West Metropolitan	**5.5**	3.4	8.7	**9.6**	6.6	13.6	**80.9**	76.1	84.9
Southern Metropolitan	**3.2***	1.8	5.7	**10.6**	6.6	16.6	**82.7**	76.6	87.5
Total	**4.7**	3.5	6.4	**9.3**	7.1	11.9	**82.4**	79.3	85.1
Rural males									
Barwon-South Western	**5.9***	2.6	12.8	**7.6***	3.3	16.2	**82.6**	74.6	88.5
Gippsland	**3.6***	1.7	7.6	**8.4**	5.3	13.2	**86.5**	80.9	90.6
Grampians	**4.6***	2.0	10.3	**4.4***	2.6	7.3	**90.2**	84.7	93.8
Hume	**2.3***	1.2	4.4	**7.8**	4.8	12.4	**82.5**	73.4	88.9
Loddon Mallee	**2.8***	1.7	4.7	**6.0***	3.3	10.8	**89.9**	85.1	93.2
Total	**4.0**	2.6	5.9	**6.5**	4.7	9.0	**86.5**	83.1	89.3
All males									
Total	**4.5**	**3.5**	**5.8**	**8.7**	**7.0**	**10.8**	**83.3**	**80.8**	**85.6**
Metropolitan females									
Eastern Metropolitan	**4.7***	2.2	10.0	**6.1**	4.1	9.0	**87.8**	82.8	91.6
North & West Metropolitan	**3.4**	2.1	5.2	**5.7**	3.7	8.8	**88.7**	85.3	91.3
Southern Metropolitan	**3.5***	1.6	7.4	**3.8**	2.4	6.0	**90.3**	86.3	93.2
Total	**3.7**	2.5	5.4	**5.2**	4.0	6.7	**89.2**	87.0	91.0
Rural females									
Barwon-South Western	**1.6***	0.6	3.8	**6.4***	3.9	10.4	**90.4**	86.0	93.5
Gippsland	**	**	**	**7.0***	4.0	12.0	**88.7**	82.0	93.1
Grampians	**2.4**	1.6	3.8	**5.6**	3.6	8.7	**90.7**	87.6	93.1
Hume	**2.6**	1.7	4.0	**5.2**	3.3	8.0	**91.4**	88.5	93.7
Loddon Mallee	**1.3***	0.6	2.8	**6.4**	4.0	10.2	**91.1**	87.3	93.9
Total	**2.2**	1.4	3.3	**6.3**	5.0	7.9	**90.5**	88.6	92.0
All females									
Total	**3.3**	**2.4**	**4.7**	**5.4**	**4.4**	**6.6**	**89.6**	**87.8**	**91.1**
Metropolitan people									
Eastern Metropolitan	**5.1**	3.2	8.0	**6.8**	4.8	9.5	**85.9**	82.3	88.9
North & West Metropolitan	**4.4**	3.1	6.2	**7.7**	5.8	10.1	**84.8**	81.9	87.3
Southern Metropolitan	**3.3***	2.0	5.6	**7.1**	4.9	10.2	**86.6**	83.0	89.6
Total	**4.2**	3.2	5.3	**7.2**	5.9	8.7	**85.8**	83.9	87.5
Rural people									
Barwon-South Western	**3.7***	1.8	7.4	**6.5***	3.9	10.6	**87.3**	82.3	91.0
Gippsland	**3.7***	1.8	7.5	**7.7**	5.4	10.9	**87.5**	83.3	90.8
Grampians	**3.3***	1.9	5.6	**4.9**	3.5	7.0	**90.7**	88.0	92.9
Hume	**2.5**	1.7	3.7	**6.5**	4.6	9.1	**86.6**	80.5	91.0
Loddon Mallee	**2.0**	1.3	3.1	**6.4**	4.3	9.3	**90.4**	87.4	92.7
Total	**3.0**	2.2	4.1	**6.4**	5.2	7.8	**88.5**	86.5	90.2
All people									
Total	**3.9**	**3.2**	**4.8**	**7.0**	**6.0**	**8.2**	**86.5**	**85.0**	**87.8**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

10.4.7 Social and civic trust

Table 10.23 shows the proportions of people who did or did not feel safe walking alone down their street after dark, by age group and sex, with 'Total' not adjusted for age. The majority of people (59.4 per cent) felt safe. However, there was a substantial difference between the sexes, with 75.7per cent of men compared with 43.8 per cent of women reporting feeling safe.

A significantly *higher* proportion of men, women and people aged 65 years or older did not feel safe walking down their street alone after dark and responded 'no' or 'not often' compared with all Victorian men, women and people, respectively.

Table 10.23: Feelings of safety, by age group and sex, Victoria, 2012

Age group (years)	Feeling of safety when walking down street at night											
	No or not often			Sometimes			Yes			Not applicable		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Males												
18–24	**	**	**	**15.1**	9.1	24.1	**80.7**	71.3	87.6	**	**	**
25–34	**14.9***	8.7	24.4	**15.5**	9.7	23.9	**66.2**	56.1	75.1	**	**	**
35–44	**3.6***	2.0	6.4	**10.8**	7.5	15.3	**84.4**	79.5	88.3	**0.8***	0.4	1.6
45–54	**5.5**	3.5	8.4	**7.6**	5.2	11.1	**84.9**	80.6	88.3	**1.3***	0.7	2.3
55–64	**6.6**	4.7	9.1	**10.0**	7.4	13.3	**81.1**	77.2	84.6	**1.9***	1.0	3.4
65+	**22.2**	19.2	25.6	**11.6**	9.3	14.3	**59.0**	55.2	62.7	**6.1**	4.6	8.1
Total	**9.7**	**8.0**	**11.7**	**11.8**	**9.9**	**13.9**	**75.7**	**73.0**	**78.3**	**1.9**	**1.5**	**2.4**
Females												
18–24	**22.7**	14.7	33.4	**32.8**	23.3	43.9	**43.2**	33.0	54.1	**	**	**
25–34	**25.2**	18.7	33.2	**20.4**	14.6	27.7	**53.4**	45.3	61.4	**	**	**
35–44	**27.1**	22.9	31.7	**21.2**	17.5	25.6	**47.5**	42.7	52.4	**3.5***	2.1	5.8
45–54	**28.6**	24.9	32.7	**20.5**	17.2	24.2	**47.4**	43.2	51.7	**3.3**	2.2	4.9
55–64	**31.5**	27.8	35.4	**16.4**	13.4	19.9	**45.1**	41.1	49.2	**5.0**	3.6	7.0
65+	**51.4**	48.2	54.6	**9.0**	7.3	11.0	**27.2**	24.5	30.0	**9.9**	8.3	11.9
Total	**31.8**	**29.6**	**34.1**	**19.3**	**17.3**	**21.6**	**43.8**	**41.4**	**46.3**	**4.1**	**3.5**	**4.8**
People												
18–24	**13.0**	8.6	19.3	**23.8**	17.9	30.9	**62.4**	54.9	69.4	**	**	**
25–34	**20.0**	15.2	25.9	**17.9**	13.6	23.3	**59.9**	53.4	66.0	**0.6***	0.2	1.6
35–44	**15.5**	13.0	18.4	**16.1**	13.5	19.1	**65.7**	62.0	69.2	**2.2**	1.4	3.4
45–54	**17.2**	14.9	19.8	**14.2**	12.0	16.7	**65.8**	62.6	69.0	**2.3**	1.6	3.2
55–64	**19.3**	17.0	21.8	**13.3**	11.2	15.6	**62.8**	59.7	65.7	**3.5**	2.6	4.7
65+	**38.2**	35.8	40.6	**10.1**	8.7	11.8	**41.6**	39.2	44.0	**8.2**	7.0	9.6
Total	**21.0**	**19.5**	**22.5**	**15.6**	**14.2**	**17.2**	**59.4**	**57.5**	**61.3**	**3.0**	**2.6**	**3.4**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 10.24 shows feelings of safety, by departmental region and sex, adjusted for age. A significantly *higher* proportion of men, women and people, who definitely felt safe walking alone down their street after dark, lived in rural regions compared with metropolitan regions.

There was a significantly *higher* proportion of men residing in Barwon-South Western Region who definitely felt safe walking alone down their street after dark compared with the proportion in all Victorian men. Compared with the proportion of all Victorian women and people who definitely felt safe, there was a significantly *higher* proportion among:

- women residing in rural regions as a whole
- women residing in Hume and Loddon Mallee regions in particular
- people residing in rural regions as a whole
- people residing in Barwon-South Western and Hume regions in particular.

There was a significantly *higher* proportion of men and people from every rural region, with the exception of Barwon-South Western Region, who thought the question was not applicable to them compared with the proportion in all Victorian men and people, respectively. There was a significantly *higher* proportion of women who lived in rural regions as a whole and Hume and Loddon Mallee regions in particular who thought the question regarding safety was not applicable to them compared with the proportion in all Victorian women.

Table 10.24: Feelings of safety, by Department of Health and Human Services region and sex, Victoria, 2012

	Feeling of safety when walking down street at night											
	No or not often			Sometimes			Yes			Not applicable		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males												
Eastern Metropolitan	**7.1**	5.1	9.9	**11.2**	7.9	15.7	**80.3**	75.5	84.3	**0.8***	0.3	2.2
North & West Metropolitan	**13.0**	9.9	17.0	**13.9**	10.6	17.9	**69.8**	64.9	74.4	**1.6***	0.9	3.0
Southern Metropolitan	**10.0**	7.0	14.1	**11.8**	8.2	16.7	**76.4**	70.7	81.4	**0.9***	0.4	1.9
Total	**10.8**	8.8	13.0	**12.6**	10.5	15.1	**74.3**	71.2	77.2	**1.1**	0.7	1.7
Rural males												
Barwon-South Western	**6.1**	4.5	8.2	**3.7***	2.3	6.1	**86.7**	82.9	89.7	**3.0***	1.4	6.6
Gippsland	**6.4**	4.0	10.1	**12.2**	8.3	17.4	**76.5**	70.6	81.6	**4.6**	3.0	7.2
Grampians	**7.9**	5.0	12.1	**6.5**	4.2	9.9	**81.6**	76.8	85.7	**4.0**	2.7	6.0
Hume	**7.6**	5.4	10.5	**7.4***	4.2	12.7	**79.6**	74.0	84.3	**4.9***	2.7	8.8
Loddon Mallee	**5.6**	4.0	7.8	**10.2***	6.2	16.5	**77.7**	71.1	83.2	**5.6***	3.0	10.1
Total	**6.5**	5.5	7.7	**7.9**	6.1	10.1	**80.6**	77.9	83.0	**4.6**	3.4	6.2
All males												
Total	**9.8**	**8.3**	**11.5**	**11.5**	**9.8**	**13.5**	**75.7**	**73.2**	**78.0**	**2.0**	**1.6**	**2.5**
Metropolitan females												
Eastern Metropolitan	**29.0**	24.3	34.1	**18.7**	14.7	23.3	**47.6**	42.0	53.3	**2.7**	1.8	4.1
North & West Metropolitan	**34.5**	30.3	39.0	**21.5**	17.5	26.1	**40.1**	35.3	45.0	**3.4**	2.4	4.9
Southern Metropolitan	**37.9**	32.4	43.8	**20.2**	15.8	25.5	**38.7**	33.3	44.4	**2.4**	1.5	3.9
Total	**34.0**	31.1	37.1	**20.5**	17.9	23.3	**41.6**	38.5	44.8	**2.9**	2.3	3.7
Rural females												
Barwon-South Western	**25.0**	20.8	29.7	**18.4**	14.1	23.7	**49.3**	43.6	55.1	**6.2**	4.2	9.0
Gippsland	**25.0**	19.1	31.9	**14.3**	9.9	20.3	**51.9**	44.6	59.2	**7.9***	4.5	13.6
Grampians	**30.5**	25.2	36.3	**17.1**	12.7	22.6	**45.6**	40.0	51.2	**5.7**	4.1	7.8
Hume	**21.1**	17.3	25.5	**14.6**	10.5	19.9	**55.5**	49.3	61.4	**7.4**	5.0	10.8
Loddon Mallee	**22.8**	19.0	27.1	**16.1**	12.1	21.1	**52.4**	47.0	57.7	**7.9**	6.0	10.4
Total	**24.7**	22.5	27.0	**16.2**	14.1	18.7	**50.9**	48.1	53.7	**7.0**	5.9	8.4
All females												
Total	**31.6**	**29.3**	**34.0**	**19.4**	**17.3**	**21.7**	**44.0**	**41.4**	**46.5**	**4.0**	**3.5**	**4.7**
Metropolitan people												
Eastern Metropolitan	**18.5**	15.8	21.6	**14.9**	12.3	18.0	**63.4**	59.5	67.1	**1.9**	1.3	2.7
North & West Metropolitan	**24.2**	21.4	27.3	**17.7**	15.0	20.8	**54.4**	50.7	58.0	**2.5**	1.8	3.4
Southern Metropolitan	**24.1**	20.6	28.0	**16.0**	13.0	19.5	**57.3**	52.9	61.6	**1.8**	1.2	2.7
Total	**22.8**	20.9	24.7	**16.6**	14.8	18.4	**57.5**	55.1	59.8	**2.1**	1.7	2.6
Rural people												
Barwon-South Western	**15.6**	13.2	18.3	**11.4**	8.7	14.8	**67.4**	63.0	71.4	**4.8**	3.3	7.1
Gippsland	**15.3**	12.2	19.1	**13.6**	10.4	17.5	**64.0**	58.9	68.7	**6.5**	4.4	9.5
Grampians	**19.7**	16.3	23.7	**11.9**	9.1	15.4	**62.7**	58.1	67.1	**5.0**	3.8	6.4
Hume	**14.3**	12.0	16.9	**11.0**	8.2	14.6	**67.6**	63.2	71.6	**6.2**	4.3	8.7
Loddon Mallee	**14.3**	12.1	16.9	**13.1**	10.0	16.9	**64.9**	60.5	69.0	**6.9**	5.0	9.4
Total	**15.7**	14.4	17.0	**12.1**	10.6	13.7	**65.6**	63.5	67.7	**5.9**	5.0	6.9
All people												
Total	**21.0**	**19.5**	**22.5**	**15.4**	**14.0**	**16.9**	**59.5**	**57.6**	**61.3**	**3.1**	**2.7**	**3.5**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 10.25 shows the proportion of people who agreed or disagreed that most people could be trusted, by age group and sex, with 'Total' not adjusted for age.

Overall, 39.5 per cent of people agreed that most people could be trusted; this was significantly *higher* in men (42.7 per cent) than women (36.5 per cent). A further 42.4 per cent agreed that most people could 'sometimes' be trusted; this was not significantly different in women (44.9 per cent) and men (39.9 per cent). In contrast, 16.6 per cent of Victorian people did not agree that most people could be trusted; this proportion was similar in women (17.3 per cent) and men (16.0 per cent).

The proportion of men aged 55–64 years, women aged 65 year or older and people aged 55 years or older who agreed that most people could be trusted was significantly *higher* compared with all Victorian men, women and people, respectively. In contrast, the proportion of men and people aged 25–34 years who agreed that most people could be trusted was significantly *lower* compared with all Victorian men and people, respectively.

