Victoria population health survey 2013

Selected indicators and trends

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Preface

The Victorian Population Health Survey (VPHS) 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 VPHS 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 are needed to ensure that public health programs remain relevant and responsive to current and emerging health issues.

Data from the VPHS are 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 the state and municipal 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 VPHS 2013 will underpin our public health efforts, especially in controlling chronic disease.

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Introduction

Introduction

Summary of findings

A summary of results from the 2013 Victorian Population Health Survey (VPHS) is provided below. All reported prevalence, or proportions, in this summary are crude estimates (***not*** age-adjusted), unless otherwise stated.

Smoking

Overall, 14.2 per cent of people who are 18 years old or over were current smokers in 2013. There was no statistically significant difference in the age-adjusted prevalence of current smoking between men (15.6 per cent) and women (13.2 per cent). There has been a significant decline in the age-adjusted proportion of 'current smokers' in both men and women during the period 2003 to 2013.

Vegetable intake

Based on the most current NHMRC (2013) guidelines, just over one in 15 people (6.6 per cent) met the recommended minimum daily intake for vegetables. No trends over time have been reported, as this is the first VPHS report with estimates based on NHMRC (2013) guidelines.

Fruit intake

Based on the most current NHMRC (2013) guidelines, just over one in two people (50.1 per cent) consumed the recommended two or more serves of fruit daily in 2013. The age-adjusted proportion was significantly higher in women (57.1 per cent) compared with men (43.0 per cent). No trends over time have been reported, as this is the first VPHS report with estimates based on NHMRC (2013) guidelines.

Physical activity

The proportion of people undertaking adequate physical activity (measured as sufficient time and sessions) to meet the national guidelines was 59.4 per cent. The age-adjusted proportion was similar in men (57.7 per cent) and women (60.8 per cent). The age-adjusted proportion of sedentary women has significantly increased over the period 2005 to 2013. However, no significant trend was observed in men during this period.

Body weight

Based on body mass index (BMI), the proportion of Victorians categorised as overweight in 2013 was 33.2 per cent; the age-adjusted proportion was significantly *higher* in men (41.8 per cent) compared with women (24.1 per cent). The proportion of Victorians categorised as obese, according to their BMI, was 16.8 per cent; the age-adjusted proportion was not significantly different in men (17.0 per cent) compared with women (16.3 per cent). The age-adjusted proportion of underweight women has declined over the period 2003 to 2013.

This was also the case for both men and women with a normal BMI. In contrast, the proportions of overweight and obese men significantly increased over the period 2003 to 2013; however, only the proportion of obese women significantly increased during this period.

Psychological distress

The proportion of people with high or very high levels of psychological distress, as determined by the Kessler 10 scale, was 10.9 per cent. The age-adjusted proportion was similar in men (10.3 per cent) and women (11.6 per cent). The prevalence of low, moderate or high or very high levels of psychological distress remained unchanged in men and women during the period 2003 to 2013.

Self-reported health

Overall, 43.6 per cent of Victorians reported their health status as being 'excellent' or 'very good' in 2013; 37.5 per cent reported their health status as 'good', while 18.6 per cent reported their health status as 'fair' or 'poor'. The age-adjusted proportions were similar in men and women.

The age-adjusted proportions, in men and women, for all categories of self-reported health have not significantly changed over the period 2005 to 2013.

About the survey

The VPHS 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 VPHS has been conducted each year since 2001 and is based on a sample of 7,500 adults who are 18 years old or over. The participants are randomly selected from each of the eight Department of Health and Human Services regions in the state. In 2008 and again in 2011–12, the sample size for the survey was expanded to include the 79 local government areas (LGAs) in the state.

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 wider community. The survey is based on core question modules to allow reporting on trends over time and to inform decisions about public health priorities. The survey findings fill a significant gap in population health data and provide information to ensure public health programs remain relevant and responsive to current and emerging health issues.

The impact of using data from the VPHS 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 regional levels.

What's new?

In 2013 the statewide sample size was smaller (*n* = 3,550) than previous statewide surveys (*n* = 7,500). The trends over time for the key health indicators continue to be reported in the time series tables. Tables reporting regional findings for the key health indicators are located in the appendix.

About the data

- The sample size for the VPHS was 3,551 respondents in 2013.
- Estimates have been age-adjusted (age-standardised) in tables for time-series 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).
- Results for departmental regions are included in the **appendix tables.** All estimates in the **appendix tables** are age-adjusted (age-standardised) estimates.
- Notes to the tables and figures indicate the statistical significance of differences between estimates. 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 the relative standard error (standard error / estimate * 100), and the tables and figures indicate the reliability of estimates.

How to interpret a table

- Tables with *age groups*: Age-specific estimates have been compared with the corresponding total estimate (the crude estimate for the population or subpopulation). For example, when age-specific estimates for males are presented, these estimates have been compared with the estimate for all adult Victorian males (labelled 'Total').
- Tables with *time trends*: Age-adjusted (age-standardised) 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 trends over time.
- *Statistically significant differences*: 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 the 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).

Sample table

Proportion (%) of the adult population, by body weight status, age group and sex, Victoria, 2013

	Age group (years)	Underweight			Normal			Overweight			Obese		
		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
			LL	UL		LL	UL		LL	UL		LL	UL
Males	18–24	**	**	**	**63.6**	46.8	77.6	**17.6***	8.6	32.5	**7.3***	2.7	17.8
	25–34	**	**	**	**36.7**	23.1	52.8	**42.4**	28.2	58.1	**15.7***	8.4	27.6
	35–44	**	**	**	**31.5**	23.7	40.5	**47.9**	38.8	57.1	**15.5**	9.8	23.7
	45–54	**	**	**	**27.5**	21.0	35.1	**48.6**	40.5	56.9	**20.3**	13.9	28.7
	55–64	**	**	**	**28.7**	22.4	35.8	**46.7**	39.6	53.9	**18.6**	13.7	24.8
	65+	**	**	**	**28.1**	23.3	33.6	**44.2**	38.9	49.7	**22.5**	18.3	27.2
Total		**1.8***	**0.7**	**4.4**	**35.1**	**30.6**	**39.9**	**42.1**	**37.7**	**46.7**	**16.9**	**14.1**	**20.2**
Females	18–24	**	**	**	**54.4**	36.2	71.4	**11.8***	5.3	24.2	**	**	**
	25–34	**	**	**	**49.3**	38.8	60.0	**25.2**	17.2	35.2	**13.5***	7.9	22.0
	35–44	**2.7***	1.0	7.1	**52.5**	45.8	59.1	**23.7**	18.7	29.6	**12.7**	9.2	17.2
	45–54	**1.7***	0.7	4.1	**36.3**	30.7	42.3	**26.8**	21.9	32.3	→ **25.2**	20.4	30.8
	55–64	**1.0***	0.4	2.2	**42.0**	36.3	48.1	**24.8**	20.5	29.8	**21.6**	17.2	26.7
	65+	**1.5***	0.8	2.8	**31.6**	27.6	35.8	**30.6**	26.7	34.8	**21.0**	17.6	24.9
Total		**2.4***	**1.3**	**4.1**	**43.8**	**40.2**	**47.4**	**24.5**	**21.9**	**27.4**	**16.7**	**14.6**	**19.0**
People	18–24	**	**	**	**59.1**	46.4	70.7	**14.7***	8.7	23.9	→ **5.3***	2.3	11.8
	25–34	**	**	**	**43.0**	34.0	52.5	**33.8**	25.3	43.5	**14.6**	9.7	21.5
	35–44	**2.0***	0.9	4.6	**42.1**	36.6	47.8	**35.6**	30.3	41.4	**14.1**	10.6	18.5
	45–54	**0.9***	0.4	2.1	**32.0**	27.5	36.7	**37.5**	32.7	42.6	**22.8**	18.7	27.6
	55–64	**0.6***	0.3	1.2	**35.5**	31.1	40.1	**35.6**	31.3	40.1	**20.1**	16.7	24.0
	65+	**1.0***	0.6	1.8	**30.0**	26.9	33.4	**36.8**	33.5	40.2	→ **21.7**	19.0	24.6
Total		**2.1***	**1.2**	**3.4**	**39.5**	**36.6**	**42.5**	**33.2**	**30.5**	**35.9**	**16.8**	**15.0**	**18.8**

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 from 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.

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 the table above:

→ People 18–24 years old had a significantly ***lower*** prevalence of obesity compared with the prevalence in all Victorian people.

→ Women 45–54 years old had a significantly ***higher*** prevalence of obesity compared with the prevalence in all Victorian women.

→ People 65 years old or over had a significantly ***higher*** prevalence of obesity compared with the prevalence in all Victorian people.

1. Methods

1 Methods

1.1 Background

Population health surveys based on computer-assisted telephone interviews (CATI) are used to collect key population health surveillance data because they provide time-series data collection procedures that are acceptable to respondents, an adequate sample size, provide quality data (especially through greater supervision of interviewers, computer data entry and question sequencing) and use current technology. 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.

Method

The VPHS 2013 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 who were 18 years old or over who lived in private dwellings in Victoria. The department's Human Research Ethics Committee approved the survey method and questionnaire content.

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

Stratification

The survey sample for the statewide VPHS was 3,551 completed interviews, with a distribution across the eight departmental regions.

Sampling frame

An 'exchange-based' approach to random digit dialling (RDD) for the VPHS was employed for the first time in 2010, using a commercial list provider to provide the RDD landline telephone sample.

The advantages of this exchange-based approach to RDD sample generation include:

- improved coverage in areas where new phone number ranges have been activated
- improved coverage in growth corridors, peri-urban areas and CBD developments
- representing each bank of phone numbers in the sampling frame in proportion to the current population of working landline numbers
- higher connection rates and therefore greater fieldwork efficiency.

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. People who are homeless or itinerant were excluded from the survey, as were people in hospitals/institutions, the frail aged and people with disabilities who are unable to participate in an interview.

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.

Call routine

The call algorithm spreads call attempts over different times of the day and days of the week. Other features of the call regime included:

- call initiation on weekday evenings and weekends only (since these are proven to be the best times to establish initial contact with households)
- appointments made for anytime the call centre was operational
- appointments set for five days after leaving the first answering machine message and eight days after leaving the second answering machine message.

Interviewing across the eight departmental regions was progressed evenly over the fieldwork period, with a view to spreading any bias resulting from seasonal or environmental factors.

After establishing contact, interviewers could make calls, by appointment, outside the time block hours. After contacting a household an interviewer would select for interview the person who was 18 years old or over with the most recent birthday in that household.

Interviewing in languages other than English

Interviews were conducted in eight community languages. As for previous surveys in the series, the department provided translated survey questionnaires in Italian, Greek, Mandarin, Cantonese, Vietnamese, Arabic, Turkish and Serbo-Croatian, with a view to achieving a more representative sample in those areas with a relatively high proportion of speakers of these languages. Bi-lingual CATI interviewers undertook the interviews in these other languages, as required.

1800 number operation

The department operated a survey hotline number during business hours throughout the data collection period to help establish survey bona fides, address sample member queries about the survey or survey process and set up appointment times with respondents for interview.

1.2 Participation

The overall response rate was 73.8 per cent. As for previous surveys in the series, the response rate was higher in regional locations (74.6 per cent) relative to metropolitan locations (72.7 per cent). There was some variation in the response rate by departmental region, ranging from 75.9 per cent in Grampians region to 71.2 per cent in North & West Metropolitan region.

The average interview length was 12.3 minutes.

1.3 Weighting

The survey data was weighted to reflect the following.

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 was as follows.

sw = nah / npl

where:
nah = the number of people who were 18+ years old in the household

npl = the number of telephone lines in the household.

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 LGA, 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 over
- *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
Ni = 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.

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*):

$$pwt_{ij} = sw_{ij} \times pbmark_i$$

where:
i = the *i* th cross-cell
j = the *j* th person in the cross-cell.

1.4 Statistical analysis

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

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 at people in the population during that period. Crude prevalence (expressed as a percentage) is presented in the report where estimates are broken down by age group. Crude prevalence is useful for service planning purposes.

Age standardisation (age adjustment)

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, any observed increases, or decreases, in the prevalence of an indicator of interest may just reflect changes in the age distribution. For example, if 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.

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.

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, but 90, 99, 99.9 or whatever percentage 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, 99 or 99.9 per cent.

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.

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 an 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 (RSE) % =
standard error / point estimate × 100

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

1.5 Profile of respondents

Table 1.1 shows the profile of the survey participants. In 2013 the survey data indicate the following:

- Females were more likely than males to participate in the survey.
- People who were 18–34 years old were less likely to participate in the survey compared with people who were 45 years old or over.
- The proportion of employed people in the survey was 49.4 per cent.
- The proportion of married people in the survey was 58.9 per cent.
- Approximately 75 per cent of participants were Australian born.

Table 1.1: Profile of respondents in the Victorian Population Health Survey, 2013

Item	Categories	Per cent
Gender	Male	37.2
	Female	62.8
Age group	18-24 years	2.8
	25-34 years	5.3
	35-44 years	14.4
	45-54 years	18.3
	55-64 years	22.2
	65+ years	36.9
Marital status	Married	58.9
	Living with a partner	5.9
	Widowed	12.3
	Divorced	8.5
	Separated	2.9
	Never married	10.7
Country of birth	Australia	75.1
Labour force status	Employed	49.4
	Unemployed	2.6
	Not in the labour force	47.4
Home ownership	Owned	83.7
	Rented	13.3
Household type	Couple only	33.9
	Couple with dependent child/children	19.3
	Couple with non-dependent child/children	6.5
	Couple with dependent and non-dependent child/children	5.1
	One-parent family with dependent child/children	3.3
	One-parent family with non-dependent child/children	2.3
	One-parent family with dependent and non-dependent child/children	0.9
	Group household	3.3
	One person household	22.8
	Other	1.7

2. Selected risk factors and self-reported health status

2 Selected risk factors and self-reported health status

2.1 Introduction

Modifiable health risk factors are those that are potentially modifiable 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. (2008) determined that 14 selected risk factors accounted for 32.2 per cent of the total burden of death, disease and injury. Table 2.1 summarises the 14 risk factors and their relative contributions.

Table 2.1: 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

Conversely, 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 chapter presents information on modifiable risk factors that influence health including smoking, fruit and vegetable intake, physical activity, overweight and obesity and psychological distress. Self-reported health is also reported as it has been shown to be a reliable predictor of ill-health, future healthcare use and premature mortality, independent of other medical, behavioural or psychosocial risk factors.

2.2 Smoking

2.2.1 Background

The tobacco epidemic is one of the biggest public health threats the world has ever faced, killing nearly six million people a year. More than five million of those deaths are the result of direct tobacco use, while more than 600,000 are the result of non-smokers being exposed to second-hand smoke. Approximately one person dies every six seconds due to tobacco, accounting for one in 10 adult deaths. Up to half of current users will eventually die of a tobacco-related disease. Because there is a lag of several years between when people start using tobacco and when their health suffers, the epidemic of tobacco-related disease and death has just begun. Tobacco caused 100 million deaths in the 20th century. If current trends continue, it may cause one billion deaths in the 21st century (WHO 2011).

Unchecked, tobacco-related deaths will increase to more than eight million per year by 2030 (World Health Organization (WHO) 2015).

Smoking causes cancer, heart disease, stroke, lung diseases (including emphysema, bronchitis and chronic airway obstruction) and diabetes. For every person who dies from a smoking-related disease, about 30 more people suffer, with at least one serious illness from smoking (US Department of Health and Human Services 2014). On average, smokers die 10 years earlier than non-smokers (Jha et al. 2013). Among young people, the short-term health consequences of smoking include respiratory and non-respiratory effects, addiction to nicotine, and the associated risk of other drug use. Long-term health consequences of youth smoking are reinforced by the fact that most young people who smoke regularly continue to smoke throughout adulthood. Smoking at an early age increases the risk of lung cancer. For most smoking-related cancers, the risk rises as the individual continues to smoke (Centers for Disease Control and Prevention 1994).

2.2.2 Age group and sex

Table 2.2 shows the smoking status of the adult Victorian population. In Victoria in 2013, 15.8 per cent of men, 12.6 per cent of women and 14.2 per cent of people reported being 'current smokers'. The proportion (%) of men, women and people who were 65 years old or over who were classified as 'current smokers' was significantly lower than the proportion of all Victorian men, women and people, respectively.

Table 2.2: Smoking status of the adult population, by age group and sex, Victoria, 2013

	Age group (years)	Current smoker			Ex- smoker			Non-smoker		
		%	95% CI		%	95% CI		%	95% CI	
			LL	UL		LL	UL		LL	UL
Males	18–24	**18.1***	8.1	35.6	**	**	**	**77.3**	60.2	88.5
	25–34	**27.8***	14.9	45.8	**16.5***	8.4	29.9	**55.7**	39.9	70.4
	35–44	**18.3**	12.2	26.5	**27.9**	20.4	36.8	**53.8**	44.6	62.8
	45–54	**9.6**	6.2	14.6	**32.9**	25.8	40.9	**57.3**	49.1	65.1
	55–64	**12.6**	8.4	18.3	**45.7**	38.7	53.0	**41.6**	34.7	48.8
	65+	**6.7**	4.5	9.9	**47.5**	42.1	52.9	**43.1**	37.8	48.6
Total		**15.8**	**12.1**	**20.5**	**29.4**	**25.8**	**33.1**	**54.3**	**49.7**	**58.8**
Females	18–24	**12.6***	5.0	28.5	**	**	**	**86.7**	71.1	94.6
	25–34	**16.0**	9.3	26.2	**16.6**	10.4	25.5	**66.1**	55.4	75.4
	35–44	**13.9**	9.9	19.0	**20.3**	15.6	25.9	**65.7**	59.2	71.6
	45–54	**16.9**	13.0	21.6	**26.5**	21.5	32.2	**56.1**	50.1	61.9
	55–64	**14.0**	10.3	18.6	**33.4**	28.2	39.1	**52.6**	46.7	58.4
	65+	**3.8**	2.6	5.5	**27.0**	23.2	31.2	**68.4**	64.2	72.4
Total		**12.6**	**10.4**	**15.3**	**21.5**	**19.1**	**24.0**	**65.4**	**62.1**	**68.5**
People	18–24	**15.4***	8.4	26.5	**	**	**	**81.9**	70.9	89.4
	25–34	**21.9**	14.1	32.5	**16.6**	11.1	24.1	**60.9**	51.0	69.9
	35–44	**16.1**	12.3	20.7	**24.0**	19.5	29.2	**59.8**	54.2	65.3
	45–54	**13.3**	10.6	16.6	**29.6**	25.2	34.5	**56.7**	51.7	61.6
	55–64	**13.3**	10.4	16.8	**39.5**	35.0	44.1	**47.2**	42.6	51.8
	65+	**5.1**	3.8	6.7	**36.3**	33.1	39.7	**56.9**	53.4	60.3
Total		**14.2**	**11.9**	**16.8**	**25.3**	**23.2**	**27.5**	**59.9**	**57.1**	**62.7**

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 from 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.

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 VPHS combines 'daily' and 'occasional' smokers to report on 'current smokers'. However, Table 2.3 shows the proportion of Victorian adults who were classified as 'daily' compared with 'occasional' smokers, by age group and sex. The data show that the majority of current smokers were in fact 'daily' rather than 'occasional' smokers.

Table 2.3: Smoking frequency among the adult population, by age group and sex, Victoria, 2013

	Age group (years)	Daily			Occasional			Ex-smoker			Non-smoker		
		%	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	**16.4***	6.8	34.5	**	**	**	**	**	**	**77.3**	60.2	88.5
	25–34	**18.7***	8.9	35.0	**	**	**	**16.5***	8.4	29.9	**55.7**	39.9	70.4
	35–44	**9.8***	5.8	15.9	**8.6***	4.3	16.2	**27.9**	20.4	36.8	**53.8**	44.6	62.8
	45–54	**7.0***	4.2	11.3	**2.7***	1.1	6.5	**32.9**	25.8	40.9	**57.3**	49.1	65.1
	55–64	**7.3***	4.7	11.3	**5.2***	2.5	10.8	**45.7**	38.7	53.0	**41.6**	34.7	48.8
	65+	**6.1***	4.0	9.2	**	**	**	**47.5**	42.1	52.9	**43.1**	37.8	48.6
Total		**10.9***	**7.9**	**14.9**	**4.9***	**2.7**	**8.6**	**29.4**	**25.8**	**33.1**	**54.3**	**49.7**	**58.8**
Females	18–24	**	**	**	**	**	**	**	**	**	**86.7**	71.1	94.6
	25–34	**9.3***	4.2	19.4	**6.7***	3.1	13.9	**16.6**	10.4	25.5	**66.1**	55.4	75.4
	35–44	**8.7**	5.8	13.0	**5.1***	2.8	9.1	**20.3**	15.6	25.9	**65.7**	59.2	71.6
	45–54	**13.6**	10.1	18.0	**3.3***	1.8	6.1	**26.5**	21.5	32.2	**56.1**	50.1	61.9
	55–64	**10.9**	7.8	15.0	**3.0***	1.4	6.3	**33.4**	28.2	39.1	**52.6**	46.7	58.4
	65+	**3.3**	2.2	5.0	**0.5***	0.2	1.1	**27.0**	23.2	31.2	**68.4**	64.2	72.4
Total		**8.5**	**6.8**	**10.5**	**4.2***	**2.8**	**6.3**	**21.5**	**19.1**	**24.0**	**65.4**	**62.1**	**68.5**
People	18–24	**10.8***	5.2	21.1	**	**	**	**	**	**	**81.9**	70.9	89.4
	25–34	**14.0***	8.1	23.3	**7.9***	3.3	17.9	**16.6**	11.1	24.1	**60.9**	51.0	69.9
	35–44	**9.2**	6.6	12.7	**6.8**	4.2	10.8	**24.0**	19.5	29.2	**59.8**	54.2	65.3
	45–54	**10.3**	8.0	13.3	**3.0***	1.8	5.0	**29.6**	25.2	34.5	**56.7**	51.7	61.6
	55–64	**9.2**	7.0	11.9	**4.1***	2.4	7.0	**39.5**	35.0	44.1	**47.2**	42.6	51.8
	65+	**4.6**	3.4	6.2	**0.5***	0.2	1.1	**36.3**	33.1	39.7	**56.9**	53.4	60.3
Total		**9.7**	**7.9**	**11.8**	**4.5***	**3.1**	**6.5**	**25.3**	**23.2**	**27.5**	**59.9**	**57.1**	**62.7**

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 from 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.

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.

2.2.3 Trend over time

The trend over time of the age-adjusted proportion (%) of men and women classified as 'current smokers' is presented in Table 2.4 and Figure 2.1.

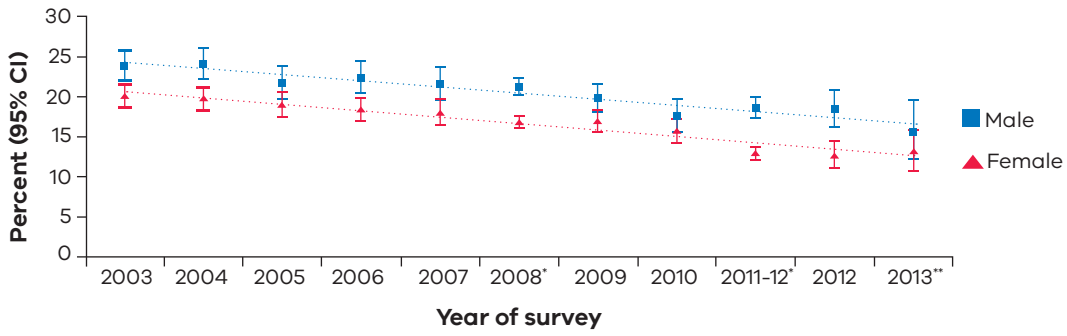
There was significant decline in the proportion of Victorian men and women who were 'current smokers' during the period 2003 to 2013.

