# Victorian Population Health Survey 2014

Modifiable risk factors contributing to chronic disease in Victoria



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## Preface

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

The Victorian Population Health Survey gives an annual assessment of the health status and wellbeing of adults living in Victoria. The value of the survey data is increasing each year as it becomes possible to comment on trends over time for key health indicators such as the prevalence of type 2 diabetes, smoking tobacco and overweight and obesity.

In 2014 the sample size was expanded to approximately 34,000 participants to allow for the reporting of analysed data at the local government area level. This third report of the Victorian Population Health Survey at the local government area level also presents quality data for a range of indicators of importance to population health at the state and regional levels of Victoria.

The health risk factors focused on in this report are overweight and obesity, smoking tobacco, consuming alcohol at levels harmful to health, inadequate intake of fruit and vegetables, daily intake of sugar-sweetened soft drinks, hypertension, psychological distress, insufficient physical activity and sedentary behaviour. These modifiable risk factors are key contributors in the development and progression of preventable chronic disease.

The Victorian Population Health Survey is a valuable resource for guiding future policy development and assists all levels of government in planning, reporting and decision-making. Important insights from the survey into the health and wellbeing of the population are currently being used to underpin and inform various frameworks and policy areas in the department. These include the Victorian Public Health and Wellbeing Outcomes Framework, the Mental Health Outcomes Framework and the report of the Chief Health Officer.

The survey's findings are also used by local government to inform municipal public health and wellbeing plans to improve population health and wellbeing in local communities. The findings are also used extensively across the non-government sector of Victoria.

Future reports released later this year will report additional findings from the Victorian Population Health Survey 2014. The next report focuses on reporting the prevalence of selected chronic conditions in Victoria as well as eye heath, health checks and cancer screening. The third report presents the remaining findings from the survey and focuses on social capital and inequalities in the social determinants of health.

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# Introduction

## Introduction

#### About the survey

The Victorian Population Health Survey is an important component of population health surveillance in Victoria. The annual survey series is an ongoing source of quality information on the health and wellbeing of adult Victorians.

The Victorian Population Health Survey has been conducted each year since 2001 and is based on a sample of 7,500 adults over 18 years of age who are randomly selected from households from each of the eight Department of Health and Human Services regions in the state. In 2008, 2011–12 and 2014, the sample size for the survey was expanded to include Victoria's 79 local government areas (LGAs) (Tables i–iii and Maps i–ii).

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

The impact of information from the Victorian Population Health Survey is extensive across both 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 LGA levels.

#### About the report

For the first time, selected findings from the survey have been presented in three separate reports. Each report includes a series of related health topics and indicators. This report includes information on: smoking; fruit and vegetable consumption; take-away meals and snacks; consumption of sugar-sweetened soft drinks; body weight status; physical activity; alcohol consumption; psychological distress; and hypertension. The second report contains information on: self-reported health and wellbeing; chronic disease prevalence; screening; biomedical checks; and eye health. The third report focuses on social capital and inequalities in the social determinants of health. In this report the data are presented in tables by age, sex and geographic area.

At the time of the survey in 2014, the department had eight health regions, so this report includes a breakdown of health data by these eight regions. The department revised the structure of its operating model in 2016, which is now based on four health branches to focus on the health interests of local populations across the state.

The former regions map to the four divisions as listed below. Note that the North & West Metropolitan Region has been split and now forms part of North Division Health and West Division Health. Victorian Population Health Survey reports that feature survey data from 2016 onwards will include a breakdown of data by nine health areas as featured below:

- West Division Health: Grampians Region, Barwon South Western Region, Western Metropolitan area (subset of North and West Region).
- North Division Health: Loddon Mallee Region, North Metropolitan area (subset of North and West Region).
- East Division: Hume Region, Eastern Metropolitan Region.
- South Division: Gippsland Region, Southern Metropolitan Region.

#### About the data

- The sample size for the Victorian Population Health Survey was expanded to 33,654 respondents in 2014 so reliable information could be presented at the LGA level.
- Estimates have been age-adjusted (agestandardised) throughout the report to eliminate the effect that differences in age structure may have on estimates from different population groups.
- The reliability of estimates has been determined using the relative standard error (standard error / estimate × 100). Tables and figures throughout the report indicate the reliability of estimates.
- *Time trends:* Time series data are presented in figures throughout the report, age-adjusted (age-standardised) estimates are presented for each year in which the survey was run, where the same question has been asked each year. 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.

If estimates are described in the text as being 'constant' over time, then there is no (statistically) significant trend observed. • Statistical significance: Individual estimates have been compared with the total Victorian estimate. Where subgroups of the population are presented (for example, males and females), the estimates have been compared with the total Victorian estimate for that population subgroup (all Victorian males, all Victorian females).

Statistically significant differences have been determined by comparing the 95 per cent confidence intervals of estimates. Where the confidence interval for an estimate in a table does not overlap with the confidence interval of the corresponding estimate for Victoria (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 Victoria (or subpopulation). Notes to the tables and figures indicate the statistical significance of differences between estimates.

If an estimate is described as being 'higher' or 'lower' than another in the text of the report it is (statistically) significantly higher or lower than the comparative estimate. If two estimates are described in the text as being 'similar', then there is no (statistically) significant difference between estimates. The sample table below provides an example of how the data are presented in this report.

		Current smoker		Ex-smoker		Non-smoker				
		%	95%	6 CI	%	955	% CI	%	95%	6 CI
LGA			LL	UL		LL	UL		LL	UL
Greater Bendigo (C)		13.0	8.7	19.2	22.2	18.4	26.5	62.9	56.1	69.3
Loddon (S)	$\rightarrow$	23.0	17.1	30.2	21.7	14.2	31.6	55.0	45.2	64.4
Macedon Ranges (S)	$\rightarrow$	8.0	5.6	11.3	25.3	20.9	30.2	66.1	61.0	70.9
Mildura (RC)		18.7	11.7	28.6	23.8	17.6	31.5	57.3	47.8	66.3
Victoria		13.1	12.3	14.0	24.8	23.9	25.7	61.5	60.4	62.6

#### Sample table: Smoking status, by LGA, Victoria, 2014

If the estimate of the LGA is coloured **red**, this indicates that it is (statistically) significantly **HIGHER** than the state estimate.

-> For example, the percentage of current smokers in the Shire of Loddon is 23.0 per cent, and this is higher than the state estimate, which is 13.1 per cent.

If the estimate of the LGA is coloured **blue**, this indicates that it is (statistically) significantly **LOWER** than the state estimate.