Table 10.25: Trust in people, by age group and sex, Victoria, 2012

	Feel people can be trusted								
	No or not often			Sometimes			Yes		
Age group (years)	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL
Males									
18–24	**13.5***	7.8	22.4	**49.2**	39.3	59.1	**36.3**	27.3	46.3
25–34	**24.3**	16.7	34.0	**44.4**	34.8	54.5	**30.3**	22.3	39.8
35–44	**16.9**	12.9	21.9	**39.0**	33.1	45.1	**42.9**	36.9	49.1
45–54	**11.9**	8.3	16.7	**38.7**	33.5	44.2	**47.7**	42.2	53.2
55–64	**12.5**	9.6	16.2	**34.3**	29.9	39.0	**52.4**	47.6	57.2
65+	**14.4**	11.9	17.3	**34.3**	30.7	38.0	**48.4**	44.6	52.2
Total	**16.0**	**13.7**	**18.5**	**39.9**	**37.0**	**42.9**	**42.7**	**39.9**	**45.6**
Females									
18–24	**17.8**	10.9	27.7	**53.7**	42.9	64.3	**26.7**	18.2	37.5
25–34	**20.5**	14.5	28.2	**50.3**	42.3	58.3	**28.4**	22.0	35.9
35–44	**18.3**	14.6	22.7	**44.5**	39.7	49.3	**36.7**	32.1	41.5
45–54	**14.8**	11.9	18.2	**42.8**	38.7	47.0	**41.6**	37.5	45.9
55–64	**13.4**	10.8	16.4	**43.9**	39.9	48.1	**41.7**	37.7	45.8
65+	**18.0**	15.6	20.7	**36.9**	33.9	40.0	**42.0**	39.0	45.2
Total	**17.3**	**15.4**	**19.4**	**44.9**	**42.4**	**47.4**	**36.5**	**34.3**	**38.9**
People									
18–24	**15.6**	10.9	21.9	**51.4**	44.0	58.7	**31.6**	25.2	38.8
25–34	**22.4**	17.4	28.5	**47.4**	41.0	53.8	**29.4**	24.1	35.3
35–44	**17.6**	14.8	20.9	**41.8**	38.0	45.7	**39.7**	36.0	43.6
45–54	**13.4**	11.0	16.2	**40.8**	37.4	44.2	**44.6**	41.2	48.1
55–64	**13.0**	11.0	15.2	**39.2**	36.2	42.3	**46.9**	43.8	50.1
65+	**16.4**	**14.6**	**18.3**	**35.7**	**33.4**	**38.1**	**44.9**	**42.5**	**47.3**
Total	**16.6**	**15.2**	**18.2**	**42.4**	**40.5**	**44.4**	**39.5**	**37.7**	**41.4**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 10.26 shows the proportions of people who agreed or disagreed that most people could be trusted, by departmental region and sex, adjusted for age.

There was a significantly *higher* proportion of people residing in rural regions as a whole who agreed that most people could be trusted compared with the proportion in all Victorian people.

Civic trust in populations can be measured by the extent to which individuals believe there are opportunities to have a real say on issues that are important to them and whether they feel valued by the society to which they belong.

Table 10.26: Trust in people, by Department of Health and Human Services region and sex, Victoria, 2012

	Feel people can be trusted								
	No or not often			Sometimes			Yes		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Metropolitan males									
Eastern Metropolitan	**11.3**	8.1	15.7	**43.8**	38.2	49.6	**43.0**	37.5	48.6
North & West Metropolitan	**20.0**	16.0	24.8	**41.6**	36.3	47.2	**36.8**	31.8	42.1
Southern Metropolitan	**15.8**	11.3	21.7	**39.8**	33.2	46.9	**43.3**	37.2	49.6
Total	**16.7**	14.1	19.7	**41.2**	37.7	44.7	**40.6**	37.3	44.0
Rural males									
Barwon-South Western	**11.1**	7.5	16.2	**43.5**	37.0	50.4	**43.8**	37.1	50.8
Gippsland	**13.2**	9.0	19.0	**36.0**	29.6	43.0	**49.9**	42.8	57.0
Grampians	**12.6**	8.0	19.3	**38.7**	31.4	46.7	**47.5**	40.0	55.1
Hume	**14.0**	10.0	19.4	**39.7**	32.7	47.2	**45.7**	38.2	53.3
Loddon Mallee	**10.7**	6.8	16.3	**39.3**	32.1	47.0	**48.7**	41.7	55.9
Total	**12.4**	10.3	14.9	**39.6**	36.1	43.1	**46.9**	43.5	50.3
All males									
Total	**15.7**	**13.6**	**18.1**	**40.7**	**37.9**	**43.5**	**42.1**	**39.5**	**44.8**
Metropolitan females									
Eastern Metropolitan	**16.0**	11.7	21.5	**46.0**	40.6	51.5	**37.1**	32.0	42.6
North & West Metropolitan	**21.8**	17.8	26.5	**43.4**	38.4	48.6	**33.7**	29.2	38.6
Southern Metropolitan	**19.0**	14.8	24.0	**44.0**	38.3	49.8	**34.7**	29.8	40.0
Total	**19.5**	17.0	22.4	**44.0**	40.8	47.2	**35.2**	32.3	38.2
Rural females									
Barwon-South Western	**11.5**	8.2	15.8	**46.1**	40.9	51.4	**41.0**	35.6	46.6
Gippsland	**14.0**	9.5	20.2	**43.7**	36.7	50.9	**41.8**	35.6	48.3
Grampians	**11.9**	8.5	16.4	**52.3**	46.5	57.9	**35.3**	30.2	40.7
Hume	**13.2**	9.5	18.1	**40.5**	34.3	47.0	**44.8**	38.4	51.3
Loddon Mallee	**12.2**	9.2	15.9	**46.6**	41.3	52.0	**39.8**	34.6	45.2
Total	12.5	10.7	14.5	**45.7**	43.0	48.5	**40.6**	38.0	43.4
All females									
Total	**17.8**	**15.8**	**20.0**	**44.5**	**41.9**	**47.1**	**36.4**	**34.1**	**38.8**
Metropolitan people									
Eastern Metropolitan	**13.5**	10.7	17.0	**45.3**	41.1	49.6	**39.8**	35.9	43.8
North & West Metropolitan	**21.0**	18.0	24.3	**42.5**	38.7	46.3	**35.2**	31.8	38.8
Southern Metropolitan	**17.5**	14.3	21.2	**41.6**	37.1	46.2	**39.2**	35.2	43.4
Total	**18.1**	16.3	20.2	**42.6**	40.2	45.1	**37.8**	35.5	40.0
Rural people									
Barwon-South Western	**11.8**	9.0	15.4	**43.6**	38.6	48.8	**43.0**	38.1	48.1
Gippsland	**13.5**	10.2	17.6	**39.9**	34.8	45.2	**45.9**	41.0	50.9
Grampians	**12.3**	9.3	16.0	**45.9**	41.1	50.7	**41.0**	36.5	45.7
Hume	**13.6**	10.7	17.2	**40.4**	35.4	45.6	**44.9**	39.8	50.1
Loddon Mallee	11.3	8.8	14.5	**43.2**	38.5	48.1	**44.1**	39.6	48.7
Total	12.5	11.0	14.1	**42.7**	40.3	45.0	43.8	41.5	46.0
All people									
Total	**16.8**	**15.3**	**18.4**	**42.6**	**40.7**	**44.6**	**39.2**	**37.4**	**41.0**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 10.27 shows the proportion of Victorians who, in 2012, believed or did not believe there were opportunities to have a real say on issues that were important to them, by age group and sex, with 'Total' not adjusted for age.

Overall, 38.8 per cent of people believed they definitely had such opportunities and 22.9 per cent believed that they did not or did not often have such opportunities; this proportion was significantly *higher* in men (25.9 per cent) than women (20.0 per cent).

There were significantly *higher* proportions of men and people aged 55 years or older who believed they had opportunities to have a real say on issues that were important to them compared with all Victorian men and people, respectively.

Table 10.27: Opportunities to have a say, by age group and sex, Victoria, 2012

Age group (years)	Opportunity to have a real say								
	No or not often			Sometimes			Yes		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Males									
18–24	**19.4**	12.7	28.4	**44.3**	34.7	54.5	**34.8**	26.0	44.8
25–34	**30.7**	22.3	40.5	**40.2**	30.9	50.3	**26.3**	18.7	35.8
35–44	**29.7**	24.4	35.5	**36.1**	30.2	42.5	**33.0**	27.7	38.7
45–54	**22.9**	18.7	27.7	**35.9**	30.7	41.5	**38.5**	33.3	44.0
55–64	**25.6**	21.6	30.2	**27.1**	22.9	31.7	**44.7**	39.9	49.5
65+	**24.8**	21.6	28.3	**26.7**	23.6	30.2	**43.4**	39.7	47.3
Total	**25.9**	**23.4**	**28.6**	**35.1**	**32.3**	**38.1**	**36.3**	**33.6**	**39.1**
Females									
18–24	**15.8**	9.7	24.8	**46.8**	36.2	57.6	**37.4**	27.4	48.5
25–34	**22.2**	16.3	29.4	**40.4**	32.7	48.5	**36.6**	29.2	44.7
35–44	**19.1**	15.5	23.3	**36.3**	31.8	41.1	**42.8**	38.1	47.8
45–54	**20.0**	16.8	23.6	**36.3**	32.3	40.5	**42.0**	37.9	46.3
55–64	**19.1**	16.0	22.5	**32.9**	29.2	36.9	**44.9**	40.8	49.0
65+	**22.4**	19.9	25.2	**29.2**	26.3	32.2	**42.9**	39.8	46.1
Total	**20.0**	**18.2**	**22.0**	**36.5**	**34.1**	**38.9**	**41.2**	**38.8**	**43.6**
People									
18–24	**17.6**	12.8	23.8	**45.5**	38.3	53.0	**36.1**	29.3	43.5
25–34	**26.4**	21.2	32.5	**40.3**	34.2	46.8	**31.4**	25.9	37.6
35–44	**24.3**	21.1	27.8	**36.2**	32.4	40.1	**38.0**	34.4	41.8
45–54	**21.4**	18.7	24.3	**36.1**	32.8	39.5	**40.3**	36.9	43.7
55–64	**22.3**	19.7	25.1	**30.1**	27.2	33.0	**44.8**	41.6	48.0
65+	**23.5**	21.5	25.7	**28.1**	25.9	30.3	**43.2**	40.7	45.6
Total	**22.9**	**21.3**	**24.6**	**35.8**	**33.9**	**37.7**	**38.8**	**37.0**	**40.7**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 10.28 shows the proportion of people who believed or did not believe there were opportunities to have a real say on issues that were important to them, by departmental region and sex, adjusted for age.

A significantly *higher* proportion of men who lived in Grampians Region believed they had such opportunities compared with all Victorian men. In contrast, a significantly *lower* proportion of men who lived in Southern Metropolitan Region believed they had such opportunities compared with all Victorian men.

Another indicator of civic trust is the extent to which people feel they are valued by the society to which they belong.

Table 10.28: Opportunities to have a say, by Department of Health and Human Services region and sex, Victoria, 2012

	Opportunity to have a real say								
	No or not often			Sometimes			Yes		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Metropolitan males									
Eastern Metropolitan	**29.8**	24.1	36.1	**28.2**	23.3	33.7	**39.9**	33.5	46.6
North & West Metropolitan	**23.6**	19.3	28.5	**36.0**	30.8	41.6	**36.2**	31.0	41.7
Southern Metropolitan	**27.5**	22.4	33.3	**42.0**	36.0	48.2	**27.9**	23.2	33.0
Total	**26.3**	23.2	29.6	**35.9**	32.3	39.6	**34.5**	31.3	37.9
Rural males									
Barwon-South Western	**26.5**	20.2	33.9	**35.0**	27.5	43.4	**37.1**	31.1	43.6
Gippsland	**27.8**	21.9	34.6	**34.2**	27.7	41.3	**34.4**	28.7	40.6
Grampians	**13.7**	9.5	19.3	**37.2**	30.3	44.7	**48.1**	41.1	55.2
Hume	**18.9**	13.5	25.9	**34.9**	29.7	40.5	**43.2**	35.9	50.9
Loddon Mallee	**32.0**	25.0	39.9	**24.9**	18.9	31.9	**42.0**	34.6	49.8
Total	**24.7**	21.6	28.0	**32.8**	29.3	36.5	**40.6**	37.3	44.0
All males									
Total	**25.8**	**23.3**	**28.5**	**35.1**	**32.3**	**38.1**	**36.1**	**33.5**	**38.8**
Metropolitan females									
Eastern Metropolitan	**19.4**	15.1	24.5	**33.8**	28.6	39.4	**43.5**	38.2	49.0
North & West Metropolitan	**18.5**	15.2	22.4	**38.0**	33.1	43.1	**41.3**	36.3	46.5
Southern Metropolitan	**24.5**	19.8	29.9	**33.8**	28.4	39.7	**40.0**	34.6	45.6
Total	**20.4**	18.0	23.1	**35.7**	32.7	39.0	**41.4**	38.3	44.7
Rural females									
Barwon-South Western	**17.1**	13.6	21.2	**38.8**	33.3	44.6	**41.9**	36.4	47.5
Gippsland	**25.1**	18.8	32.7	**36.1**	29.2	43.6	**37.3**	31.6	43.4
Grampians	**15.6**	12.1	19.8	**42.2**	36.8	47.7	**40.5**	35.3	45.8
Hume	**17.5**	13.4	22.5	**39.2**	33.3	45.4	**40.6**	34.6	46.8
Loddon Mallee	**20.4**	16.3	25.2	**36.0**	30.9	41.5	**42.1**	36.9	47.6
Total	**19.1**	17.0	21.4	**38.3**	35.6	41.1	**40.6**	38.0	43.3
All females									
Total	**20.1**	**18.1**	**22.2**	**36.4**	**33.9**	**38.9**	**41.3**	**38.8**	**43.9**
Metropolitan people									
Eastern Metropolitan	**24.8**	21.0	28.9	**30.9**	27.2	34.8	**41.6**	37.4	46.0
North & West Metropolitan	**20.8**	18.1	23.9	**37.3**	33.6	41.1	**38.6**	34.9	42.4
Southern Metropolitan	**25.9**	22.3	29.9	**37.9**	33.5	42.4	**33.9**	30.2	37.9
Total	**23.3**	21.3	25.4	**35.9**	33.5	38.3	**38.0**	35.7	40.4
Rural people									
Barwon-South Western	**21.9**	18.3	26.1	**36.4**	31.6	41.5	**39.9**	35.3	44.6
Gippsland	**26.5**	22.1	31.5	**35.1**	30.2	40.3	**35.7**	31.6	40.0
Grampians	**14.6**	11.9	17.8	**39.2**	34.8	43.9	**44.8**	40.3	49.4
Hume	**18.1**	14.7	22.2	**37.3**	33.1	41.7	**41.9**	37.1	46.8
Loddon Mallee	**26.2**	22.0	30.8	**30.4**	26.3	34.9	**42.1**	37.5	46.9
Total	**21.9**	20.0	23.9	**35.5**	33.2	37.8	**40.7**	38.6	42.9
All people									
Total	**22.9**	**21.3**	**24.6**	**35.8**	**33.9**	**37.8**	**38.7**	**36.9**	**40.6**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 10.29 shows the proportions of Victorians who did or did not feel valued by society, by age group and sex, with 'Total' not adjusted for age.

More than half of all people (54.0 per cent) definitely felt valued by society. A further 29.6 per cent only sometimes felt they were valued by society, while 11.5 per cent did not feel valued by society.

Significantly *higher* proportions of women and people aged 35–44 years definitely felt valued by society compared with all Victorian women and people, respectively. In contrast, significantly *higher* proportions of women and people aged 65 years or older did not feel valued by society compared with all Victorian women and people, respectively.