Table 2.4: Proportion (%) of the adult population classified as 'current smokers', by survey year and sex, Victoria, 2003–2013

	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**
2013**	**15.6**	**12.2**	**19.7**	**13.2**	**10.7**	**16.0**	**14.5**	**12.2**	**17.0**

Data are age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
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.
* LGA level survey (sample size approximately 34,000); **Survey (sample size approximately 3,600).

Figure 2.1: Proportion (%) of the adult population classified as 'current smokers', by survey year and sex, Victoria, 2003–2013



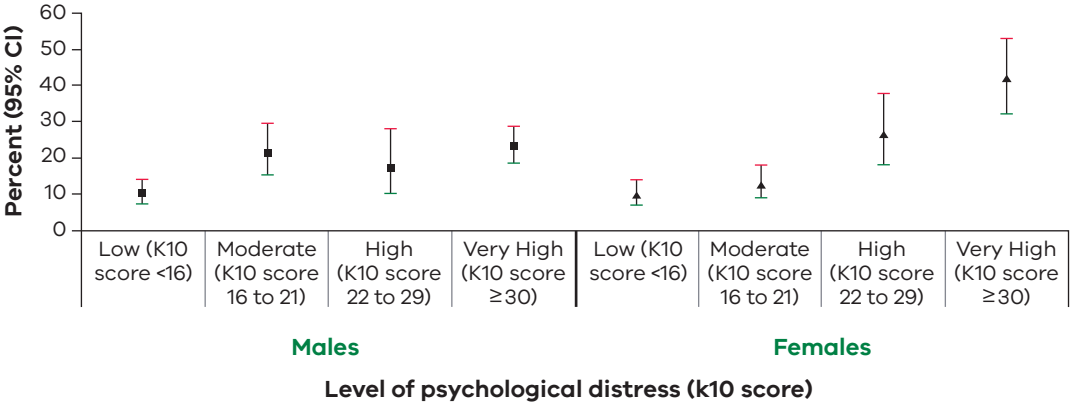
Data were age-standardised to the 2011 Victorian population.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Ordinary least squares linear regression was used to test for trends over time.
Statistically significant decline in the prevalence of current smokers in both males and females.
* LGA level survey (sample size approximately 34,000); **Survey (sample size approximately 3,600).

2.2.4 Association with selected risk factors

The age-adjusted proportion (%) of adult Victorians classified as 'current smokers', by level of psychological distress (Figure 2.2), self-reported health status (Figure 2.3) and sex, is presented below.

The proportion of women classified as 'current smokers' appeared to increase with increasing psychological distress and poorer self-reported health.

Figure 2.2: Proportion (%) of adult population classified as 'current smokers', by level of psychological distress,[a] Victoria, 2013



[a] Based on the Kessler 10 scale for psychological distress (see section 2.7 for a description of the scale). Data are age-standardised to the 2011 Victorian population.

Figure 2.3: Proportion (%) of adult population classified as 'current smokers', by self-reported health status, Victoria, 2013

Data are age-standardised to the 2011 Victorian population.

2.3 Fruit and vegetable consumption

2.3.1 Background

The food that people eat defines, to an extent, their health, growth and development, with fruit and vegetables playing a major role in this equation. Eating a variety of fruit and vegetables, and enough of them, gives people a better chance of getting all the nutrients and dietary fibre they need (Australian Institute of Health and Welfare (AIHW) 2000). This may also prevent major health conditions such as cardiovascular disease, diabetes, obesity and certain cancers (WHO 2002).

2.3.2 Australian dietary guidelines

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) alter some of the serving sizes and recommendations for fruit and vegetable consumption based on sex and age. Analysis of the VPHS 2013 data has been undertaken using these new Australian guidelines (NHMRC 2013).

Table 2.5 shows the differences between the two sets of guidelines. The 2003 Australian guidelines recommend a minimum daily vegetable intake of four serves for 12–18 year olds and five serves for people who are 19 years old or over, where a serve is defined as half a cup of cooked vegetables or a cup of salad vegetables (NHMRC 2003). The recommended minimum daily fruit intake is three serves for 12–18 year olds and two serves for people who are 19 years old or over, where a serve is defined as one medium piece or two small pieces of fruit or one cup of diced pieces (NHMRC 2003).

Table 2.5: Australian adult dietary guidelines for vegetable and fruit consumption, by sex and age group, 2003[a] and 2013[b]

	NHMRC, 2003 Serves/day			NHMRC, 2013 Serves/day		
	Age group (years)	Vegetables (75g/serve)	Fruit (150g/serve)	Age group (years)	Vegetables and legumes/beans (75g/serve)	Fruit (150g/serve)
Males	12-18	4	3	19-50	6	2
	19+	5	2	51-70	5.5	2
				70+	5	2
Females	12-18	4	3	19-50	6	2
	19+	5	2	51-70	5.5	2
				70+	5	2

[a] NHMRC, [b] NHMRC 2013.

Table 2.6 shows age-specific and crude proportions (%) of the adult Victorian population, by daily vegetable consumption category (serves per day) and sex.

The proportion of people who consumed one or less than one serve of vegetables daily was 6.2 per cent among all Victorian adults. The proportion was similar across all age groups and among men, women and people.

A significantly higher proportion of 45–54-year-old men consumed three to four serves of vegetables daily compared with all Victorian men. A significantly higher proportion of all women consumed three to four serves of vegetables daily compared with all men.

The proportion of people who consumed five or more serves of vegetables daily was 7.9 per cent among all Victorian people. The proportion of men and women who consumed five or more serves of vegetables daily was similar across all age groups.

Table 2.6: Daily vegetable consumption (serves/day) among the adult population, by age group and sex, Victoria, 2013

	Age group (years)	0 or <1 serve/day			1 to 2 serves/day			3 or 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	**	**	**	**71.0**	54.1	83.6	**	**	**	**	**	**
	25–34	**7.8***	3.2	17.9	**69.8**	52.9	82.6	**14.3***	6.4	28.9	**	**	**
	35–44	**6.0***	2.8	12.2	**71.0**	62.2	78.5	**15.9**	10.6	23.3	**7.1***	3.6	13.6
	45–54	**3.8***	1.8	7.8	**63.8**	55.0	71.7	**29.3**	21.6	38.3	**	**	**
	55–64	**9.3**	5.7	14.7	**65.5**	58.3	72.1	**19.3**	14.3	25.7	**3.5***	1.7	6.8
	65+	**7.6**	5.2	11.0	**62.6**	57.2	67.6	**19.5**	15.7	23.9	**6.0**	3.9	9.2
Total		**7.4**	**5.3**	**10.3**	**67.3**	**62.8**	**71.5**	**17.4**	**14.4**	**20.9**	**5.4***	**3.2**	**9.0**
Females	18–24	**	**	**	**48.7**	31.0	66.7	**32.6***	17.7	52.2	**	**	**
	25–34	**	**	**	**49.6**	38.8	60.4	**33.9**	24.2	45.2	**9.9***	4.8	19.1
	35–44	**3.8***	1.9	7.2	**56.1**	49.3	62.7	**29.0**	23.5	35.2	**9.6**	6.1	14.9
	45–54	**4.2***	2.2	7.7	**51.6**	45.5	57.6	**32.5**	27.0	38.4	**11.0**	7.7	15.4
	55–64	**4.7***	2.7	7.9	**46.0**	40.0	52.0	**33.1**	27.8	38.9	**14.6**	10.9	19.4
	65+	**5.5**	3.5	8.5	**48.4**	43.9	52.8	**32.4**	28.5	36.7	**10.2**	7.8	13.2
Total		**5.0**	**3.3**	**7.7**	**50.2**	**46.6**	**53.9**	**32.2**	**28.9**	**35.8**	**10.3**	**8.5**	**12.5**
All people	18–24	**11.6***	5.0	24.7	**60.3**	47.4	71.9	**17.7***	9.9	29.7	**6.8***	3.1	14.1
	25–34	**5.1***	2.4	10.5	**60.0**	50.2	69.1	**23.8**	16.8	32.6	**8.4***	3.6	18.6
	35–44	**4.9***	2.9	8.1	**63.5**	58.0	68.7	**22.5**	18.4	27.2	**8.4**	5.7	12.2
	45–54	**4.0**	2.5	6.4	**57.6**	52.4	62.7	**30.9**	26.1	36.1	**6.1**	4.3	8.6
	55–64	**7.0**	4.8	10.0	**55.7**	51.0	60.3	**26.3**	22.5	30.5	**9.1**	6.9	11.9
	65+	**6.5**	4.9	8.6	**54.9**	51.4	58.3	**26.5**	23.6	29.5	**8.3**	6.6	10.3
Total		**6.2**	**4.8**	**8.1**	**58.7**	**55.8**	**61.6**	**24.9**	**22.5**	**27.4**	**7.9**	**6.3**	**9.8**

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 from 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.

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.

2.3.3 Fruit consumption

Table 2.7 shows age-specific and crude proportions (%) of the adult Victorian population, by daily fruit consumption category (serves per day) and sex.

The proportion of people who consumed less than one serve of fruit daily was 12.1 per cent. The proportion was significantly higher in men (15.4 per cent) compared with women (8.9 per cent).

The proportion of adults who consumed two or more serves of fruit daily was 50.1 per cent among all Victorian people. The proportion of women who consumed two or more serves of fruit daily (56.9 per cent) was significantly higher than the proportion in men (43.1 per cent).

Table 2.7: Daily fruit consumption (serves/day) among the adult population, by age group and sex, Victoria, 2013

	Age group (years)	0 or <1 serve/day			1 serve/day			2 or more serves/day		
		%	95% CI		%	95% CI		%	95% CI	
			LL	UL		LL	UL		LL	UL
Males	18–24	**17.6***	7.4	36.4	**51.0**	34.2	67.5	**30.2***	17.0	47.7
	25–34	**19.1***	10.6	32.1	**40.7**	26.5	56.6	**39.2**	25.4	55.0
	35–44	**15.1**	10.0	22.1	**45.6**	36.5	54.9	**38.4**	30.0	47.6
	45–54	**12.6**	8.8	17.7	**30.9**	23.9	39.0	**55.3**	47.1	63.2
	55–64	**15.1**	11.1	20.2	**40.5**	33.6	47.9	**44.0**	37.0	51.2
	65+	**13.0**	10.0	16.8	**35.2**	29.9	40.8	**49.5**	44.0	54.9
Total		**15.4**	**12.5**	**19.0**	**40.3**	**35.8**	**45.0**	**43.1**	**38.6**	**47.6**
Females	18–24	**14.4***	6.4	29.0	**27.9***	14.1	47.7	**57.3**	39.1	73.6
	25–34	**5.4***	2.3	12.3	**37.4**	28.0	47.8	**57.2**	46.6	67.2
	35–44	**9.1**	6.0	13.5	**39.6**	33.3	46.3	**50.5**	43.8	57.2
	45–54	**11.9**	8.8	16.0	**31.8**	26.5	37.6	**56.1**	50.2	61.9
	55–64	**9.5**	6.8	13.3	**30.7**	25.5	36.4	**59.6**	53.7	65.2
	65+	**5.8**	4.2	8.0	**32.0**	27.9	36.3	**60.8**	56.4	65.0
Total		**8.9**	**7.2**	**11.1**	**33.7**	**30.4**	**37.1**	**56.9**	**53.3**	**60.4**
All people	18–24	**16.0***	8.8	27.3	**39.7**	28.2	52.3	**43.5**	31.7	56.0
	25–34	**12.3**	7.6	19.4	**39.0**	30.2	48.6	**48.2**	38.9	57.5
	35–44	**12.0**	8.9	16.0	**42.6**	37.0	48.3	**44.5**	39.0	50.2
	45–54	**12.3**	9.7	15.4	**31.4**	26.9	36.2	**55.7**	50.7	60.7
	55–64	**12.3**	9.8	15.3	**35.5**	31.1	40.1	**51.9**	47.3	56.5
	65+	**9.1**	7.4	11.1	**33.4**	30.1	36.9	**55.6**	52.1	59.1
Total		**12.1**	**10.4**	**14.1**	**36.9**	**34.1**	**39.8**	**50.1**	**47.2**	**53.0**

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.
* 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 2.8 shows the age-specific and crude proportions (%) of the adult Victorian population who met the 2013 Australian guidelines for fruit and vegetable consumption.

The proportion of people who met both guidelines for daily fruit and vegetable consumption was 5.6 per cent of all Victorian adults. A significantly higher proportion of women (8.3 per cent) than men (2.8 per cent) met both guidelines.

The proportion of people who met neither set of guidelines was 46.8 per cent among all Victorian adults. The proportion of people who did not meet either set of guidelines was significantly lower in older people (65 years old or over) compared with all Victorian people.

Table 2.8: Compliance with vegetable and fruit consumption guidelines[a] among the adult population, by age group and sex, Victoria, 2013

	Age group (years)	Met both fruit and vegetable consumption guidelines			Met vegetable consumption guidelines			Met fruit consumption guidelines			Did not meet either set of guidelines		
		%	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	**	**	**	**	**	**	**30.2***	17.0	47.7	**62.9**	45.6	77.4
	25–34	**0.0**	.	.	**0.0**	.	.	**39.2**	25.4	55.0	**58.7**	43.1	72.8
	35–44	**5.0***	2.1	11.2	**5.4***	2.4	11.5	**38.4**	30.0	47.6	**60.2**	51.0	68.8
	45–54	**	**	**	**	**	**	**55.3**	47.1	63.2	**42.9**	35.1	51.1
	55–64	**	**	**	**	**	**	**44.0**	37.0	51.2	**53.2**	46.0	60.3
	65+	**3.9***	2.2	6.8	**5.3**	3.3	8.3	**49.5**	44.0	54.9	**45.8**	40.3	51.3
Total		**2.8***	**1.7**	**4.5**	**3.2**	**2.1**	**4.9**	**43.1**	**38.6**	**47.6**	**53.8**	**49.2**	**58.4**
Females	18–24	**	**	**	**	**	**	**57.3**	39.1	73.6	**42.3**	26.0	60.5
	25–34	**9.1***	4.3	17.9	**9.3***	4.6	18.1	**57.2**	46.6	67.2	**40.5**	30.8	51.1
	35–44	**6.6***	3.7	11.3	**9.3**	5.9	14.3	**50.5**	43.8	57.2	**44.6**	38.0	51.3
	45–54	**9.1**	6.2	13.1	**10.6**	7.4	14.9	**56.1**	50.2	61.9	**42.3**	36.5	48.2
	55–64	**11.1**	7.8	15.5	**14.1**	10.5	18.7	**59.6**	53.7	65.2	**36.5**	31.0	42.3
	65+	**7.8**	5.8	10.4	**9.9**	7.6	12.8	**60.8**	56.4	65.0	**34.7**	30.5	39.0
Total		**8.3**	**6.6**	**10.3**	**9.9**	**8.1**	**12.0**	**56.9**	**53.3**	**60.4**	**40.0**	**36.6**	**43.6**
All people	18–24	**6.3***	2.8	13.6	**6.6***	3.0	13.8	**43.5**	31.7	56.0	**52.8**	40.4	64.8
	25–34	**4.5***	2.1	9.3	**4.6***	2.2	9.4	**48.2**	38.9	57.5	**49.7**	40.3	59.0
	35–44	**5.8**	3.6	9.3	**7.3**	4.9	10.9	**44.5**	39.0	50.2	**52.3**	46.6	57.9
	45–54	**4.8**	3.2	6.9	**5.5**	3.8	7.9	**55.7**	50.7	60.7	**42.6**	37.7	47.6
	55–64	**6.4**	4.6	9.0	**8.2**	6.1	10.9	**51.9**	47.3	56.5	**44.7**	40.1	49.3
	65+	**6.0**	4.6	7.8	**7.8**	6.1	9.8	**55.6**	52.1	59.1	**39.7**	36.3	43.2
Total		**5.6**	**4.5**	**6.9**	**6.6**	**5.5**	**7.9**	**50.1**	**47.2**	**53.0**	**46.8**	**43.9**	**49.7**

[a] Based on NHMRC (2013) 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 from 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.

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.

2.3.4 Trend over time

As this is the first estimate of fruit and vegetable consumption in Victoria, based on the new Australian guidelines (NHMRC, 2013), no trend over time is reported.

2.3.5 Association with self-reported health status

The age-adjusted proportion (%) of Victorian men and women who met vegetable (Figure 2.4) and fruit (Figure 2.5) consumption guidelines appeared to decline with poorer self-reported health status.

Figure 2.4: Proportion (%) of the adult population complying with vegetable consumption guidelines,[a] by self-reported health status and sex, Victoria, 2013

[a] Based on NHMRC (2013) guidelines.
The estimate for males with 'Fair / Poor' self-reported health were unreliable (RSE>50%) and hence not shown.
Data are age-standardised to the 2011 Victorian population.

Figure 2.5: Proportion (%) of the adult population complying with fruit consumption guidelines,[a] by self-reported health status and sex, Victoria, 2013

[a] Based on NHMRC (2013) guidelines.
Data are age-standardised to the 2011 Victorian population.

2.4 Physical activity

2.4.1. Background

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:

(i) time spent walking (for more than 10 minutes at a time) for recreation or exercise, or to get to and from places

(ii) time spent doing vigorous household chores (excluding gardening)

(iii) 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. 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.

Table 2.9 outlines the definitions of sufficient activity and sessions per week, as applied to the VPHS. Data were collected on the number of sessions and the duration of each type of 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 2.9: Definition of sufficient physical activity time and sessions per week

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

2.4.2 Type of physical activity

Table 2.10 shows the age-specific and crude proportions (%) of the adult Victorian population who undertook physical activity in the week preceding the 2013 survey, by type of physical activity, age group and sex.

There were significantly higher proportions of older men, women and people (65 years old or over) who reported not doing any physical activity compared with the proportion of all Victorian men, women and people, respectively. There were also significantly higher proportions of older men, women and people (65 years old or over) who reported walking as their only form of physical activity compared with the proportion of all Victorian men, women and people, respectively.

In contrast, a significantly higher proportion of 35–44-year-old women and people reported undertaking both walking and vigorous physical activity compared with the proportion of all Victorian women and people, respectively.

There were significantly lower proportions of older men, women and people (65 years old or over) who reported undertaking both walking and vigorous physical activity compared with the proportion of all Victorian men, women and people, respectively.

Table 2.10: Proportion (%) of the adult population undertaking physical activity during the week prior to the interview, by type of activity, age group and sex, Victoria, 2013

	Age group (years)	None			Walking only			Vigorous activity only			Walking and 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	**	**	**	**	**	**	**	**	**	**70.1**	51.4	83.9
	25–34	**	**	**	**21.2***	12.0	34.6	**	**	**	**62.9**	48.0	75.6
	35–44	**5.3***	2.4	11.4	**20.7**	13.8	29.7	**5.4***	2.7	10.6	**67.1**	57.8	75.3
	45–54	**3.4***	1.7	6.4	**22.5**	16.3	30.1	**4.3***	2.1	8.3	**62.2**	54.0	69.7
	55–64	**6.9***	3.9	11.9	**32.0**	25.7	39.0	**4.7***	2.6	8.3	**51.8**	44.6	58.9
	65+	**13.5**	10.3	17.5	**34.4**	29.2	40.0	**7.4**	4.9	10.9	**38.5**	33.4	43.8
Total		**6.5**	**4.7**	**8.9**	**23.6**	**20.1**	**27.4**	**5.7**	**4.0**	**7.9**	**58.7**	**54.2**	**63.0**
Females	18–24	**0.0**	.	.	**19.0***	9.3	35.1	**	**	**	**70.4**	52.7	83.5
	25–34	**	**	**	**20.4**	13.2	30.1	**	**	**	**71.2**	60.9	79.6
	35–44	**3.9***	1.8	8.1	**14.7**	10.4	20.3	**4.5***	2.4	8.2	**74.1**	67.6	79.8
	45–54	**3.6***	1.8	7.1	**20.8**	16.3	26.1	**9.7**	6.7	13.9	**62.7**	56.7	68.4
	55–64	**7.9**	5.1	12.1	**27.4**	22.4	33.0	**5.5**	3.4	8.7	**54.3**	48.4	60.1
	65+	**16.1**	13.3	19.5	**34.0**	29.9	38.3	**6.4**	4.4	9.3	**37.8**	33.6	42.2
Total		**6.3**	**5.1**	**7.8**	**22.9**	**20.2**	**25.9**	**5.7**	**4.5**	**7.3**	**61.2**	**57.8**	**64.5**
People	18–24	**	**	**	**14.1***	7.3	25.3	**5.3***	2.0	13.1	**70.2**	57.7	80.3
	25–34	**2.8***	1.0	7.2	**20.8**	14.6	28.7	**4.8***	2.2	9.9	**67.0**	58.1	74.8
	35–44	**4.6***	2.6	7.9	**17.6**	13.4	22.8	**5.0**	3.1	7.8	**70.7**	65.0	75.7
	45–54	**3.5**	2.2	5.6	**21.6**	17.7	26.1	**7.0**	5.0	9.8	**62.5**	57.5	67.2
	55–64	**7.4**	5.2	10.4	**29.7**	25.6	34.1	**5.1**	3.5	7.3	**53.1**	48.4	57.7
	65+	**14.9**	12.7	17.4	**34.2**	30.9	37.6	**6.8**	5.2	9.0	**38.1**	34.8	41.5
Total		**6.4**	**5.3**	**7.8**	**23.2**	**21.0**	**25.6**	**5.7**	**4.6**	**7.0**	**60.0**	**57.2**	**62.7**

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 from 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.

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.

2.4.3 Australian physical activity guidelines

Table 2.11 shows the age-specific and crude proportion (%) of the adult Victorian population who comply with Australian physical activity guidelines (1999), by age group and sex.

Overall, the proportion of men who engaged in sufficient physical activity (58.2 per cent) was similar to the proportion in women (60.5 per cent). There was a significantly lower proportion of older men, women and people (65 years old or over) who engaged in sufficient physical activity compared with the proportion of all Victorian men, women and people, respectively.

Sedentary behaviour was reported by 6.4 per cent of Victorian people, with no significant difference in the proportion between the sexes. There were significantly higher proportions of older men, women and people (65 years old or over) who reported sedentary behaviour compared with the proportion of all Victorian men, women and people, respectively.

Table 2.11: Proportion (%) of adult population who comply with Australian physical activity guidelines, by physical activity[a] status, age group and sex, Victoria, 2013

		Physical activity status								
	Age group (years)	Sedentary			Insufficient			Sufficient		
		%	95% CI		%	95% CI		%	95% CI	
			LL	UL		LL	UL		LL	UL
Males	18–24	**	**	**	**23.5***	11.3	42.5	**61.5**	43.4	76.8
	25–34	**	**	**	**29.8**	17.8	45.4	**58.9**	43.5	72.8
	35–44	**5.3***	2.4	11.4	**30.1**	22.1	39.6	**62.0**	52.5	70.6
	45–54	**3.4***	1.7	6.4	**24.7**	18.3	32.5	**63.4**	55.3	70.8
	55–64	**6.9***	3.9	11.9	**28.1**	22.1	35.0	**59.0**	51.8	65.8
	65+	**13.5**	10.3	17.5	**33.9**	28.6	39.6	**45.2**	39.9	50.6
Total		**6.5**	**4.7**	**8.9**	**28.6**	**24.6**	**33.0**	**58.2**	**53.6**	**62.7**
Females	18–24	**0.0**	.	.	**24.0***	11.6	43.0	**70.4**	51.1	84.4
	25–34	**	**	**	**27.6**	19.0	38.3	**65.8**	55.1	75.2
	35–44	**3.9***	1.8	8.1	**26.7**	21.0	33.2	**65.0**	58.1	71.3
	45–54	**3.6***	1.8	7.1	**26.4**	21.5	31.9	**65.9**	60.1	71.3
	55–64	**7.9**	5.1	12.1	**26.1**	21.4	31.6	**59.9**	54.0	65.5
	65+	**16.1**	13.3	19.5	**34.3**	30.3	38.6	**40.7**	36.4	45.2
Total		**6.3**	**5.1**	**7.8**	**27.9**	**24.8**	**31.2**	**60.5**	**57.0**	**63.9**
People	18–24	**	**	**	**23.7**	14.4	36.6	**65.9**	52.8	76.9
	25–34	**2.8***	1.0	7.2	**28.7**	21.0	38.0	**62.4**	52.9	71.0
	35–44	**4.6***	2.6	7.9	**28.4**	23.3	34.0	**63.5**	57.7	68.9
	45–54	**3.5**	2.2	5.6	**25.6**	21.4	30.2	**64.7**	59.7	69.3
	55–64	**7.4**	5.2	10.4	**27.1**	23.2	31.4	**59.4**	54.8	63.9
	65+	**14.9**	12.7	17.4	**34.1**	30.8	37.6	**42.8**	39.4	46.2
Total		**6.4**	**5.3**	**7.8**	**28.2**	**25.7**	**31.0**	**59.4**	**56.5**	**62.2**

[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 from 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.