-> For example, the percentage of current smokers for the Shire of Macedon Ranges is 8.0 per cent, and this is lower than the state estimate, which is 13.1 per cent.

#### How to interpret the maps

The 79 LGAs were ranked, for each risk factor of interest, based on the prevalence of the risk factor in question. The LGAs were then divided into five groups (quintiles 1 to 4 having 16 LGAs and quintile 5 having 15 LGAs). 'Quintile 1' included the group of 16 LGAs with the poorest results for the risk factor in question (for example, the highest prevalence of smoking, or the lowest prevalence of compliance with fruit/vegetable consumption guidelines). In contrast, 'quintile 5' included the 15 LGAs with the best results (for example, the lowest prevalence of smoking or the highest prevalence of compliance with fruit/vegetable consumption guidelines). As such, the higher the quintile grouping of a LGA, the better the result for the risk factor in question.

# How is local government involved in public health?

The Victorian Government has long developed policies, programs and resources that encourage preventive health practices across all levels of government, non-government agencies and the private sector. *The Public Health and Wellbeing Act 2008* requires all government departments and levels of government in Victoria to be responsible for public health and wellbeing. This approach is necessary because the environment in which we live influences many of the factors that affect our health and wellbeing.

The Act requires the Minister for Health to prepare a state public health and wellbeing plan every four years. The *Public Health and Wellbeing Plan* 2015–2019 outlines the government's current key priorities for improving the health and wellbeing of all Victorians, particularly the most disadvantaged. As many chronic diseases and injuries are preventable, the plan focuses on encouraging healthy living from the early years and throughout life.

# How can this survey help local government?

Local government is ideally placed to lead local policies, programs and infrastructure development that can influence health through its work in a range of areas including transport, roads, parks, waste, land use, urban planning, recreation, cultural activities and in creating safer public places. Because information from the Victorian Population Health Survey is now available at the LGA level, providing a breakdown of particular risk factors and conditions across municipalities, councils are able to use the information from the survey to inform plans aimed at enhancing public health and wellbeing across Victoria.





#### Table i: Metropolitan local government areas, by Department of Health and Human Services region

Region	LGA ID number <sup>a</sup>	LGA name
North & West	4	Banyule
Metropolitan	10	Brimbank
	18	Darebin
	31	Hobsons Bay
	33	Hume
	42	Maribyrnong
	44	Melbourne
	45	Melton
	50	Moonee Valley
	52	Moreland
	57	Nillumbik
	74	Whittlesea
	76	Wyndham
	77	Yarra

Region	LGA ID number <sup>a</sup>	LGA name
Southern	7	Bayside
Metropolitan	13	Cardinia
	14	Casey
	20	Frankston
	22	Glen Eira
	26	Greater Dandenong
	35	Kingston
	53	Mornington Peninsula
	59	Port Phillip
	64	Stonnington

a. Local government area (LGA) ID number is based on the alphabetical order of LGA names (see Table iii).

Region	LGA ID number <sup>a</sup>	LGA name
Eastern	9	Boroondara
Metropolitan	36	Knox
	40	Manningham
	43	Maroondah
	49	Monash
	73	Whitehorse
	78	Yarra Ranges



Map ii: Rural local government areas, by Department of Health and Human Services region

#### Table ii: Rural local government areas, by Department of Health and Human Services region

Region	LGA ID number <sup>a</sup>	LGA name
Barwon-	16	Colac Otway
South Western	17	Corangamite
Western	23	Glenelg
	27	Greater Geelong
	55	Moyne
	61	Queenscliffe
	63	Southern Grampians
	66	Surf Coast
	70	Warrnambool

Region	LGA ID number <sup>a</sup>	LGA name
Grampians	2	Ararat
	3	Ballarat
	24	Golden Plains
	29	Hepburn
	30	Hindmarsh
	32	Horsham
	51	Moorabool
	58	Northern Grampians
	60	Pyrenees
	72	West Wimmera
	79	Yarriambiack

Region	LGA ID number <sup>a</sup>	LGA name
Hume	1	Alpine
	8	Benalla
	28	Greater Shepparton
	34	Indigo
	41	Mansfield
	47	Mitchell
	48	Moira
	56	Murrindindi
	65	Strathbogie
	68	Towong
	69	Wangaratta
	75	Wodonga

Region	LGA ID number <sup>a</sup>	LGA name
Gippsland	5	Bass Coast
	6	Baw Baw
	19	East Gippsland
	37	Latrobe
	62	South Gippsland
	71	Wellington

a. Local government area (LGA) ID number is based on the alphabetical order of LGA names (Table iii).

Region	LGA ID number <sup>a</sup>	LGA name
Loddon Mallee	11	Buloke
	12	Campaspe
	15	Central Goldfields
	21	Gannawarra
	25	Greater Bendigo
	38	Loddon
	39	Macedon Ranges
	46	Mildura
	54	Mount Alexander
	67	Swan Hill

#### Table iii: Local government area names and Department of Health and Human Services regions

LGA name	Region	LGA ID no.ª	LGA name	Region	LGA ID no.ª
Alpine (S)	Hume	1	Hindmarsh (S)	Grampians	30
Ararat (RC)	Grampians	2	Hobsons Bay (C)	North & West Metropolitan	31
Ballarat (C)	Grampians	3	Horsham (RC)	Grampians	32
Banyule (C)	North & West Metropolitan	4	Hume (C)	North & West Metropolitan	33
Bass Coast (S)	Gippsland	5	Indigo (S)	Hume	34
Baw Baw (S)	Gippsland	6	Kingston (C)	Southern Metropolitan	35
Bayside (C)	Southern Metropolitan	7	Knox (C)	Eastern Metropolitan	36
Benalla (RC)	Hume	8	Latrobe (C)	Gippsland	37
Boroondara (C)	Eastern Metropolitan	9	Loddon (S)	Loddon Mallee	38
Brimbank (C)	North & West Metropolitan	10	Macedon Ranges	Mallee Loddon	39
Buloke (S)	Loddon Mallee	11	(S)		
Campaspe (S)	Loddon Mallee	12	Manningham (C)	Eastern Metropolitan	40
Cardinia (S)	Southern Metropolitan	13	Mansfield (S)	Hume	41
Casey (C)	Southern Metropolitan	14	Maribyrnong (C)	North & West Metropolitan	42
Central Goldfields (S)	Loddon Mallee	15	Maroondah (C) Melbourne (C)	Eastern Metropolitan North & West Metropolitan	43 44
Colac Otway (S)	Barwon-South Western	16	Melton (S)	North & West Metropolitan	45
Corangamite (S)	Barwon-South Western	17	Mildura (RC)	Loddon Mallee	46
Darebin (C)	North & West Metropolitan	18	Mitchell (S)	Hume	47
East Gippsland (S)	Gippsland	19	Moira (S)	Hume	48
Frankston (C)	Southern Metropolitan	20	Monash (C)	Eastern Metropolitan	49
Gannawarra (S)	Loddon Mallee	21	Moonee Valley (C)	North & West Metropolitan	50
Glen Eira (C)	Southern Metropolitan	22	Moorabool (S)	Grampians	51
Glenelg (S)	Barwon-South Western	23	Moreland (C)	North & West Metropolitan	52
Golden Plains (S)	Grampians	24	Mornington	Southern Metropolitan	53
Greater Bendigo (C)	Loddon Mallee	25	Peninsula (S)		
Greater Dandenong (C)	Southern Metropolitan	26	Mount Alexander (S)	Loddon Mallee Barwon-South Western	54 55
Greater Geelona (C)	Barwon-South Western	27	Murrindindi (S)	Hume	56
Greater Shepparton	Hume	28	Nillumbik (S)	North & West Metropolitan	57
(C) Hepburn (S)	Grampians	29	Northern Grampians (S)	Grampians	58