Table 10.29: Feeling valued by society, by age group and sex, Victoria, 2012

	Feel valued by society								
	No or not often			Sometimes			Yes		
Age group (years)	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL
Males									
18–24	**6.6***	3.0	13.8	**37.0**	27.8	47.2	**54.0**	43.9	63.8
25–34	**15.1**	9.4	23.5	**32.2**	23.7	42.0	**46.6**	36.9	56.6
35–44	**12.1**	8.6	16.7	**27.2**	22.3	32.9	**57.7**	51.6	63.6
45–54	**10.2**	7.5	13.9	**30.1**	25.4	35.3	**56.4**	50.9	61.8
55–64	**15.5**	12.2	19.6	**26.3**	22.3	30.8	**51.2**	46.3	56.0
65+	**14.5**	12.1	17.4	**21.6**	18.7	24.8	**55.4**	51.6	59.1
Total	**12.5**	**10.7**	**14.6**	**28.9**	**26.3**	**31.7**	**53.5**	**50.5**	**56.4**
Females									
18–24	**6.4***	3.0	13.0	**40.8**	30.6	52.0	**52.4**	41.6	63.1
25–34	**9.8**	6.0	15.6	**35.1**	27.8	43.2	**52.7**	44.6	60.7
35–44	**8.2**	5.7	11.5	**26.5**	22.5	30.9	**62.1**	57.2	66.7
45–54	**10.3**	8.1	13.2	**29.6**	25.9	33.6	**55.3**	51.0	59.4
55–64	**11.0**	8.8	13.6	**29.1**	25.4	33.0	**53.2**	49.1	57.3
65+	**16.3**	14.1	18.8	**23.8**	21.3	26.6	**50.5**	47.3	53.7
Total	**10.6**	**9.3**	**12.1**	**30.3**	**27.9**	**32.7**	**54.5**	**52.0**	**56.9**
People									
18–24	**6.5***	3.8	10.9	**38.9**	31.8	46.4	**53.2**	45.8	60.5
25–34	**12.5**	8.8	17.3	**33.6**	27.9	39.9	**49.6**	43.3	56.0
35–44	**10.1**	7.9	12.8	**26.9**	23.6	30.4	**59.9**	56.0	63.7
45–54	**10.3**	8.4	12.5	**29.9**	26.8	33.1	**55.8**	52.4	59.2
55–64	**13.2**	11.2	15.6	**27.7**	25.0	30.7	**52.2**	49.1	55.4
65+	**15.5**	13.8	17.4	**22.8**	20.9	24.9	**52.7**	50.2	55.1
Total	**11.5**	**10.4**	**12.8**	**29.6**	**27.8**	**31.5**	**54.0**	**52.1**	**55.9**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 10.30 shows the proportions of Victorian people who did or did not feel valued by society, by departmental region and sex, adjusted for age.

There were no significant differences in the proportions of men, women and people who did or did not feel valued between those who lived in rural regions and those in metropolitan regions.

The only notable regional difference was a significantly *higher* proportion of men residing in Grampians Region who felt valued by society compared with the proportion in all Victorian men.

Table 10.30: Feeling valued by society, by Department of Health and Human Services region and sex, Victoria, 2012

	Feel valued by society								
	No or not often			Sometimes			Yes		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Metropolitan males									
Eastern Metropolitan	**11.2**	7.7	15.9	**31.4**	25.6	37.9	**52.8**	46.7	58.8
North & West Metropolitan	**13.5**	10.2	17.7	**29.4**	24.5	34.8	**51.2**	45.7	56.7
Southern Metropolitan	**11.2**	8.2	15.2	**28.4**	22.6	35.1	**53.7**	46.7	60.6
Total	**12.2**	10.1	14.7	**29.6**	26.2	33.1	**52.3**	48.6	56.0
Rural males									
Barwon-South Western	**12.8**	8.0	20.0	**35.0**	27.5	43.2	**49.3**	43.0	55.6
Gippsland	**14.8**	10.2	21.1	**33.7**	27.3	40.7	**49.5**	42.8	56.3
Grampians	**11.3**	7.3	17.1	**21.6**	16.7	27.5	**64.2**	57.2	70.6
Hume	**21.7**	14.3	31.5	**19.4**	15.7	23.6	**55.7**	46.2	64.9
Loddon Mallee	**12.1**	7.9	18.2	**23.2**	17.3	30.3	**60.8**	53.7	67.5
Total	**14.5**	11.7	17.9	**27.3**	24.0	30.9	**55.2**	51.5	58.7
All males									
Total	**12.7**	**10.9**	**14.7**	**29.2**	**26.5**	**32.0**	**52.9**	**49.9**	**55.9**
Metropolitan females									
Eastern Metropolitan	**10.6**	7.4	15.2	**30.1**	25.1	35.7	**54.9**	49.3	60.4
North & West Metropolitan	**9.5**	7.4	12.2	**29.8**	25.2	34.8	**55.4**	50.3	60.4
Southern Metropolitan	**11.9**	8.7	16.1	**31.2**	25.9	37.1	**51.7**	45.9	57.5
Total	**10.4**	8.7	12.3	**30.3**	27.3	33.5	**54.3**	51.0	57.5
Rural females									
Barwon-South Western	**11.4**	8.0	16.0	**30.1**	25.0	35.9	**54.2**	48.4	59.9
Gippsland	**13.4**	8.8	20.0	**26.9**	20.4	34.5	**55.6**	48.0	62.9
Grampians	**9.9**	7.3	13.3	**32.9**	27.7	38.5	**54.4**	48.6	60.0
Hume	**11.5**	7.9	16.4	**29.3**	24.0	35.2	**56.3**	49.8	62.5
Loddon Mallee	**10.1**	7.6	13.1	**31.5**	26.6	36.9	**55.1**	49.7	60.3
Total	**11.3**	9.6	13.3	**30.2**	27.6	32.9	**54.9**	52.0	57.7
All females									
Total	**10.5**	**9.2**	**12.1**	**30.4**	**28.0**	**32.9**	**54.5**	**51.9**	**57.0**
Metropolitan people									
Eastern Metropolitan	**10.9**	8.4	14.0	**30.9**	26.9	35.3	**53.7**	49.5	57.8
North & West Metropolitan	**11.6**	9.5	14.1	**29.6**	26.2	33.3	**53.2**	49.4	57.0
Southern Metropolitan	**11.5**	9.2	14.3	**29.8**	25.8	34.2	**52.7**	48.2	57.2
Total	**11.4**	10.0	12.9	**30.0**	27.7	32.4	**53.2**	50.7	55.6
Rural people									
Barwon-South Western	**11.9**	8.9	15.6	**32.8**	28.1	37.8	**51.8**	47.1	56.5
Gippsland	**14.6**	10.9	19.2	**30.2**	25.5	35.3	**52.1**	47.0	57.2
Grampians	**10.4**	8.0	13.4	**27.4**	23.4	31.9	**59.4**	54.7	63.9
Hume	**16.5**	11.5	23.2	**24.3**	20.7	28.1	**56.1**	50.0	62.0
Loddon Mallee	**11.4**	8.6	14.9	**27.4**	23.3	31.8	**57.7**	53.1	62.1
Total	**12.9**	11.1	14.8	**28.7**	26.6	30.9	**55.1**	52.8	57.4
All people									
Total	**11.7**	**10.5**	**12.9**	**29.8**	**28.0**	**31.7**	**53.6**	**51.6**	**55.6**

Data were age-standardised to the 2011 Victorian population.

LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.

Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

10.4.8 Community and civic engagement

Community and civic engagement is measured through such indicators as membership of organised groups, attendance at local community events, being involved in the community through volunteering, taking action on behalf of the community, being a member of a decision-making board, rating the local neighbourhood and being actively involved in a local school.

Table 10.31 shows membership of an organised group, by age group and sex, with 'Total' not adjusted for age.

The highest membership, with 28.3 per cent, was for a sports group; membership was significantly *higher* in men (35.5 per cent) compared with women (21.5 per cent).

In descending order of membership, 24.3 per cent of people were a member of a professional group or academic society, 18.3 per cent were a member of an 'other' community or action group, 16.9 per cent were a member of a religious group and 12.4 per cent were a member of a school group.

Significantly, *higher* proportions of women were members of a religious or school group compared with their male counterparts. By contrast there was no difference between the sexes for membership of a professional or 'other' group.

Membership of a sports group appeared to decline with age; the highest membership was in men and people aged 18–24 years. In contrast, membership of a religious or community group was greatest in men, women and people aged 65 years or older.

Membership of a school group was clearly highest in men, women and people aged 35–44 years, while membership of a professional group or academic society was highest in those of working age and lowest in those aged 65 years or older. The prevalence of membership in an 'other' community or action group increased with age.

Table 10.31: Membership of an organised group, by age group and sex, Victoria, 2012

	Member of a community group														
	Sports			Religious			School			Professional			Other		
Age group (years)	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL
Males															
18–24	51.8	41.8	61.6	13.6*	7.6	23.2	14.7*	8.5	24.2	22.9	15.3	32.9	13.8	8.5	21.6
25–34	31.5	23.2	41.1	11.7*	6.5	20.1	6.1*	2.6	13.7	37.5	28.5	47.5	15.1	9.3	23.6
35–44	35.2	29.5	41.3	12.5	9.1	17.0	18.0	13.5	23.7	31.2	25.7	37.2	15.4	11.7	20.1
45–54	34.3	29.4	39.5	11.8	8.7	15.8	9.0	6.6	12.3	25.8	21.3	30.8	19.7	15.6	24.5
55–64	31.8	27.4	36.4	15.9	12.6	19.8	4.9	3.3	7.4	22.7	18.7	27.3	23.4	19.6	27.6
65+	31.8	28.4	35.5	23.6	20.4	27.0	2.0	1.2	3.2	15.4	12.9	18.3	25.5	22.4	28.8
Total	**35.5**	**32.7**	**38.4**	**14.7**	**12.8**	**16.9**	**9.1**	**7.4**	**11.2**	**26.5**	**23.9**	**29.3**	**18.7**	**16.7**	**20.9**
Females															
18–24	25.8	17.9	35.7	15.1*	9.1	24.1	24.2	15.8	35.3	23.9	16.0	34.2	10.1*	5.3	18.5
25–34	20.9	15.4	27.7	13.9	9.4	20.0	12.9	8.9	18.3	26.1	19.7	33.7	15.0	10.3	21.2
35–44	25.5	21.5	29.9	19.3	15.7	23.5	30.7	26.4	35.2	28.6	24.3	33.3	15.2	12.2	18.8
45–54	24.3	20.8	28.1	17.1	14.1	20.6	14.8	12.2	17.9	24.4	21.0	28.1	14.5	12.0	17.5
55–64	18.3	15.3	21.6	20.8	17.4	24.6	9.2	6.9	12.1	20.9	17.6	24.5	21.1	18.1	24.6
65+	15.2	13.2	17.5	26.1	23.5	28.9	3.8	2.8	5.2	10.1	8.4	12.1	28.8	26.0	31.7
Total	**21.5**	**19.6**	**23.5**	**18.9**	**17.2**	**20.8**	**15.6**	**13.8**	**17.6**	**22.2**	**20.1**	**24.3**	**17.9**	**16.3**	**19.6**
People															
18–24	39.1	32.3	46.4	14.4	9.8	20.6	19.3	13.8	26.4	23.4	17.7	30.3	12.0	8.1	17.3
25–34	26.2	21.1	32.1	12.8	9.1	17.6	9.5	6.5	13.5	31.9	26.2	38.1	15.0	11.1	20.0
35–44	30.3	26.7	34.0	15.9	13.3	19.0	24.4	21.2	28.0	29.9	26.4	33.6	15.3	12.8	18.1
45–54	29.2	26.2	32.4	14.5	12.2	17.1	12.0	10.1	14.2	25.1	22.2	28.1	17.1	14.6	19.8
55–64	24.9	22.2	27.7	18.4	16.0	21.1	7.1	5.6	8.9	21.8	19.2	24.6	22.2	19.8	24.9
65+	22.7	20.8	24.8	24.9	22.9	27.1	3.0	2.3	3.9	12.5	11.0	14.2	27.3	25.2	29.5
Total	**28.3**	**26.6**	**30.1**	**16.9**	**15.5**	**18.3**	**12.4**	**11.2**	**13.8**	**24.3**	**22.6**	**26.0**	**18.3**	**17.0**	**19.7**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 10.32 shows membership of an organised group, by departmental region and sex, adjusted for age.

There were significantly *higher* proportions of men and women in rural regions who belonged to a sports group or other community or action group compared with their metropolitan counterparts.

There was no significant difference in the proportion of men or women who belonged to a religious group in metropolitan compared with rural regions.

There was a significantly *higher* proportion of women who belonged to a school group in rural regions compared with the proportion in metropolitan regions.

There were significantly *higher* proportions of men in metropolitan regions who belonged to a professional group or academic society compared with their rural counterparts.

Table 10.32: Membership of an organised group, by Department of Health and Human Services region and sex, Victoria, 2012