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.

2.4.4 Trend over time

Table 2.12 and Figure 2.6 show the age-adjusted proportion (%) of the adult Victorian population who undertake sufficient physical activity, by survey year and sex, adjusted for age.

The proportions (%) of Victorian men and women who engaged in sedentary behaviour, insufficient physical activity or sufficient physical activity remained unchanged between 2005 and 2013.

Table 2.12: Proportion (%) of the adult population who undertake sufficient physical activity, by level of physical activity, survey year and sex, Victoria, 2005–2013

		Physical activity status								
		Sedentary			Insufficient			Sufficient		
		%	95% CI		%	95% CI		%	95% CI	
	Years		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
	2013**	**6.7**	**4.9**	**9.1**	**28.9**	**25.0**	**33.3**	**57.7**	**53.2**	**62.0**
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
	2013**	**6.3**	**5.1**	**7.8**	**27.7**	**24.5**	**31.1**	**60.8**	**57.2**	**64.2**
People	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
	2013**	**6.5**	**5.4**	**7.8**	**28.2**	**25.7**	**31.0**	**59.3**	**56.5**	**2.1**

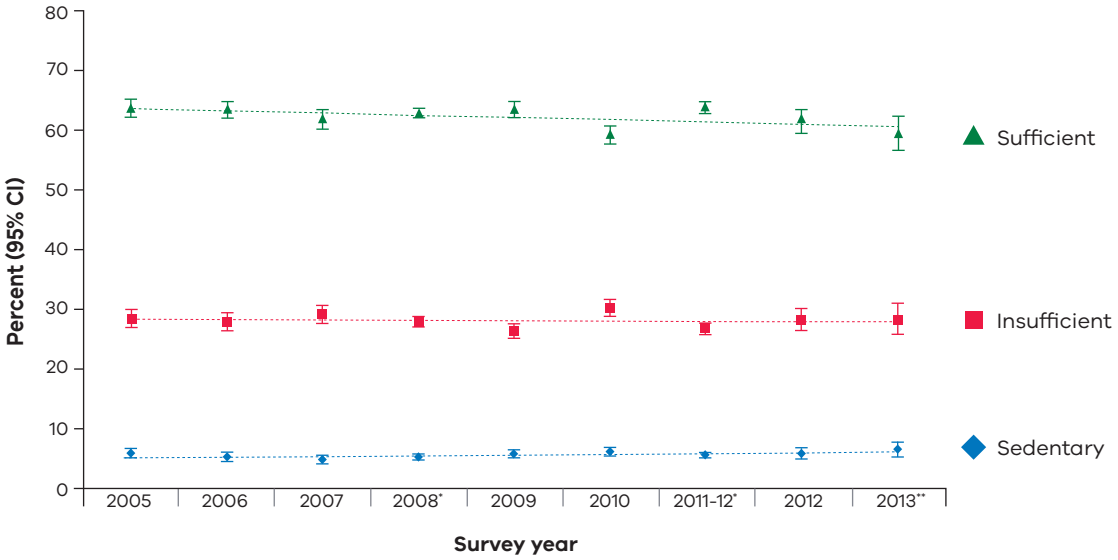
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

Data are age-standardised to the 2011 Victorian population.

Ordinary least squares regression was used to test for trends over time.

* LGA level survey (sample size approximately 34,000); ** Survey (sample size approximately 3,600).

Figure 2.6: Proportion (%) of the adult population who undertake sufficient physical activity, by level of physical activity and survey year, Victoria, 2005-2013



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.
* LGA level survey (sample size approximately 34,000); ** Survey (sample size approximately 3,600).

2.4.5 Association with self-reported health status

The age-adjusted proportion (%) of the adult Victorian population who were sedentary and sufficiently active are presented in Figure 2.7 and Figure 2.8, respectively.

The proportion of the population who were sedentary appeared to increase with poorer self-reported health (Figure 2.7), in both men and women.

Figure 2.7: Proportion (%) of the adult population who are sedentary, by self-reported health status and sex, Victoria, 2013

Data are age-standardised to the 2011 Victorian population.

In contrast, the proportion of the population who were sufficiently active appeared to decrease with poorer self-reported health (Figure 2.8), in both men and women.

Figure 2.8: Proportion (%) of the adult population who are sufficiently active, by self-reported health status and sex, Victoria, 2013

Data are age-standardised to the 2011 Victorian population

2.5 Overweight and obesity

2.5.1 Background

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). Being obese can ultimately 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 total amount of fat and its anatomical distribution influence 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 cannot distinguish between body fat and muscle. Therefore an individual who is very muscular with low body fat could have a high BMI and be classified as obese. Nevertheless self-reported data still have 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.

2.5.2 WHO classification of body weight based on BMI

The BMI provides a measure of body weight in relation to height that can be used to determine weight status in the population (Table 2.13). It is calculated as weight in kilograms divided by height in metres squared: BMI = weight (kg) / height squared (m^2).

Table 2.13: Body weight status classification based on body mass index

BMI score	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

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 and/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 based on self-reported height and weight are likely underestimate the true prevalence of overweight and obesity and overestimate the prevalence of normal and underweight.

2.5.3 Age group and sex

Table 2.14 shows the age-specific body weight status of the adult Victorian population, by age group and sex.

Overall, 42.1 per cent of men and 24.5 per cent of women were overweight, while 16.9 per cent of men and 16.7 per cent of women were obese in 2013. Men and people aged 18–24 years had a significantly lower prevalence of overweight compared with all Victorian men and people, respectively. Women aged 45–54 years had a significantly higher prevalence of obesity compared with the prevalence in all Victorian women. Older people (65 years old or over) had a significantly higher prevalence of obesity compared with the prevalence in all Victorian people.

Table 2.14: Body weight status of the adult population, by age group and sex, Victoria, 2013

	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	**	**	**	**63.6**	46.8	77.6	**17.6***	8.6	32.5	**7.3***	2.7	17.8
	25–34	**	**	**	**36.7**	23.1	52.8	**42.4**	28.2	58.1	**15.7***	8.4	27.6
	35–44	**	**	**	**31.5**	23.7	40.5	**47.9**	38.8	57.1	**15.5**	9.8	23.7
	45–54	**	**	**	**27.5**	21.0	35.1	**48.6**	40.5	56.9	**20.3**	13.9	28.7
	55–64	**	**	**	**28.7**	22.4	35.8	**46.7**	39.6	53.9	**18.6**	13.7	24.8
	65+	**	**	**	**28.1**	23.3	33.6	**44.2**	38.9	49.7	**22.5**	18.3	27.2
Total		**1.8***	**0.7**	**4.4**	**35.1**	**30.6**	**39.9**	**42.1**	**37.7**	**46.7**	**16.9**	**14.1**	**20.2**
Females	18–24	**	**	**	**54.4**	36.2	71.4	**11.8***	5.3	24.2	**	**	**
	25–34	**	**	**	**49.3**	38.8	60.0	**25.2**	17.2	35.2	**13.5***	7.9	22.0
	35–44	**2.7***	1.0	7.1	**52.5**	45.8	59.1	**23.7**	18.7	29.6	**12.7**	9.2	17.2
	45–54	**1.7***	0.7	4.1	**36.3**	30.7	42.3	**26.8**	21.9	32.3	**25.2**	20.4	30.8
	55–64	**1.0***	0.4	2.2	**42.0**	36.3	48.1	**24.8**	20.5	29.8	**21.6**	17.2	26.7
	65+	**1.5***	0.8	2.8	**31.6**	27.6	35.8	**30.6**	26.7	34.8	**21.0**	17.6	24.9
Total		**2.4***	**1.3**	**4.1**	**43.8**	**40.2**	**47.4**	**24.5**	**21.9**	**27.4**	**16.7**	**14.6**	**19.0**
People	18–24	**	**	**	**59.1**	46.4	70.7	**14.7***	8.7	23.9	**5.3***	2.3	11.8
	25–34	**	**	**	**43.0**	34.0	52.5	**33.8**	25.3	43.5	**14.6**	9.7	21.5
	35–44	**2.0***	0.9	4.6	**42.1**	36.6	47.8	**35.6**	30.3	41.4	**14.1**	10.6	18.5
	45–54	**0.9***	0.4	2.1	**32.0**	27.5	36.7	**37.5**	32.7	42.6	**22.8**	18.7	27.6
	55–64	**0.6***	0.3	1.2	**35.5**	31.1	40.1	**35.6**	31.3	40.1	**20.1**	16.7	24.0
	65+	**1.0***	0.6	1.8	**30.0**	26.9	33.4	**36.8**	33.5	40.2	**21.7**	19.0	24.6
Total		**2.1***	**1.2**	**3.4**	**39.5**	**36.6**	**42.5**	**33.2**	**30.5**	**35.9**	**16.8**	**15.0**	**18.8**

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 from 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.

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.

2.5.4 Trend over time

The trend over time of the age-adjusted proportion (%) of the adult Victorian population classified as underweight, normal weight, overweight and obese is presented in Table 2.15 and Figure 2.9.

In women and people the prevalence of underweight declined significantly between 2003 and 2013. The prevalence of normal weight also significantly declined in men, women and people. By contrast the prevalence of overweight significantly increased in men and people but remained unchanged in women. The prevalence of obesity increased significantly in men, women and people during this period.

Table 2.15: Body weight status[a] of the adult population, by sex, Victoria, 2003–2013

		BMI category											
		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	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI 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
	2013**	**1.7***	**0.7**	**4.2**	**35.4**	**31.3**	**39.7**	**41.8**	**37.7**	**46.1**	**17.0**	**14.4**	**20.1**
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
	2013**	**2.4***	**1.4**	**4.2**	**44.3**	**40.5**	**48.0**	**24.1**	**21.5**	**26.9**	**16.3**	**14.3**	**18.5**
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
	2013**	**2.1***	**1.3**	**3.5**	**40.0**	**37.1**	**42.9**	**32.8**	**30.2**	**35.4**	**16.6**	**14.9**	**18.4**

[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.

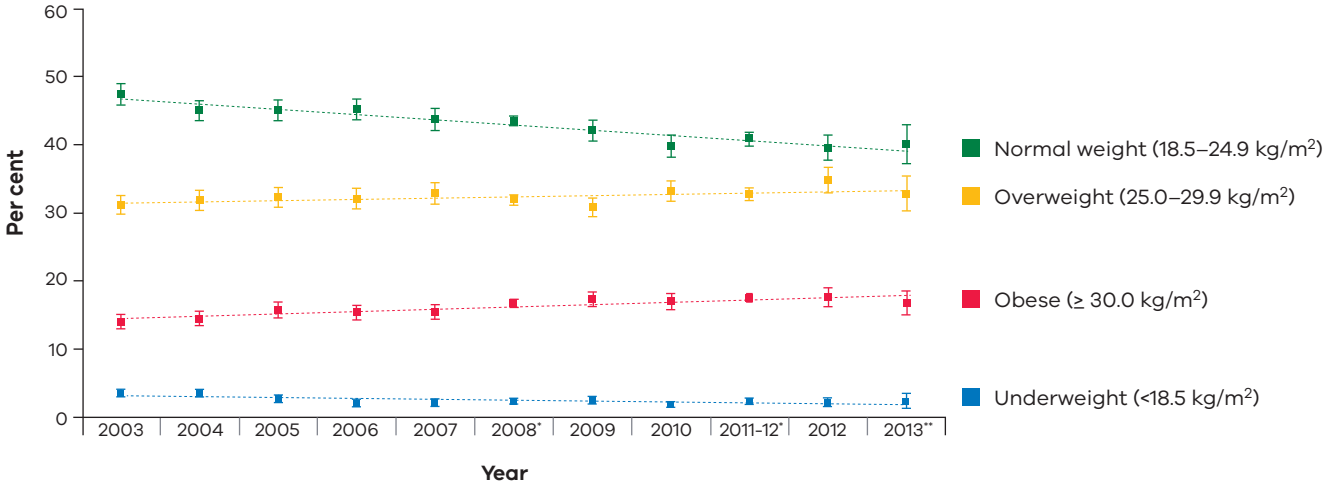
Data are age-standardised to the 2011 Victorian population.

* 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.

* LGA level survey (sample size approximately 34,000); ** Survey (sample size approximately 3,600).

Figure 2.9: Body weight status[a] of the adult population, Victoria, 2003–2013



[a] Based on body mass index (BMI)

Data are age-standardised to the 2011 Victorian population.

Ordinary least squares regression was used to test for trends over time.

* LGA level survey (sample size approximately 34,000); ** Survey (sample size approximately 3,600).

Table 2.16 shows the age-specific and crude proportion (%) of the Victorian adult population who were classified as either overweight or obese.

A significantly higher proportion of 45–54-year-old women and people and older women and people (65 years old or over) were either overweight or obese compared with all Victorian women and people, respectively. A significantly lower proportion of 18–24-year-old men, women and people were either overweight or obese compared with all Victorian men, women and people, respectively.

Table 2.16: Proportion (%) of the adult population who are overweight or obese, by sex, Victoria, 2013

	Age group (years)	Not overweight or obese			Overweight or obese		
		%	95% CI		%	95% CI	
			LL	UL		LL	UL
Males	18–24	**67.4**	51.0	80.4	**24.8***	13.9	40.2
	25–34	**41.3**	27.1	57.2	**58.2**	42.4	72.4
	35–44	**32.8**	24.9	41.9	**63.4**	54.3	71.7
	45–54	**27.6**	21.1	35.2	**69.0**	61.1	75.8
	55–64	**28.8**	22.6	35.9	**65.3**	58.1	71.9
	65+	**28.6**	23.7	34.0	**66.7**	61.2	71.8
Total		**36.9**	**32.3**	**41.7**	**59.1**	**54.3**	**63.7**
Females	18–24	**62.1**	42.7	78.3	**14.9***	7.2	28.5
	25–34	**50.4**	39.8	60.9	**38.6**	29.0	49.2
	35–44	**55.2**	48.6	61.7	**36.4**	30.4	42.8
	45–54	**38.0**	32.3	44.0	**52.0**	46.0	57.9
	55–64	**43.0**	37.2	49.0	**46.4**	40.7	52.3
	65+	**33.1**	29.1	37.4	**51.6**	47.1	55.9
Total		**46.1**	**42.5**	**49.8**	**41.3**	**38.0**	**44.6**
People	18–24	**64.8**	52.0	75.8	**20.0**	12.7	29.9
	25–34	**45.8**	36.6	55.3	**48.4**	39.2	57.8
	35–44	**44.2**	38.6	49.9	**49.7**	44.1	55.4
	45–54	**32.9**	28.4	37.7	**60.3**	55.4	65.1
	55–64	**36.0**	31.7	40.7	**55.7**	51.0	60.2
	65+	**31.0**	27.9	34.4	**58.5**	55.0	61.9
Total		**41.6**	**38.7**	**44.6**	**50.0**	**47.1**	**52.9**

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 from 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.

2.5.5 Extended body mass index categories

Table 2.17 shows the body weight status of the adult Victorian population classified by the extended body mass index category, age group and sex.

The prevalence of class I obesity was significantly higher in older people (65 years old or over) and significantly lower in 18–24 year olds compared with the prevalence in all Victorian people. There was no significant difference in the prevalence of class II and class III obesity by age group or sex.

Table 2.17: Body weight status of the adult population, by extended body mass index category, age group and sex, Victoria, 2013

Age group (years)	Underweight: BMI <18.5			Normal weight: BMI 18.5-24.9			Overweight: BMI 25.0-29.9			Obese class I: BMI 30.0-34.9			Obese class II: BMI 35.0-39.9			Obese class III: BMI ≥40.0		
	%	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	**	**	**	**63.6**	46.8	77.6	**17.6***	8.6	32.5	**	**	**	**0.0**	.	.	**	**	**
25–34	**	**	**	**36.7**	23.1	52.8	**42.4**	28.2	58.1	**10.0***	4.7	20.2	**	**	**	**0.0**	.	.
35–44	**	**	**	**31.5**	23.7	40.5	**47.9**	38.8	57.1	**10.2***	5.7	17.6	**4.3***	1.7	10.6	**	**	**
45–54	**	**	**	**27.5**	21.0	35.1	**48.6**	40.5	56.9	**12.1**	8.1	17.7	**7.6***	3.2	17.2	**	**	**
55–64	**	**	**	**28.7**	22.4	35.8	**46.7**	39.6	53.9	**15.2**	10.6	21.3	**2.3***	1.1	4.8	**1.1***	0.5	2.6
65+	**	**	**	**28.1**	23.3	33.6	**44.2**	38.9	49.7	**16.2**	12.7	20.3	**3.6***	1.9	6.6	**2.7***	1.4	5.3
Total	**1.8***	**0.7**	**4.4**	**35.1**	**30.6**	**39.9**	**42.1**	**37.7**	**46.7**	**11.5**	**9.4**	**14.1**	**4.2**	**2.7**	**6.5**	**1.2***	**0.7**	**2.2**
Females																		
18–24	**	**	**	**54.4**	36.2	71.4	11.8*	5.3	24.2	**	**	**	**	**	**	**0.0**	.	.
25–34	**	**	**	**49.3**	38.8	60.0	25.2	17.2	35.2	**8.8***	4.6	16.2	**	**	**	**	**	**
35–44	**2.7***	1.0	7.1	**52.5**	45.8	59.1	23.7	18.7	29.6	**7.1**	4.7	10.6	**3.1***	1.6	5.8	**2.5***	1.1	5.5
45–54	**1.7***	0.7	4.1	**36.3**	30.7	42.3	26.8	21.9	32.3	**17.1**	13.0	22.2	**6.1**	3.7	9.9	**2.0***	1.0	4.1
55–64	**1.0***	0.4	2.2	**42.0**	36.3	48.1	24.8	20.5	29.8	**14.8**	11.1	19.5	**3.4***	2.1	5.6	**3.3***	1.8	6.1
65+	**1.5***	0.8	2.8	**31.6**	27.6	35.8	30.6	26.7	34.8	**15.6**	12.6	19.1	**4.1**	2.6	6.4	**1.3***	0.6	2.9
Total	**2.4***	**1.3**	**4.1**	**43.8**	**40.2**	**47.4**	**24.5**	**21.9**	**27.4**	**11.1**	**9.4**	**12.9**	**3.8**	**2.8**	**5.3**	**1.8**	**1.2**	**2.6**
People																		
18–24	**	**	**	**59.1**	46.4	70.7	**14.7***	8.7	23.9	**2.7***	1.0	7.2	**	**	**	**	**	**
25–34	**	**	**	**43.0**	34.0	52.5	**33.8**	25.3	43.5	**9.4***	5.7	15.2	**4.5***	2.0	9.9	**	**	**
35–44	**2.0***	0.9	4.6	**42.1**	36.6	47.8	**35.6**	30.3	41.4	**8.6**	5.9	12.5	**3.7***	2.0	6.7	**1.8***	0.9	3.5
45–54	**0.9***	0.4	2.1	**32.0**	27.5	36.7	**37.5**	32.7	42.6	**14.6**	11.6	18.3	**6.9***	4.0	11.4	**1.3***	0.7	2.4
55–64	**0.6***	0.3	1.2	**35.5**	31.1	40.1	**35.6**	31.3	40.1	**15.0**	11.9	18.7	**2.9**	1.9	4.4	**2.2***	1.3	3.7
65+	**1.0***	0.6	1.8	**30.0**	26.9	33.4	**36.8**	33.5	40.2	**15.9**	13.6	18.5	**3.9**	2.7	5.6	**1.9***	1.1	3.2
Total	**2.1***	**1.2**	**3.4**	**39.5**	**36.6**	**42.5**	**33.2**	**30.5**	**35.9**	**11.3**	**9.9**	**12.8**	**4.0**	**3.0**	**5.3**	**1.5**	**1.1**	**2.1**

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 from 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.

2.5.6 Overweight or obesity by self-reported health status

The age-adjusted proportion (%) of the adult Victorian population who were classified as either overweight or obese appeared to increase with poorer self-reported health in both men and women (Figure 2.10).

Figure 2.10: Proportion (%) of the adult population who are either overweight or obese, by self-reported health status and sex, Victoria, 2013

Data are age-standardised to the 2011 Victorian population.

2.6 Psychological distress

2.6.1 Background

Psychological distress is an important risk factor for a number of diseases and conditions including anxiety, depression, migraine, cardiovascular disease (CVD), chronic obstructive pulmonary disease (COPD), cerebrovascular disease, injury and obesity. (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. All questions 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).

2.6.2 Age group and sex

The age-specific and crude proportions (%) of the adult Victorian population according to their psychological distress, age group and sex are presented in Table 2.18.

Overall, 10.9 per cent of people had high or very high levels of psychological distress; the prevalence was similar in men (10.3 per cent) and women (11.5 per cent).

Table 2.18: Psychological distress levels among the adult population, by age group and sex, Victoria, 2013

	Age group (years)	Mild (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	18–24	**59.9**	42.9	74.9	**22.3***	11.4	39.2	**16.5***	7.6	32.1
	25–34	**42.3**	28.6	57.4	**37.5**	23.4	54.2	**17.0***	8.1	32.0
	35–44	**68.4**	59.1	76.5	**20.1**	13.7	28.5	**6.9***	3.1	14.7
	45–54	**71.3**	63.6	77.9	**14.4**	9.8	20.7	**7.5**	4.6	12.1
	55–64	**72.6**	65.8	78.6	**15.9**	11.3	21.9	**5.9***	3.3	10.2
	65+	**68.1**	62.5	73.2	**13.4**	10.4	17.1	**8.2**	5.6	11.8
Total		**63.2**	**58.4**	**67.8**	**21.1**	**17.0**	**25.8**	**10.3**	**7.6**	**13.9**
Females	18–24	**61.2**	43.7	76.3	**24.5***	12.5	42.6	**14.2***	7.0	26.9
	25–34	**60.8**	50.0	70.7	**17.8**	11.1	27.4	**14.9***	8.8	24.1
	35–44	**69.0**	62.4	74.9	**18.9**	14.2	24.8	**8.4**	5.4	12.7
	45–54	**58.2**	52.2	64.0	**24.2**	19.4	29.8	**12.2**	8.9	16.4
	55–64	**63.2**	57.3	68.8	**21.4**	16.9	26.6	**10.3**	7.2	14.7
	65+	**59.9**	55.5	64.2	**20.0**	16.6	23.9	**9.6**	7.4	12.5
Total		**62.1**	**58.6**	**65.5**	**20.9**	**18.1**	**23.9**	**11.5**	**9.5**	**13.8**
People	18–24	**60.6**	48.3	71.6	**23.4**	14.7	35.2	**15.4***	9.1	24.8
	25–34	**51.5**	42.1	60.9	**27.7**	19.3	38.1	**15.9**	10.1	24.2
	35–44	**68.7**	63.1	73.8	**19.5**	15.4	24.4	**7.6**	5.0	11.6
	45–54	**64.7**	59.8	69.2	**19.4**	15.9	23.5	**9.9**	7.6	12.8
	55–64	**67.8**	63.4	72.0	**18.7**	15.4	22.5	**8.2**	6.0	11.0
	65+	**63.7**	60.2	67.0	**17.0**	14.6	19.6	**9.0**	7.2	11.1
Total		**62.6**	**59.7**	**65.5**	**21.0**	**18.5**	**23.7**	**10.9**	**9.1**	**13.0**

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 from 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.