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

a. Local government area (LGA) ID number is based on the alphabetical order of LGA names. B = Borough; C = City; S = Shire; RC = Rural City. Table iii: Local government area names and Department of Health and Human Services regions (continued)

LGA name	Region	LGA ID no.ª
Port Phillip (C)	Southern Metropolitan	59
Pyrenees (S)	Grampians	60
Queenscliffe (B)	Barwon-South Western	61
South Gippsland (S)	Gippsland	62
Southern Grampians (S)	Barwon-South Western	63
Stonnington (C)	Southern Metropolitan	64
Strathbogie (S)	Hume	65
Surf Coast (S)	Barwon-South Western	66
Swan Hill (RC)	Loddon Mallee	67
Towong (S)	Hume	68
Wangaratta (RC)	Hume	69
Warrnambool (C)	Barwon-South Western	70
Wellington (S)	Gippsland	71
West Wimmera (S)	Grampians	72
Whitehorse (C)	Eastern Metropolitan	73
Whittlesea (C)	North & West Metropolitan	74
Wodonga (RC)	Hume	75
Wyndham (C)	North & West Metropolitan	76
Yarra (C)	North & West Metropolitan	77
Yarra Ranges (S)	Eastern Metropolitan	78
Yarriambiack (S)	Grampians	79

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

a. Local government area (LGA) ID number is based on the alphabetical order of LGA names.

B = Borough; C = City; S = Shire; RC = Rural City.



# Summary of findings

## Summary of findings

The following is a summary of results from the Victorian Population Health Survey 2014.

#### Smoking



### Fruit intake



#### Consumption of take-away meals or snacks



### Sugar-sweetened soft drink consumption



### Body weight





## Physical activity





# This proportion was significantly *higher* in men compared with women

## Physical activity associated with occupation



### Lifetime risk of alcohol-related harm



## Risk of alcohol-related injury on a single occasion



#### Psychological distress



#### LGA risk factor profile

The combined distribution of seven selected risk factors in each LGA is presented in Map iii. These risk factors are: obesity, sedentary behavior, inadequate physical activity, not meeting NHMRC (2013) guidelines for either vegetable or fruit consumption, daily intake of sugar-sweetened soft drinks, smoking status (current smoker), at increased risk of alcohol-related harm on a single occasion either yearly, monthly or weekly, high blood pressure, high or very high levels of psychological distress and total household income <\$40,000. Additional maps within this report separately describe the distribution of selected risk factors in each LGA.



Note: Local government area (LGA) ID is based on the alphabetical order of LGA names (see Table iii).

alcohol-related harm on a single occasion, either yearly, monthly or weekly, high blood pressure, high or very high levels of either vegetable or fruit consumption, daily consumer of sugar sweetened soft drinks, current smoker, at increased risk of a. Risk factors are: obesity, sedentary behavious, insufficient physical activity, did not meet NHMRC (2013) guidelines for psychological distress and total annual household income < \$40,000.







## 1. Methods

#### Background

Population health surveys based on computerassisted 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, 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.

#### Survey methods

The Victorian Population Health Survey 2014 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 18 years of age or older who lived in private dwellings in Victoria. The Department of Health and Human Services' Human Research Ethics Committee approved the survey method and questionnaire content.

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

#### Stratification

In 2014 the department divided Victoria geographically into five rural and three metropolitan regions that comprised 79 LGAs. The survey sample was stratified by LGA, with a target sample size of 426 respondents per LGA. A total of 33,654 interviews were completed, including 940 interviews in languages other than English.

#### Sampling frame

Victorian Population Health Surveys up to and including 2009 used a 'list assisted' form of random digit dialling (RDD) for the sample frame. While list-assisted RDD approaches have provided a good contemporary coverage of households with a landline telephone connection, they tend to under-represent phone numbers in new exchanges and generate a relatively high proportion of non-working telephone numbers, which leads to some loss in fieldwork efficiency. An exchange-based approach to RDD was employed for the first time in 2010, using a commercial list provider to provide the RDD landline telephone sample. For the Victorian Population Health Survey 2014, a customised approach to RDD sample generation was agreed with the commercial list provider, whereby RDD numbers were generated and tested at the time of each request, rather than being drawn from a preexisting (and potentially ageing) pool of numbers.

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

- improved coverage in areas where new telephone number ranges have been activated
- improved coverage in growth corridors, periurban areas and central business district 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 or institutions, the frail aged and people with disabilities who were unable to participate in an interview.

## Move to a dual-frame sampling design in 2015.

Please note that the Victorian Population Health Survey in 2015 will use a dual-frame sampling design. This survey design uses a randomly generated frame of landline telephone numbers and a randomly generated frame of mobile phone numbers to reach a representative sample of households. Adult Victorians will be randomly selected via a landline telephone or mobile phone and invited to participate in the Victorian Population Health Survey.

The landline telephone has been the primary mode of surveying the adult population in Victoria since 2001. However, more Victorians are now using mobile phones, including those who have given up their residential landline telephones entirely and now reside in mobile-only households. In order to reduce this coverage gap and reach a more representative sample of the population, 50 per cent of the stratified random sample will be interviewed using mobile phones in 2015.