	Member of a community group														
	Sport			Religious			School			Professional			Other		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males															
Eastern Metropolitan	**40.2**	33.8	46.9	**20.7**	15.7	26.8	**10.4**	6.6	16.1	**32.3**	26.6	38.6	**15.7**	12.0	20.4
North & West Metropolitan	**27.3**	22.8	32.4	**14.9**	11.5	19.2	**7.2**	4.9	10.6	**25.9**	21.4	30.8	**15.1**	11.6	19.3
Southern Metropolitan	**32.6**	26.8	39.0	**11.5**	8.3	15.7	**9.4**	5.9	14.6	**26.2**	20.7	32.7	**19.1**	15.1	23.9
Total	**32.5**	29.2	35.9	**15.3**	12.9	18.1	**8.7**	6.8	11.2	**27.6**	24.5	30.8	**16.9**	14.5	19.5
Rural males															
Barwon-South Western	**50.0**	41.6	58.5	**12.4**	9.3	16.4	**11.4**	7.2	17.6	**20.5**	14.1	28.9	**21.3**	16.3	27.3
Gippsland	**42.6**	36.0	49.4	**13.6**	9.2	19.7	**7.7**	4.8	12.3	**22.3**	16.7	29.1	**22.3**	17.5	27.8
Grampians	**41.7**	34.3	49.5	**15.3**	11.8	19.7	**9.8**	6.5	14.5	**22.5**	16.9	29.3	**25.8**	19.7	32.9
Hume	**40.3**	30.9	50.5	**24.7**	18.8	31.6	**8.5**	5.4	13.0	**14.6**	9.3	22.2	**25.9**	18.5	34.9
Loddon Mallee	**40.6**	33.4	48.3	**10.4**	7.8	13.8	**7.3**	5.0	10.6	**20.8**	15.1	27.9	**26.4**	20.6	33.2
Total	**43.7**	40.0	47.6	**14.9**	12.1	18.3	**8.9**	7.1	11.0	**19.7**	16.8	23.1	**24.2**	21.3	27.4
All males															
Total	**35.1**	**32.4**	**38.0**	**15.1**	**13.1**	**17.4**	**8.9**	**7.3**	**10.8**	**25.6**	**23.1**	**28.2**	**18.8**	**16.9**	**21.0**
Metropolitan females															
Eastern Metropolitan	**21.2**	17.0	26.1	**19.6**	15.8	24.1	**15.2**	12.4	18.7	**24.3**	19.5	29.9	**19.2**	15.5	23.5
North & West Metropolitan	**17.5**	14.0	21.6	**18.0**	14.7	21.9	**13.9**	10.6	18.1	**20.9**	17.1	25.3	**15.0**	12.0	18.5
Southern Metropolitan	**21.4**	17.2	26.2	**18.0**	14.4	22.2	**14.8**	11.2	19.3	**21.9**	17.6	26.9	**14.8**	11.8	18.4
Total	**19.5**	17.2	22.1	**18.4**	16.3	20.7	**14.6**	12.4	17.0	**22.0**	19.4	24.9	**15.6**	13.7	17.7
Rural females															
Barwon-South Western	**26.0**	21.2	31.5	**23.2**	18.6	28.5	**19.4**	14.9	24.9	**25.8**	20.7	31.6	**19.3**	15.5	23.9
Gippsland	**25.6**	20.3	31.7	**20.7**	14.8	28.3	**21.8**	16.4	28.4	**22.6**	16.8	29.8	**22.5**	18.4	27.2
Grampians	**29.7**	24.2	35.8	**22.2**	18.2	26.9	**17.2**	13.0	22.4	**21.3**	16.6	27.0	**24.7**	20.2	29.7
Hume	**28.0**	22.7	33.9	**21.6**	16.7	27.4	**19.4**	14.2	25.9	**24.2**	18.7	30.7	**21.8**	17.7	26.5
Loddon Mallee	**27.0**	22.4	32.2	**15.0**	12.1	18.4	**20.4**	16.4	25.0	**20.6**	16.6	25.2	**22.9**	19.0	27.3
Total	**26.9**	24.5	29.5	**20.3**	18.0	22.9	**19.3**	17.1	21.8	**23.0**	20.6	25.6	**22.0**	20.1	24.1
All females															
Total	**21.3**	**19.4**	**23.4**	**18.9**	**17.1**	**20.8**	**15.5**	**13.8**	**17.5**	**22.3**	**20.2**	**24.5**	**17.3**	**15.7**	**19.0**
Metropolitan people															
Eastern Metropolitan	**30.6**	26.5	35.1	**20.3**	16.8	24.3	**13.0**	10.4	16.2	**28.0**	24.1	32.3	**17.6**	14.8	20.8
North & West Metropolitan	**22.2**	19.2	25.5	**16.3**	13.9	19.1	**10.6**	8.5	13.2	**23.3**	20.3	26.6	**15.2**	12.8	18.0
Southern Metropolitan	**26.7**	23.1	30.7	**14.9**	12.4	17.8	**12.2**	9.5	15.5	**23.9**	20.3	27.9	**16.9**	14.3	19.9
Total	**25.8**	23.7	28.0	**16.9**	15.2	18.7	**11.7**	10.2	13.4	**24.7**	22.7	26.8	**16.3**	14.8	18.0
Rural people															
Barwon-South Western	**38.0**	33.0	43.2	**17.9**	14.7	21.7	**15.1**	11.8	19.2	**23.0**	18.8	27.8	**20.4**	17.0	24.3
Gippsland	**33.5**	28.7	38.6	**16.9**	13.0	21.8	**13.9**	10.7	17.9	**22.0**	17.8	26.9	**22.6**	19.3	26.2
Grampians	**35.6**	31.0	40.5	**18.6**	15.9	21.8	**13.6**	10.6	17.1	**21.2**	17.5	25.4	**24.8**	21.0	29.0
Hume	**34.2**	28.4	40.6	**23.5**	18.6	29.2	**13.9**	10.6	18.0	**19.1**	15.1	24.0	**24.1**	19.5	29.3
Loddon Mallee	**34.1**	29.5	38.9	**12.8**	10.7	15.2	**14.1**	11.4	17.2	**20.7**	17.0	25.0	**24.6**	21.1	28.6
Total	**35.3**	33.0	37.7	**17.7**	15.8	19.7	**14.1**	12.6	15.7	**21.3**	19.3	23.4	**23.1**	21.4	25.0
All people															
Total	**28.1**	**26.4**	**29.9**	**17.0**	**15.7**	**18.5**	**12.2**	**11.0**	**13.6**	**23.9**	**22.2**	**25.6**	**18.1**	**16.9**	**19.5**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 10.33 shows the proportion of the population who believe in the possibility of getting a job through a contact in a social group, by age group and sex, with 'Total' not adjusted for age.

Overall, 62.1 per cent of people believe in the possibility of getting a job through a contact in a social group, with no significant difference between men (62.9 per cent) and women (61.2 per cent).

A significantly *higher* proportion of men and people aged 18–24 years and women aged 25–34 years believe in the possibility of getting a job through a contact in a social group compared with the proportion in all Victorian men, people and women, respectively. In contrast, a significantly *lower* proportion of men and people aged 45–64 years and women aged 55–64 years believe in the possibility of getting a job through a contact in one of these social groups compared with the proportion in all Victorian men, people and women, respectively.

Table 10.33: Possibility of getting a job through a contact in a social group, by age group and sex, Victoria, 2012

	Possibility of getting a job through a contact in one of these groups					
	Yes			No		
	%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL
Males						
18–24	81.1	69.5	88.9	14.3*	7.6	25.4
25–34	69.0	56.8	79.0	23.4	14.8	35.0
35–44	61.0	53.4	68.1	30.9	24.4	38.2
45–54	51.0	44.1	58.0	39.6	32.9	46.7
55–64	52.5	46.2	58.7	34.3	28.7	40.5
65+						
Total	62.9	58.8	66.8	28.6	25.1	32.5
Females						
18–24	69.8	54.1	81.9	29.8	17.7	45.6
25–34	76.2	66.1	84.1	19.4	12.6	28.7
35–44	65.3	59.3	70.8	24.3	19.4	29.9
45–54	52.4	46.8	58.0	36.7	31.4	42.3
55–64	41.0	35.6	46.7	43.6	38.3	49.2
65+						
Total	61.2	57.5	64.8	30.2	26.8	33.7
People						
18–24	76.0	66.5	83.4	21.3	14.2	30.8
25–34	72.2	64.2	79.0	21.6	15.7	29.0
35–44	63.2	58.4	67.7	27.5	23.4	32.1
45–54	51.7	47.2	56.2	38.2	33.8	42.7
55–64	46.8	42.6	51.0	38.9	35.0	43.1
65+						
Total	62.1	59.3	64.8	29.4	26.9	32.0

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 10.34 shows the proportion of the population who believe in the possibility of getting a job through a contact in a social group, by departmental region and sex, adjusted for age.

A significantly *higher* proportion of women and people residing in rural areas as a whole, and Hume and Loddon Mallee regions in particular, believe in the possibility of getting a job through a contact in a social group compared with the proportion in all Victorian men, people and women, respectively.

Table 10.34: Possibility of getting a job through a contact in a social group, by Department of Health and Human Services region and sex, Victoria, 2012

	Possibility of getting a job through a contact in one of these groups					
	Yes			No		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Metropolitan males						
Eastern Metropolitan	**60.2**	51.1	68.6	**33.0**	24.9	42.1
North & West Metropolitan	**58.3**	49.9	66.2	**31.8**	24.8	39.7
Southern Metropolitan	**63.5**	55.8	70.5	**28.3**	21.8	35.8
Total	**60.7**	55.4	65.7	**30.8**	26.1	35.9
Rural males						
Barwon-South Western	**70.9**	61.5	78.9	**24.6**	17.1	34.1
Gippsland	**55.2**	45.4	64.5	**36.0**	27.1	46.0
Grampians	**69.7**	60.4	77.6	**25.0**	17.7	34.1
Hume	**65.4**	55.2	74.3	**27.7**	19.2	38.0
Loddon Mallee	**69.5**	60.5	77.2	**22.1**	15.6	30.4
Total	**67.0**	62.6	71.1	**26.1**	22.3	30.4
All males						
Total	**62.5**	**58.4**	**66.4**	**29.4**	**25.8**	**33.4**
Metropolitan females						
Eastern Metropolitan	**57.0**	49.0	64.7	**33.9**	26.5	42.1
North & West Metropolitan	**56.0**	47.7	64.1	**34.3**	27.5	41.7
Southern Metropolitan	**63.0**	53.7	71.4	**28.0**	20.2	37.5
Total	**58.0**	53.0	62.9	**32.4**	28.0	37.3
Rural females						
Barwon-South Western	**70.9**	64.2	76.8	**24.5**	19.0	30.9
Gippsland	**70.9**	64.3	76.8	**25.0**	19.3	31.7
Grampians	**70.6**	64.2	76.4	20.4	15.4	26.5
Hume	74.7	67.8	80.6	**20.8**	15.3	27.6
Loddon Mallee	72.9	65.8	79.0	**21.8**	16.1	28.9
Total	71.4	68.1	74.4	23.1	20.2	26.3
All females						
Total	**61.5**	**57.6**	**65.2**	**30.1**	**26.7**	**33.8**
Metropolitan people						
Eastern Metropolitan	**58.9**	52.9	64.7	**33.0**	27.4	39.1
North & West Metropolitan	**57.2**	50.9	63.2	**33.2**	27.5	39.4
Southern Metropolitan	**63.3**	57.3	68.8	**27.8**	22.6	33.7
Total	**59.3**	55.6	62.9	**31.6**	28.2	35.2
Rural people						
Barwon-South Western	**69.9**	63.3	75.7	**25.7**	20.1	32.3
Gippsland	**62.8**	56.4	68.8	**30.5**	24.8	37.0
Grampians	**69.9**	64.1	75.2	**22.8**	18.0	28.5
Hume	70.9	64.9	76.2	**23.3**	18.2	29.3
Loddon Mallee	71.5	66.0	76.4	21.5	17.2	26.6
Total	69.1	66.3	71.8	**24.7**	22.2	27.5
All people						
Total	**62.0**	**59.2**	**64.8**	**29.7**	**27.1**	**32.5**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

10.4.9 Attendance at a local community event

A further indicator of community participation is attendance at a local community event within the past six months.

Table 10.35 shows attendance at a local community event in the six months prior to the survey, by age group and sex, with 'Total' not adjusted for age. Overall, 55.0 per cent of people had attended a local community event; this proportion was similar in women (55.3 per cent) and men (54.7 per cent).

Significantly *higher* proportions of men, women and people aged 35–44 years had attended a local community event compared with all Victorian men, women and people, respectively. In contrast, a significantly *lower* proportion of men, women and people aged 65 years or older had attended a local community event.

Table 10.35: Attendance at a local community event, by age group and sex, Victoria, 2012

	Attended a local community event in the past 6 months					
	Yes			No		
	%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL
Males						
18–24	**57.7**	47.4	67.3	**42.3**	32.7	52.6
25–34	**44.3**	34.9	54.1	**54.8**	44.9	64.2
35–44	**66.8**	60.6	72.4	**32.8**	27.2	38.9
45–54	**57.8**	52.1	63.3	**42.2**	36.7	47.9
55–64	**55.1**	50.2	59.9	**44.7**	39.9	49.6
65+	**47.5**	43.7	51.3	**51.8**	48.0	55.6
Total	**54.7**	**51.7**	**57.7**	**44.9**	**41.9**	**47.9**
Females						
18–24	**47.4**	36.9	58.2	**52.6**	41.8	63.1
25–34	**54.8**	46.6	62.7	**45.1**	37.2	53.3
35–44	**67.8**	62.9	72.3	**31.8**	27.3	36.7
45–54	**57.0**	52.7	61.3	**42.3**	38.1	46.6
55–64	**52.5**	48.3	56.6	**47.2**	43.1	51.3
65+	**49.6**	46.4	52.8	**50.0**	46.9	53.2
Total	**55.3**	**52.8**	**57.8**	**44.4**	**41.9**	**46.9**
People						
18–24	**52.7**	45.2	60.0	**47.3**	40.0	54.8
25–34	**49.5**	43.2	55.9	**50.0**	43.6	56.3
35–44	**67.3**	63.4	70.9	**32.3**	28.7	36.2
45–54	**57.4**	53.8	60.9	**42.3**	38.8	45.8
55–64	**53.8**	50.6	56.9	**46.0**	42.8	49.1
65+	**48.7**	46.2	51.1	**50.8**	48.4	53.3
Total	**55.0**	**53.1**	**56.9**	**44.6**	**42.7**	**46.6**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 10.36 shows attendance at a local community event in the six months prior to the survey, by departmental region and sex, adjusted for age.

A significantly *higher* proportion of men, women and people who lived in a rural region had attended a local community event in the six months prior to the survey compared with their metropolitan counterparts.

Moreover, there was a significantly *higher* proportion of men, women and people in every rural region who had attended a local community event compared with all Victorian men, women and people, respectively. In contrast, the proportion of women and people residing in North & West Metropolitan Region and people residing in metropolitan regions as a whole who had attended a local community event in the past six months was significantly *lower* compared with all Victorian women and people, respectively.

Table 10.36: Attendance at a local community event, by Department of Health and Human Services region and sex, Victoria, 2012

	Attended a local community event in the past 6 months					
	Yes			No		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Metropolitan males						
Eastern Metropolitan	**46.0**	40.6	51.5	**53.9**	48.4	59.3
North & West Metropolitan	**47.6**	42.2	53.1	**52.1**	46.7	57.6
Southern Metropolitan	**49.5**	43.1	55.8	**49.7**	43.3	56.0
Total	**48.2**	44.7	51.6	**51.4**	47.9	54.8
Rural males						
Barwon-South Western	**65.9**	57.6	73.3	**34.1**	26.7	42.4
Gippsland	**65.3**	58.3	71.8	**34.4**	28.0	41.5
Grampians	**74.8**	67.7	80.7	**25.2**	19.3	32.3
Hume	**73.2**	65.8	79.4	**26.7**	20.5	34.1
Loddon Mallee	**81.8**	77.0	85.8	**17.9**	13.9	22.7
Total	**72.3**	68.9	75.5	**27.6**	24.4	31.0
All males						
Total	**54.2**	**51.3**	**57.0**	**45.5**	**42.6**	**48.3**
Metropolitan females						
Eastern Metropolitan	**53.7**	48.1	59.2	**45.8**	40.3	51.4
North & West Metropolitan	**47.4**	42.4	52.5	**52.4**	47.4	57.5
Southern Metropolitan	**50.8**	45.0	56.5	**49.1**	43.3	54.9
Total	**50.3**	47.1	53.5	**49.4**	46.2	52.6
Rural females						
Barwon-South Western	**64.9**	59.3	70.2	**34.6**	29.3	40.3
Gippsland	**69.9**	63.1	75.8	**29.5**	23.5	36.2
Grampians	**71.2**	65.6	76.2	**28.4**	23.4	33.9
Hume	**72.3**	66.2	77.6	**27.2**	21.9	33.2
Loddon Mallee	**75.3**	70.2	79.8	**24.6**	20.1	29.7
Total	**70.1**	67.4	72.7	**29.4**	26.9	32.1
All females						
Total	**55.3**	**52.6**	**57.8**	**44.4**	**41.8**	**47.0**
Metropolitan people						
Eastern Metropolitan	**49.9**	45.7	54.0	**49.8**	45.6	54.0
North & West Metropolitan	**47.5**	43.8	51.3	**52.3**	48.5	56.0
Southern Metropolitan	**50.3**	45.8	54.7	**49.3**	44.8	53.7
Total	**49.2**	46.8	51.6	**50.5**	48.1	52.8
Rural people						
Barwon-South Western	**65.4**	60.5	70.0	**34.4**	29.8	39.3
Gippsland	**67.0**	61.7	71.9	**32.5**	27.7	37.8
Grampians	**73.1**	68.8	77.0	**26.7**	22.7	31.0
Hume	**73.0**	68.1	77.3	**26.7**	22.3	31.5
Loddon Mallee	**78.8**	75.3	82.0	**21.0**	17.8	24.5
Total	**71.3**	69.1	73.3	**28.4**	26.4	30.6
All people						
Total	**54.7**	**52.8**	**56.6**	**45.0**	**43.0**	**46.9**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

10.4.10 Volunteering

Table 10.37 shows rates of volunteering, by age group and sex, with 'Total' not adjusted for age. Overall, 23.6 per cent of people reported helping out a local group by volunteering in 2012; this proportion was not significantly different between the sexes. In contrast, 64.5 per cent of people rarely or never volunteered.