2.6.3 Trend over time

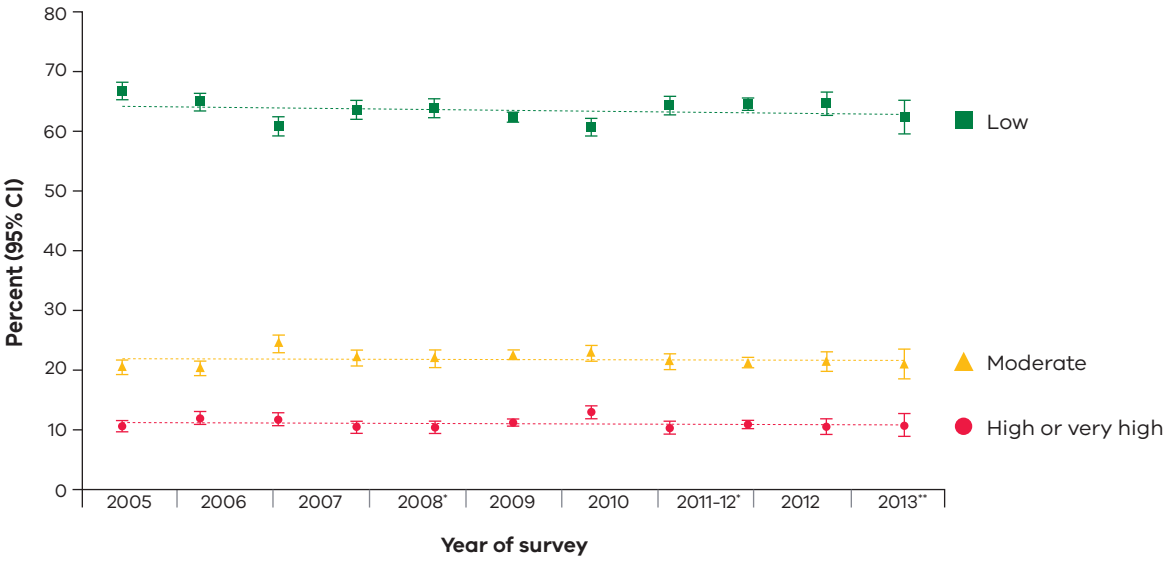
The trend over time of the age-adjusted proportions (%) of the adult Victorian population according to their level of psychological distress is presented in Table 2.19 and Figure 2.11. The prevalence in men, women and people of 'low', 'moderate', 'high or very high' levels of psychological distress remained unchanged for the period 2003 to 2013.

Table 2.19: Psychological distress levels among the adult population, by sex, Victoria, 2003–2013

		Level of psychological distress:								
		Mild (K10 score < 16)			Moderate (K10 score 16–21)			High or very high (K10 score ≥ 22)		
	Survey years	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI 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
	2013**	**63.3**	**59.1**	**67.3**	**20.8**	**17.3**	**24.7**	**10.3**	**7.7**	**13.8**
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
	2013**	**62.0**	**58.3**	**65.5**	**20.9**	**18.0**	**24.0**	**11.6**	**9.5**	**14.1**
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
	2013**	**62.4**	**59.5**	**65.1**	**21.1**	**18.7**	**23.8**	**10.9**	**9.1**	**13.0**

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' not reported here.
* LGA level survey (sample size approximately 34,000); ** Survey (sample size approximately 3,600).

Figure 2.11: Psychological distress levels among the adult population, Victoria, 2003–2013



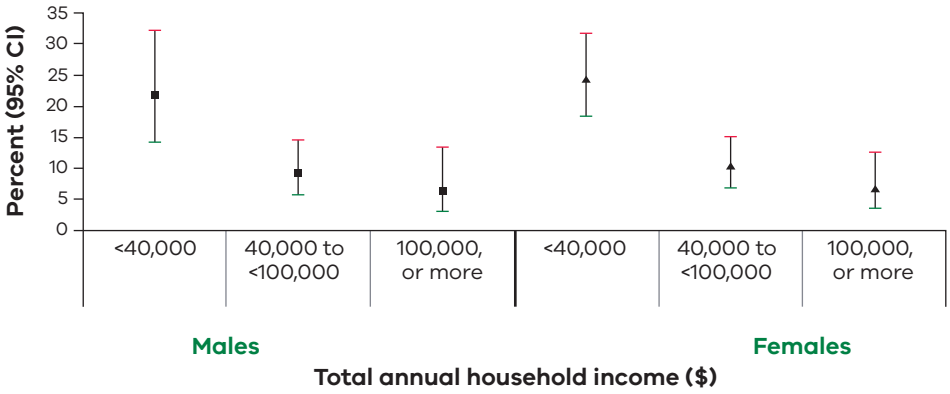
[a] Based on the Kessler 10 psychological distress scale.
Data were age-standardised to the 2011 Victorian population.
Ordinary least squares linear regression was used to test for statistical significance (NS).
* LGA level survey (sample size approximately 34,000); **Survey (sample size approximately 3,600).

2.6.4 Association with income, smoking and self-reported health status

The age-adjusted proportion (%) of the adult Victorian population with a 'high, or very high' level of psychological distress, by total annual household income, smoking status and self-reported health status and sex, are presented in Figure 2.12, Figure 2.13 and Figure 2.14, respectively.

The proportion of the population with a 'high or very high' level of psychological distress appears to decline with increasing total annual household income in both men and women (Figure 2.12).

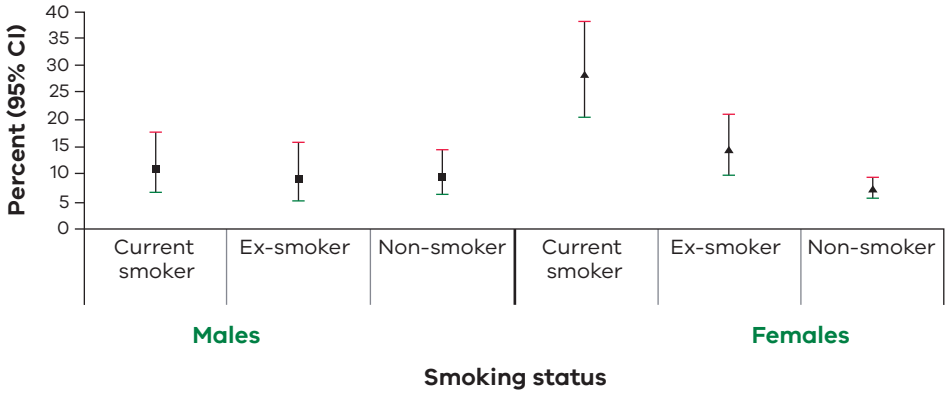
Figure 2.12: Proportion (%) of the adult population with high or very high levels of psychological distress, by level of total annual household income and sex, Victoria, 2013



Data are age-standardised to the 2011 Victorian population.

The proportion of the population with 'high or very high' levels of psychological distress was significantly lower in non-smoking women than women who were current smokers, but this pattern was not apparent in men (Figure 2.14).

Figure 2.14: Proportion (%) of the adult population with high or very high levels of psychological distress, by smoking status and sex, Victoria, 2013



Data are age-standardised to the 2011 Victorian population.

The proportion of the population with a 'high or very high' level of psychological distress appeared to increase with poorer self-reported health status in both men and women (Figure 2.15). The proportion was significantly lower in those with 'excellent or very good' health compared with those with 'fair or poor' health.

Figure 2.15: Proportion (%) of the adult population with high or very high levels of psychological distress, by self-reported health status and sex, Victoria, 2013

Data are age-standardised to the 2011 Victorian population.

2.7 Self-reported health

2.7.1 Background

Self-reported health status has been shown to be a reliable predictor of ill-health, future healthcare 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 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.

2.7.2 Age group and sex

Table 2.20 shows the self-reported health status of the adult Victorian population.

Overall, 43.6 per cent of people reported being in 'excellent' or 'very good' health; 37.5 per cent reported their health as 'good', while 18.6 per cent reported their health as 'fair' or 'poor'. There were no significant differences between the sexes. A higher proportion of older women and people (65 years old or over) reported their health as 'fair' or 'poor' compared with all Victorian women and people, respectively.

Table 2.20: Self-reported health status of the adult population, by sex, Victoria, 2013

	Age group (years)	Excellent / Very good			Good			Fair/Poor		
		%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL
Males	18–24	**39.3**	24.4	56.5	**38.3**	23.2	56.0	**22.4***	11.1	40.0
	25–34	**41.0**	26.3	57.4	**39.3**	26.1	54.3	**19.7***	11.0	32.8
	35–44	**44.1**	35.4	53.3	**42.4**	33.6	51.8	**13.4***	8.0	21.7
	45–54	**38.7**	31.2	46.9	**38.9**	31.0	47.5	**20.4**	14.8	27.4
	55–64	**43.4**	36.5	50.5	**36.3**	29.7	43.4	**20.4**	14.9	27.2
	65+	**41.0**	35.8	46.4	**30.2**	25.5	35.2	**28.3**	23.3	33.9
Total		**41.3**	**36.8**	**46.0**	**37.7**	**33.3**	**42.2**	**20.6**	**17.3**	**24.4**
Females	18–24	**48.6**	31.4	66.1	**46.7**	29.7	64.4	**	**	**
	25–34	**39.1**	29.2	49.9	**44.2**	33.8	55.1	**16.8**	10.7	25.3
	35–44	**50.0**	43.3	56.8	**35.4**	29.2	42.2	**14.5**	10.4	19.9
	45–54	**52.3**	46.3	58.2	**33.9**	28.5	39.7	**13.8**	10.4	18.2
	55–64	**48.9**	43.1	54.8	**33.1**	27.8	38.9	**17.6**	13.6	22.5
	65+	**38.5**	34.4	42.9	**33.0**	29.1	37.1	**27.6**	23.6	31.9
Total		**45.8**	**42.2**	**49.4**	**37.4**	**33.8**	**41.0**	**16.6**	**14.5**	**19.0**
People	18–24	**43.9**	32.1	56.4	**42.4**	30.7	55.0	**13.8***	7.4	24.2
	25–34	**40.0**	30.8	49.9	**41.7**	33.0	51.0	**18.3**	12.6	25.7
	35–44	**47.1**	41.5	52.8	**38.9**	33.4	44.7	**14.0**	10.4	18.6
	45–54	**45.6**	40.6	50.7	**36.4**	31.5	41.5	**17.1**	13.7	21.0
	55–64	**46.2**	41.6	50.8	**34.7**	30.4	39.2	**19.0**	15.5	23.0
	65+	**39.7**	36.4	43.1	**31.7**	28.6	34.9	**27.9**	24.7	31.3
Total		**43.6**	**40.7**	**46.5**	**37.5**	**34.7**	**40.4**	**18.6**	**16.6**	**20.8**

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 from 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.

2.7.3 Trend over time

The trend over time of self-reported health status among the adult Victorian population is presented in Table 2.21 and Figure 2.16.

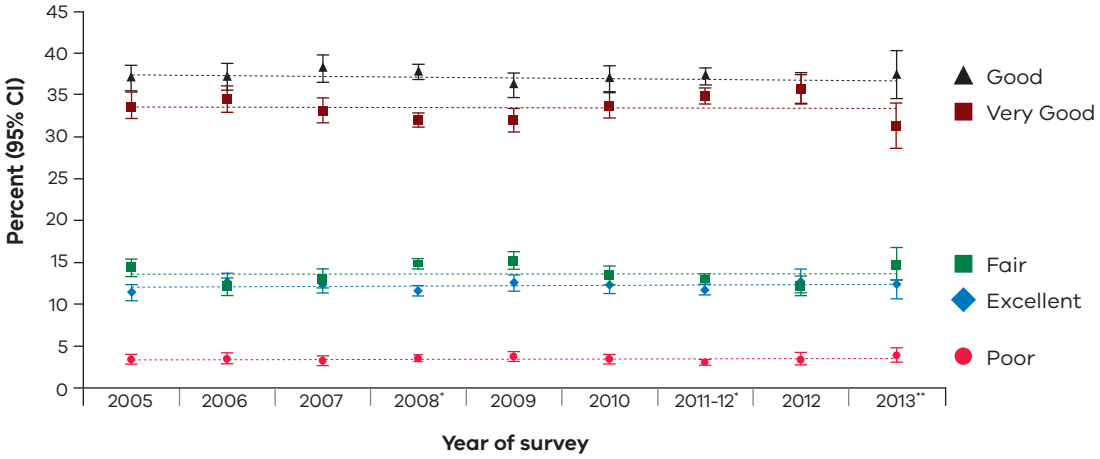
For categories of self-reported health status, the proportion of Victorian males and females has remained constant between 2005 and 2013.

Table 2.21: Self-reported health status of the adult population, by sex, Victoria, 2005–2013

		Excellent			Very good			Good			Fair			Poor		
		%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
	Years		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
	2013**	**12.3**	**9.7**	**15.5**	**29.2**	**25.2**	**33.4**	**37.3**	**33.1**	**41.7**	**16.4**	**13.4**	**19.9**	**4.4**	**3.1**	**6.2**
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
	2013**	**12.7**	**10.3**	**15.6**	**33.4**	**30.0**	**37.0**	**37.4**	**33.8**	**41.2**	**12.9**	**11.1**	**15.0**	**3.3**	**2.5**	**4.2**
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
	2013**	**12.5**	**10.6**	**14.5**	**31.3**	**28.6**	**34.1**	**37.4**	**34.6**	**40.2**	**14.7**	**12.9**	**16.7**	**3.9**	**3.1**	**4.8**

Data were age-standardised to the 2011 Victorian population.
Ordinary least squares regression was used to test for trends over time.
* LGA level survey (sample size approximately 34,000); ** Survey (sample size approximately 3,600).

Figure 2.16: Self-reported health status of the adult population, Victoria, 2005–2013

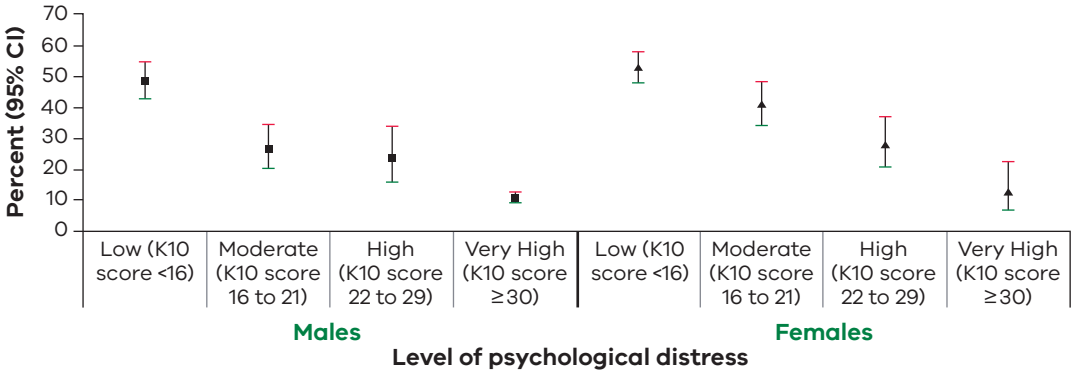


Data were age-standardised to the 2011 Victorian population.
* LGA level survey (sample size approximately 34,000); ** Survey (sample size approximately 3,600).
Ordinary least squares regression was used to test for trends over time (NS).

Figure 2.17 and Figure 2.18 show the self-reported health status of the adult Victorian population by level of psychological distress and sex.

The proportion (%) of the population reporting excellent or very good health appeared to decline with increasing levels of psychological distress, the decline being more linear in women than men (Figure 2.17).

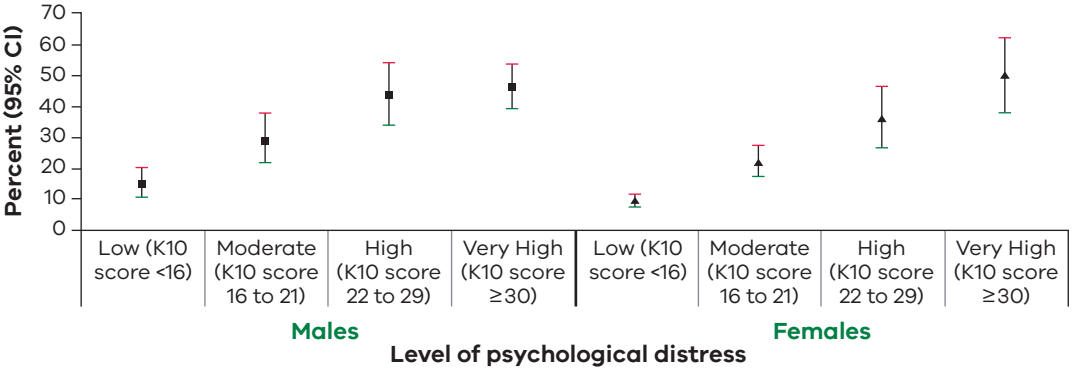
Figure 2.17: Proportion (%) of the adult population reporting excellent or very good health, by level of psychological distress and sex, Victoria, 2013



Data were age-standardised to the 2011 Victorian population.
Kessler 10 scale was used to assess psychological distress

The proportion (%) of the adult Victorian population reporting fair or poor health appeared to increase with increasing levels of psychological distress (Figure 2.18).

Figure 2.18: Proportion (%) of the population reporting fair or poor health, by level of psychological distress and sex, Victoria, 2013



Data were age-standardised to the 2011 Victorian population.
Kessler 10 scale was used to assess psychological distress

Appendix tables

Age-adjusted estimates, by sex, for departmental regions and Victoria

Table A1: Smoking status among the adult population, by Department of Health and Human Services region and sex, 2013

	Current smoker			Ex-smoker			Non-smoker		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Metropolitan males									
Eastern Metropolitan	**14.2***	7.7	24.9	**24.3**	18.1	31.9	**61.4**	51.0	70.9
North & West Metropolitan	**14.3**	9.9	20.2	**32.5**	26.7	38.9	**52.7**	45.8	59.6
Southern Metropolitan	**17.3**	11.4	25.3	**28.4**	21.4	36.6	**53.1**	44.2	61.8
Total	**15.4**	11.4	20.4	**28.9**	25.0	33.1	**55.0**	49.6	60.3
Rural males									
Barwon-South Western	**7.7***	3.9	14.8	**30.0**	22.2	39.2	**61.8**	52.2	70.6
Gippsland	**26.6**	19.3	35.4	**35.5**	28.6	43.1	**37.4**	29.9	45.5
Grampians	**17.6***	10.0	29.3	**33.1**	25.7	41.5	**49.0**	37.6	60.5
Hume	**11.9**	7.8	17.7	**34.1**	25.7	43.5	**53.6**	44.5	62.5
Loddon Mallee	**19.0***	9.6	34.2	**27.8**	21.2	35.5	**53.2**	40.4	65.6
Total	**15.9**	11.6	21.2	**32.0**	28.0	36.3	**51.8**	46.2	57.4
All males Total	**15.6**	**12.2**	**19.7**	**29.6**	**26.5**	**32.9**	**54.2**	**49.8**	**58.5**
Metropolitan females									
Eastern Metropolitan	**11.1***	5.7	20.5	**17.7**	12.4	24.7	**70.5**	60.7	78.8
North & West Metropolitan	**15.6**	11.7	20.4	**20.5**	16.8	24.7	**63.4**	58.2	68.3
Southern Metropolitan	**8.3**	5.2	12.8	**21.7**	17.6	26.5	**70.0**	64.3	75.2
Total	12.4	9.6	16.0	20.5	17.9	23.4	66.6	62.6	70.3
Rural females									
Barwon-South Western	**16.1**	10.8	23.3	**20.1**	16.1	24.8	**54.0**	47.0	60.8
Gippsland	**16.8**	10.3	26.2	**24.8**	18.4	32.5	**57.7**	48.6	66.3
Grampians	**17.4**	11.7	24.9	**21.3**	16.4	27.2	**61.3**	53.7	68.4
Hume	**10.4**	7.2	14.9	**21.7**	16.7	27.6	**67.1**	61.0	72.6
Loddon Mallee	**12.3**	8.4	17.6	**21.8**	17.4	27.0	**64.9**	58.6	70.7
Total	**15.7**	12.6	19.3	**22.0**	19.4	24.8	**61.8**	57.8	65.7
All females Total	**13.2**	**10.7**	**16.0**	**20.8**	**18.7**	**23.2**	**65.5**	**62.3**	**68.6**
Metropolitan people									
Eastern Metropolitan	**12.9**	8.1	19.8	**20.7**	16.5	25.8	**66.0**	58.7	72.6
North & West Metropolitan	**14.9**	11.8	18.7	**26.3**	22.8	30.2	**58.2**	53.8	62.5
Southern Metropolitan	**13.5**	9.2	19.3	**24.7**	20.8	29.2	**61.1**	54.8	67.0
Total	**14.1**	11.5	17.2	**24.3**	22.0	26.8	**61.0**	57.6	64.3
Rural people									
Barwon-South Western	**11.6**	8.1	16.2	**27.2**	21.2	34.1	**61.0**	53.6	68.0
Gippsland	**22.0**	15.1	30.8	**30.0**	25.0	35.5	**47.3**	39.0	55.8
Grampians	**17.9**	12.3	25.3	**26.8**	22.4	31.9	**55.2**	47.7	62.5
Hume	**11.0**	8.2	14.6	**28.8**	22.7	35.7	**59.6**	52.9	65.9
Loddon Mallee	**15.9**	10.1	24.3	**24.6**	20.5	29.2	**58.9**	51.2	66.3
Total	**15.4**	12.6	18.6	**27.0**	24.5	29.7	**57.2**	53.6	60.7
All people Total	**14.5**	**12.2**	**17.0**	**25.0**	**23.1**	**27.0**	**60.0**	**57.2**	**62.7**

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 from 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 A2: Smoking behaviour among the adult population, by Department of Health and Human Services region and sex, 2013