Using a dual-frame sampling design, the Victorian Population Health Survey will reach people aged less than 35 years, as well as other demographic groups, such as people who rent their homes and recent arrivals to Australia. Each of these groups is disproportionately more likely to be mobile-only. In 2014, 40 per cent of 18 to 24 year olds and 51 per cent of 25 to 34 year olds were mobile-only (ACMA, December, 2014),<sup>1</sup> and could no longer be reached via a residential landline telephone.

The socio-demographic indicators of the sampled population in Victoria are likely to change in 2015 with the introduction of dual-frame sampling. Population groups including young adults who were difficult to reach using a landline sampling frame will now be included in a dual-frame sample. This has the potential to affect the point estimates for indicators which are strongly associated with age, such as smoking status. The size of the mobile-only population will continue to increase over time and the Victorian Population Health Survey dual-frame sample will be adjusted accordingly to accommodate the growth in the proportion of the population who reside in mobile-only households.

Having a more representative sample of the population will greatly benefit the quality and representativeness of the Victorian Population Health Survey data. Population health interventions will also benefit by being able to better target specific sub-populations within the community with the use of a dual-frame sampling design.

#### Sample size

The sample size for each LGA for the Victorian Population Health Survey (conducted in 2008, 2011–12 and 2014) was approximately 426. The sample size is based on the following formula assuming a prevalence of 7.5 per cent for a variable of interest, with a confidence interval of 2.5 per cent (7.5 (5.0, 10.0) per cent), all percentages being expressed as a proportion:

Sample size ( <i>n</i> ) = $\frac{Z^2 \times p \times (1 - p)}{c^2}$ = 426				
where:				
p = proportion	(0.075)			
Z = 1.96	(Z-score of level of significance (alpha = 0.05))			
c = confidence interval	(0.025).			

<sup>1.</sup> Australian Communications and Media Authority, Communication Report 2013-14 (Dec, 2014).

# Statistically detectable difference between two estimates

While a sample size of n = 426 in each LGA permitted the detection of a variable of interest with a population prevalence of 7.5 (95% CI: 5.0, 10.0) per cent and a statistical power of 80 per cent, the sample size required to determine a difference between two estimates is considerably higher. Figure 1.1 shows the estimated sample size required to detect a statistically significant difference of 5–15 per cent between two estimates. The two estimates could be, for example, two different geographic areas or the same estimate across two different points in time. Figure 1.1 also shows that the sample size required for any given absolute difference between two estimates varies according to the prevalence of the estimate. In general, larger sample sizes are needed to detect differences between estimates with a prevalence of 50 per cent compared with estimates that have a prevalence that is higher (such as 70 per cent) or lower (such as 10 per cent) than 50 per cent.

The figure shows that to be able to detect a 5 per cent difference across time or between two LGAs in a variable with a prevalence of approximately 50 per cent (for example, the proportion of adults in Victoria who met the recommended guidelines for daily fruit intake), a sample size of 1,600 people per LGA would be required.

The LGA-level Victorian Population Health Survey with an LGA sample size of 426 is only able to statistically detect true differences of 10 per cent or more where the prevalence of the estimate of interest is in the range of 10–50 per cent. Therefore, in response to a frequently asked question about whether the 2011–12 LGA-level Victorian Population Health Survey can be directly compared with the 2014 LGA-level Victorian Population Health Survey in order to be able to track changes over time, the answer is 'yes', but only if any observed difference in the variable of interest **exceeds** the range of 7–10 per cent (depending on its prevalence). However, a difference in the range of 7–10 per cent is a very large difference in public health terms, and few health outcomes or risk factors have been observed to change by such large amounts, particularly over short periods of time.

However, at the statewide level, the Victorian Population Health Survey with a sample size of approximately 7,500 (statewide surveys) or 34,000 (LGA-level surveys) is powered to be able to detect very small differences of 2 per cent or more from year to year. This has enabled the time-series analyses that can be found throughout the report.


# Figure 1.1: Estimated sample size to detect statistically significant differences for prevalence at 10, 30 and 50 per cent

Dotted black line indicates the sample size per LGA employed in the 2008, 2011–12 and 2014 surveys.

# 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 algorithm spreads call attempts over different times of 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 any time the call centre was operational
- appointments set for five days' time after leaving the first answering machine message and eight days' time after leaving the second answering machine message.

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 18 years of age or older with the most recent birthday.

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

# Interviewing in languages other than English

Interviews were conducted in nine community languages. As for previous surveys in the series, the department provided translated survey questionnaires in Italian, Greek, Mandarin, Cantonese, Vietnamese, Arabic, Turkish, Serbian and Croatian, with a view to achieving a more representative sample in those areas with a relatively high proportion of speakers of these languages. CATI interviewers were recruited to undertake the interviews in these other languages, as required. The average interview length was 25.4 minutes.

# Participation

The response rate, defined as the proportion of households contacted that were not identified as out of scope and an interview completed, was 69.6 per cent. The response rate was higher in the rural LGAs (72.7 per cent) compared with metropolitan LGAs (65.2 per cent) and ranged from 53.2 per cent in Brimbank (C) to 79.7 per cent in Queenscliffe (B).

# Weighting

The survey data was weighted to reflect the following.

# (i) The probability of selecting the respondent within the household

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

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

## sw = nah/npl

where:

- nah = the number of adults 18 years of age or older in the household
- *npl* = the number of telephone lines in the household.

# (ii) 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 crosscells 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 older
- sex: male, female
- geography: 79 LGAs.

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 crosscell. For each cross-cell, the formula for this component was:

pbmark	ki = Ni∕∑swij
where:	
<i>i</i> =	the <i>i</i> th cross-cell
<i>j</i> =	the <i>j</i> th person in the cross-cell
Ni =	the population of the <i>i</i> th cross-cell
∑swij =	the sum of selection weights f <mark>or all</mark> respondents (1 to <i>j</i> ) in the <i>i</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*):

pwtij = swij × pbmarki	
where:	
i = the  i  th cross-cell	
j = the  j  th person in the cross-cell.	

# **Statistical analysis**

The survey data was analysed using the Stata statistical software package (Version 14.1, StatCorp LP, College Station Texas).

# **Crude rates**

A crude rate 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. Crude rates (expressed as percentages) are only presented in the report where estimates are broken down by age group. Crude rates are useful for service planning purposes as they indicate the absolute estimate of the indicator of interest.

However, in making comparisons of estimates over time, crude rates can be difficult to interpret because the age distribution of the population is also changing over time. If one does *not* take into account changes in the age distribution, any observed increases, or decreases, in the prevalence of the indicator of interest may just reflect changes in the age distribution. For example, bearing in mind that 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** rate (described below). Only age-standardised rates are reported for time-series data in this report. Similarly, only age-standardised rates are reported when making comparisons between different geographic areas. This is particularly pertinent for Victoria because rural LGAs tend to have populations characterised by larger proportions of older people compared with metropolitan LGAs.