The proportion of people volunteering was significantly *higher* in women and people aged 35–44 years and those aged 65 years or older compared with all Victorian women and people, respectively. In contrast, the proportion of women and people volunteering among those aged 18–24 years was significantly lower compared with all Victorian women and people, respectively.

Table 10.37: Helped out as a volunteer, by age group and sex, Victoria, 2012

Age group (years)	Helped out as a volunteer								
	No or not often			Sometimes			Yes, definitely		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Males									
18–24	**71.2**	61.6	79.2	**13.2***	7.6	21.8	**15.6**	10.1	23.5
25–34	**75.3**	66.4	82.5	**4.3***	1.8	9.7	**19.5**	13.1	27.9
35–44	**57.0**	50.8	63.0	**15.9**	11.4	21.6	**27.1**	22.3	32.6
45–54	**61.3**	55.8	66.5	**15.4**	11.9	19.7	**22.9**	18.7	27.8
55–64	**63.1**	58.4	67.6	**10.8**	8.2	14.1	**25.9**	22.0	30.3
65+	**61.1**	57.4	64.7	**10.8**	8.7	13.4	**27.9**	24.8	31.3
Total	**64.8**	**62.1**	**67.4**	**11.6**	**9.9**	**13.5**	**23.3**	**21.1**	**25.7**
Females									
18–24	**71.8**	61.7	80.1	**18.7**	11.8	28.5	**9.4***	5.5	15.7
25–34	**69.3**	61.4	76.2	**12.0**	7.6	18.5	**18.7**	13.3	25.6
35–44	**56.0**	51.2	60.8	**13.0**	10.0	16.7	**30.8**	26.7	35.4
45–54	**63.5**	59.4	67.3	**11.9**	9.5	14.8	**24.4**	21.0	28.0
55–64	**62.9**	58.9	66.8	**10.6**	8.4	13.4	**26.4**	23.0	30.2
65+	**63.8**	60.8	66.7	**6.8**	5.4	8.5	**29.1**	26.4	32.0
Total	**64.2**	**61.9**	**66.4**	**11.8**	**10.2**	**13.6**	**23.9**	**22.1**	**25.8**
People									
18–24	**71.5**	64.7	77.5	**15.9**	11.2	22.1	**12.6**	9.0	17.5
25–34	**72.3**	66.5	77.5	**8.1**	5.4	12.1	**19.1**	14.7	24.4
35–44	**56.5**	52.6	60.3	**14.4**	11.6	17.7	**29.0**	25.8	32.5
45–54	**62.4**	59.0	65.6	**13.6**	11.5	16.1	**23.7**	20.9	26.6
55–64	**63.0**	59.9	66.0	**10.7**	8.9	12.8	**26.2**	23.5	29.0
65+	**62.6**	60.2	64.9	**8.6**	7.4	10.1	**28.6**	26.5	30.8
Total	**64.5**	**62.7**	**66.2**	**11.7**	**10.5**	**13.0**	**23.6**	**22.2**	**25.1**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 10.38 shows the proportion who helped out as a volunteer, by departmental region and sex, adjusted for age.

There were significantly *higher* proportions of men and women who volunteered in rural Victoria compared with their metropolitan counterparts.

With the exception of men who lived in Gippsland Region and women who lived in Barwon-South Western and Loddon Mallee regions, there was a significantly *higher* proportion of men, women and people who volunteered in all the remaining rural regions compared with the proportion in all Victorian men, women and people, respectively. In contrast, there was a significantly *lower* proportion of men, women and people who volunteered in the North & West Metropolitan Region compared with all Victorian men, women and people.

Table 10.38: Volunteering, by Department of Health and Human Services region and sex, Victoria, 2012

	Helped out as a volunteer								
	No or not often			Sometimes			Yes, definitely		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Metropolitan males									
Eastern Metropolitan	**67.9**	62.6	72.8	**11.7**	8.6	15.8	**20.1**	16.0	24.8
North & West Metropolitan	**72.0**	66.9	76.6	**9.1**	6.6	12.6	**18.8**	15.0	23.4
Southern Metropolitan	**70.1**	64.6	75.1	**13.0**	9.4	17.8	**16.4**	12.6	20.9
Total	**69.8**	66.6	72.8	**11.2**	9.2	13.4	**18.8**	16.3	21.6
Rural males									
Barwon-South Western	**50.5**	42.2	58.9	**11.4**	8.6	14.9	**38.0**	29.9	46.7
Gippsland	**57.9**	51.3	64.3	**11.4**	8.4	15.2	**30.7**	24.8	37.3
Grampians	**44.1**	36.7	51.8	**13.7**	9.7	19.0	**41.9**	34.7	49.5
Hume	**51.6**	41.6	61.5	**12.3**	8.5	17.6	**36.0**	26.8	46.2
Loddon Mallee	**54.7**	47.7	61.5	**10.7**	7.6	14.9	**34.4**	28.0	41.5
Total	**52.0**	48.3	55.7	**11.9**	10.2	13.7	**36.0**	32.4	39.7
All males									
Total	**65.2**	**62.6**	**67.7**	**11.5**	**9.9**	**13.2**	**23.1**	**21.0**	**25.4**
Metropolitan females									
Eastern Metropolitan	**60.5**	54.9	65.9	**9.7**	6.8	13.6	**29.8**	24.9	35.3
North & West Metropolitan	**74.6**	70.3	78.5	**9.4**	6.8	12.9	**15.8**	13.0	19.1
Southern Metropolitan	**63.5**	57.9	68.8	**13.4**	10.0	17.7	**22.9**	18.7	27.7
Total	**67.8**	64.8	70.6	**10.7**	8.8	12.8	**21.5**	19.2	24.0
Rural females									
Barwon-South Western	**58.8**	53.0	64.4	**14.2**	10.3	19.1	**26.5**	22.1	31.5
Gippsland	**54.9**	48.1	61.6	**13.5**	9.4	19.1	**31.6**	26.0	37.7
Grampians	**53.7**	48.4	59.0	**13.7**	10.0	18.6	**32.6**	27.6	38.0
Hume	**52.3**	45.9	58.7	**11.9**	8.2	16.9	**35.8**	29.9	42.1
Loddon Mallee	**56.1**	50.7	61.4	**17.9**	13.7	23.1	**25.8**	22.1	29.9
Total	**55.3**	52.5	58.1	**14.6**	12.6	16.9	**29.9**	27.6	32.3
All females									
Total	**64.7**	**62.3**	**67.0**	**11.6**	**10.1**	**13.3**	**23.6**	**21.7**	**25.6**
Metropolitan people									
Eastern Metropolitan	**64.3**	60.2	68.2	**10.5**	8.3	13.2	**25.0**	21.6	28.8
North & West Metropolitan	**73.1**	69.8	76.2	**9.4**	7.4	11.8	**17.4**	15.0	20.2
Southern Metropolitan	**66.7**	62.7	70.6	**13.1**	10.5	16.3	**19.8**	16.8	23.3
Total	**68.8**	66.6	70.8	**10.9**	9.6	12.5	**20.1**	18.4	22.0
Rural people									
Barwon-South Western	**55.0**	49.9	60.0	**13.1**	10.2	16.6	**31.6**	27.0	36.6
Gippsland	**56.6**	51.9	61.2	**12.4**	9.8	15.6	**31.0**	26.8	35.4
Grampians	**49.5**	44.8	54.2	**13.7**	10.8	17.2	**36.7**	32.2	41.5
Hume	**51.8**	45.7	57.9	**12.1**	9.3	15.7	**36.0**	30.4	42.1
Loddon Mallee	**55.4**	50.9	59.9	**14.3**	11.5	17.7	**30.1**	26.3	34.3
Total	**53.8**	51.5	56.1	**13.2**	11.8	14.7	**32.9**	30.7	35.1
All people									
Total	**65.0**	**63.2**	**66.7**	**11.5**	**10.4**	**12.8**	**23.3**	**21.9**	**24.8**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

10.4.11 Taken local action on behalf of the community

Respondents who had previously indicated that they were members of a group (sports, religious, school, professional and/or an 'other' community or action group) were asked whether they had taken any local action on behalf of the community in the past two years. This included such actions as getting together with neighbours to have speed bumps built in the street or signing a petition not to have trees in a local park cut down. For rural areas this might include attending a meeting or signing a petition to protect the habitat of a native animal.

Table 10.39 shows the proportions of men and women in Victoria who had taken action on behalf of the community in the previous two years, by age group and sex, with 'Total' not adjusted for age.

Overall, 41.5 per cent of people responded that they had taken action on behalf of the community in the previous two years; this proportion was similar between men (39.8 per cent) and women (43.2 per cent). There was no significant difference in the proportion in men, women and people by age group or sex compared with all Victorian men, women and people.

Table 10.39: Taken local action on behalf of the community, by age group and sex, Victoria, 2012

	Groups involved with has taken local action on behalf of the community in last 2 years					
	Yes			No		
	%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL
Males						
18–24	**42.7**	31.4	54.8	**52.5**	40.4	64.2
25–34	**34.9**	24.7	46.8	**59.9**	47.9	70.8
35–44	**36.9**	30.0	44.4	**57.5**	49.9	64.7
45–54	**39.0**	32.6	45.8	**58.4**	51.6	65.0
55–64	**46.2**	40.0	52.4	**51.1**	44.9	57.3
65+	**41.9**	37.4	46.6	**55.4**	50.7	60.1
Total	**39.8**	**36.4**	**43.3**	**56.2**	**52.5**	**59.7**
Females						
18–24	**37.8**	25.6	51.7	**61.3**	47.4	73.6
25–34	**50.9**	40.5	61.2	**43.3**	33.3	53.8
35–44	**42.9**	37.1	48.9	**52.5**	46.6	58.5
45–54	**44.7**	39.3	50.3	**51.0**	45.5	56.6
55–64	**43.9**	38.5	49.4	**52.9**	47.4	58.4
65+	**38.8**	34.9	42.9	**57.7**	53.7	61.7
Total	**43.2**	**40.2**	**46.3**	**52.9**	**49.8**	**56.0**
People						
18–24	**40.5**	31.9	49.6	**56.5**	47.3	65.2
25–34	**42.0**	34.3	50.2	**52.5**	44.3	60.5
35–44	**39.9**	35.3	44.7	**55.0**	50.2	59.7
45–54	**41.8**	37.5	46.2	**54.8**	50.4	59.2
55–64	**45.0**	40.9	49.2	**52.0**	47.8	56.2
65+	**40.3**	37.3	43.4	**56.7**	53.6	59.7
Total	**41.5**	**39.1**	**43.8**	**54.6**	**52.2**	**57.0**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 10.40 shows the proportion of men and women in Victoria who had taken action on behalf of the community in the previous two years, by departmental region and sex, adjusted for age.

Of those who had taken local action on behalf of the community compared with all Victorian men, women and people, respectively, there was a significantly *higher* proportion among:

- men residing in rural regions as a whole and in particular Barwon-South Western and Loddon Mallee regions
- women and people residing in rural regions as a whole and Hume Region in particular
- people residing in every rural region, with the exception of Gippsland.

Table 10.40: Taken local action on behalf of community, by Department of Health and Human Services region and sex, Victoria, 2012

	Groups involved with has taken local action on behalf of the community in last 2 years					
	Yes			No		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Metropolitan males						
Eastern Metropolitan	**31.2**	25.8	37.2	**64.6**	58.2	70.5
North & West Metropolitan	**37.7**	30.9	45.0	**57.7**	50.6	64.5
Southern Metropolitan	**33.8**	27.5	40.8	**60.0**	51.5	68.0
Total	**35.2**	31.0	39.6	**59.9**	55.3	64.3
Rural males						
Barwon-South Western	**55.6**	47.4	63.5	**42.6**	34.8	50.9
Gippsland	**46.0**	37.9	54.2	**51.3**	43.0	59.5
Grampians	**47.4**	38.8	56.2	**48.7**	40.0	57.3
Hume	**52.0**	42.5	61.3	**47.1**	37.8	56.6
Loddon Mallee	**56.2**	49.2	63.1	**39.9**	32.2	48.0
Total	**51.8**	47.3	56.3	**45.8**	41.3	50.3
All males						
Total	**39.6**	**36.2**	**43.0**	**56.1**	**52.6**	**59.7**
Metropolitan females						
Eastern Metropolitan	**37.5**	30.8	44.7	**58.5**	51.6	65.2
North & West Metropolitan	**41.8**	34.9	49.0	**54.8**	47.7	61.8
Southern Metropolitan	**44.9**	36.7	53.3	**51.5**	43.1	59.8
Total	**41.6**	37.4	46.0	**54.9**	50.5	59.1
Rural females						
Barwon-South Western	**45.7**	38.6	52.9	**46.3**	39.7	53.1
Gippsland	**51.9**	42.9	60.7	**46.1**	37.4	55.1
Grampians	**53.5**	45.5	61.2	**43.9**	36.3	51.9
Hume	**55.2**	47.9	62.3	**40.3**	33.6	47.4
Loddon Mallee	**47.8**	40.8	54.9	**49.4**	42.4	56.5
Total	**50.1**	46.5	53.7	**45.5**	42.0	49.1
All females						
Total	**43.7**	**40.5**	**47.1**	**52.5**	**49.2**	**55.8**
Metropolitan people						
Eastern Metropolitan	**34.4**	29.9	39.3	**61.4**	56.3	66.2
North & West Metropolitan	**39.8**	34.9	44.9	**56.0**	51.0	61.0
Southern Metropolitan	**38.3**	32.8	44.2	**56.7**	50.4	62.8
Total	**38.0**	34.9	41.1	**57.7**	54.4	60.8
Rural people						
Barwon-South Western	**50.2**	44.1	56.4	**45.1**	39.2	51.1
Gippsland	**48.7**	42.6	54.9	**48.7**	42.6	54.8
Grampians	**50.4**	44.5	56.3	**46.4**	40.5	52.3
Hume	**53.3**	46.5	59.9	**44.1**	37.5	50.9
Loddon Mallee	**52.4**	46.6	58.1	**44.4**	38.6	50.3
Total	**50.9**	48.0	53.9	**45.7**	42.8	48.6
All people						
Total	**41.4**	**39.0**	**43.9**	**54.5**	**52.0**	**56.9**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

10.4.12 Actively involved in children's school

Respondents were asked if they had children at primary or secondary school. If they did, they were subsequently asked if they were actively involved with activities at their children's school.

Of people resident in Victoria, the proportion with school-aged children is presented in Table 10.41, by age group and sex, with 'Total' not adjusted for age. Overall, 25.8 per cent of people had children in school; this proportion was similar in men (25.8 per cent) and women (25.7 per cent). The proportion was significantly *higher* in men, women and people aged 35–54 years compared with the proportion in all Victorian men, women and people.