	Daily			Occasional			Ex-smoker			Non-smoker		
	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL	%	95% CI LL	95% CI UL
Metropolitan males												
Eastern Metropolitan	**11.1***	5.1	22.3	**3.2***	1.2	7.8	**24.3**	18.1	31.9	**61.4**	51.0	70.9
North & West Metropolitan	**9.4**	5.9	14.7	**4.9***	2.6	8.9	**32.5**	26.7	38.9	**52.7**	45.8	59.6
Southern Metropolitan	**9.7***	4.5	19.9	**7.6***	3.2	16.6	**28.4**	21.4	36.6	**53.1**	44.2	61.8
Total	**9.9**	6.7	14.6	**5.4***	3.1	9.3	**28.9**	25.0	33.1	**55.0**	49.6	60.3
Rural males												
Barwon-South Western	**3.4***	1.8	6.6	**	**	**	**30.0**	22.2	39.2	**61.8**	52.2	70.6
Gippsland	**26.1**	18.9	34.9	**	**	**	**35.5**	28.6	43.1	**37.4**	29.9	45.5
Grampians	**11.5***	6.3	20.0	**	**	**	**33.1**	25.7	41.5	**49.0**	37.6	60.5
Hume	**11.0**	7.0	16.8	**	**	**	**34.1**	25.7	43.5	**53.6**	44.5	62.5
Loddon Mallee	**18.0***	8.8	33.3	**	**	**	**27.8**	21.2	35.5	**53.2**	40.4	65.6
Total	**13.3**	9.3	18.7	**2.5***	1.2	5.3	**32.0**	28.0	36.3	**51.8**	46.2	57.4
All males Total	**10.8**	**8.0**	**14.5**	**4.8***	**2.8**	**8.0**	**29.6**	**26.5**	**32.9**	**54.2**	**49.8**	**58.5**
Metropolitan females												
Eastern Metropolitan	**4.4***	2.4	8.2	**	**	**	**17.7**	12.4	24.7	**70.5**	60.7	78.8
North & West Metropolitan	**11.2**	7.7	16.0	**4.4***	2.5	7.6	**20.5**	16.8	24.7	**63.4**	58.2	68.3
Southern Metropolitan	**5.0**	3.1	8.0	**3.2***	1.3	7.7	**21.7**	17.6	26.5	**70.0**	64.3	75.2
Total	**7.7**	5.7	10.4	**4.7**	2.9	7.6	**20.5**	17.9	23.4	**66.6**	62.6	70.3
Rural females												
Barwon-South Western	**11.7***	7.1	18.8	**4.3***	2.2	8.3	**20.1**	16.1	24.8	**54.0**	47.0	60.8
Gippsland	**16.2**	9.8	25.7	**	**	**	**24.8**	18.4	32.5	**57.7**	48.6	66.3
Grampians	**9.9**	6.6	14.6	**7.4***	3.5	15.0	**21.3**	16.4	27.2	**61.3**	53.7	68.4
Hume	**8.2**	5.4	12.4	**2.2***	1.0	4.9	**21.7**	16.7	27.6	**67.1**	61.0	72.6
Loddon Mallee	**9.9**	6.7	14.4	**	**	**	**21.8**	17.4	27.0	**64.9**	58.6	70.7
Total	**12.0**	9.3	15.3	**3.7**	2.3	5.8	**22.0**	19.4	24.8	**61.8**	57.8	65.7
All females Total	**8.7**	**6.9**	**10.9**	**4.5**	**2.9**	**6.8**	**20.8**	**18.7**	**23.2**	**65.5**	**62.3**	**68.6**
Metropolitan people												
Eastern Metropolitan	**7.9***	4.1	14.4	**5.0***	2.4	10.4	**20.7**	16.5	25.8	**66.0**	58.7	72.6
North & West Metropolitan	**10.2**	7.6	13.6	**4.7**	3.0	7.1	**26.3**	22.8	30.2	**58.2**	53.8	62.5
Southern Metropolitan	**7.7***	4.3	13.4	**5.8***	2.7	12.3	**24.7**	20.8	29.2	**61.1**	54.8	67.0
Total	**8.9**	6.8	11.5	**5.2**	3.5	7.6	**24.3**	22.0	26.8	**61.0**	57.6	64.3
Rural people												
Barwon-South Western	**7.5**	4.8	11.6	**4.1***	2.2	7.5	**27.2**	21.2	34.1	**61.0**	53.6	68.0
Gippsland	**21.3**	14.5	30.2	**0.6***	0.3	1.6	**30.0**	25.0	35.5	**47.3**	39.0	55.8
Grampians	**11.4***	6.8	18.4	**6.5***	3.1	13.2	**26.8**	22.4	31.9	**55.2**	47.7	62.5
Hume	**9.5**	6.9	13.0	**1.5***	0.7	3.0	**28.8**	22.7	35.7	**59.6**	52.9	65.9
Loddon Mallee	**14.2**	8.5	22.6	**1.8***	0.7	4.4	**24.6**	20.5	29.2	**58.9**	51.2	66.3
Total	**12.4**	9.8	15.5	**3.0**	2.0	4.5	**27.0**	24.5	29.7	**57.2**	53.6	60.7
All people Total	**9.7**	**8.0**	**11.9**	**4.7**	**3.3**	**6.7**	**25.0**	**23.1**	**27.0**	**60.0**	**57.2**	**62.7**

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 from 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.
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 A3: Smoking status among the adult population, by selected socioeconomic determinants, modifiable risk factors and health status, Victoria, 2013

Males	Current smoker			Ex-smoker			Non-smoker		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Victoria	**15.6**	12.2	19.7	**29.6**	26.5	32.9	**54.2**	49.8	58.5
Country of birth									
Australia	**17.7**	13.7	22.6	**29.7**	26.0	33.6	**52.0**	47.0	56.8
Overseas	**12.9***	7.1	22.3	**29.1**	24.1	34.7	**57.6**	48.7	66.1
Language spoken at home									
English only	**15.9**	12.0	20.7	**28.9**	25.8	32.2	**54.6**	49.6	59.5
Language other than English	**18.7**	12.0	28.0	**29.4**	23.2	36.4	**51.6**	42.7	60.3
Metro-Rural regions									
Rural	**15.9**	11.6	21.2	**32.0**	28.0	36.3	**51.8**	46.2	57.4
Metropolitan	**15.4**	11.4	20.4	**28.9**	25.0	33.1	**55.0**	49.6	60.3
Level of education									
None or Primary	**21.2**	15.4	28.5	**9.6***	5.2	17.2	**14.5**	9.4	21.7
Secondary	**15.7**	9.9	24.0	**34.0**	27.7	40.8	**50.3**	42.2	58.3
TAFE or Tertiary	**14.8**	11.1	19.6	**27.7**	24.1	31.5	**56.5**	51.4	61.4
Employment status (<65 years)									
Employed	**19.6**	14.0	26.9	**26.1**	22.2	30.4	**54.2**	47.3	60.9
Unemployed	**25.2**	17.3	35.1	**28.8**	18.2	42.4	**46.0**	34.4	58.0
Not in labour force	**9.7***	5.4	16.6	**11.8**	8.4	16.1	**67.5**	61.6	72.9
Total annual household income ($)									
<40,000	**15.9**	10.8	22.9	**23.4**	18.9	28.6	**60.5**	53.1	67.4
40,000 to <100,000	**12.8**	8.5	18.9	**31.5**	26.6	36.9	**55.0**	48.7	61.2
100,000, or more	**13.9**	9.0	20.9	**27.4**	22.7	32.8	**56.3**	49.0	63.3
Psychological distress (K10 score)[a]									
Low (K10 score <16)	**10.3**	7.3	14.4	**30.8**	27.1	34.9	**58.7**	53.8	63.4
Moderate (K10 score 16 to 21)	**21.9**	15.5	30.0	**25.9**	19.7	33.2	**51.5**	43.8	59.0
High (K10 score 22 to 29)	**17.7***	10.4	28.5	**34.6**	26.0	44.3	**45.3**	38.2	52.6
Very high (K10 score ≥30)	**23.5**	18.9	28.9	**20.4**	14.6	27.8	**44.6**	38.3	51.0
Physical activity level[b]									
Sedentary	**12.6***	6.0	24.6	**20.1**	14.4	27.4	**57.3**	46.4	67.6
Insufficient	**21.3**	14.4	30.1	**29.4**	23.8	35.7	**48.2**	39.6	56.9
Sufficient	**12.4**	8.8	17.2	**29.4**	25.6	33.4	**58.2**	53.1	63.1
Compliance with fruit & vegetable consumption guidelines[c]									
Both	**	**	**	**34.6**	25.9	44.4	**50.2**	42.6	57.8
Vegetable only[d]	**17.1**	11.5	24.6	**29.1**	20.1	40.2	**53.8**	46.0	61.4
Fruit only[d]	**12.3***	7.0	20.6	**30.5**	25.5	36.1	**57.1**	49.3	64.5
Neither	**16.2**	12.5	20.9	**29.8**	25.9	34.1	**53.0**	47.9	58.1
Long term risk of alcohol related harm (2009)[e]									
Abstainer	**12.1***	6.1	22.4	**20.8**	15.5	27.2	**67.1**	57.5	75.5
At low risk	**15.3**	11.6	19.8	**29.3**	25.6	33.3	**54.7**	49.9	59.4
At increased risk	**32.3**	25.4	40.0	**43.5**	35.7	51.7	**24.1**	16.5	34.0
Self-reported health									
Excellent / Very Good	**13.6**	9.4	19.3	**29.7**	25.4	34.4	**56.5**	50.2	62.6
Good	**11.3**	7.0	17.8	**32.2**	26.8	38.1	**56.4**	49.4	63.2
Fair / Poor	**25.4**	18.8	33.2	**26.5**	20.2	34.0	**46.8**	39.6	54.0
BMI category[f]									
Underweight	**9.8**	9.8	9.8	**10.8**	10.8	10.8	**47.0**	47.0	47.0
Normal	**14.3**	9.8	20.3	**26.1**	20.8	32.2	**58.9**	51.4	65.9
Overweight	**14.0**	9.0	21.1	**31.6**	26.8	36.9	**53.9**	47.7	60.0
Obese	**16.5**	10.0	25.8	**37.0**	28.9	45.9	**46.4**	36.1	57.0

Continued >

Females	Current smoker %	95% CI LL	95% CI UL	Ex-smoker %	95% CI LL	95% CI UL	Non-smoker %	95% CI LL	95% CI UL
Victoria	**13.2**	10.7	16.0	**20.8**	18.7	23.2	**65.5**	62.3	68.6
Country of birth									
Australia	**15.6**	12.6	19.1	**22.0**	19.6	24.5	**61.9**	58.1	65.5
Overseas	**6.3**	3.9	10.1	**18.3**	14.2	23.4	**75.2**	69.9	79.8
Language spoken at home									
English only	**14.3**	11.6	17.5	**23.8**	21.2	26.5	**61.6**	57.9	65.2
Language other than English	**9.3**	6.1	13.9	**12.0**	8.8	16.3	**78.1**	72.8	82.6
Metro-Rural regions									
Rural	**15.7**	12.6	19.3	**22.0**	19.4	24.8	**61.8**	57.8	65.7
Metropolitan	**12.4**	9.6	16.0	**20.5**	17.9	23.4	**66.6**	62.6	70.3
Level of education									
None or Primary	**8.8***	5.0	15.2	**3.8***	1.9	7.3	**45.9**	40.4	51.6
Secondary	**18.4**	14.4	23.2	**18.8**	14.8	23.7	**62.5**	57.0	67.8
TAFE or Tertiary	**12.7**	9.3	17.2	**23.0**	20.4	26.0	**63.5**	58.9	67.9
Employment status (<65 years)									
Employed	**16.0**	11.9	21.2	**21.1**	17.9	24.7	**62.3**	56.9	67.4
Unemployed	**14.3***	8.0	24.5	**20.5**	12.3	32.1	**65.2**	54.2	74.8
Not in labour force	**16.6**	11.8	22.7	**16.0**	12.4	20.4	**67.3**	60.9	73.2
Total annual household income ($)									
<40,000	**18.6**	13.6	24.9	**15.0**	11.9	18.8	**65.0**	58.7	70.9
40,000 to <100,000	**14.0**	9.7	19.8	**21.8**	17.8	26.4	**63.6**	57.3	69.5
100,000, or more	**9.8***	5.8	16.2	**28.6**	23.9	33.9	**59.1**	53.1	64.9
Psychological distress (K10 score)[a]									
Low (K10 score <16)	**10.2**	7.3	14.2	**22.1**	19.6	24.9	**67.4**	63.2	71.3
Moderate (K10 score 16 to 21)	**13.1**	9.2	18.3	**18.2**	14.7	22.3	**67.8**	61.8	73.2
High (K10 score 22 to 29)	**27.1**	18.3	38.3	**26.3**	18.8	35.4	**45.5**	36.3	55.1
Very high (K10 score ≥30)	**42.7**	32.5	53.5	**19.4**	12.4	29.1	**37.9**	28.1	48.6
Physical activity level[b]									
Sedentary	**10.1***	5.6	17.7	**13.8**	8.3	21.9	**63.1**	54.1	71.3
Insufficient	**12.1**	9.3	15.6	**18.0**	14.4	22.3	**69.7**	64.8	74.1
Sufficient	**12.6**	9.9	15.9	**22.5**	19.6	25.5	**64.3**	60.4	68.0
Compliance with fruit & vegetable consumption guidelines[c]									
Both	**11.9***	5.9	22.8	**16.2**	11.9	21.7	**70.8**	60.4	79.3
Vegetable only[d]	**11.5***	5.7	21.7	**19.5**	14.9	25.1	**68.1**	58.3	76.6
Fruit only[d]	**9.8**	7.0	13.6	**21.1**	18.3	24.2	**68.7**	64.5	72.7
Neither	**17.8**	14.2	22.2	**19.7**	16.5	23.4	**61.9**	57.0	66.6
Long term risk of alcohol related harm (2009)[e]									
Abstainer	**9.5**	6.7	13.3	**9.1**	6.6	12.2	**81.3**	76.9	85.0
At low risk	**14.4**	11.4	18.1	**24.5**	21.8	27.5	**60.4**	56.4	64.3
At increased risk	**12.2***	6.9	20.7	**28.5**	21.9	36.3	**27.4**	20.6	35.4
Self-reported health									
Excellent / Very Good	**6.2**	4.2	9.1	**22.2**	19.5	25.3	**71.3**	67.6	74.8
Good	**18.0**	13.6	23.5	**19.3**	15.8	23.4	**62.1**	56.7	67.3
Fair / Poor	**27.6**	21.2	35.1	**22.1**	16.5	29.1	**49.4**	40.9	57.9
BMI category[f]									
Underweight	**16.3**	10.5	24.5	**17.2**	10.9	26.1	**62.3**	52.0	71.5
Normal	**12.6**	9.4	16.7	**20.9**	17.6	24.6	**66.4**	61.8	70.6
Overweight	**10.7**	7.7	14.8	**20.4**	16.9	24.4	**68.7**	63.8	73.2
Obese	**10.2**	7.0	14.6	**24.7**	19.3	31.0	**63.7**	56.7	70.1

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.
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.
Estimates that are (statistically) significantly different from 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.

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).
Data were age-standardised to the 2011 Victorian population.

Table A4: Daily vegetable consumption (serves/day) among the adult population, by Department of Health and Human Services region and sex, 2013

	0 or <1 serve/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	**9.4***	3.9	21.1	**64.9**	53.7	74.7	**18.6**	12.8	26.2	**5.4***	2.7	10.3
North & West Metropolitan	**8.9**	5.8	13.4	**68.9**	61.7	75.3	**15.9**	11.1	22.3	**3.6***	1.7	7.5
Southern Metropolitan	**6.2***	3.0	12.6	**69.5**	60.2	77.4	**13.7**	9.6	19.2	**8.0***	3.5	17.1
Total	**8.1**	5.6	11.6	**67.2**	62.0	72.1	**16.6**	13.2	20.6	**5.7***	3.3	9.7
Rural males												
Barwon-South Western	**12.4**	7.8	19.3	**59.7**	50.2	68.5	**20.7**	15.1	27.8	**6.1***	2.7	13.2
Gippsland	**1.7***	0.8	3.4	**77.3**	70.0	83.2	**14.5**	9.4	21.6	**	**	**
Grampians	**3.6***	1.6	7.8	**59.9**	48.6	70.2	**30.8**	21.2	42.4	**	**	**
Hume	**4.8***	2.5	9.2	**65.4**	55.8	73.9	**23.2**	15.6	33.1	**2.9***	1.3	6.5
Loddon Mallee	**2.3***	1.1	5.1	**73.7**	62.3	82.7	**13.2**	8.8	19.3	**2.0***	0.8	4.9
Total	**6.2**	3.9	9.8	**66.8**	61.2	71.9	**19.8**	16.2	24.0	**3.8**	2.4	6.0
All males **Total**	**7.4**	**5.4**	**10.2**	**67.3**	**63.0**	**71.2**	**17.3**	**14.5**	**20.5**	**5.4**	**3.3**	**8.6**
Metropolitan females												
Eastern Metropolitan	**	**	**	**49.4**	39.0	59.9	**30.9**	22.8	40.4	**12.3**	7.8	18.8
North & West Metropolitan	**6.2**	4.0	9.5	**50.3**	44.2	56.5	**33.5**	27.6	40.0	**7.5**	5.1	11.0
Southern Metropolitan	**3.5***	1.8	6.6	**59.9**	53.2	66.2	**23.0**	18.2	28.6	**10.8**	6.9	16.5
Total	**5.4***	3.2	8.8	**52.1**	47.4	56.7	**30.5**	26.3	35.1	**9.7**	7.5	12.5
Rural females												
Barwon-South Western	**6.7***	2.7	15.5	**37.8**	30.5	45.7	**32.2**	27.1	37.9	**12.5***	7.3	20.6
Gippsland	**7.7***	3.3	17.0	**47.9**	38.5	57.4	**33.1**	26.2	40.8	**10.1***	6.1	16.3
Grampians	**1.9***	0.8	4.7	**49.4**	41.1	57.7	**34.3**	26.9	42.6	**11.4**	7.3	17.3
Hume	**3.4***	1.6	6.9	**32.6**	27.1	38.7	**42.9**	37.1	48.8	**14.8***	8.5	24.4
Loddon Mallee	**1.2***	0.5	2.9	**53.3**	47.6	58.9	**32.8**	27.5	38.6	**12.0**	8.9	15.9
Total	**4.2**	2.6	6.8	**46.0**	41.3	50.9	**35.7**	31.5	40.2	**11.9**	9.4	15.0
All females **Total**	**5.0**	**3.3**	**7.7**	**50.2**	**46.4**	**54.0**	**32.2**	**28.6**	**35.9**	**10.3**	**8.4**	**12.5**
Metropolitan people												
Eastern Metropolitan	**8.2***	4.0	15.9	**57.2**	49.1	64.9	**24.6**	19.0	31.2	**8.9**	5.9	13.2
North & West Metropolitan	**7.4**	5.5	10.0	**59.7**	54.7	64.4	**24.8**	20.6	29.6	**5.6**	3.9	8.0
Southern Metropolitan	**5.2***	3.0	8.8	**62.4**	55.6	68.8	**18.9**	15.4	22.9	**10.6***	6.4	17.1
Total	**6.7**	4.9	9.0	**59.7**	56.1	63.3	**23.4**	20.6	26.5	**7.9**	6.0	10.3
Rural people												
Barwon-South Western	**13.0**	8.4	19.6	**49.2**	42.0	56.5	**27.9**	23.5	32.8	**8.8**	5.7	13.4
Gippsland	**4.5***	2.1	9.7	**62.9**	56.0	69.3	**23.8**	19.0	29.5	**7.2**	4.5	11.4
Grampians	**2.7***	1.5	5.0	**53.6**	45.9	61.0	**33.5**	26.3	41.5	**8.0**	5.2	12.0
Hume	**4.2***	2.6	6.9	**49.8**	40.5	59.0	**33.1**	24.6	42.8	**8.5***	5.1	13.8
Loddon Mallee	**1.9***	1.0	3.5	**63.5**	55.5	70.9	**23.1**	19.1	27.6	**6.8**	5.0	9.1
Total	**5.5**	3.8	8.0	**55.9**	52.1	59.7	**28.2**	25.1	31.4	**7.7**	6.3	9.4
All people **Total**	**6.2**	**4.8**	**8.1**	**58.7**	**55.8**	**61.6**	**24.7**	**22.4**	**27.2**	**8.0**	**6.4**	**9.9**

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 from 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.

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 A5: Daily fruit consumption (serves/day) among the adult population, by Department of Health and Human Services region and sex, 2013

	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	**13.5***	7.1	24.2	**46.5**	36.3	57.0	**39.4**	30.2	49.4
North & West Metropolitan	**15.0**	10.1	21.7	**35.4**	29.3	42.0	**47.7**	40.7	54.9
Southern Metropolitan	**11.2***	6.7	18.2	**48.1**	38.8	57.6	**40.4**	32.5	48.8
Total	**13.0**	9.6	17.3	**41.8**	36.4	47.3	**44.1**	38.9	49.5
Rural males									
Barwon-South Western	**22.6**	16.0	31.0	**32.0**	23.3	42.0	**45.4**	36.9	54.2
Gippsland	**20.7**	13.2	31.0	**42.1**	33.5	51.1	**36.6**	30.0	43.8
Grampians	**20.4**	12.4	31.6	**41.1**	30.2	52.9	**36.6**	28.4	45.6
Hume	**32.2**	22.8	43.3	**28.8**	18.7	41.5	**38.7**	31.2	46.7
Loddon Mallee	**24.5**	19.3	30.6	**38.3**	31.3	45.9	**32.1**	24.7	40.6
Total	**23.7**	19.2	29.0	**36.5**	30.9	42.4	**38.2**	33.7	42.8
All males Total	**15.4**	**12.5**	**18.9**	**40.4**	**36.0**	**44.9**	**43.0**	**38.7**	**47.3**
Metropolitan females									
Eastern Metropolitan	**2.2***	1.1	4.3	**35.1**	25.9	45.6	**61.9**	51.5	71.3
North & West Metropolitan	**11.3**	7.8	16.1	**32.8**	28.1	37.9	**55.4**	49.5	61.2
Southern Metropolitan	**10.0***	5.9	16.5	**34.2**	27.7	41.3	**55.4**	47.9	62.7
Total	**8.3**	6.2	11.2	**34.1**	30.0	38.5	**57.1**	52.6	61.4
Rural females									
Barwon-South Western	**13.0**	8.3	19.7	**27.6**	22.2	33.7	**49.0**	42.0	56.0
Gippsland	**14.7***	8.7	23.8	**28.8**	22.9	35.7	**56.2**	47.7	64.3
Grampians	**11.9**	7.3	18.7	**35.0**	27.5	43.2	**51.5**	43.3	59.6
Hume	**6.0***	3.6	9.7	**32.9**	22.0	46.1	**60.8**	48.0	72.3
Loddon Mallee	**9.0**	6.1	13.1	**33.6**	27.7	40.1	**56.9**	50.6	63.0
Total	**11.5**	9.0	14.7	**32.6**	28.9	36.5	**55.2**	51.0	59.4
All females Total	**9.1**	**7.3**	**11.4**	**33.3**	**29.9**	**36.8**	**57.1**	**53.4**	**60.7**
Metropolitan people									
Eastern Metropolitan	**7.7***	4.2	13.7	**41.2**	33.5	49.3	**50.4**	42.6	58.2
North & West Metropolitan	**13.0**	9.8	17.1	**34.1**	30.1	38.3	**51.8**	47.0	56.5
Southern Metropolitan	**9.6**	6.6	13.8	**41.7**	35.5	48.2	**48.2**	42.1	54.4
Total	**10.6**	8.5	13.1	**38.0**	34.6	41.6	**50.6**	47.1	54.2
Rural people									
Barwon-South Western	**21.4**	15.9	28.2	**30.9**	24.6	38.0	**47.4**	41.9	52.9
Gippsland	**17.8**	12.5	24.6	**35.7**	28.6	43.4	**46.2**	39.7	52.9
Grampians	**16.0**	11.0	22.7	**38.3**	31.2	45.9	**43.9**	37.6	50.5
Hume	**20.4**	13.5	29.5	**30.0**	22.3	39.1	**49.3**	41.0	57.6
Loddon Mallee	**16.9**	12.5	22.4	**36.2**	28.2	45.0	**44.3**	36.1	52.7
Total	**18.2**	15.3	21.5	**34.3**	30.6	38.2	**46.4**	43.1	49.8
All people Total	**12.2**	**10.4**	**14.3**	**36.9**	**34.1**	**39.8**	**50.0**	**47.1**	**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 from 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 A6: Compliance with vegetable and fruit consumption guidelines[a] among the adult population, by Department of Health and Human Services region and sex, 2013