# Age standardisation

Age-standardised rates, also known as ageadjusted rates, were calculated using the direct method of standardisation. The direct agestandardised rates that are presented in this report are based on the weighted sum of agespecific rates applied to a standard population – the 2011 estimated resident population of Victoria.

# 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 and relative standard errors, providing the likely range of the true value of an estimate and an indication of the reliability of an estimate.

# Confidence interval (95 per cent)

A confidence interval is a range in which it is estimated that the true population value lies. A common confidence interval used in statistics is the 95 per cent confidence interval. This is interpreted as: if we were to draw several random samples from the same population, on average, 19 of every 20 (95 per cent) such confidence intervals would contain the true population estimate and one of every 20 (5 per cent) would not. Ninety-five per cent confidence intervals are reported for all estimates throughout the report and used to ascertain statistical significance (see below). The width of a confidence interval expresses the precision of an estimate; the wider the interval the less the precision.

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

# Statistical significance

Only statistically significant trends and patterns are reported for the Victorian Population Health Survey 2014. Statistical significance provides an indication of how likely a result is due to chance. With the exception of time trends over time (see below), statistically significant differences between estimates were deemed to exist where the 95 per cent confidence intervals for percentages 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**

A relative standard error (RSE) provides an indication of the reliability of an estimate. Estimates with RSEs less than 25 per cent are generally regarded as 'reliable' for general use. The percentages presented in tables and graphs in this report have RSEs less than 25 per cent, unless otherwise stated. Rates 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, percentages with RSEs higher than 50 per cent were not considered reliable estimates and have not been presented. A double asterisk (\*\*) has been included in tables and graphs where the percentage would otherwise appear, indicating the relevant RSE was higher than 50 per cent.

Relative standard error (%) = 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 trends across 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 the 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.

# Profile of survey respondents

Known *pbmarks* for selected data items may be used to assess the representativeness of the sample. Table 1.1 shows the profile of respondents in the Victorian Population Health Survey 2014 and indicates the following:

- Women were more likely than men to participate in the survey.
- Adults 18–34 years of age were less likely to participate in the survey.
- Adults 55 years of age or older were more likely to participate in the survey.

			-		
	Benchmark dataª (%)	Unweighted survey sample (%)	Weighted survey sample (%)		
Sex					
Males	48.9	38.6	49.0		
Females	51.1	61.4	51.0		
Age group (years)					
18–24	13.0	2.4	12.6		
25–34	18.9	3.9	19.3		
35–44	18.4	10.8	18.1		
45–54	17.3	16.6	16.9		
55–64	14.5	22.4	14.3		
65+	18.0	43.8	18.7		

# Table 1.1: Profile of respondents in the Victorian Population Health Survey 2014

<sup>a</sup> Service Planning, Department of Health, 2011, State Government of Victoria

# **Modifiable risk factors**

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 is posited around attempting to effect a change in people's lifestyle choices and behaviours, where there is considerable scope for health gain.

In quantifying the relative contribution of various modifiable risk factors, Begg and colleagues (2008) determined that 14 selected risk factors accounted for 32.2 per cent of the total burden of death, disease and injury.

Table 1.2 summarises the 14 risk factors and their relative contributions.

Therefore, 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 report presents information on modifiable risk factors that influence health including smoking, alcohol consumption, fruit and vegetable intake, water intake, consumption of sugarsweetened soft drinks, physical activity, pre-obese (overweight) and obesity, psychological distress and hypertension.

# Table 1.2: 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 attributed health loss	32.2

Source: Begg et al. 2008.





# 2. Smoking



PUIT F

4

# Key findings

Current smoking











The proportion of current smokers decreased for males and females between 2003 and 2014



# Introduction

There are several ways of classifying smoking status, depending on the question being asked. The Victorian Population Health Survey defines smokers as 'daily' or 'occasional' and combines the two to report on 'current smokers'. A person is categorised as an 'ex-smoker' if he/she has smoked at least 100 cigarettes or a similar amount of tobacco in their lifetime. By contrast Cancer Council Victoria defines smokers as 'regular smokers' if they smoke daily or at least weekly, and 'irregular smokers' if they smoke less than weekly (Alexander et al. 2012). It defines 'former smokers' in the same way as the Victorian Population Health Survey defines 'ex-smokers'.

The Australian Bureau of Statistics (ABS) reports on both 'current daily smokers' and 'current smokers', which includes current daily, weekly and less than weekly smokers (ABS 2012).

# **Smoking status in Victoria**

The trend over time of the age-adjusted prevalence of smoking is investigated as part of the Victorian Population Health Survey (Table 2.1 and Figure 2.1). The prevalence of current smoking in Victoria continues to decline in both men and women. Between 2003 and 2014, the prevalence of current smoking declined by almost 40 per cent (3.6 per cent per year), representing an absolute percentage point reduction of 8.8 per cent over 11 years. The decline in the prevalence of smoking was particularly marked among women, where the 2014 estimate was significantly lower than the estimate in 2010, and there has been a relative decline of 42.3 per cent since 2003. There was a lower relative decline among men of 38.2 per cent.

	Males				Females	5	People			
	%	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	19.1	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	
2011–2012#	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	
2014#	14.7	13.4	16.1	11.6	10.6	12.5	13.1	12.3	14.0	

# Table 2.1: Proportion (%) of current smokers, by survey year and sex, Victoria, 2003–2014

Data are age-standardised to the 2011 Victorian population.

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

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

There was statistically significant decline in the prevalence of current smokers in both males and females.

Survey sample size: # ~34,000; \* ~3,600; remaining surveys ~7,500.



# Figure 2.1: Proportion (%) of current smokers, by survey year and sex, Victoria, 2003–2014

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.

There was statistically significant decline in the prevalence of current smokers in both males and females

Survey sample size: # ~34,000; \* ~3,600; remaining surveys ~7,500.

Table 2.2 and Figure 2.2 show the smoking status in Victoria, by age group and sex. In Victoria in 2014, 14.7 per cent of men, 11.6 per cent of women and 13.1 per cent of adults reported being current smokers. Compared with all Victorian women and adults respectively, women and adults 45–54 years of age had a significantly higher proportion of current smoking. Overall the prevalence of smoking was significantly higher among men compared with women.