Table 10.41: Have children at primary or secondary school, by age group and sex, Victoria, 2012

	Have children at primary or secondary school					
	Yes			No		
	%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL
Males						
18–24	**	**	**	98.5	90.3	99.8
25–34	14.3	9.0	21.9	84.8	77.0	90.3
35–44	63.3	57.2	69.0	36.3	30.6	42.4
45–54	54.0	48.5	59.4	45.7	40.2	51.2
55–64	9.8	7.2	13.2	90.2	86.8	92.8
65+	1.7*	0.9	3.3	98.2	96.6	99.1
Total	**25.8**	**23.4**	**28.3**	**73.9**	**71.4**	**76.3**
Females						
18–24	**	**	**	99.0	93.2	99.9
25–34	22.7	17.2	29.4	76.3	69.3	82.0
35–44	70.3	65.5	74.7	29.4	25.1	34.2
45–54	45.5	41.3	49.7	54.5	50.2	58.7
55–64	4.5	2.8	7.0	95.4	92.8	97.1
65+	**	**	**	99.3	98.3	99.7
Total	**25.7**	**23.8**	**27.8**	**74.0**	**71.9**	**75.9**
People						
18–24	**	**	**	98.8	95.0	99.7
25–34	18.5	14.4	23.3	80.6	75.6	84.7
35–44	66.8	63.0	70.4	32.8	29.2	36.7
45–54	49.7	46.2	53.2	50.1	46.7	53.6
55–64	7.1	5.5	9.1	92.8	90.8	94.4
65+	1.1*	0.6	1.9	98.8	98.0	99.3
Total	**25.8**	**24.2**	**27.4**	**73.9**	**72.3**	**75.5**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 10.42 shows the proportion of the population with school-aged children, by departmental region and sex, adjusted for age. The proportion was not significantly different in any of the regions in men, women and people, with the exception of people residing in rural regions as a whole compared with the proportion in all Victorian men, women and people, respectively.

Table 10.42: Have children at primary or secondary school, by Department of Health and Human Services region and sex, Victoria, 2012

	Have children at primary or secondary school					
	Yes			No		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Metropolitan males						
Eastern Metropolitan	**22.8**	19.7	26.2	**77.0**	73.6	80.1
North & West Metropolitan	**23.4**	20.1	27.1	**76.4**	72.7	79.7
Southern Metropolitan	**27.2**	23.3	31.3	**72.3**	68.1	76.1
Total	**24.7**	22.6	27.0	**74.9**	72.7	77.1
Rural males						
Barwon-South Western	**30.8**	24.5	37.9	**69.2**	62.1	75.5
Gippsland	**26.9**	21.8	32.7	**73.1**	67.3	78.2
Grampians	**24.9**	20.8	29.4	**75.1**	70.6	79.2
Hume	**26.2**	20.7	32.7	**73.8**	67.3	79.3
Loddon Mallee	**30.6**	24.7	37.2	**69.1**	62.5	75.0
Total	**28.4**	25.6	31.3	**71.5**	68.6	74.3
All males						
Total	**25.4**	**23.6**	**27.2**	**74.4**	**72.5**	**76.1**
Metropolitan females						
Eastern Metropolitan	**24.3**	21.2	27.6	**75.4**	72.0	78.5
North & West Metropolitan	**23.4**	20.5	26.7	**76.6**	73.3	79.5
Southern Metropolitan	**26.6**	23.4	30.1	**72.7**	69.1	76.1
Total	**24.7**	22.8	26.7	**75.0**	73.0	76.9
Rural females						
Barwon-South Western	**28.5**	24.6	32.8	**71.3**	67.0	75.2
Gippsland	**28.4**	24.4	32.7	**71.6**	67.3	75.6
Grampians	**27.5**	24.1	31.2	**72.5**	68.8	75.9
Hume	**28.8**	24.7	33.3	**71.2**	66.7	75.3
Loddon Mallee	**27.5**	24.2	31.1	**72.3**	68.7	75.7
Total	**28.2**	26.4	30.0	**71.7**	69.9	73.5
All females						
Total	**25.3**	**23.8**	**27.0**	**74.4**	**72.8**	**76.0**
Metropolitan people						
Eastern Metropolitan	**23.5**	21.3	25.9	**76.2**	73.9	78.4
North & West Metropolitan	**23.5**	21.2	25.9	**76.4**	74.0	78.7
Southern Metropolitan	**26.9**	24.3	29.6	**72.5**	69.7	75.2
Total	**24.7**	23.2	26.2	**75.0**	73.5	76.5
Rural people						
Barwon-South Western	**29.7**	26.1	33.6	**70.2**	66.3	73.8
Gippsland	**28.1**	24.6	31.8	**71.9**	68.2	75.4
Grampians	**26.2**	23.4	29.2	**73.8**	70.8	76.6
Hume	**27.4**	23.8	31.4	**72.6**	68.6	76.2
Loddon Mallee	**29.1**	25.6	32.8	**70.7**	67.0	74.2
Total	28.2	26.6	30.0	**71.7**	70.0	73.3
All people						
Total	**25.3**	**24.1**	**26.5**	**74.4**	**73.2**	**75.6**

Data were age-standardised to the 2011 Victorian population.

LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.

Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 10.43 shows the data for men and women who were actively involved with their children's school as a proportion of the total population of people with school aged children, by age group and sex, with 'Total' not adjusted for age.

Overall, 54.2 per cent of people were actively involved with their children's school; the proportion was similar in men (53.7 per cent) and women (54.8 per cent).

There was a significantly *lower* proportion of women and people aged 45–54 years who were actively involved in their children's school activities (40.8 per cent) compared with all Victorian women with school-aged children.

Table 10.43: Actively involved in children's school, by age group and sex, Victoria, 2012

	Actively involved with activities in children's school					
	Yes			No		
	%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL
Males						
18–24	**100.0**	.	.	**0.0**	.	.
25–34	**50.6**	28.6	72.5	**49.4**	27.5	71.4
35–44	**61.2**	53.7	68.2	**38.8**	31.8	46.3
45–54	**45.3**	37.8	53.1	**54.7**	46.9	62.2
55–64	**50.4**	34.9	65.9	**49.6**	34.1	65.1
65+	**32.8***	10.2	67.6	**67.2**	32.4	89.8
Total	**53.7**	**48.4**	**58.9**	**46.3**	**41.1**	**51.6**
Females						
18–24	**100.0**	.	.	**0.0**	.	.
25–34	**59.2**	44.4	72.5	**40.8**	27.5	55.6
35–44	**62.0**	56.2	67.5	**38.0**	32.5	43.8
45–54	**40.8**	35.0	46.9	**59.2**	53.1	65.0
55–64	**45.6***	24.2	68.6	**54.4**	31.4	75.8
65+	**	**	**	**64.6***	19.3	93.3
Total	**54.8**	**50.5**	**59.0**	**45.2**	**41.0**	**49.5**
People						
18–24	**100.0**	.	.	**0.0**	.	.
25–34	**55.9**	43.2	67.9	**44.1**	32.1	56.8
35–44	**61.6**	57.0	66.1	**38.4**	33.9	43.0
45–54	**43.2**	38.3	48.2	**56.8**	51.8	61.7
55–64	**48.9**	36.0	61.9	**51.1**	38.1	64.0
65+	**33.5***	13.4	62.2	**66.5**	37.8	86.6
Total	**54.2**	**50.9**	**57.6**	**45.8**	**42.4**	**49.1**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 10.44 shows the data for men and women who were actively involved with their children's school as a proportion of the total population with school-aged children, by departmental region and sex, adjusted for age.

There was a significantly *lower* proportion of men residing in rural regions compared with men residing in metropolitan regions who were actively involved in their children's school. There was no significant difference in the proportion of women and people residing in rural regions who were actively involved in their children's school compared with their metropolitan counterparts.

Overall, there was a significantly *lower* proportion of men residing in Eastern Metropolitan Region, women residing in North & West Metropolitan Region and people residing in the Barwon-South Western and Gippsland regions who were actively involved with their children's school compared with the proportion in all Victorian men, women and people, respectively.

Table 10.44: Actively involved in children's school, by Department of Health and Human Services region and sex, Victoria, 2012

	Actively involved with activities in children's school					
	Yes			No		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Metropolitan males						
Eastern Metropolitan	32.8	25.5	41.0	32.5	25.2	40.8
North & West Metropolitan	**48.5**	39.5	57.5	**45.2**	36.3	54.4
Southern Metropolitan	**43.7**	35.2	52.6	26.0	18.2	35.6
Total	**58.5**	51.7	65.0	**41.5**	35.0	48.3
Rural males						
Barwon-South Western	25.8	19.2	33.8	**54.0**	46.6	61.2
Gippsland	**37.2**	27.0	48.8	**59.6**	48.3	70.1
Grampians	**52.2**	42.7	61.4	24.2	16.0	34.9
Hume	**47.0**	39.4	54.6	33.3	26.1	41.4
Loddon Mallee	**40.9**	29.0	53.9	**43.9**	31.9	56.7
Total	**41.7**	34.5	49.4	**58.3**	50.6	65.5
All males						
Total	**51.6**	**45.5**	**57.7**	**48.4**	**42.3**	**54.5**
Metropolitan females						
Eastern Metropolitan	**40.6**	30.4	51.7	**35.6**	25.6	47.0
North & West Metropolitan	36.8	28.1	46.5	**40.7**	31.9	50.3
Southern Metropolitan	**49.5**	42.2	56.9	**39.5**	32.4	47.1
Total	**54.4**	47.8	60.9	**45.6**	39.1	52.2
Rural females						
Barwon-South Western	**45.6**	39.5	51.8	**42.7**	36.7	49.0
Gippsland	**43.6**	34.7	53.0	**41.3**	32.5	50.8
Grampians	**57.4**	46.8	67.3	**39.3**	29.5	50.0
Hume	**49.8**	39.9	59.7	**31.7**	22.6	42.5
Loddon Mallee	**40.0**	32.1	48.4	**43.0**	35.0	51.4
Total	**50.8**	43.6	58.0	**49.2**	42.0	56.4
All females						
Total	**53.6**	**47.7**	**59.4**	**46.4**	**40.6**	**52.3**
Metropolitan people						
Eastern Metropolitan	**42.1**	32.1	52.9	**38.7**	28.8	49.6
North & West Metropolitan	**50.4**	41.5	59.3	**47.1**	38.3	56.1
Southern Metropolitan	**50.8**	44.1	57.4	**36.0**	29.7	42.9
Total	**55.3**	48.3	62.2	**44.7**	37.8	51.7
Rural people						
Barwon-South Western	34.7	26.6	43.7	**56.5**	47.8	64.9
Gippsland	39.5	32.4	47.2	**57.3**	49.7	64.6
Grampians	**58.8**	47.6	69.2	**34.1**	24.1	45.8
Hume	**55.7**	47.2	63.8	**41.2**	33.1	49.7
Loddon Mallee	**43.0**	33.8	52.7	**48.1**	38.7	57.6
Total	**47.8**	41.5	54.2	**52.2**	45.8	58.5
All people						
Total	**54.3**	**49.5**	**59.0**	**45.7**	**41.0**	**50.5**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

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11. Inequalities in health




11. Inequalities in health

Introduction

Governments have long recognised the importance of ensuring access to clean water, good housing and sanitation as prerequisites for good health. Advances in clinical practice, medical technology and epidemiology have also enabled health practitioners to better diagnose and treat many diseases and conditions, and their risk factors. Such advances have significantly increased life expectancy and improved population health over the past few decades. However, these health gains have not been shared equally across the entire population; certain groups in our society have poorer health status than others.

Some of these differences in health status are due to genetic or biological variations and/or result from lifestyle choices. Other disparities in people's health are not so easily explained. Despite significant achievements in public health in Victoria over the past century, the evidence on socioeconomic status (SES) and health in Australia is unequivocal; people lower in the socioeconomic hierarchy fare significantly worse in terms of their health. Specifically, those classified as having low SES have higher mortality rates for most major causes of death. Their morbidity profile indicates they experience more ill health (both physiological and psychosocial) and their use of healthcare services suggests they are less likely, or may have less opportunity, to act to prevent disease or detect it at an early stage. Moreover, socioeconomic differences in health are evident for both males and females at every stage of the life course (birth, infancy, childhood, adolescence and adulthood), and the relationship exists irrespective of how SES and health are measured (Kawachi, Subramanian & Almeida-Filho 2002; Whitehead 1991).

Health *inequality* is a generic term used to describe the differences in health between subpopulations, while health *inequity* refers to those inequalities in health that are deemed to be unfair and avoidable, stemming from some form of injustice (Kawachi et al. 2002).

SES can be measured in many ways. Univariate or proxy measures include income (individual or household), educational attainment and occupation. Income provides individuals and families with necessary material resources and determines their purchasing power for accessing goods and services needed to maintain good health. Greater levels of educational attainment are associated with higher levels of knowledge and other non-material resources likely to promote a healthy lifestyle. Education also provides formal qualifications that affect occupational status and associated income level. Occupational status reflects social status and power and material conditions related to paid work (Lahelma et al. 2004).

There are also composite measures of SES such as the Cambridge Social Interaction and Stratification Scale (CAMSIS), which relies on patterns of social interaction to determine the social structure and an individual's position in it (Bottero & Prandy 2003). There are also area-based composite measures such as the Index of Relative Socio-Economic Disadvantage (IRSED), which was developed by the Australian Bureau of Statistics (ABS) as one of its Socio-Economic Indexes for Areas (SEIFA). SEIFA ranks areas in Australia according to relative socioeconomic advantage and disadvantage (ABS 2013). In the absence of individual level data, SEIFA is a reasonable alternative, although it assumes that it represents every individual in the specified area and is therefore less sensitive than the individual-level measures. In short, there is no consensus definition of SES.

To tackle health inequalities, it must be accepted that they exist, that they have significant social and economic consequences, and that they can be prevented.

11.1 Ability to raise money in an emergency

Table 11.1 shows the proportion of the population who could raise $2,000 within two days in an emergency, by age group and sex, with 'Total' not adjusted for age. Overall, 86.5 per cent of people could raise $2,000 in an emergency within two days; the proportion was significantly *higher* in men (89.2 per cent) than women (83.9 per cent). The proportion was not significantly different (by age group) compared with the proportion in all Victorians of the corresponding sex.

Table 11.1: Ability to raise $2,000 within two days in an emergency, by age group and sex, 2012

	Yes			No		
	%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL
Males						
18–24	**82.3**	73.5	88.7	**14.6**	8.9	23.2
25–34	**89.6**	81.4	94.5	**6.8***	3.1	14.1
35–44	**91.5**	87.6	94.2	**6.7**	4.2	10.3
45–54	**88.4**	83.6	91.9	**8.0**	5.3	11.9
55–64	**92.5**	89.6	94.6	**4.4**	2.9	6.6
65+	**89.7**	87.0	92.0	**8.3**	6.2	10.9
Total	**89.2**	**87.1**	**91.0**	**7.9**	**6.4**	**9.8**
Females						
18–24	**85.0**	75.7	91.2	**12.7***	7.2	21.4
25–34	**81.4**	74.0	87.1	**16.2**	10.9	23.3
35–44	**86.2**	82.2	89.3	**10.7**	7.9	14.4
45–54	**85.5**	82.4	88.2	**11.2**	8.8	14.1
55–64	**86.1**	82.9	88.8	**11.3**	8.8	14.2
65+	**80.0**	77.2	82.6	**15.2**	12.9	17.8
Total	**83.9**	**81.9**	**85.6**	**13.0**	**11.4**	**14.8**
People						
18–24	**83.7**	77.5	88.4	**13.7**	9.4	19.4
25–34	**85.6**	80.3	89.6	**11.4**	8.0	16.2
35–44	**88.8**	86.1	91.0	**8.7**	6.8	11.2
45–54	**86.9**	84.2	89.2	**9.6**	7.7	11.9
55–64	**89.2**	87.1	91.0	**7.9**	6.4	9.7
65+	**84.4**	82.4	86.2	**12.0**	10.4	13.9
Total	**86.5**	**85.1**	**87.8**	**10.5**	**9.4**	**11.8**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 11.2 shows the proportion of the population who could raise $2,000 within two days in an emergency, by departmental region and sex, adjusted for age.