	Met both fruit and vegetable consumption 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	**3.2***	1.4	7.5	**3.8***	1.8	8.0	**39.4**	30.2	49.4	**58.8**	48.9	68.1
North & West Metropolitan	**3.2***	1.4	7.2	**3.2***	1.4	7.2	**47.7**	40.7	54.9	**49.3**	42.0	56.5
Southern Metropolitan	**3.6***	1.4	8.6	**4.1***	1.8	8.9	**40.4**	32.5	48.8	**56.9**	48.2	65.1
Total	**3.4***	2.1	5.7	**3.8**	2.4	6.0	**44.1**	38.9	49.5	**53.2**	47.8	58.5
Rural males												
Barwon-South Western	**1.1***	0.4	2.6	**	**	**	**45.4**	36.9	54.2	**52.4**	43.6	60.9
Gippsland	**	**	**	**1.1***	0.4	3.0	**36.6**	30.0	43.8	**62.2**	55.1	68.8
Grampians	**	**	**	**	**	**	**36.6**	28.4	45.6	**58.7**	49.7	67.2
Hume	**	**	**	**	**	**	**38.7**	31.2	46.7	**59.4**	51.4	66.9
Loddon Mallee	**	**	**	**	**	**	**32.1**	24.7	40.6	**54.6**	42.9	65.7
Total	**1.0***	0.6	1.8	**1.9***	1.0	3.3	**38.2**	33.7	42.8	**57.0**	52.0	61.8
All males **Total**	**2.8**	**1.8**	**4.5**	**3.3**	**2.2**	**4.9**	**43.0**	**38.7**	**47.3**	**53.8**	**49.4**	**58.2**
Metropolitan females												
Eastern Metropolitan	**11.5**	7.2	17.9	**12.0**	7.6	18.4	**61.9**	51.5	71.3	**36.7**	27.4	47.1
North & West Metropolitan	**5.8**	3.7	9.0	**7.3**	4.9	10.6	**55.4**	49.5	61.2	**41.6**	36.0	47.5
Southern Metropolitan	**8.7**	5.4	13.7	**10.1**	6.5	15.4	**55.4**	47.9	62.7	**41.0**	33.9	48.6
Total	**8.1**	6.1	10.7	**9.3**	7.2	12.0	**57.1**	52.6	61.4	**40.2**	35.9	44.6
Rural females												
Barwon-South Western	**8.9***	4.9	15.8	**11.1**	6.7	17.7	**49.0**	42.0	56.0	**38.4**	31.6	45.6
Gippsland	**7.7***	4.4	13.2	**9.3**	5.8	14.8	**56.2**	47.7	64.3	**41.3**	33.2	49.8
Grampians	**8.0***	4.6	13.6	**11.1**	7.1	16.9	**51.5**	43.3	59.6	**43.2**	35.3	51.6
Hume	**12.1***	6.4	21.8	**14.5***	8.3	24.2	**60.8**	48.0	72.3	**31.2**	22.0	42.1
Loddon Mallee	**8.0**	5.6	11.3	**11.5**	8.6	15.3	**56.9**	50.6	63.0	**39.1**	33.1	45.5
Total	**8.9**	6.6	11.8	**11.5**	9.0	14.4	**55.2**	51.0	59.4	**40.5**	36.3	44.8
All females **Total**	**8.3**	**6.6**	**10.3**	**9.9**	**8.1**	**12.0**	**57.1**	**53.4**	**60.7**	**39.8**	**36.3**	**43.4**
Metropolitan people												
Eastern Metropolitan	**7.5**	4.8	11.6	**8.0**	5.2	12.1	**50.4**	42.6	58.2	**48.0**	40.2	55.8
North & West Metropolitan	**4.5**	2.9	6.8	**5.3**	3.6	7.6	**51.8**	47.0	56.5	**45.3**	40.6	50.1
Southern Metropolitan	**6.5**	4.2	9.9	**7.5**	5.0	11.0	**48.2**	42.1	54.4	**48.4**	42.1	54.7
Total	**5.8**	4.5	7.5	**6.6**	5.2	8.3	**50.6**	47.1	54.2	**46.6**	43.1	50.2
Rural people												
Barwon-South Western	**5.1***	2.9	8.8	**6.9**	4.4	10.7	**47.4**	41.9	52.9	**49.9**	44.4	55.4
Gippsland	**4.4***	2.5	7.7	**5.5**	3.4	8.7	**46.2**	39.7	52.9	**51.9**	45.3	58.5
Grampians	**4.4***	2.6	7.3	**7.2**	4.6	11.0	**43.9**	37.6	50.5	**51.1**	44.6	57.5
Hume	**6.3***	3.4	11.6	**7.7***	4.5	13.0	**49.3**	41.0	57.6	**46.2**	37.6	55.1
Loddon Mallee	**4.3**	3.0	6.1	**6.0**	4.4	8.1	**44.3**	36.1	52.7	**47.1**	40.1	54.2
Total	**4.8**	3.8	6.2	**6.6**	5.3	8.1	**46.4**	43.1	49.8	**49.1**	45.8	52.5
All people **Total**	**5.6**	**4.6**	**6.9**	**6.6**	**5.5**	**8.0**	**50.0**	**47.1**	**53.0**	**46.8**	**43.9**	**49.8**

[a] Based on NHMRC (2013) 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 from 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.
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 A7: Compliance with fruit and vegetable consumption guidelines[a] among the adult population, by selected socioeconomic determinants, modifiable risk factors, health status and sex, 2013

	Males						Females					
	Met vegetable consumption guidelines			Met fruit consumption guidelines			Met vegetable consumption guidelines			Met fruit consumption guidelines		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Victoria (18+ years)	**5.4**	**3.4**	**8.6**	**42.3**	**38.1**	**46.7**	**10.4**	**8.5**	**12.6**	**55.9**	**52.3**	**59.5**
Country of birth												
Australia	**5.2***	2.8	9.4	**40.3**	35.6	45.1	**10.4**	8.4	12.8	**56.6**	52.5	60.6
Overseas	**5.9***	3.2	10.7	**47.8**	40.0	55.7	**11.6**	7.0	18.5	**53.4**	45.7	61.0
Language spoken at home												
English only	**4.3**	2.9	6.5	**42.5**	37.8	47.3	**10.9**	8.8	13.4	**55.3**	50.9	59.5
Language other than English	**6.8***	3.2	13.5	**43.7**	36.0	51.8	**7.9***	4.7	13.1	**56.0**	49.0	62.7
Metro-Rural regions												
Rural	**4.2**	2.7	6.7	**37.7**	33.4	42.3	**12.8**	9.7	16.7	**53.1**	48.6	57.6
Metropolitan	**5.7***	3.3	9.6	**43.4**	38.2	48.7	**9.6**	7.4	12.3	**56.1**	51.7	60.5
Level of education												
None or Primary	**0.0**	.	.	**19.3**	15.4	23.8	**	**	**	**23.8**	18.4	30.2
Secondary	**4.9***	2.8	8.4	**36.8**	29.7	44.4	**7.2**	4.9	10.5	**49.9**	43.0	56.8
TAFE or Tertiary	**5.3***	2.8	9.6	**43.7**	38.5	49.1	**12.0**	9.5	15.0	**58.5**	53.6	63.2
Employment status (<65 years)												
Employed	**4.1***	1.9	8.4	**43.5**	36.9	50.4	**10.6**	7.9	14.2	**57.0**	51.5	62.3
Unemployed	**	**	**	**41.2**	30.2	53.1	**9.3***	3.7	21.5	**29.2**	18.6	42.6
Not in labour force	**7.3***	2.9	16.9	**36.7**	29.2	44.9	**8.5**	5.6	12.8	**51.8**	44.1	59.4
Total annual household income ($)												
<40,000	**7.0***	2.9	15.9	**41.8**	34.2	49.9	**9.6***	5.1	17.1	**50.1**	41.6	58.7
40,000 to <100,000	**8.0***	4.3	14.2	**42.9**	36.7	49.4	**11.1**	8.2	15.0	**56.8**	50.4	63.0
100,000, or more	**1.6***	0.7	3.5	**39.9**	32.9	47.2	**15.0**	10.1	21.7	**55.8**	49.5	62.0
Psychological distress (K10 score)[c]												
Low (K10 score <16)	**4.8**	3.1	7.4	**42.3**	37.1	47.7	**11.1**	8.8	13.9	**55.9**	51.2	60.5
Moderate (K10 score 16 to 21)	**6.8***	3.5	12.9	**40.3**	32.7	48.4	**7.3**	4.7	11.2	**54.4**	46.7	61.8
High (K10 score 22 to 29)	**	**	**	**36.6**	27.0	47.3	**13.6***	7.4	23.6	**57.5**	46.8	67.5
Very high (K10 score ≥30)	**	**	**	**19.9**	13.9	27.7	**7.1***	3.0	16.3	**46.4**	37.1	56.0
Physical activity level[d]												
Sedentary	**	**	**	**28.7**	22.6	35.6	**	**	**	**32.7**	24.6	41.9
Insufficient	**2.1***	0.9	4.8	**41.6**	34.0	49.5	**6.0**	4.0	8.9	**48.7**	42.4	55.1
Sufficient	**7.6**	4.7	12.1	**44.2**	39.1	49.4	**13.5**	10.8	16.7	**61.4**	57.1	65.5
Smoking status												
Current smoker	**	**	**	**30.2**	21.3	40.9	**7.3***	3.5	14.6	**40.4**	31.9	49.4
Ex-smoker	**5.4***	2.6	10.7	**44.8**	35.4	54.6	**8.7**	6.2	12.1	**61.4**	54.5	67.9
Non-smoker	**4.6**	3.0	7.1	**45.7**	40.4	51.1	**11.0**	8.7	13.7	**59.0**	54.7	63.2

Continued >

Table A7: Compliance with fruit and vegetable consumption guidelines[a] among the adult population, by selected socioeconomic determinants, modifiable risk factors, health status and sex, 2013

	Males						Females					
	Met vegetable consumption guidelines			Met fruit consumption guidelines			Met vegetable consumption guidelines			Met fruit consumption guidelines		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Victoria (18+ years)	**5.4**	**3.4**	**8.6**	**42.3**	**38.1**	**46.7**	**10.4**	**8.5**	**12.6**	**55.9**	**52.3**	**59.5**
Self-reported health												
Excellent / Very Good	**8.5***	4.7	14.7	**47.6**	40.6	54.6	**13.4**	10.5	17.0	**60.3**	55.2	65.3
Good	**3.9***	2.1	7.1	**44.7**	38.0	51.6	**8.4**	5.7	12.0	**55.8**	50.0	61.5
Fair / Poor	**	**	**	**27.0**	20.7	34.4	**5.0***	2.9	8.3	**40.0**	31.6	49.1
BMI category[e]												
Underweight	**7.0**	7.0	7.0	**27.2**	27.2	27.2	**8.1***	3.4	18.2	**53.9**	42.7	64.7
Normal	**5.8**	3.7	9.2	**46.0**	38.8	53.4	**11.5**	8.7	15.2	**58.0**	53.0	62.9
Overweight	**7.5***	3.4	15.6	**43.3**	36.1	50.8	**12.1**	7.9	18.0	**53.8**	48.9	58.6
Obese	**2.4***	0.9	6.2	**39.2**	30.7	48.5	**9.9**	6.5	14.9	**43.5**	37.2	50.1

[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] 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 from 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.

Table A8: Types of physical activity undertaken among adults during the previous week, by Department of Health and Human Services region and sex, 2013

	None			Walking only			Vigorous activity			Walking & vigorous		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males												
Eastern Metropolitan	**8.0**	4.9	12.9	**25.5**	17.1	36.2	**6.4***	2.8	14.2	**53.1**	41.7	64.2
North & West Metropolitan	**6.2***	3.1	12.2	**22.0**	16.8	28.2	**7.2***	4.3	11.8	**57.3**	50.2	64.2
Southern Metropolitan	**7.7***	4.5	12.8	**25.2**	18.9	32.8	**3.4***	1.3	8.3	**61.7**	53.6	69.2
Total	**6.9**	4.7	10.1	**24.0**	19.9	28.6	**5.7**	3.8	8.7	**58.1**	52.9	63.1
Rural males												
Barwon-South Western	**4.1***	2.1	8.2	**29.5**	21.2	39.4	**6.4***	2.7	14.2	**58.1**	48.8	66.9
Gippsland	**8.9***	4.3	17.4	**18.8**	12.9	26.5	**3.8***	1.5	9.1	**63.4**	54.1	71.9
Grampians	**9.2***	4.5	17.8	**20.3**	14.7	27.4	**7.6***	4.2	13.4	**53.0**	41.8	63.9
Hume	**6.6***	3.9	11.0	**22.7**	19.1	26.6	**4.5***	2.1	9.3	**60.4**	55.0	65.6
Loddon Mallee	**2.4***	1.2	4.8	**23.1**	15.2	33.6	**5.0***	2.5	9.7	**59.3**	46.0	71.3
Total	**5.9**	4.2	8.1	**23.7**	19.6	28.3	**5.5**	3.6	8.2	**58.6**	52.8	64.1
All males Total	**6.7**	**4.9**	**9.1**	**23.8**	**20.6**	**27.4**	**5.7**	**4.0**	**7.9**	**58.3**	**54.1**	**62.3**
Metropolitan females												
Eastern Metropolitan	**6.3**	4.0	9.8	**20.1**	15.3	26.1	**3.1***	1.8	5.5	**64.8**	56.2	72.6
North & West Metropolitan	**5.9**	4.3	8.2	**24.5**	19.5	30.3	**4.3**	2.8	6.8	**63.1**	57.2	68.6
Southern Metropolitan	**7.2***	4.0	12.6	**25.1**	19.0	32.2	**6.0**	3.8	9.6	**58.1**	50.9	64.9
Total	**6.2**	4.7	8.0	**23.5**	20.2	27.3	**4.7**	3.5	6.3	**62.0**	57.8	66.0
Rural females												
Barwon-South Western	**4.4**	2.8	6.6	**19.3**	14.8	24.9	**6.1***	2.9	12.5	**57.3**	51.0	63.4
Gippsland	**6.5**	4.3	9.7	**20.5**	15.5	26.6	**7.6***	3.3	16.5	**58.2**	49.1	66.7
Grampians	**7.5**	5.2	10.7	**31.0**	24.0	39.0	**5.4**	3.3	8.6	**49.6**	41.6	57.6
Hume	**9.4**	6.4	13.6	**21.9**	18.5	25.8	**8.7**	5.4	13.7	**57.3**	52.0	62.5
Loddon Mallee	**5.7***	3.4	9.5	**16.8**	12.5	22.1	**13.4***	6.6	25.2	**60.8**	50.1	70.5
Total	**6.4**	5.2	7.9	**22.2**	19.2	25.6	**8.3**	5.5	12.3	**58.8**	54.3	63.2
All females Total	**6.3**	**5.1**	**7.8**	**22.7**	**19.9**	**25.7**	**5.5**	**4.3**	**7.1**	**61.6**	**58.2**	**64.9**
Metropolitan people												
Eastern Metropolitan	**7.0**	4.9	9.8	**23.0**	17.7	29.4	**4.8***	2.5	8.7	**59.0**	51.4	66.2
North & West Metropolitan	**5.9**	3.8	8.9	**23.2**	19.4	27.5	**5.9**	4.1	8.4	**60.4**	55.6	65.0
Southern Metropolitan	**6.9**	4.7	10.2	**24.3**	20.0	29.2	**4.6**	3.0	7.1	**61.3**	55.9	66.5
Total	**6.5**	5.1	8.2	**23.6**	21.0	26.5	**5.2**	4.0	6.8	**60.3**	57.0	63.5
Rural people												
Barwon-South Western	**4.0**	2.6	6.0	**25.7**	19.5	33.0	**7.6***	3.8	14.7	**60.2**	53.4	66.6
Gippsland	**8.1**	5.2	12.5	**19.7**	14.9	25.5	**5.2***	2.5	10.3	**60.8**	53.4	67.7
Grampians	**8.4**	5.4	12.8	**24.8**	19.8	30.5	**6.4**	4.2	9.5	**51.8**	44.6	58.9
Hume	**7.8**	5.6	10.8	**20.6**	15.3	27.2	**6.5**	4.2	9.8	**60.8**	54.4	66.8
Loddon Mallee	**4.1**	2.7	6.3	**19.9**	15.0	25.9	**9.2***	4.4	18.1	**59.9**	51.3	67.9
Total	**6.2**	5.1	7.5	**22.2**	19.5	25.1	**7.0**	5.1	9.6	**59.2**	55.5	62.9
All people Total	**6.5**	**5.4**	**7.8**	**23.0**	**20.9**	**25.3**	**5.6**	**4.6**	**6.9**	**60.2**	**57.5**	**62.8**

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 from 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 A9: Physical activity[a] status of the adult population, by Department of Health and Human Services region and sex, 2013

	Physical activity status								
	Sedentary			Insufficient			Sufficient		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Metropolitan males									
Eastern Metropolitan	**8.0**	4.9	12.9	**32.1**	23.0	42.8	**52.6**	41.1	63.8
North & West Metropolitan	**6.2***	3.1	12.2	**29.3**	23.4	35.8	**57.2**	49.8	64.2
Southern Metropolitan	**7.7***	4.5	12.8	**33.5**	24.4	44.1	**56.2**	45.9	65.9
Total	**6.9**	4.7	10.1	**31.2**	26.3	36.6	**56.3**	50.8	61.6
Rural males									
Barwon-South Western	**4.1***	2.1	8.2	**25.8**	18.3	35.2	**67.1**	57.8	75.2
Gippsland	**8.9***	4.3	17.4	**15.9**	10.5	23.3	**57.3**	48.7	65.5
Grampians	**9.2***	4.5	17.8	**17.8**	12.4	25.1	**60.1**	48.5	70.7
Hume	**6.6***	3.9	11.0	**23.6**	17.2	31.5	**62.5**	54.6	69.9
Loddon Mallee	**2.4***	1.2	4.8	**23.5**	16.7	31.9	**62.4**	50.3	73.2
Total	**5.9**	4.2	8.1	**22.1**	18.2	26.7	**62.0**	56.3	67.3
All males Total	**6.7**	**4.9**	**9.1**	**28.9**	**25.0**	**33.3**	**57.7**	**53.2**	**62.0**
Metropolitan females									
Eastern Metropolitan	**6.3**	4.0	9.8	**32.2**	23.1	42.9	**54.8**	44.6	64.6
North & West Metropolitan	**5.9**	4.3	8.2	**25.5**	20.8	30.9	**66.0**	60.7	70.9
Southern Metropolitan	**7.2***	4.0	12.6	**27.9**	21.7	35.1	**59.9**	52.8	66.6
Total	**6.2**	4.7	8.0	**27.8**	23.9	32.0	**61.5**	57.1	65.7
Rural females									
Barwon-South Western	**4.4**	2.8	6.6	**25.9**	19.6	33.5	**55.0**	47.8	62.0
Gippsland	**6.5**	4.3	9.7	**31.6**	23.6	40.9	**52.9**	44.4	61.3
Grampians	**7.5**	5.2	10.7	**31.0**	23.8	39.2	**52.4**	44.2	60.5
Hume	**9.4**	6.4	13.6	**21.8**	17.1	27.4	**59.8**	50.9	68.1
Loddon Mallee	**5.7***	3.4	9.5	**28.3**	19.4	39.3	**59.4**	48.7	69.2
Total	**6.4**	5.2	7.9	**28.2**	24.1	32.8	**58.1**	53.4	62.6
All females Total	**6.3**	**5.1**	**7.8**	**27.7**	**24.5**	**31.1**	**60.8**	**57.2**	**64.2**
Metropolitan people									
Eastern Metropolitan	**7.0**	4.9	9.8	**31.6**	25.0	39.1	**54.4**	46.6	62.0
North & West Metropolitan	**5.9**	3.8	8.9	**27.2**	23.4	31.5	**61.9**	57.2	66.3
Southern Metropolitan	**6.9**	4.7	10.2	**30.2**	24.5	36.7	**59.0**	52.6	65.2
Total	**6.5**	5.1	8.2	**29.3**	26.1	32.7	**59.1**	55.6	62.5
Rural people									
Barwon-South Western	**4.0**	2.6	6.0	**28.1**	21.4	36.0	**63.9**	56.2	71.0
Gippsland	**8.1**	5.2	12.5	**23.8**	17.9	30.9	**54.3**	45.6	62.8
Grampians	**8.4**	5.4	12.8	**23.7**	18.9	29.4	**56.4**	49.1	63.4
Hume	**7.8**	5.6	10.8	**22.6**	18.5	27.4	**61.8**	55.9	67.4
Loddon Mallee	**4.1**	2.7	6.3	**25.5**	18.6	33.9	**60.9**	52.8	68.4
Total	**6.2**	5.1	7.5	**24.9**	21.9	28.2	**60.3**	56.6	63.9
All people Total	**6.5**	**5.4**	**7.8**	**28.2**	**25.7**	**31.0**	**59.3**	**56.5**	**62.1**

[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 from 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 A10: Physical activity levels[a] among the adult population, by selected socioeconomic determinants, modifiable risk factors, conditions and sex, Victoria, 2013

	Physical activity status											
	Males						Females					
	Sedentary			Sufficient			Sedentary			Sufficient		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Victoria (18+ years)	**6.7**	**4.9**	**9.1**	**57.7**	**53.2**	**62.0**	**6.3**	**5.1**	**7.8**	**60.8**	**57.2**	**64.2**
Country of birth												
Australia	**5.8**	4.2	7.8	**61.5**	56.5	66.3	**6.3**	4.9	8.2	**64.0**	60.4	67.5
Overseas	**10.1***	5.2	18.7	**49.2**	40.4	58.1	**6.4**	4.5	9.0	**49.6**	41.7	57.5
Language spoken at home												
English only	**7.0**	4.9	9.9	**61.9**	56.6	66.9	**6.2**	4.5	8.3	**63.9**	60.0	67.5
Language other than English	**7.0**	4.2	11.2	**49.3**	40.8	57.9	**8.4**	5.8	11.9	**50.0**	42.3	57.7
Metro-Rural regions												
Rural	**5.9**	4.2	8.1	**62.0**	56.3	67.3	**6.4**	5.2	7.9	**58.1**	53.4	62.6
Metropolitan	**6.9**	4.7	10.1	**56.3**	50.8	61.6	**6.2**	4.7	8.0	**61.5**	57.1	65.7
Level of education												
None or Primary	**10.3***	5.8	17.7	**8.3***	4.4	15.1	**10.5**	6.5	16.4	**30.9**	25.3	37.0
Secondary	**10.5**	6.7	16.1	**55.5**	47.1	63.6	**8.1**	6.1	10.7	**52.1**	45.3	58.7
TAFE or Tertiary	**4.6**	3.3	6.6	**61.3**	56.3	66.0	**3.9**	2.7	5.6	**65.4**	60.9	69.7
Employment status (<65 years)												
Employed	**4.0**	2.5	6.3	**60.3**	53.3	66.8	**3.9**	2.4	6.3	**66.9**	61.7	71.8
Unemployed	**	**	**	**47.6**	36.8	58.6	**0.0**	.	.	**63.5**	48.6	76.2
Not in labour force	**8.8***	3.8	18.9	**55.1**	45.5	64.4	**3.5**	2.2	5.4	**63.9**	55.8	71.4
Total annual household income ($)												
<40,000	**13.0**	7.9	20.6	**53.9**	46.3	61.3	**8.0**	5.7	11.2	**51.0**	43.5	58.4
40,000 to <100,000	**4.7***	2.8	7.7	**53.1**	45.7	60.3	**3.8**	2.4	6.0	**61.8**	55.4	67.9
100,000, or more	**	**	**	**71.1**	62.5	78.4	**0.8***	0.3	1.8	**72.3**	64.3	79.1
Psychological distress (K10 score)[b]												
Low (K10 score <16)	**6.7**	4.3	10.4	**59.2**	53.1	65.0	**5.6**	4.1	7.7	**63.4**	58.7	67.8
Moderate (K10 score 16 to 21)	**6.2***	3.4	11.2	**59.2**	51.0	67.0	**5.2**	3.7	7.2	**61.0**	54.2	67.4
High (K10 score 22 to 29)	**10.2***	5.8	17.4	**53.8**	44.6	62.7	**9.0**	6.1	13.1	**50.0**	40.5	59.4
Very high (K10 score ≥30)	**7.2**	5.0	10.2	**42.7**	36.4	49.3	**8.0**	3.9	15.4	**52.4**	42.1	62.6
Compliance with fruit & vegetable consumption guidelines[c]												
Both	**	**	**	**69.0**	61.6	75.5	**1.3***	0.6	2.9	**75.4**	67.6	81.8
Vegetable only[d]	**	**	**	**76.1**	69.8	81.4	**2.0***	1.0	4.0	**77.6**	70.9	83.1
Fruit only[d]	**5.0***	2.9	8.3	**60.3**	52.7	67.4	**4.5**	3.5	5.9	**66.7**	62.8	70.4
Neither	**7.2**	4.9	10.5	**57.5**	51.8	62.9	**9.2**	6.6	12.7	**52.6**	47.1	58.0
Smoking status												
Current smoker	**9.5***	5.7	15.6	**44.5**	35.1	54.3	**6.0***	3.5	10.1	**57.5**	49.1	65.5
Ex-smoker	**4.3**	3.1	5.8	**54.8**	47.9	61.5	**4.6**	2.9	7.2	**56.1**	50.7	61.3
Non-smoker	**6.8**	4.4	10.3	**61.0**	55.4	66.3	**7.0**	5.4	9.1	**59.3**	55.0	63.6

Continued >

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Table A10: Physical activity levels[a] among the adult population, by selected socioeconomic determinants, modifiable risk factors, conditions and sex, Victoria, 2013

	Physical activity status											
	Males						Females					
	Sedentary			Sufficient			Sedentary			Sufficient		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Victoria (18+ years)	**6.7**	**4.9**	**9.1**	**57.7**	**53.2**	**62.0**	**6.3**	**5.1**	**7.8**	**60.8**	**57.2**	**64.2**
Self-reported health												
Excellent / Very Good	**2.8***	1.7	4.7	**67.8**	60.9	74.0	**3.1**	2.1	4.6	**70.5**	65.2	75.3
Good	**5.3**	3.4	8.2	**56.8**	50.0	63.3	**7.8**	5.4	11.1	**55.5**	49.9	60.9
Fair / Poor	**16.2**	10.5	24.2	**41.1**	32.9	49.9	**9.4**	7.0	12.5	**46.6**	37.4	56.0
BMI category[e]												
Underweight	**14.5**	14.5	14.5	**20.1**	20.1	20.1	**24.3**	15.9	35.3	**38.5**	25.8	53.0
Normal	**3.8***	2.0	7.2	**64.0**	56.7	70.6	**4.9**	3.5	6.8	**65.0**	60.4	69.4
Overweight	**6.3**	4.1	9.4	**62.4**	56.6	67.9	**4.1**	3.0	5.5	**65.2**	59.0	70.9
Obese	**7.3**	5.0	10.7	**40.5**	31.9	49.8	**6.9**	4.9	9.7	**57.1**	50.0	63.9

[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] 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 from 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.