		Curi	rent smo	oker	E	Ex-smok	er	Non-smoker			
		%	95%	6 CI	%	95%	% CI	%	959	% CI	
	(years)		LL	UL		LL	UL		LL	UL	
Males	18–24	17.9	13.3	23.5	5.1*	3.0	8.7	76.7	70.6	81.8	
	25–34	17.7	13.6	22.6	18.7	14.3	24.1	63.4	57.3	69.0	
	35–44	15.7	13.3	18.4	27.1	23.9	30.5	57.0	53.3	60.5	
	45–54	16.5	14.3	18.8	29.3	26.7	32.1	53.5	50.5	56.5	
	55–64	13.9	12.4	15.7	38.8	36.4	41.3	46.7	44.2	49.2	
	65–74	9.0	7.7	10.5	47.7	5.4	50.1	42.3	40.0	44.7	
	75–84	4.7	3.6	6.1	50.9	47.7	54.0	43.0	39.9	46.1	
	85+	2.7*	1.2	5.8	48.9	42.6	55.2	47.7	41.4	54.1	
	Victoria	14.7	13.4	16.1	28.2	26.9	29.6	56.6	54.9	58.3	
Females	18–24	12.2	8.9	16.5	5.7*	3.4	9.4	82.1	77.0	86.3	
	25–34	13.0	10.2	16.3	19.6	15.6	24.2	67.1	62.1	71.6	
	35–44	12.9	11.3	14.8	24.4	22.2	26.7	62.2	59.6	64.7	
	45–54	15.4	3.8	17.2	28.0	26.0	30.1	56.1	53.8	58.5	
	55–64	11.0	9.8	12.4	29.3	27.4	31.3	58.9	56.8	61.0	
	65–74	7.1	6.1	8.2	26.3	24.5	28.2	65.6	63.6	67.5	
	75–84	3.5	2.7	4.4	20.6	18.6	22.7	74.1	71.8	76.3	
	85+	1.7*	0.8	3.4	22.6	18.7	27.0	74.4	69.9	78.5	
	Victoria	11.6	10.6	12.5	21.9	20.7	23.1	65.9	64.5	67.3	
Persons	18–24	15.1	12.1	18.6	5.4	3.7	7.8	79.3	75.4	82.7	
	25–34	15.3	12.8	18.2	19.2	16.1	22.6	65.2	61.4	68.9	
	35–44	14.3	12.8	15.9	25.7	23.8	27.7	59.6	57.4	61.8	
	45–54	15.9	14.6	17.4	28.7	27.0	30.4	54.8	52.9	56.7	
	55–64	12.4	11.4	13.5	34.0	32.4	35.6	52.9	51.3	54.6	
	65–74	8.0	7.2	8.9	36.2	34.6	37.7	54.9	53.3	56.5	
	75–84	4.0	3.3	4.8	34.6	32.7	36.6	59.7	57.6	61.7	
	85+	2.1*	1.2	3.6	33.7	30.1	37.5	63.1	59.3	66.8	
	Victoria	13.1	12.3	14.0	24.8	23.9	25.7	61.5	60.4	62.6	

# Table 2.2: Smoking status, by age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* Estimate has a RSE 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.



# Figure 2.2: Proportion (%) of current smokers, by age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. 95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

Table 2.3 shows the prevalence of current smoking by departmental region. Men, women and adults who lived in Gippsland Region had a significantly higher prevalence of smoking compared with all Victorian men, women and adults. For men, the proportion of current smokers was higher in rural areas (18.0 per cent) compared with the metropolitan area (13.7 per cent). Similarly, the proportion of current smokers was higher in adults living in rural areas (15.5 per cent) compared with metropolitan areas (13.1 per cent).

	Cur	rent smo	oker Ex-smoker		ker	Ν	lon-smo	ker	
	%	95%	% CI	%	95	5% CI	%	95	% CI
Region		LL	UL		LL	UL		LL	UL
Males (18+ years)									
Eastern Metropolitan	11.9	9.2	15.3	29.6	26.0	33.3	57.9	53.6	62.1
North & West Metropolitan	14.1	12.0	16.4	28.6	26.3	30.9	56.9	54.0	59.7
Southern Metropolitan	14.9	12.1	18.2	27.9	25.0	31.0	56.7	52.9	60.5
All metropolitan regions	13.7	12.3	15.4	28.4	26.8	30.1	57.4	55.3	59.4
Barwon-South Western	16.2	11.4	22.5	25.6	21.2	30.6	57.6	50.5	64.4
Gippsland	23.3	7.2	30.7	27.2	22.9	31.8	48.7	41.7	55.8
Grampians	17.9	12.9	24.2	27.8	23.3	32.7	53.9	47.4	60.2
Hume	19.6	15.7	24.1	30.1	25.9	34.7	49.9	44.5	55.4
Loddon Mallee	15.6	12.6	19.1	26.4	23.3	29.7	56.7	52.3	61.0
All rural regions	18.0	15.7	20.7	27.3	25.3	29.5	53.9	50.9	56.8
Victoria	14.7	13.4	16.1	28.2	26.9	29.6	56.6	54.9	58.3
Females (18+ years)									
Eastern Metropolitan	7.7	5.9	10.0	20.4	17.8	23.4	71.5	68.1	74.6
North & West Metropolitan	12.1	10.5	13.9	19.9	18.1	21.8	67.4	65.1	69.6
Southern Metropolitan	12.8	10.8	15.0	23.1	20.2	26.2	63.6	60.3	66.8
All metropolitan regions	11.2	10.1	12.3	21.1	19.7	22.6	67.2	65.5	68.8
Barwon-South Western	8.3	6.1	11.3	27.9	22.2	34.4	62.9	56.6	68.9
Gippsland	16.4	13.0	20.4	24.5	21.1	28.2	58.9	54.2	63.4
Grampians	13.3	11.0	16.0	26.2	22.3	30.5	58.7	53.8	63.4
Hume	12.6	10.4	15.2	24.5	22.1	27.0	62.5	59.3	65.6
Loddon Mallee	16.0	11.7	21.3	20.5	17.9	23.3	63.0	57.7	68.0
All rural regions	13.0	11.4	14.6	24.7	22.7	26.8	61.6	59.2	63.9
Victoria	11.6	10.6	12.5	21.9	20.7	23.1	65.9	64.5	67.3
People (18+ years)									
Eastern Metropolitan	9.8	8.1	11.8	24.7	22.5	27.1	65.0	62.3	67.7
North & West Metropolitan	13.1	11.8	14.6	23.8	22.4	25.3	62.5	60.7	64.3
Southern Metropolitan	13.8	12.1	15.8	25.3	23.3	27.5	60.4	57.8	62.8
All metropolitan regions	12.4	11.5	13.4	24.5	23.4	25.6	62.5	61.2	63.8
Barwon-South Western	12.3	9.4	16.0	26.5	22.8	30.7	60.4	55.5	65.2
Gippsland	20.0	16.2	24.5	25.9	23.1	29.0	53.6	49.1	58.0
Grampians	15.7	12.6	19.4	26.9	23.9	30.1	56.3	52.2	60.4
Hume	16.1	13.8	18.7	27.3	24.7	30.0	56.3	53.0	59.5
Loddon Mallee	15.1	12.4	18.3	23.3	21.2	25.4	60.6	57.1	64.0
All rural regions	15.5	14.1	17.1	25.9	24.4	27.4	57.8	55.9	59.7
Victoria	13.1	12.3	14.0	24.8	23. <u>9</u>	25.7	61 <u>.5</u>	60. <u>4</u>	62.6