A significantly *higher* proportion of men residing in Eastern Metropolitan and Hume regions and people residing in the Eastern Metropolitan Region had the ability to raise $2,000 in an emergency within two days compared with the proportion in all Victorian men and people, respectively.

Table 11.2: Ability to raise $2,000 within two days in an emergency, by Department of Health and Human Services region and sex, 2012

	Yes			No		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Metropolitan males						
Eastern Metropolitan	**95.0**	92.3	96.8	**3.8***	2.2	6.4
North & West Metropolitan	**86.4**	81.7	90.1	**9.6**	6.7	13.6
Southern Metropolitan	**88.1**	82.7	92.0	**9.3**	5.8	14.6
Total	**89.0**	86.2	91.3	**8.0**	6.2	10.4
Rural males						
Barwon-South Western	**89.0**	80.7	94.0	**9.6***	4.8	18.1
Gippsland	**86.4**	80.5	90.8	**11.5**	7.4	17.4
Grampians	**88.7**	82.9	92.7	**5.6***	3.3	9.4
Hume	**94.9**	91.8	96.8	**4.1***	2.4	7.2
Loddon Mallee	**85.3**	78.3	90.4	**11.9**	7.3	19.0
Total	**88.9**	86.1	91.1	**8.7**	6.6	11.3
All males						
Total	**89.0**	**86.8**	**90.8**	**8.2**	**6.6**	**10.0**
Metropolitan females						
Eastern Metropolitan	**86.8**	81.8	90.6	**9.0**	6.5	12.3
North & West Metropolitan	**81.3**	77.0	85.0	**14.4**	11.0	18.5
Southern Metropolitan	**82.5**	77.8	86.3	**15.0**	11.4	19.6
Total	**83.2**	80.6	85.6	**13.3**	11.2	15.7
Rural females						
Barwon-South Western	**87.6**	83.6	90.6	**10.8**	7.9	14.7
Gippsland	**88.0**	83.3	91.5	**10.9**	7.6	15.6
Grampians	**84.3**	79.3	88.2	**12.9**	9.2	17.7
Hume	**84.3**	78.8	88.6	**12.8**	8.7	18.3
Loddon Mallee	**84.9**	80.6	88.4	**12.8**	9.6	16.8
Total	**86.0**	84.0	87.7	**11.9**	10.3	13.8
All females						
Total	**83.9**	**81.9**	**85.8**	**12.9**	**11.2**	**14.8**
Metropolitan people						
Eastern Metropolitan	**91.0**	88.1	93.2	**6.5**	4.9	8.5
North & West Metropolitan	**83.7**	80.5	86.4	**12.1**	9.8	14.9
Southern Metropolitan	**85.2**	81.8	88.1	**12.2**	9.5	15.5
Total	**86.0**	84.1	87.7	**10.7**	9.3	12.4
Rural people						
Barwon-South Western	**88.7**	84.8	91.7	**9.8**	6.9	13.7
Gippsland	**86.7**	82.6	89.9	**11.7**	8.6	15.7
Grampians	**86.3**	82.6	89.3	**9.3**	7.0	12.4
Hume	**89.7**	86.5	92.3	**8.3**	6.0	11.5
Loddon Mallee	**85.1**	81.1	88.4	**12.4**	9.4	16.2
Total	**87.3**	85.7	88.8	**10.3**	9.0	11.9
All people						
Total	**86.4**	**84.9**	**87.7**	**10.6**	**9.4**	**11.9**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 11.3 shows the age-adjusted proportion of the population who could raise $2,000 within two days in an emergency, by socioeconomic determinant, selected risk factors and health status, by sex.

11.1.1 Ability to raise $2,000 in an emergency within two days

When compared with the proportion in all Victorian men and women, there were significantly *higher* proportions of men and women who could raise $2,000 within two days with the following characteristic:

- total household income of $100,000 or more.

When compared with the proportion in all Victorian women, there were significantly *higher* proportions of women who could raise $2,000 within two days with the following characteristics:

- TAFE or tertiary education
- employed
- complied with both fruit and vegetable consumption guidelines
- excellent or very good self-reported health
- at increased lifetime risk of alcohol-related harm

When compared with the proportion in all Victorian men and women, there was a significantly *lower* proportion of men and women who could raise $2,000 within two days with the following characteristics:

- primary or no education
- not in the labour force
- total annual household income of less than $40,000
- very high levels of psychological distress
- current smoker.

When compared with the proportion in all Victorian men, there was a significantly *lower* proportion of men who could raise $2,000 within two days with the following characteristics:

- sedentary
- complied with both fruit and vegetable consumption guidelines
- underweight
- diagnosed with diabetes.

When compared with the proportion in all Victorian women, there was a significantly *lower* proportion of women who could raise $2,000 within two days with the following characteristics:

- spoke a language other than English at home
- unemployed
- high levels of psychological distress
- abstained from alcohol consumption
- fair or poor self-reported health.

11.1.2 Inability to raise $2,000 in an emergency within two days

When compared with the proportion in all Victorian men and women, there was a significantly *higher* proportion of men and women who could not raise $2,000 within two days with the following characteristics:

- total household income of $40,000 or less
- very high levels of psychological distress
- current smoker.

When compared with the proportion in all Victorian men, there was a significantly *higher* proportion of men who could not raise $2,000 within two days with the following characteristics:

- not in the labour force
- underweight.

When compared with the proportion in all Victorian women, there was a significantly *higher* proportion of women who could not raise $2,000 within two days with the following characteristics:

- spoke a language other than English at home
- primary or secondary education
- unemployed
- high levels of psychological distress
- abstained from alcohol consumption
- fair or poor self-rated health
- obese.

When compared with the proportion in all Victorian women, there was a significantly lower proportion of women who could not raise $2,000 within two days with the following characteristics:

- TAFE or tertiary education
- excellent or very good self-reported health
- at increased lifetime risk of alcohol-related harm.

Table 11.3 (revised): Ability to raise $2,000 within two days in an emergency, by selected risk factors and sex, Victoria, 2012

	Males						Females					
	Yes			No			Yes			No		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Victoria	**89.0**	**86.8**	**90.8**	**8.2**	**6.6**	**10.0**	**83.9**	**81.9**	**85.8**	**12.9**	**11.2**	**14.8**
Country of birth												
Australia	**90.1**	87.7	92.0	**7.2**	5.6	9.2	**87.0**	84.8	88.9	**10.1**	8.5	12.0
Overseas	**88.8**	84.6	91.9	**9.0**	6.1	13.0	**78.3**	74.0	82.0	**18.1**	14.5	22.3
Language spoken at home												
English only	**89.9**	87.5	91.9	**7.1**	5.5	9.2	**86.8**	84.6	88.8	**10.6**	8.9	12.5
Language other than English	**86.3**	81.8	89.9	**11.1**	8.0	15.3	**75.0**	70.4	79.1	**19.5**	15.9	23.6
Metro-Rural regions												
Rural	**88.9**	86.1	91.1	**8.7**	6.6	11.3	**86.0**	84.0	87.7	**11.9**	10.3	13.8
Metropolitan	**89.0**	86.2	91.3	**8.0**	6.2	10.4	**83.2**	80.6	85.6	**13.3**	11.2	15.7
Level of education												
None or Primary	**31.7**	27.9	35.7	**8.5**	5.3	13.3	**34.9**	29.0	41.2	**41.3**	36.8	46.0
Secondary	**84.6**	80.1	88.3	**11.5**	8.4	15.3	**77.0**	72.4	81.2	**20.5**	16.4	25.3
TAFE or Tertiary	**92.6**	90.0	94.6	**6.1**	4.2	8.8	**88.4**	85.9	90.6	**8.5**	6.8	10.6
Employment status (<65 years)												
Employed	**90.8**	87.9	93.0	**7.1**	5.1	9.8	**89.0**	85.9	91.4	**9.6**	7.2	12.6
Unemployed	**87.8**	78.6	93.4	**8.4***	4.0	16.7	**72.7**	62.7	80.7	**22.2**	14.9	31.6
Not in labour force	**63.8**	57.3	69.9	**23.8**	18.1	30.6	**76.7**	71.4	81.2	**18.3**	14.3	23.0
Total annual household income ($)												
<40,000	**79.8**	72.3	85.7	**19.0**	13.2	26.5	**68.0**	61.3	74.1	**29.5**	23.5	36.2
40,000 to <100,000	**90.4**	86.1	93.4	**8.0**	5.1	12.3	**88.3**	84.2	91.4	**9.7**	7.0	13.4
100,000, or more	**96.6**	93.4	98.3	**3.0***	1.4	6.2	**91.2**	88.4	93.3	**3.6***	1.8	6.9
Psychological distress (K10 score) [a]												
Low (K10 score <16)	**91.8**	89.6	93.6	**6.1**	4.5	8.2	**88.3**	85.7	90.5	**9.2**	7.2	11.7
Moderate (K10 score 16 to 21)	**88.0**	83.3	91.5	**10.3**	7.0	14.9	**82.8**	78.7	86.2	**14.4**	11.2	18.3
High (K10 score 22 to 29)	**82.9**	74.3	89.0	**15.8**	9.8	24.5	**69.8**	62.4	76.4	**25.6**	19.5	32.9
Very high (K10 score ≥30)	**61.2**	51.8	69.8	**29.7**	23.1	37.3	**62.9**	51.9	72.7	**32.1**	23.6	42.1
Physical activity level [b]												
Sedentary	**73.3**	65.7	79.7	**10.6**	6.9	16.1	**73.5**	62.1	82.5	**21.5**	13.2	33.1
Insufficient	**87.5**	83.4	90.7	**9.5**	6.7	13.4	**79.3**	74.6	83.4	**16.3**	12.6	20.7
Sufficient	**91.5**	89.2	93.4	**6.8**	5.1	9.0	**87.8**	85.5	89.8	**10.0**	8.3	11.9
Compliance with fruit & vegetable consumption guidelines [c]												
Both	**82.4**	77.2	86.6	**	**	**	**90.9**	86.3	94.1	**7.9**	4.8	12.6
Vegetable only [d]	**89.6**	83.6	93.6	**5.0***	2.4	10.2	**89.5**	85.4	92.5	**8.4**	5.6	12.4
Fruit only [d]	**89.2**	85.5	92.1	**7.3**	4.9	10.6	**85.7**	82.4	88.4	**11.8**	9.3	15.0
Neither	**89.4**	86.7	91.6	**8.9**	6.8	11.5	**82.0**	79.0	84.6	**14.3**	12.1	16.9
Smoking status												
Current smoker	**81.7**	76.4	86.0	**14.1**	10.2	19.2	**74.6**	67.9	80.3	**24.8**	19.1	31.6
Ex-smoker	**85.6**	77.6	91.1	**11.5***	6.3	20.0	**85.5**	79.7	89.9	**13.0**	8.8	18.9
Non-smoker	**90.5**	87.6	92.8	**6.2**	4.7	8.2	**84.9**	82.4	87.1	**10.8**	8.9	13.0
Lifetime risk of alcohol related harm (2009) [e]												
Abstainer / no longer drinks alcohol	**86.7**	80.4	91.2	**11.2**	7.0	17.4	**75.5**	69.9	80.3	**21.1**	16.4	26.6
Reduced risk	**92.5**	88.0	95.4	**3.9***	2.1	7.1	**84.3**	80.2	87.6	**12.7**	9.5	16.7
Increased risk	**89.6**	87.1	91.6	**8.1**	6.3	10.4	**89.4**	86.7	91.6	**7.8**	6.1	10.0
Self-reported health												
Excellent / Very Good	**93.0**	90.3	94.9	**4.9**	3.2	7.5	**89.8**	87.1	91.9	**7.4**	5.5	9.7
Good	**86.9**	83.3	89.9	**10.2**	7.6	13.5	**81.4**	77.7	84.6	**14.8**	11.9	18.3
Fair / Poor	**85.5**	80.0	89.7	**12.0**	8.2	17.3	**69.1**	61.8	75.6	**28.1**	21.7	35.4
BMI category [f]												
Underweight	**55.0**	44.9	64.8	**30.5**	21.4	41.4	**82.0**	72.7	88.6	**13.7***	8.0	22.6
Normal	**87.5**	83.2	90.8	**9.6**	6.6	13.8	**87.0**	84.1	89.5	**9.9**	7.8	12.5
Overweight	**91.3**	88.0	93.7	**6.6**	4.5	9.6	**86.2**	82.6	89.1	**11.4**	8.6	14.9
Obese	**88.2**	84.3	91.2	**9.1**	6.6	12.4	**76.3**	68.6	82.5	**21.0**	15.1	28.5
Diabetes												
No diabetes	**89.3**	87.0	91.1	**7.9**	6.3	9.8	**84.7**	82.6	86.6	**12.2**	10.5	14.1
Diabetes	**78.6**	75.0	81.7	**6.7**	4.2	10.7	**77.9**	70.5	83.9	**19.3**	13.6	26.7
Depression												
Yes	**87.5**	83.1	90.9	**11.0**	7.8	15.4	**78.4**	73.8	82.3	**17.9**	14.6	21.8
No	**90.1**	87.9	91.9	**7.5**	5.8	9.6	**86.0**	83.6	88.0	**11.1**	9.2	13.3

a Based on the Kessler 10 scale for psychological distress.
b Based on DoHA (1999) guidelines.
c Based on NHMRC (2003) guidelines.
d Includes those meeting both guidelines.
e NHMRC (2009) guidelines.
f Based on Body Mass Index (BMI).
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.

11.2 Food security

To assess levels of food insecurity in Victoria, respondents were asked 'In the last 12 months, were there any times that you ran out of food and couldn't afford to buy more?'

Table 11.4 shows the proportion of Victorian people who ran out food and could not afford to buy more, by age group and sex, with 'Total' not adjusted for age.

Overall, 3.4 per cent of people reported running out of food in the previous 12 months and being unable to afford to buy more. This proportion was similar in men (3.1 per cent) and women (3.7 per cent).

A significantly *lower* proportion of men, women and people aged 65 years or older reported running out food and not being able to afford to buy more compared with the proportion in all Victorian men, women and people.