Table A11: Body weight status of the adult population, by Department of Health and Human Services region and sex, 2013

	Underweight			Normal weight			Overweight			Obese		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Metropolitan males												
Eastern Metropolitan	**	**	**	53.3	44.2	62.2	29.2	22.7	36.8	11.5*	6.9	18.7
North & West Metropolitan	**	**	**	29.2	22.7	36.7	46.9	39.5	54.4	19.2	14.3	25.3
Southern Metropolitan	**	**	**	35.1	26.6	44.6	45.7	37.6	54.1	13.2	8.7	19.5
Total	2.0*	0.7	5.2	37.1	32.0	42.5	41.6	36.5	46.8	15.7	12.5	19.6
Rural males												
Barwon-South Western	**	**	**	31.1	23.7	39.5	42.1	34.1	50.5	20.6	14.1	29.1
Gippsland	**	**	**	27.6	20.1	36.5	47.3	39.1	55.7	20.4	16.4	25.1
Grampians	0.0	.	.	32.9	23.0	44.5	38.0	29.2	47.7	19.6	12.5	29.4
Hume	0.0	.	.	21.6	13.1	33.4	46.5	33.2	60.2	28.8	19.9	39.7
Loddon Mallee	**	**	**	34.7	27.8	42.3	44.9	35.3	55.0	13.1	9.0	18.5
Total	**	**	**	29.6	25.2	34.4	43.1	37.6	48.8	21.3	17.0	26.3
All males Total	1.7*	0.7	4.2	35.4	31.3	39.7	41.8	37.7	46.1	17.0	14.4	20.1
Metropolitan females												
Eastern Metropolitan	2.6*	1.0	6.6	43.7	36.1	51.7	19.7	14.1	26.8	14.2	9.2	21.3
North & West Metropolitan	4.0*	1.7	9.0	43.2	37.3	49.3	27.0	22.4	32.2	14.6	11.7	18.1
Southern Metropolitan	**	**	**	49.0	41.6	56.4	21.8	16.4	28.5	16.1	11.5	22.3
Total	2.6*	1.4	5.0	45.8	41.3	50.4	23.3	20.2	26.8	14.8	12.4	17.6
Rural females												
Barwon-South Western	**	**	**	37.1	30.4	44.3	25.9	20.1	32.6	14.7	11.6	18.6
Gippsland	**	**	**	28.8	21.3	37.7	33.5	25.0	43.3	25.5	19.5	32.7
Grampians	**	**	**	38.7	31.5	46.5	22.8	17.6	29.0	26.8	20.3	34.5
Hume	**	**	**	44.0	35.3	53.0	24.7	17.1	34.2	19.7	15.1	25.3
Loddon Mallee	1.0*	0.4	2.4	44.2	38.3	50.3	23.5	18.7	29.1	22.2	17.2	28.2
Total	1.9*	1.0	3.8	40.6	36.5	44.8	26.1	22.6	29.8	21.1	18.4	24.0
All females Total	2.4*	1.4	4.2	44.3	40.5	48.0	24.1	21.5	26.9	16.3	14.3	18.5
Metropolitan people												
Eastern Metropolitan	3.1*	1.2	7.7	48.7	41.2	56.2	24.3	19.7	29.6	12.9	9.3	17.8
North & West Metropolitan	3.0*	1.4	6.4	36.5	31.9	41.4	36.8	32.3	41.5	16.9	13.9	20.3
Southern Metropolitan	**	**	**	43.9	37.7	50.2	32.0	26.3	38.2	14.8	11.4	19.0
Total	2.3*	1.3	4.1	41.7	38.2	45.3	32.2	29.1	35.4	15.2	13.2	17.5
Rural people												
Barwon-South Western	**	**	**	36.1	30.2	42.4	34.3	28.0	41.2	20.3	15.0	27.0
Gippsland	**	**	**	28.2	21.5	36.1	39.7	31.9	48.1	23.1	18.8	28.1
Grampians	**	**	**	36.0	29.0	43.6	29.9	24.3	36.1	23.4	18.0	29.8
Hume	**	**	**	32.3	25.0	40.6	35.7	27.3	45.1	24.6	18.6	31.8
Loddon Mallee	0.6*	0.3	1.4	39.4	34.1	44.9	33.8	27.6	40.8	17.7	14.1	22.0
Total	1.2*	0.7	2.1	34.8	31.6	38.2	34.7	31.2	38.4	21.2	18.5	24.1
All people Total	2.1*	1.3	3.5	40.0	37.1	42.9	32.8	30.2	35.4	16.6	14.9	18.4

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 from 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.
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 A12: Proportion (%) of the adult population who are overweight or obese, by Department of Health and Human Services region and sex, 2013

	Not overweight or obese			Overweigt or obese		
	%	95% CI		%	95% CI	
		LL	UL		LL	UL
Metropolitan males						
Eastern Metropolitan	**56.8**	48.7	64.6	**40.8**	33.0	49.0
North & West Metropolitan	**31.4**	24.7	39.0	**66.1**	58.4	73.0
Southern Metropolitan	**35.2**	26.8	44.7	**58.9**	50.4	66.9
Total	**39.1**	34.0	44.4	**57.3**	52.2	62.4
Rural males						
Barwon-South Western	**33.0**	25.6	41.4	**62.7**	54.6	70.1
Gippsland	**28.5**	21.0	37.4	**67.8**	58.9	75.5
Grampians	**32.9**	23.0	44.5	**57.6**	46.9	67.6
Hume	**21.6**	13.1	33.4	**75.3**	63.6	84.1
Loddon Mallee	**35.0**	28.0	42.6	**58.0**	48.1	67.2
Total	**30.2**	25.7	35.0	**64.4**	59.6	68.9
All males **Total**	**37.1**	**33.0**	**41.4**	**58.9**	**54.7**	**62.9**
Metropolitan females						
Eastern Metropolitan	**46.3**	38.7	54.1	**33.9**	26.6	42.0
North & West Metropolitan	**47.2**	41.8	52.7	**41.7**	36.6	46.9
Southern Metropolitan	**49.9**	42.5	57.2	**38.0**	31.1	45.3
Total	**48.4**	43.9	53.1	**38.1**	34.4	42.0
Rural females						
Barwon-South Western	**39.3**	32.8	46.2	**40.6**	34.4	47.2
Gippsland	**29.6**	22.0	38.4	**59.0**	50.0	67.5
Grampians	**42.2**	35.0	49.9	**49.6**	42.0	57.3
Hume	**46.0**	37.2	55.0	**44.4**	35.6	53.5
Loddon Mallee	**45.1**	39.2	51.2	**45.7**	39.6	52.0
Total	**42.5**	38.5	46.6	**47.2**	43.2	51.2
All females **Total**	**46.7**	**42.9**	**50.5**	**40.4**	**37.3**	**43.5**
Metropolitan people						
Eastern Metropolitan	**51.8**	44.2	59.3	**37.2**	31.6	43.2
North & West Metropolitan	**39.5**	34.9	44.2	**53.7**	48.9	58.3
Southern Metropolitan	**44.4**	38.3	50.7	**46.7**	40.6	52.9
Total	**44.0**	40.5	47.6	**47.4**	44.1	50.7
Rural people						
Barwon-South Western	**38.0**	32.2	44.2	**54.6**	48.6	60.5
Gippsland	**28.8**	22.0	36.7	**62.8**	55.3	69.8
Grampians	**37.6**	30.7	44.9	**53.3**	46.4	60.1
Hume	**33.4**	26.1	41.7	**60.3**	52.1	68.0
Loddon Mallee	**40.0**	34.7	45.6	**51.6**	45.4	57.6
Total	**36.0**	32.8	39.4	**55.9**	52.6	59.2
All people **Total**	**42.1**	**39.3**	**45.0**	**49.4**	**46.7**	**52.0**

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 from 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 A13: Body weight status of the adult population, by extended body mass index category, Department of Health and Human Services region and sex, 2013

	Underweight			Normal weight			Overweight			Obese I			Obese II			Obese 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	**	**	**	**53.3**	44.2	62.2	**29.2**	22.7	36.8	**7.1***	4.1	11.8	**	**	**	**	**	**
North & West Metropolitan	**	**	**	**29.2**	22.7	36.7	**46.9**	39.5	54.4	**13.0**	8.9	18.6	**4.8***	2.5	9.0	**1.4***	0.6	3.1
Southern Metropolitan	**	**	**	**35.1**	26.6	44.6	**45.7**	37.6	54.1	**8.8**	5.4	13.9	**2.7***	1.0	6.9	**	**	**
Total	**2.0***	0.7	5.2	**37.1**	32.0	42.5	**41.6**	36.5	46.8	**10.3**	7.8	13.4	**4.3***	2.6	7.1	**1.2***	0.5	2.5
Rural males																		
Barwon-South Western	**	**	**	**31.1**	23.7	39.5	**42.1**	34.1	50.5	**10.6**	6.6	16.7	**7.8***	3.8	15.4	**	**	**
Gippsland	**	**	**	**27.6**	20.1	36.5	**47.3**	39.1	55.7	**17.6**	13.9	22.0	**2.3***	1.1	4.8	**	**	**
Grampians	**0.0**	.	.	**32.9**	23.0	44.5	**38.0**	29.2	47.7	**18.8**	11.7	28.6	**	**	**	**	**	**
Hume	**0.0**	.	.	**21.6**	13.1	33.4	**46.5**	33.2	60.2	**24.3**	15.9	35.3	**	**	**	**	**	**
Loddon Mallee	**	**	**	**34.7**	27.8	42.3	**44.9**	35.3	55.0	**9.5**	6.1	14.4	**2.0***	0.7	5.1	**	**	**
Total	**	**	**	**29.6**	25.2	34.4	**43.1**	37.6	48.8	**15.8**	12.3	20.1	**4.0***	2.1	7.6	**1.4***	0.8	2.6
All males Total	**1.7***	**0.7**	**4.2**	**35.4**	**31.3**	**39.7**	**41.8**	**37.7**	**46.1**	**11.7**	**9.6**	**14.3**	**4.1**	**2.7**	**6.2**	**1.2***	**0.7**	**2.2**
Metropolitan females																		
Eastern Metropolitan	**2.6***	1.0	6.6	**43.7**	36.1	51.7	**19.7**	14.1	26.8	**10.0**	6.2	15.7	**4.0***	1.5	10.1	**	**	**
North & West Metropolitan	**4.0***	1.7	9.0	**43.2**	37.3	49.3	**27.0**	22.4	32.2	**10.3**	7.8	13.5	**2.5***	1.5	4.2	**1.9***	1.0	3.6
Southern Metropolitan	**	**	**	**49.0**	41.6	56.4	**21.8**	16.4	28.5	**8.9**	6.0	12.9	**3.9***	1.7	9.0	**3.3***	1.4	7.6
Total	**2.6***	1.4	5.0	**45.8**	41.3	50.4	**23.3**	20.2	26.8	**9.9**	8.0	12.1	**3.2**	2.0	5.1	**1.7***	1.0	2.9
Rural females																		
Barwon-South Western	**	**	**	**37.1**	30.4	44.3	**25.9**	20.1	32.6	**9.4**	6.9	12.7	**3.9**	2.4	6.4	**	**	**
Gippsland	**	**	**	**28.8**	21.3	37.7	**33.5**	25.0	43.3	**15.8**	10.8	22.5	**7.2***	3.8	13.1	**2.6***	1.2	5.3
Grampians	**	**	**	**38.7**	31.5	46.5	**22.8**	17.6	29.0	**18.4**	12.8	25.7	**6.4***	3.2	12.4	**1.9***	0.8	4.8
Hume	**	**	**	**44.0**	35.3	53.0	**24.7**	17.1	34.2	**13.5**	9.6	18.7	**4.3***	2.3	8.0	**1.9***	0.9	4.0
Loddon Mallee	**1.0***	0.4	2.4	**44.2**	38.3	50.3	**23.5**	18.7	29.1	**14.4**	10.4	19.5	**5.5***	3.1	9.7	**2.3***	1.0	5.2
Total	**1.9***	1.0	3.8	**40.6**	36.5	44.8	**26.1**	22.6	29.8	**13.8**	11.6	16.4	**5.4**	4.0	7.2	**1.9**	1.3	2.8
All females Total	**2.4***	**1.4**	**4.2**	**44.3**	**40.5**	**48.0**	**24.1**	**21.5**	**26.9**	**10.8**	**9.3**	**12.6**	**3.7**	**2.7**	**5.0**	**1.8**	**1.2**	**2.7**

Metropolitan people																	
Eastern Metropolitan	**3.1***	1.2	7.7	**48.7**	41.2	56.2	**24.3**	19.7	29.6	**8.7**	6.1	12.3	**3.9***	1.9	8.1	**	**	**
North & West Metropolitan	**3.0***	1.4	6.4	**36.5**	31.9	41.4	**36.8**	32.3	41.5	**11.6**	9.1	14.7	**3.7**	2.3	5.9	**1.6***	0.9	2.6
Southern Metropolitan	**	**	**	**43.9**	37.7	50.2	**32.0**	26.3	38.2	**8.8**	6.5	12.0	**3.6***	1.9	6.7	**2.4***	1.1	5.0
Total	**2.3***	1.3	4.1	**41.7**	38.2	45.3	**32.2**	29.1	35.4	**10.1**	8.5	11.9	**3.7**	2.6	5.3	**1.4**	0.9	2.2
Rural people																	
Barwon-South Western	**	**	**	**36.1**	30.2	42.4	**34.3**	28.0	41.2	**9.9**	7.3	13.1	**8.7***	4.7	15.5	**1.8***	0.9	3.8
Gippsland	**	**	**	**28.2**	21.5	36.1	**39.7**	31.9	48.1	**16.7**	12.0	22.8	**5.0***	2.6	9.2	**1.5***	0.7	3.0
Grampians	**	**	**	**36.0**	29.0	43.6	**29.9**	24.3	36.1	**18.9**	13.9	25.1	**3.2***	1.6	6.3	**1.3***	0.6	2.8
Hume	**	**	**	**32.3**	25.0	40.6	**35.7**	27.3	45.1	**19.2**	13.6	26.5	**3.7***	2.1	6.4	**1.7***	0.8	3.5
Loddon Mallee	**0.6***	0.3	1.4	**39.4**	34.1	44.9	**33.8**	27.6	40.8	**11.9**	9.1	15.5	**3.8***	2.3	6.4	**2.0***	1.0	3.8
Total	**1.2***	0.7	2.1	**34.8**	31.6	38.2	**34.7**	31.2	38.4	**14.6**	12.4	17.0	**4.9**	3.4	7.0	**1.7**	1.2	2.4
All people **Total**	**2.1***	**1.3**	**3.5**	**40.0**	**37.1**	**42.9**	**32.8**	**30.2**	**35.4**	**11.2**	**9.9**	**12.7**	**3.9**	**3.0**	**5.1**	**1.5**	**1.1**	**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 from 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.
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 A14: Body weight status of the adult population, by body mass index category, selected socioeconomic determinants, modifiable risk factors, conditions and sex, Victoria, 2013

	Males						Females					
	Not overweight or obese			Overweight or obese			Not overweight or obese			Overweight or obese		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Victoria (18+ years)	**37.1**	**33.0**	**41.4**	**58.9**	**54.7**	**62.9**	**46.7**	**42.9**	**50.5**	**40.4**	**37.3**	**43.5**
Country of birth												
Australia	**34.3**	29.9	39.1	**60.9**	56.3	65.3	**44.6**	40.5	48.9	**42.6**	39.0	46.2
Overseas	**41.0**	33.5	48.9	**57.0**	49.0	64.6	**49.9**	41.8	57.9	**34.9**	29.8	40.5
Language spoken at home												
English only	**38.0**	33.6	42.5	**57.5**	53.2	61.7	**44.7**	40.4	49.1	**43.0**	39.1	46.9
Language other than English	**30.9**	23.5	39.4	**66.3**	57.8	74.0	**49.0**	40.6	57.5	**35.4**	30.5	40.6
Metro-Rural regions												
Rural	**30.2**	25.7	35.0	**64.4**	59.6	68.9	**42.5**	38.5	46.6	**47.2**	43.2	51.2
Metropolitan	**39.1**	34.0	44.4	**57.3**	52.2	62.4	**48.4**	43.9	53.0	**38.1**	34.4	42.0
Level of education												
None or Primary	**13.7**	12.8	14.8	**28.3**	23.6	33.5	**29.3**	25.5	33.3	**21.4**	17.3	26.3
Secondary	**27.5**	21.3	34.6	**66.6**	59.0	73.5	**45.7**	39.9	51.6	**41.9**	37.0	46.9
TAFE or Tertiary	**38.4**	32.9	44.1	**57.2**	51.9	62.4	**47.2**	42.4	52.0	**41.1**	36.9	45.4
Employment status (<65 years)												
Employed	**41.7**	36.3	47.3	**55.3**	49.8	60.7	**51.0**	45.6	56.5	**38.0**	33.5	42.7
Unemployed	**34.9**	24.3	47.1	**62.6**	50.0	73.7	**42.5**	29.3	56.8	**46.3**	34.1	58.8
Not in labour force	**35.6**	27.0	45.2	**45.2**	34.8	56.1	**49.5**	41.4	57.5	**38.6**	32.3	45.4
Total annual household income ($)												
<40,000	**26.1**	19.7	33.7	**67.8**	59.5	75.2	**42.7**	34.5	51.4	**47.1**	38.8	55.7
40,000 to <100,000	**37.8**	32.3	43.8	**60.7**	54.7	66.3	**43.6**	37.4	49.9	**46.1**	40.5	51.8
100,000, or more	**43.1**	35.8	50.7	**53.2**	45.7	60.6	**55.9**	47.3	64.1	**33.0**	26.8	39.9
Psychological distress (K10 score)[a]												
Low (K10 score <16)	**39.5**	34.1	45.3	**58.5**	52.8	64.0	**45.9**	41.0	50.9	**38.8**	34.9	42.9
Moderate (K10 score 16 to 21)	**32.0**	24.9	40.0	**61.1**	53.4	68.3	**44.7**	38.3	51.2	**48.1**	41.8	54.5
High (K10 score 22 to 29)	**32.2**	22.6	43.6	**57.4**	47.9	66.5	**47.8**	39.3	56.4	**42.2**	34.0	50.9
Very high (K10 score ≥30)	**20.2**	15.5	25.8	**67.6**	61.9	72.8	**31.7**	21.6	43.8	**56.5**	45.2	67.1
Physical activity level[b]												
Sedentary	**28.8**	20.4	39.0	**52.8**	44.2	61.2	**36.0**	29.9	42.6	**31.7**	25.0	39.2
Insufficient	**36.4**	29.4	44.0	**60.9**	53.4	68.0	**46.0**	38.6	53.7	**42.2**	36.4	48.2
Sufficient	**39.9**	34.4	45.5	**56.5**	50.9	61.9	**48.9**	44.4	53.4	**40.2**	36.3	44.2
Compliance with fruit & vegetable consumption guidelines[c]												
Both	**35.9**	25.9	47.4	**51.3**	40.8	61.6	**52.9**	43.6	62.1	**42.6**	33.5	52.3
Vegetable only[d]	**34.8**	24.7	46.6	**61.9**	50.7	72.0	**51.3**	41.5	60.9	**45.0**	35.4	54.9
Fruit only[d]	**39.4**	32.4	46.8	**57.1**	49.8	64.1	**49.0**	43.8	54.2	**39.0**	35.3	42.8
Neither	**36.7**	31.7	42.0	**59.1**	54.0	64.0	**43.4**	38.1	48.9	**41.7**	36.9	46.8

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Table A14: Body weight status of the adult population, by body mass index category, selected socioeconomic determinants, modifiable risk factors, conditions and sex, Victoria, 2013

	Males						Females					
	Not overweight or obese			Overweight or obese			Not overweight or obese			Overweight or obese		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL
Victoria	**37.1**	**33.0**	**41.4**	**58.9**	**54.7**	**62.9**	**46.7**	**42.9**	**50.5**	**40.4**	**37.3**	**43.5**
Smoking status												
Current smoker	**37.9**	29.7	46.8	**52.6**	44.6	60.5	**43.4**	35.3	51.9	**35.6**	29.4	42.4
Ex-smoker	**25.0**	19.0	32.0	**73.4**	66.4	79.4	**38.6**	32.9	44.6	**40.8**	35.2	46.8
Non-smoker	**40.3**	35.0	45.8	**55.2**	49.8	60.5	**47.3**	42.9	51.8	**40.7**	36.8	44.7
Self-reported health												
Excellent / Very Good	**46.2**	39.5	53.1	**51.1**	44.3	57.9	**54.7**	49.3	60.1	**34.9**	30.6	39.4
Good	**32.5**	26.4	39.2	**63.2**	56.8	69.2	**41.3**	35.5	47.3	**43.7**	38.8	48.8
Fair / Poor	**28.2**	22.5	34.6	**64.2**	57.6	70.3	**35.0**	29.8	40.7	**49.7**	41.4	58.1

[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.