# Table 2.3: Smoking status, by Department of Health and Human Services region and sex, Victoria, 2014

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

# Smoking status by departmental region and local government area

HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MANSFIELD MARIB' RNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONEE VALLEY MOOR/ BOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NILLUMBIK NORTI STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOOL WELLING TON WEST WIMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARRIAME ACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDARA BRIN MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONEE VALLE MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NILLUMB NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUTH GIPPS MMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARF ACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDAF BANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMI DAREBIN EAST GIPPS FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI GREATER DANDLOONG REATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON IORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MAN FIELD MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE VALLEY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI LUMBIK NORTHERN CRAMPIANS CORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT SLAND STONNINGTON STRATHBO IE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOO INGTON WEST WIMMERA WHITEHN IAMBIACK ALPINE ARARAT BALLARAT WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGE S COAST BAW BAW BAYSIDE BENALLA BOROONI ARA BRIMBANK BULOKE CAMPASPE CARDINA. COSEY CENTRAL COSEFIELDS CODEC-OTWAY CORANGAMIN DARE BIN EAST GIPPSLATID FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI DIGC GREATER DANDENONG GREATER GEELONG OREATER SHEPPARTON HEPBURN HINDMARSH HOBSON BAY HORSHAM HUME INDIGO KINGSTON KNOX LATPOBE LODDON MACEDON RANGES MANNINGHAM MANS FIELD MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MORA MONASH MOONE VALLEY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEX MOER MOUNE MURRINDINDI NII LUMI IK NORTHERN GRAMPIANS PORT PHILLUP YRENEES QUEENSCLIEFE SOUTHERN COMPIANS SOUT GIPP SLAND STONNINGTON STRATHBOGIE SUBF COAST SWAN HILD TOWONG WANGARATTA WARNAMBOC WELLINGTON WEST WIMMERA WHITEHOUSE THITTLESEA WODONGA WANDHAM YARRA YARRA RANGE YARF MABIACK ALPINE ARARAT BALLARATEBANY LEE BASS COAST BAW BAW BAYSIDE BENALLA BORCONI ARA BRIMBANK BULOKE CAMPASPE CARDINA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANG MIL ARA BRIMBANK BULOKE CAMPASPE CARDINA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANG MIL DARE BIN EAST GIPPSLAND FOAKSTON GANNAWARKA GLENERA GLENELG GOLDEN PLAINS GREATER BALLA BORCONI ARA BRIMBANK BULOKE CAMPASPE CARDINA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANG MIL DARE BIN EAST GIPPSLAND FOAKSTON GANNAWARKA GLENERA GLENELG GOLDEN PLAINS GREATER BEN DIGC GREATER DANDENONG GREATER GELONICAR SHEPPARTON HEPBUEN HINDMARSH HOBSON BAY JORSHAM HUME INDIGO KINGSTON JANA ARA RA BELLONICAR SHEPPARTON HEPBUEN HINDMARSH HOBSON BAY JORSHAM HUME INDIGO KINGSTON JANA ARA BLAR BORD DI ANACEDON PLAINS GREATER CELONICAR SHEPPARTON HEPBUEN HINDMARSH HOBSON BAY JORSHAM HUME INDIGO KINGSTON JANA ARA BLED DI CON MACEDON PLAINS GREATER BEN FIELD MARIBYRNONG MAROONDAH MELBOUNNE MENTON MILDURA MITCHELL MOIRA MONASH MOONE VALLEY HANRARD MAROONDAH MELBOUNNE FOR PLAINS MANNINGHAM MANS FIELD MARIBYRNONG MAROONDAH MELBOUNNE FOR PLAINS MOONE VALLEY HANRARD MARONDA MARONDA MARONDA HALBOONDA MARONDA SEY CENTR BRIMBANK BULOKE CAMPASPE CARDIN SCOL **JULA MOUNT ALEX** MORELAND MORNIN VALLEY N ANDER MOYNE MURRINDINDI NI MPIANS POR **NEES QUEENSCL** LUMBIK NORTHERN G AN WANGARATTA WARRNAMBOO **GIPPSLAND STONNINGTON** TRATH OGIE SURF COAS WELLINGTON WEST WIMMERA YARRIAMBIACK ALPINE ARARAT BALLARAT ARA BRIMBANK BULOKE CAMPASPE CARDINIA FIELD MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE VALLEY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI LUMBIK NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT GIPPSLAND STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOC WELLINGTON WEST WIMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGE YARRIAMBIACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONI ARA BRIMBANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMI

Table 2.4 shows the prevalence of current smoking by LGA in Eastern Metropolitan Region. The LGAs of Boroondara (C) and Whitehorse (C) had a significantly lower proportion of current smokers compared with Victoria.

# Table 2.4: Smoking status, by LGA, in Eastern Metropolitan Region, Victoria, 2014

	Current smoker			E	x-smoke	er	Non-smoker			
	%	95%	6 CI	%	95%	% CI	%	95%	% CI	
LGA		LL	UL		LL	UL		LL	UL	
Boroondara (C)	7.2*	4.1	12.3	22.1	17.4	27.6	70.7	64.2	76.4	
Knox (C)	13.3	8.5	20.3	23.3	18.0	29.5	62.8	55.1	69.9	
Manningham (C)	8.8*	4.9	15.3	20.9	16.2	26.5	69.6	62.3	76.0	
Maroondah (C)	13.4	8.2	21.0	30.9	22.9	40.2	55.5	46.2	64.5	
Monash (C)	10.8	7.0	16.2	27.2	22.2	32.9	62.0	55.4	68.1	
Whitehorse (C)	5.2*	3.0	8.9	23.7	17.8	30.8	69.8	62.5	76.1	
Yarra Ranges (S)	8.9	6.0	13.0	26.0	21.3	31.2	64.9	59.7	69.8	
Eastern Metropolitan Region	9.8	8.1	11.8	24.7	22.5	27.1	65.0	62.3	67.7	
Victoria	13.1	12.3	14.0	24.8	23.9	25.7	61.5	60.4	62.6	

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 2.5 shows the prevalence of current smoking by LGA in North & West Metropolitan Region. There were no significant differences between the proportion of people who were current smokers in LGAs and Victoria.