Table 11.4: Ran out of food in the previous 12 months, by age group and sex, Victoria, 2012

	Ran out of food last 12 months					
	Yes			No		
	%	95% CI		%	95% CI	
Age group (years)		LL	UL		LL	UL
Males						
18–24	**4.7***	1.8	11.6	**95.3**	88.4	98.2
25–34	**4.9***	2.3	10.2	**92.5**	85.6	96.3
35–44	**3.6***	2.1	6.1	**96.3**	93.8	97.9
45–54	**3.2***	1.4	7.2	**96.8**	92.8	98.6
55–64	**1.6***	0.8	3.3	**98.4**	96.7	99.2
65+	**0.6***	0.3	1.4	**99.2**	98.3	99.6
Total	**3.1**	**2.2**	**4.5**	**96.3**	**94.7**	**97.4**
Females						
18–24	**3.5***	1.4	8.5	**96.5**	91.5	98.6
25–34	**5.3***	2.7	10.2	**94.3**	89.4	97.0
35–44	**5.9**	3.8	9.0	**93.7**	90.6	95.8
45–54	**4.3**	2.9	6.2	**95.2**	93.1	96.6
55–64	**2.0**	1.3	3.3	**97.8**	96.5	98.6
65+	**0.8***	0.4	1.8	**99.0**	98.0	99.5
Total	**3.7**	**2.8**	**4.8**	**96.0**	**94.9**	**96.9**
People						
18–24	**4.1***	2.1	7.9	**95.9**	92.1	97.9
25–34	**5.1***	3.1	8.4	**93.4**	89.5	95.9
35–44	**4.8**	3.4	6.6	**95.0**	93.1	96.4
45–54	**3.7**	2.5	5.6	**96.0**	94.1	97.3
55–64	**1.8**	1.2	2.8	**98.1**	97.1	98.7
65+	**0.7***	0.4	1.3	**99.1**	98.5	99.4
Total	**3.4**	**2.7**	**4.2**	**96.2**	**95.3**	**96.9**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria

LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.

* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.

Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 11.5 shows the proportion of Victorian people who ran out of food and could not afford to buy more, by departmental region and sex, adjusted for age.

A similar proportion of men, women and people residing in rural regions had run out of food and could not afford to buy more compared with their metropolitan counterparts.

Table 11.5: Ran out of food in the previous 12 months, by Department of Health and Human Services region and sex, Victoria, 2012

	Ran out of food last 12 months					
	Yes			No		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Metropolitan males						
Eastern Metropolitan	**	**	**	**98.7**	96.0	99.6
North & West Metropolitan	**3.5***	1.7	7.3	**95.3**	91.1	97.6
Southern Metropolitan	**2.3***	1.1	4.4	**97.1**	94.7	98.5
Total	**2.6***	1.6	4.5	**96.6**	94.4	98.0
Rural males						
Barwon-South Western	**8.4***	3.8	17.5	**91.4**	82.4	96.1
Gippsland	**6.2***	3.2	11.7	**93.8**	88.3	96.8
Grampians	**	**	**	**95.9**	89.2	98.5
Hume	**2.3***	1.1	4.7	**97.4**	94.9	98.7
Loddon Mallee	**3.5***	1.4	8.3	**96.5**	91.7	98.6
Total	**5.1**	3.4	7.7	**94.8**	92.2	96.5
All males						
Total	**3.2**	**2.2**	**4.6**	**96.2**	**94.5**	**97.4**
Metropolitan females						
Eastern Metropolitan	**1.8***	1.1	3.2	**97.5**	95.3	98.7
North & West Metropolitan	**3.2***	1.9	5.4	**96.5**	94.4	97.8
Southern Metropolitan	**5.7**	3.6	9.1	**93.9**	90.6	96.1
Total	**3.7**	2.7	5.0	**96.0**	94.5	97.0
Rural females						
Barwon-South Western	**2.0***	1.1	3.6	**97.8**	96.1	98.7
Gippsland	**4.8***	2.2	10.1	**95.2**	89.9	97.8
Grampians	**2.2***	1.1	4.3	**97.5**	95.4	98.6
Hume	**4.1***	2.0	8.3	**95.7**	91.6	97.9
Loddon Mallee	**5.0***	2.7	9.0	**95.0**	90.9	97.3
Total	**3.6**	2.6	4.9	**96.3**	94.9	97.3
All females						
Total	**3.6**	**2.8**	**4.7**	**96.0**	**94.9**	**96.9**
Metropolitan people						
Eastern Metropolitan	**1.6***	0.9	2.8	**98.1**	96.7	99.0
North & West Metropolitan	**3.5**	2.2	5.6	**95.7**	93.3	97.3
Southern Metropolitan	**3.9**	2.6	5.8	**95.6**	93.6	97.0
Total	**3.2**	2.4	4.2	**96.3**	95.0	97.2
Rural people						
Barwon-South Western	**5.1***	2.8	9.3	**94.7**	90.6	97.1
Gippsland	**5.7***	3.4	9.3	**94.3**	90.7	96.6
Grampians	**3.0***	1.5	5.8	**96.9**	94.1	98.3
Hume	**3.1***	1.8	5.3	**96.6**	94.5	98.0
Loddon Mallee	**4.3***	2.5	7.2	**95.7**	92.8	97.5
Total	**4.4**	3.3	5.7	**95.5**	94.2	96.6
All people						
Total	**3.4**	**2.7**	**4.3**	**96.1**	**95.1**	**96.9**

Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Table 11.6 shows the age-adjusted proportion of Victorian people who ran out of food and could not afford to buy more, by selected socio-demographic characteristics, risk factors, chronic condition and sex.

When compared with the proportion in all Victorian men and women, there was a significantly *higher* proportion of men and women who ran out of food and could not afford to buy more who had the following characteristics:

- unemployed
- not in the labour force
- total annual household income of less than $40,000
- high, or very high levels of psychological distress.

When compared with the proportion in all Victorian men, there was a significantly *higher* proportion of men who ran out of food and could not afford to buy more who had the following characteristic:

- underweight.

When compared with the proportion in all Victorian women, there were significantly *higher* proportions of women who ran out of food and could not afford to buy more who had the following characteristic:

- diagnosed with depression.

Table 11.6: Ran out of food in the last 12 months, by selected risk factors and sex, Victoria, 2012

	Ran out of food last 12 months					
	Males			Females		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Victoria	**3.2**	**2.2**	**4.6**	**3.6**	**2.8**	**4.7**
Country of birth						
Australia	**3.4**	2.2	5.1	**3.4**	2.6	4.5
Overseas	**2.5***	1.2	4.8	**4.6***	2.3	9.1
Language spoken at home						
English only	**3.5**	2.3	5.3	**3.5**	2.7	4.6
Language other than English	**2.3***	1.0	5.0	**3.8***	2.2	6.6
Metro-Rural regions						
Rural	**5.1**	3.4	7.7	**3.6**	2.6	4.9
Metropolitan	**2.6***	1.6	4.5	**3.7**	2.7	5.0
Level of education						
None or Primary	**	**	**	**1.5***	0.6	4.0
Secondary	**4.4**	2.8	7.0	**6.5**	4.1	10.2
TAFE or Tertiary	**2.3***	1.4	3.9	**2.5**	1.7	3.5
Employment status (<65 years)						
Employed	**2.6***	1.6	4.3	**2.8**	1.8	4.1
Unemployed	**11.4***	5.4	22.5	**12.7***	6.5	23.4
Not in labour force	**9.7***	4.6	19.3	**7.2**	4.8	10.6
Total annual household income ($)						
<40,000	**12.5***	7.5	20.1	**14.2**	9.7	20.2
40,000 to <100,000	**3.4***	1.6	7.0	**2.8**	1.8	4.2
100,000, or more	**	**	**	**	**	**
Psychological distress (K10 score) [a]						
Low (K10 score <16)	**1.3***	0.6	2.9	**1.6***	1.0	2.8
Moderate (K10 score 16 to 21)	**4.6***	2.5	8.4	**3.8***	2.2	6.5
High (K10 score 22 to 29)	**11.3***	6.1	20.0	**11.7**	7.7	17.4
Very high (K10 score ≥30)	**9.9***	5.3	17.9	**16.0**	10.3	24.1
Physical activity level [b]						
Sedentary	**6.1***	2.3	15.2	**6.7***	3.3	13.1
Insufficient	**1.7***	0.9	3.0	**2.8***	1.7	4.7
Sufficient	**3.4**	2.1	5.3	**3.5**	2.5	4.9
Compliance with fruit & vegetable consumption guidelines [c]						
Both	**0.0**	.	.	**	**	**
Vegetable only [d]	**	**	**	**5.2***	2.3	11.0
Fruit only [d]	**3.5***	1.9	6.3	**2.2**	1.4	3.4
Neither	**3.1**	1.9	4.9	**4.8**	3.4	6.7
Smoking status						
Current smoker	**5.9**	3.8	9.0	**6.9**	4.6	10.1
Ex-smoker	**7.8***	3.2	17.7	**5.9***	2.9	11.6
Non-smoker	**1.5***	0.7	3.1	**2.4**	1.6	3.5
Long term risk of alcohol related harm (2009) [e]						
Abstainer	**3.0***	1.5	5.7	**3.4**	2.2	5.2
At low risk	**2.8**	1.7	4.5	**3.3**	2.4	4.6
At increased risk	**6.0***	2.8	12.3	**7.6***	3.9	14.2
Self-reported health						
Excellent/Very Good	**2.7***	1.3	5.6	**2.0**	1.3	3.1
Good	**2.5**	1.6	4.0	**4.6**	3.0	7.0
Fair/Poor	**6.5***	3.9	10.5	**7.0**	4.4	11.0
BMI category [f]						
Underweight	**10.7**	6.7	16.8	**	**	**
Normal	**6.0***	3.6	9.9	**2.4**	1.6	3.7
Overweight	**1.2***	0.6	2.2	**4.4***	2.6	7.2
Obese	**2.2***	1.0	4.5	**6.6***	3.9	10.8
Diabetes						
No diabetes	**3.3**	2.2	4.7	**3.6**	2.8	4.7
Diabetes	**	**	**	**4.3***	1.8	9.6
Depression						
Yes	**6.3**	3.9	10.1	**8.3**	5.8	11.7
No	**2.4**	1.5	3.8	**2.0**	1.3	2.9

a Based on the Kessler 10 scale for psychological distress.
b Based on DoHA (1999) guidelines.
c Based on NHMRC (2003) guidelines.
d Includes those meeting both guidelines.
e NHMRC (2009) guidelines.
f Based on Body Mass Index (BMI).

Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

Data were age-standardised to the 2011 Victorian population.

LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above/below Victoria.

* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.

** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.

Table 11.7 shows the frequency of running out of food and not being able to afford to buy more, by age group and sex, with 'Total' not adjusted for age.

Overall, of those running out of food and not being able to afford to buy more, the proportion of people who did so 'weekly' or more often was 7.1 per cent; the proportion was 7.7 per cent in women, but the estimate was too unreliable to be reported for men. The proportion of people who did so 'every two weeks' was 9.4 per cent, while the proportion who ran out 'once a month' was 19.6 per cent. However, 63.6 per cent of those running out of food and not being able to afford to buy more did so 'less than once a month'.

Table 11.7: Frequency of running out of food and not being able to afford to buy more, by age group and sex, 2012

Age group (years)	Once a week or more			Once every 2 weeks			Once a month			Less than once a month		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Males												
18–24	**	**	**	**0.0**	.	.	**	**	**	**65.6***	21.9	92.8
25–34	**	**	**	**	**	**	**	**	**	**42.5***	14.0	77.1
35–44	**0.0**	.	.	**	**	**	**	**	**	**69.4**	39.2	88.8
45–54	**	**	**	**	**	**	**	**	**	**63.4***	26.5	89.3
55–64	**0.0**	.	.	**	**	**	**	**	**	**75.0**	42.7	92.4
65+	**	**	**	**	**	**	**	**	**	**44.8***	12.7	81.8
Total	**	**	**	**12.7***	**5.0**	**28.4**	**22.0***	**10.0**	**41.9**	**59.0**	**40.6**	**75.2**
Females												
18–24	**	**	**	**	**	**	**	**	**	**71.6**	33.7	92.6
25–34	**0.0**	.	.	**	**	**	**	**	**	**74.4**	42.3	92.0
35–44	**	**	**	**	**	**	**	**	**	**71.4**	49.7	86.3
45–54	**	**	**	**	**	**	**28.0***	14.1	48.1	**52.3**	33.5	70.4
55–64	**	**	**	**	**	**	**	**	**	**74.0**	50.5	88.9
65+	**40.6***	11.8	77.8	**	**	**	**	**	**	**40.4***	12.5	76.2
Total	**7.7***	**3.8**	**15.1**	**6.7***	**3.1**	**14.0**	**17.6***	**10.3**	**28.5**	**67.3**	**55.2**	**77.4**
People												
18–24	**	**	**	**	**	**	**	**	**	**68.1**	36.2	88.9
25–34	**	**	**	**	**	**	**29.1***	11.1	57.5	**59.0**	33.1	80.8
35–44	**	**	**	**	**	**	**13.9***	5.6	30.3	**70.6**	52.9	83.7
45–54	**	**	**	**	**	**	**26.7***	13.1	46.7	**57.0**	36.5	75.3
55–64	**	**	**	**12.4***	4.5	29.7	**12.4***	4.8	28.4	**74.5**	55.8	87.1
65+	**	**	**	**	**	**	**	**	**	**42.0***	18.3	70.2
Total	**7.1***	**3.5**	**14.0**	**9.4***	**5.0**	**17.0**	**19.6**	**12.1**	**30.1**	**63.6**	**52.6**	**73.3**

Data are age-specific estimates, while 'Total' represents the crude (not age standardised) estimate for Victoria
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
* Estimate has a relative standard error (RSE) of between 25 and 50 per cent and should be interpreted with caution.
** Estimate has a relative standard error (RSE) greater than 50 per cent and is not reported as it is unreliable for general use.
Note that the estimates may not add up to 100 per cent due to a proportion of 'don't know' or 'refused' responses not reported here.

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Appendix




Appendix: Questionnaire items for the Victorian Population Health Survey

Alcohol

- Whether had an alcoholic drink of any kind in previous 12 months
- Frequency of having an alcoholic drink of any kind
- Amount of standard drinks consumed when drinking
- Level of frequency of high-risk drinking

Asthma

- Asthma status (current and past)

Blood pressure

- High blood pressure status

Body weight status

- Self-reported height and weight

Chronic diseases

- Heart disease
- Stroke
- Cancer
- Osteoporosis
- Arthritis
- Systemic lupus erythematosus (SLE)
- Depression

Demographics

- Age
- Sex
- Marital status
- Household composition
- Country of birth
- Main language spoken at home
- Country of birth of mother
- Country of birth of father
- Highest level of education
- Employment status
- Main field of occupation
- Household income
- Housing tenure
- Indigenous status
- Area of state (Department of Health and Human Services region)

Diabetes

- Diabetes status
- Type of diabetes
- Age first diagnosed with diabetes
- Type of healthcare received in past year

Health checks

- Whether had a blood pressure check in previous two years
- Whether had a cholesterol check in previous two years
- Whether had a test for diabetes or elevated blood glucose levels in previous two years

Mental health

- Psychological distress (Kessler 10 Psychological Distress Scale)
- Whether sought help for mental health related problem
- Type of mental health professional sought help from
- Depression and/or anxiety

Nutrition

- Daily vegetable consumption
- Daily fruit consumption
- Milk consumption
- Water consumption
- Food security
- Consumption of sugar-sweetened soft drinks
- Consumption of potato-based snacks and ‘take-away’ meals

Oral care

- Self-rated dental health
- Last visit to a dental health professional
- Whether has private insurance for dental expenses

Physical activity

- Frequency and amount of vigorous physical activity in past week
- Physical activity at work

Self-reported health status

Smoking

- Smoking status
- Frequency of smoking
- Smoking in the home

Social capital measures

- Social networks and support structures
- Social and community participation
- Civic involvement and empowerment
- Trust in people and social institutions
- Tolerance of diversity