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 from 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 A15: Psychological distress levels among the adult population, by Department of Health and Human Services region and sex, 2013

	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	**72.5**	61.3	81.5	**10.3***	4.6	21.5	**12.1***	6.9	20.3
North & West Metropolitan	**63.1**	56.8	68.9	**19.4**	14.3	25.7	**10.7**	6.6	16.7
Southern Metropolitan	**57.7**	48.5	66.4	**25.9**	18.9	34.3	**10.4***	5.8	17.8
Total	**63.2**	58.1	68.1	**19.6**	15.6	24.3	**11.0**	7.8	15.4
Rural males									
Barwon-South Western	**69.7**	60.2	77.9	**18.3**	11.8	27.3	**6.5***	3.4	12.1
Gippsland	**64.3**	59.3	68.9	**22.1**	14.7	31.9	**11.8***	5.8	22.8
Grampians	**57.2**	47.4	66.5	**28.1**	20.3	37.7	**	**	**
Hume	**68.2**	55.6	78.7	**22.5***	13.1	35.7	**4.7***	2.5	8.8
Loddon Mallee	**63.9**	50.9	75.2	**23.8***	13.8	37.8	**9.0***	4.2	18.2
Total	**64.7**	58.9	70.1	**22.8**	17.9	28.6	**8.2**	5.3	12.6
All males **Total**	**63.3**	**59.1**	**67.3**	**20.8**	**17.3**	**24.7**	**10.3**	**7.7**	**13.8**
Metropolitan females									
Eastern Metropolitan	**68.2**	60.5	75.0	**19.2**	13.3	26.8	**8.2***	4.0	16.0
North & West Metropolitan	**59.1**	52.7	65.1	**21.6**	16.6	27.6	**12.1**	8.7	16.5
Southern Metropolitan	**60.0**	52.3	67.3	**21.1**	15.8	27.6	**11.5**	7.7	16.9
Total	**62.0**	57.5	66.2	**20.8**	17.4	24.8	**10.7**	8.3	13.8
Rural females									
Barwon-South Western	**55.6**	48.8	62.2	**15.1**	11.2	20.1	**17.3**	12.4	23.5
Gippsland	**61.1**	52.0	69.5	**23.1**	15.9	32.3	**13.8***	8.0	22.9
Grampians	**57.9**	49.7	65.7	**24.4**	18.2	31.9	**15.1**	9.6	22.9
Hume	**65.7**	56.3	74.1	**15.1**	11.0	20.5	**16.5***	9.9	26.2
Loddon Mallee	**60.7**	49.9	70.5	**25.4**	17.1	36.1	**9.6**	6.0	14.9
Total	**61.6**	57.0	66.1	**20.9**	17.2	25.2	**14.8**	11.6	18.7
All females **Total**	**62.0**	**58.3**	**65.5**	**20.9**	**18.0**	**24.0**	**11.6**	**9.5**	**14.1**
Metropolitan people									
Eastern Metropolitan	**70.3**	62.7	76.9	**14.9**	10.2	21.3	**9.9**	6.0	15.9
North & West Metropolitan	**60.9**	56.0	65.5	**20.9**	16.9	25.4	**11.2**	8.3	14.8
Southern Metropolitan	**57.6**	51.6	63.5	**24.6**	19.5	30.4	**11.5**	8.1	16.0
Total	**62.2**	58.8	65.5	**20.6**	17.8	23.8	**10.8**	8.7	13.3
Rural people									
Barwon-South Western	**65.9**	58.7	72.4	**18.7**	13.5	25.4	**12.1**	8.7	16.5
Gippsland	**62.6**	55.6	69.0	**22.5**	15.6	31.3	**13.2**	8.1	20.7
Grampians	**57.1**	50.6	63.4	**26.8**	20.7	33.9	**12.0***	7.2	19.3
Hume	**67.3**	58.7	74.9	**18.7**	12.6	26.8	**10.3**	6.6	15.7
Loddon Mallee	**62.0**	53.2	70.0	**24.9**	17.7	33.8	**9.2**	5.7	14.6
Total	**63.4**	59.6	67.0	**21.9**	18.7	25.5	**11.4**	9.1	14.1
All people **Total**	**62.4**	**59.5**	**65.1**	**21.1**	**18.7**	**23.8**	**10.9**	**9.1**	**13.0**

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 from 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.

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 A16: Psychological distress levels among the population, by selected socioeconomic determinants, modifiable risk factors, conditions and sex, Victoria, 2013

	Males						Females					
	Mild (K10 score <16)			High or very high (K10 score ≥22)			Mild (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	**63.3**	**59.1**	**67.3**	**10.3**	**7.7**	**13.8**	**62.0**	**58.3**	**65.5**	**11.6**	**9.5**	**14.1**
Country of birth												
Australia	**61.6**	57.0	66.1	**10.7**	7.5	15.0	**65.3**	61.3	69.1	**10.3**	8.4	12.7
Overseas	**69.1**	61.7	75.6	**8.6***	5.1	14.0	**55.9**	48.6	62.9	**14.5**	10.1	20.3
Language spoken at home												
English only	**65.2**	60.4	69.7	**10.0**	6.7	14.6	**65.5**	61.3	69.5	**9.9**	8.0	12.2
Language other than English	**55.4**	47.1	63.5	**13.4**	8.8	19.8	**51.9**	44.4	59.3	**14.7**	10.0	21.0
Metro-Rural regions												
Rural	**64.7**	58.9	70.1	**8.2**	5.3	12.6	**61.6**	57.0	66.1	**14.8**	11.6	18.7
Metropolitan	**63.2**	58.1	68.1	**11.0**	7.8	15.4	**62.0**	57.5	66.2	**10.7**	8.3	13.8
Level of education												
None or Primary	**28.9**	22.5	36.4	**7.0***	3.0	15.8	**18.6**	15.3	22.4	**6.3***	3.2	11.9
Secondary	**67.7**	59.5	74.9	**10.1**	6.3	15.8	**56.5**	50.8	62.1	**15.1**	11.0	20.5
TAFE or Tertiary	**60.4**	55.1	65.4	**9.8**	6.4	14.7	**64.2**	59.2	68.9	**9.7**	7.4	12.8
Employment status (<65 years)												
Employed	**63.3**	56.6	69.4	**11.1**	7.0	17.3	**65.3**	59.7	70.5	**9.3**	6.6	12.8
Unemployed	**28.6**	17.6	42.9	**15.8**	10.5	23.0	**55.5**	41.7	68.5	**24.8***	14.4	39.3
Not in labour force	**33.1**	24.6	42.9	**17.3**	11.8	24.8	**55.0**	47.6	62.1	**15.3**	11.2	20.5
Total annual household income ($)												
<40,000	**54.4**	43.8	64.6	**21.8**	14.2	32.1	**47.8**	40.6	55.2	**24.3**	18.2	31.6
40,000 to <100,000	**63.9**	56.9	70.3	**9.1**	5.6	14.5	**68.4**	62.0	74.1	**10.2**	6.8	15.0
100,000, or more	**75.0**	67.6	81.3	**6.3***	2.9	13.3	**68.4**	60.3	75.5	**6.6***	3.4	12.4
Physical activity level[b]												
Sedentary	**62.4**	50.8	72.7	**7.5***	4.1	13.1	**54.4**	47.0	61.6	**10.5**	6.9	15.6
Insufficient	**59.2**	51.8	66.2	**12.3**	7.6	19.3	**58.7**	51.6	65.5	**13.4**	9.8	18.0
Sufficient	**66.0**	60.7	71.0	**9.2**	5.9	14.1	**65.0**	60.4	69.3	**10.1**	7.6	13.4
Compliance with fruit & vegetable consumption guidelines[c]												
Both	**67.8**	59.8	74.9	**3.7**	0.8	15.2	**68.1**	56.6	77.7	**13.8***	7.2	24.9
Vegetable only[d]	**62.8**	53.0	71.6	**	**	**	**65.5**	54.7	74.9	**15.5***	8.5	26.6
Fruit only[d]	**67.1**	61.5	72.3	**7.7***	4.4	13.1	**61.7**	56.4	66.7	**12.3**	9.1	16.3
Neither	**64.4**	58.6	69.7	**11.4**	8.1	15.8	**62.1**	57.0	66.9	**11.2**	8.7	14.2
Smoking status												
Current smoker	**48.9**	40.0	58.0	**10.9**	6.5	17.6	**47.9**	38.4	57.5	**28.3**	20.3	37.8
Ex-smoker	**64.9**	54.3	74.2	**9.1***	5.1	15.7	**56.0**	49.7	62.1	**14.5**	9.8	20.9
Non-smoker	**66.1**	60.5	71.3	**9.5**	6.2	14.4	**63.9**	59.5	68.1	**7.2**	5.5	9.4

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Table A16: Psychological distress levels among the population, by selected socioeconomic determinants, modifiable risk factors, conditions and sex, Victoria, 2013

	Males						Females					
	Mild (K10 score <16)			High or very high (K10 score ≥22)			Mild (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	**63.3**	**59.1**	**67.3**	**10.3**	**7.7**	**13.8**	**62.0**	**58.3**	**65.5**	**11.6**	**9.5**	**14.1**
Self-reported health												
Excellent / Very Good	**76.1**	70.6	80.9	**6.2***	2.9	12.8	**71.6**	66.2	76.6	**5.4**	3.4	8.4
Good	**61.1**	54.3	67.4	**8.0***	4.8	12.9	**61.9**	56.6	67.0	**12.0**	8.7	16.3
Fair / Poor	**43.5**	34.9	52.6	**21.3**	14.9	29.5	**32.7**	26.3	39.9	**33.9**	28.1	40.4
BMI category[e]												
Underweight	**31.0**	31.0	31.0	**26.8**	26.8	26.8	**63.7**	49.0	76.2	**15.3***	7.5	28.4
Normal	**68.5**	61.1	75.0	**8.3***	4.4	15.2	**62.1**	56.8	67.2	**9.8**	7.1	13.5
Overweight	**65.1**	58.3	71.3	**6.9***	4.1	11.3	**62.8**	55.3	69.8	**12.3**	8.1	18.1
Obese	**60.5**	51.0	69.3	**16.0**	10.2	24.2	**57.5**	49.8	64.9	**13.0**	9.0	18.5

[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.

[e] 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 from 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.

Table A17: Self-reported health status of the adult population, by Department of Health and Human Services region and sex, 2005–2013

Males	Excellent /Very good			Good			Fair / Poor		
	%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL
Metropolitan males									
Eastern Metropolitan	**46.4**	35.6	57.6	**29.1**	20.9	39.0	**23.7**	15.3	34.8
North & West Metropolitan	**36.9**	29.8	44.6	**37.7**	31.2	44.7	**24.7**	19.1	31.3
Southern Metropolitan	**41.3**	33.4	49.7	**43.9**	35.8	52.4	**14.7**	10.1	20.9
Total	**41.1**	35.8	46.6	**37.4**	32.2	42.8	**21.0**	17.1	25.6
Rural males									
Barwon-South Western	**45.7**	37.0	54.7	**36.8**	28.1	46.5	**17.1**	11.2	25.3
Gippsland	**56.5**	47.1	65.4	**24.5**	16.6	34.6	**18.9**	15.5	22.8
Grampians	**38.8**	30.3	48.0	**37.5**	26.8	49.7	**23.7**	15.1	35.2
Hume	**31.7**	24.5	40.0	**52.7**	45.1	60.2	**15.4**	10.8	21.4
Loddon Mallee	**39.4**	28.5	51.5	**29.8**	23.8	36.6	**30.6**	21.1	42.0
Total	**42.3**	36.6	48.2	**36.3**	31.0	42.1	**21.2**	16.5	26.8
All males Total	**41.5**	**37.1**	**46.0**	**37.3**	**33.1**	**41.7**	**20.7**	**17.5**	**24.5**
Metropolitan females									
Eastern Metropolitan	**42.8**	33.1	53.1	**42.7**	32.8	53.1	**14.4**	10.2	19.9
North & West Metropolitan	**44.2**	38.0	50.7	**35.3**	29.3	41.9	**20.3**	16.6	24.6
Southern Metropolitan	**50.4**	42.9	57.9	**36.7**	29.5	44.5	**12.9**	9.6	17.1
Total	**45.9**	41.4	50.4	**37.7**	33.3	42.3	**16.3**	13.9	19.0
Rural females									
Barwon-South Western	**41.3**	35.1	47.8	**31.8**	25.3	39.1	**16.7**	11.6	23.4
Gippsland	**46.8**	37.6	56.1	**34.6**	25.8	44.6	**18.5**	12.1	27.4
Grampians	**42.8**	35.5	50.5	**37.6**	30.0	45.9	**19.4**	13.9	26.4
Hume	**52.1**	43.1	60.9	**33.4**	25.1	42.8	**13.2**	9.5	18.1
Loddon Mallee	**45.3**	35.1	55.9	**40.5**	30.6	51.3	**14.1**	9.9	19.6
Total	**46.6**	42.0	51.3	**36.4**	32.0	41.1	**16.5**	13.7	19.8
All females Total	**46.1**	**42.5**	**49.9**	**37.4**	**33.8**	**41.2**	**16.2**	**14.2**	**18.3**
Metropolitan people									
Eastern Metropolitan	**44.2**	36.4	52.2	**36.1**	29.2	43.7	**19.3**	13.9	26.0
North & West Metropolitan	**40.6**	35.8	45.6	**36.5**	31.9	41.4	**22.4**	18.8	26.5
Southern Metropolitan	**46.4**	40.5	52.5	**39.1**	33.2	45.3	**14.4**	11.2	18.3
Total	**43.4**	39.9	46.9	**37.5**	34.1	41.1	**18.8**	16.4	21.4
Rural people									
Barwon-South Western	**44.5**	38.4	50.7	**35.2**	28.7	42.3	**19.9**	14.3	27.1
Gippsland	**51.4**	43.7	59.1	**29.4**	22.6	37.1	**19.1**	13.8	25.7
Grampians	**41.1**	35.2	47.2	**37.0**	29.9	44.8	**21.8**	15.8	29.3
Hume	**41.1**	32.8	50.0	**43.9**	35.5	52.6	**14.2**	11.1	17.9
Loddon Mallee	**42.0**	33.9	50.5	**35.5**	28.0	43.8	**22.4**	16.2	30.1
Total	**44.3**	40.5	48.2	**36.2**	32.6	39.9	**19.2**	16.2	22.6
All people Total	**43.8**	**40.9**	**46.7**	**37.4**	**34.6**	**40.2**	**18.6**	**16.6**	**20.7**

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 from 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 A18: Self-reported health status of the adult population, by selected socioeconomic determinants, modifiable risk factors and health status, Victoria, 2013

	Males						Females					
	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	**41.5**	**37.1**	**46.0**	**20.7**	**17.5**	**24.5**	**46.1**	**42.5**	**49.9**	**16.2**	**14.2**	**18.3**
Country of birth												
Australia	**43.0**	38.2	48.0	**20.7**	17.0	25.0	**49.0**	44.9	53.1	**14.8**	12.6	17.3
Overseas	**38.3**	30.0	47.3	**21.3**	14.5	30.2	**41.2**	33.1	49.9	**19.3**	15.3	24.1
Language spoken at home												
English only	**43.5**	38.5	48.6	**19.9**	16.0	24.5	**48.3**	44.2	52.4	**14.8**	12.5	17.5
Language other than English	**34.7**	26.8	43.5	**26.9**	20.8	34.0	**39.9**	33.1	47.1	**22.2**	18.3	26.6
Metro-Rural regions												
Rural	**42.3**	36.6	48.2	**21.2**	16.5	26.8	**46.6**	42.0	51.3	**16.5**	13.7	19.8
Metropolitan	**41.1**	35.8	46.6	**21.0**	17.1	25.6	**45.9**	41.4	50.4	**16.3**	13.9	19.0
Level of education												
None or Primary	**5.4***	2.3	12.0	**21.8**	19.2	24.7	**23.2**	19.2	27.7	**22.8**	17.9	28.7
Secondary	**37.9**	30.9	45.4	**26.7**	20.5	34.0	**41.1**	34.5	47.9	**20.3**	15.7	25.9
TAFE or Tertiary	**42.6**	37.2	48.2	**16.5**	13.4	20.1	**48.3**	43.4	53.2	**12.9**	10.8	15.4
Employment status (<65 years)												
Employed	**43.1**	36.9	49.5	**14.0**	10.0	19.2	**50.7**	45.0	56.3	**10.6**	8.2	13.5
Unemployed	**27.2***	15.9	42.3	**42.1**	32.4	52.5	**26.9**	16.2	41.2	**18.1**	11.1	28.3
Not in labour force	**17.6**	12.2	24.8	**42.2**	33.6	51.2	**41.5**	33.9	49.4	**20.4**	16.2	25.4
Total annual household income ($)												
<40,000	**20.8**	14.4	29.0	**49.8**	40.0	59.6	**30.4**	23.2	38.6	**30.1**	24.3	36.5
40,000 to <100,000	**43.6**	36.6	51.0	**15.3**	11.5	20.1	**46.5**	40.5	52.6	**12.4**	9.3	16.3
100,000, or more	**51.9**	43.5	60.2	**20.0**	13.3	28.8	**62.8**	55.0	69.9	**4.2***	2.4	7.3
Psychological distress (K10 score)[a]												
Low (K10 score <16)	**48.5**	42.7	54.5	**14.9**	10.9	20.2	**52.7**	47.9	57.5	**9.5**	7.7	11.8
Moderate (K10 score 16 to 21)	**26.5**	20.0	34.2	**29.2**	21.9	37.8	**40.9**	34.1	48.1	**22.1**	17.5	27.4
High (K10 score 22 to 29)	**23.5**	15.7	33.6	**43.8**	34.1	54.0	**27.9**	20.6	36.6	**36.0**	26.8	46.4
Very high (K10 score ≥30)	**10.6**	9.0	12.4	**46.5**	39.5	53.6	**12.5***	6.7	22.2	**50.0**	38.0	62.0
Physical activity level[b]												
Sedentary	**17.5**	11.2	26.3	**42.7**	33.2	52.8	**21.9**	13.9	32.7	**20.8**	15.4	27.6
Insufficient	**34.6**	27.0	43.0	**23.4**	17.5	30.6	**38.2**	31.3	45.6	**20.8**	16.5	25.8
Sufficient	**49.0**	43.4	54.7	**14.4**	11.4	18.1	**54.4**	49.9	58.9	**11.5**	9.3	14.0
Compliance with fruit & vegetable consumption guidelines[c]												
Both	**55.2**	44.6	65.3	**8.6**	4.1	17.4	**58.1**	47.2	68.3	**6.9**	3.6	12.7
Vegetable only[d]	**69.9**	59.2	78.8	**9.0***	5.1	15.2	**57.9**	47.4	67.8	**9.2***	5.5	15.0
Fruit only[d]	**47.4**	40.0	54.8	**12.5**	9.5	16.4	**49.6**	44.5	54.7	**12.4**	10.2	15.0
Neither	**36.5**	31.1	42.1	**26.2**	21.3	31.8	**40.8**	35.7	46.2	**20.4**	17.0	24.3

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Table A18: Self-reported health status of the adult population, by selected socioeconomic determinants, modifiable risk factors and health status, Victoria, 2013

	Males						Females					
	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	**41.5**	**37.1**	**46.0**	**20.7**	**17.5**	**24.5**	**46.1**	**42.5**	**49.9**	**16.2**	**14.2**	**18.3**
Smoking status												
Current smoker	**34.8**	27.3	43.1	**34.3**	26.4	43.1	**22.8**	16.3	31.0	**30.0**	22.9	38.2
Ex-smoker	**36.5**	30.1	43.4	**14.8**	10.6	20.3	**40.4**	36.1	44.9	**16.0**	11.2	22.3
Non-smoker	**42.9**	37.3	48.7	**17.4**	13.7	22.0	**50.2**	45.9	54.5	**14.0**	12.0	16.4
BMI category[e]												
Underweight	**22.0**	22.0	22.0	**26.8**	26.8	26.8	**37.4**	25.7	50.8	**20.7**	12.6	32.0
Normal	**55.2**	48.5	61.7	**14.0**	10.0	19.4	**54.8**	49.7	59.9	**12.2**	9.6	15.5
Overweight	**40.8**	33.6	48.3	**15.5**	12.0	19.8	**43.5**	37.4	49.8	**13.7**	10.1	18.4
Obese	**29.3**	20.5	40.0	**36.0**	27.5	45.5	**37.0**	30.2	44.3	**27.7**	22.5	33.6

[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] 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 from 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.

References

Australian Institute of Health and Welfare (AIHW) 2000, *Australia's health 2000*, AIHW, Canberra.

Andrews G, Slade T 2001, 'Interpreting scores on the Kessler Psychological Distress Scale (K10)', *Australian and New Zealand Journal of Public Health*, no. 25, pp. 494–497.

Begg SJ, Vos T, Barker B, Stanley L, Lopez AD, 2008, 'Burden of disease and injury in Australia in the new millenium: measuring health loss from diseases, injuries and risk factors', *Medical Journal of Australia*, no. 188, pp. 36–40.

Burstrom B, Fredlund P 2001, 'Self-rated health: Is it as good a predictor of subsequent mortality among adults in lower as well as in higher social classes?', *Journal of Epidemiology and Community Health, 55*(11):836-40.

Centers for Disease Control and Prevention 1994, *Preventing tobacco use among young people – a report of the Surgeon General*, CDC, Atlanta.

Department of Health and Ageing (DoHA) 1999, *National physical activity guidelines for adults*, DoHA, Canberra.

Elgar FJ, Stewart JM 2008, 'Validity of self-report screening for overweight and obesity. Evidence from the Canadian Community Health Survey', *Canadian Journal of Public Health*, no. 99, pp. 423–427.

Furukawa TA, Kessler RC, Slade T, Andrews G, 2003, 'The performance of the K6 and K10 screening scales for psychological distress in the Australian National Survey of Mental Health and Well-Being', *Psychological Medicine*, 33, 357-62.

Hamer M, Kivimaki M, Stamatakis E, Batty GD, 2012, 'Psychological distress as a risk factor for death from cerebrovascular disease', *Canadian Medical Association Journal*, 184, 1461-6.

Holden L, Scuffham P, Hilton M, Vecchio N, Whiteford H, 2010, 'Psychological distress is associated with a range of high-priority health conditions affecting working Australians', *Australian and New Zealand Journal of Public Health*, 34, 304–10.

Idler EL, Benyamini Y 1997, 'Self-rated health and mortality: a review of twenty-seven community studies', *Journal of Health and Social Behavior*, no. 38, pp. 21–37.

Jha P, Ramasundarahettige C, Landsman V, Rostron B, Thun M, Anderson RN, McAfee T, Peto R 2013, '21st century hazards of smoking and benefits of cessation in the United States', *New England Journal of Medicine,* no. 368, pp. 341–350.

Kessler RC, Barker PR, Colpe LJ, Epstein JF, Gfroerer JC, Hiripi E, Howes MJ, Normand SL, Manderscheid RW, Walters EE, Zaslavsky AM 2003, 'Screening for serious mental illness in the general population', *Archives of General Psychiatry*, no. 60, 184–189.

Miilunpalo S, Vuori I, Oja P, Pasanen M, Urponen H 1997, 'Self-rated health status as a health measure: the predictive value of self-reported health status on the use of physician services and on mortality in the working-age population', *Journal of Clinical Epidemiology,* no. 50, pp. 517–528.

National Health and Medical Research Council (NHMRC) 2003a, *Dietary guidelines for Australian adults*, NHMRC, Canberra.

National Health and Medical Research Council (NHMRC) 2003b, *Dietary guidelines for children and adolescents in Australia*, NHMRC, Canberra.

National Health and Medical Research Council (NHMRC) 2013, *Dietary guidelines for Australian adults*, NHMRC, Canberra.

Stansfeld SA, Fuhrer R, Shipley MJ, Marmot MG 2002, 'Psychological distress as a risk factor for coronary heart disease in the Whitehall II Study', *International Journal of Epidemiology*, no. 31, 248–255.

US Department of Health and Human Services 2014, *The health consequences of smoking – 50 years of progress*. A report of the Surgeon General, US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, Atlanta.

WHO 2000, Obesity: preventing and managing the global epidemic: report of a WHO consultation (WHO technical report series 894), World Health Organization, Geneva, Switzerland.

World Health Organization (WHO) 2002, *Diet, nutrition and the prevention of chronic diseases: report of a joint WHO/FAO expert consultation*, Geneva, 28 January to 1 February 2002, WHO technical report series; 916.

World Health Organization (WHO) 2013, Fact sheet number 311: *Overweight and obesity*, viewed 14 August 2014, <http://www.who.int/mediacentre/factsheets/fs311/en/index.html>.

World Health Organization (WHO) 2015, Information sheet, *Tobacco*, viewed 20 March 2015, <http://www.who.int/mediacentre/factsheets/fs339/en/>.