# Table 2.5: Smoking status, by LGA, in North & West Metropolitan Region, Victoria, 2014

	Cur	Current smoker			x-smoke	er	Non-smoker			
	%	95%	6 CI	%	95%	% CI	%	959	% CI	
LGA		LL	UL		LL	UL		LL	UL	
Banyule (C)	8.6	5.2	13.8	23.8	18.7	29.6	67.5	60.9	73.5	
Brimbank (C)	17.5	13.4	22.5	19.3	15.3	24.0	62.0	56.4	67.3	
Darebin (C)	12.1*	7.1	19.8	26.3	20.5	33.0	61.0	52.7	68.7	
Hobsons Bay (C)	11.8	8.3	16.5	25.3	18.4	33.7	61.9	53.9	69.2	
Hume (C)	15.5	11.3	20.8	23.9	19.8	28.6	59.6	53.7	65.2	
Maribyrnong (C)	15.7	10.5	22.8	21.5	17.5	26.0	62.7	55.3	69.5	
Melbourne (C)	8.0*	4.5	14.0	22.6	18.1	27.9	69.1	62.4	75.0	
Melton (S)	11.8	8.9	15.4	25.6	20.6	31.3	62.4	56.4	68.0	
Moonee Valley (C)	12.6	8.1	19.2	23.7	19.2	28.8	62.7	55.9	69.0	
Moreland (C)	15.1	10.4	21.6	27.9	22.0	34.7	56.9	49.4	64.0	
Nillumbik (S)	10.7	6.8	16.3	20.7	16.7	25.3	67.8	61.4	73.6	
Whittlesea (C)	15.1	11.3	19.8	22.9	18.7	27.7	61.7	56.0	67.0	
Wyndham (C)	13.1	9.7	17.4	27.5	22.5	33.0	58.6	52.7	64.2	
Yarra (C)	14.3	8.7	22.6	27.1	21.5	33.7	58.	49.2	66.7	
North & West Metropolitan Region	13.1	11.8	14.6	23.8	22.4	25.3	62.5	60.7	64.3	
Victoria	13.1	12.3	14.0	24.8	23.9	25.7	61.5	60.4	62.6	

Data were age-standardised to the 2011 Victorian population.

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}~$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 2.6 shows the prevalence of current smoking by LGA in Southern Metropolitan Region. The LGA of Port Philip (C) had a significantly lower proportion of current smokers compared with Victoria.

### Table 2.6: Smoking status, by LGA, in Southern Metropolitan Region, Victoria, 2014

	Cur	Current smoker			Ex-smok	er	N	on-smol	ker
	%	95%	6 CI	%	95	% CI	%	95%	% CI
LGA		LL	UL		LL	UL		LL	UL
Bayside (C)	9.5*	4.8	17.8	25.3	19.7	32.0	65.1	56.4	72.9
Cardinia (S)	18.4	13.6	24.4	30.2	24.4	36.8	51.2	44.4	57.9
Casey (C)	16.3	11.8	22.0	25.2	20.8	30.2	57.8	51.3	64.1
Frankston (C)	17.2	12.8	22.7	26.1	21.6	31.2	55.8	49.8	61.7
Glen Eira (C)	18.2	12.7	25.5	21.3	17.2	26.0	60.2	52.8	67.1
Greater Dandenong (C)	14.5	9.7	21.1	18.3	14.1	23.4	67.0	60.0	73.3
Kingston (C)	13.9	9.3	20.3	20.8	16.5	25.8	64.3	58.0	70.1
Mornington Peninsula (S)	13.1	8.1	20.3	30.5	23.5	38.5	56.1	47.2	64.6
Port Phillip (C)	7.4	5.0	10.7	32.9	24.0	43.3	58.8	48.7	68.3
Stonnington (C)	7.9*	4.2	14.5	27.4	21.7	34.0	64.5	57.0	71.5
Southern Metropolitan Region	13.8	12.1	15.8	25.3	23.3	27.5	60.4	57.8	62.8
Victoria	13.1	12.3	14.0	24.8	23.9	25.7	61.5	60.4	62.6

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}\,$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 2.7 shows the prevalence of current smoking by LGA in Barwon-South Western Region. There were no significant differences between the proportion of people who were current smokers in these LGAs and Victoria.

# Table 2.7: Smoking status, by LGA, in Barwon-South Western Region, Victoria, 2014

	Cu	Current smoker			Ex-smok	er	Non-smoker			
	%	95	% CI	%	95	% CI	%	95	% CI	
LGA		LL	UL	-	LL	UL		LL	UL	
Colac-Otway (S)	13.6*	8.1	21.8	20.8	17.1	25.0	64.4	56.5	71.6	
Corangamite (S)	10.9	6.6	17.5	27.6	21.9	34.1	61.4	53.7	68.5	
Glenelg (S)	16.0	11.4	22.1	22.9	18.9	27.5	60.4	54.3	66.2	
Greater Geelong (C)	12.2	8.1	17.9	27.9	21.9	34.8	59.1	51.2	66.5	
Moyne (S)	12.6	7.6	20.0	28.8	23.7	34.5	58.2	50.6	65.3	
Queenscliffe (B)	14.6*	7.0	28.0	28.3	21.7	35.9	56.4	48.1	64.3	
Southern Grampians (S)	9.7*	5.8	15.7	26.6	20.0	34.3	63.1	54.9	70.6	
Surf Coast (S)	10.0	6.4	15.4	26.7	21.5	32.7	62.	55.5	69.8	
Warrnambool (C)	9.7*	5.7	16.0	23.4	19.4	28.0	66.5	59.8	72.6	
Barwon-South Western Region	12.3	9.4	16.0	26.5	22.8	30.7	60.4	55.5	65.2	
Victoria	13.1	12.3	14.0	24.8	23.9	25.7	61.5	60.4	62.6	

Data were age-standardised to the 2011 Victorian population.

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 2.8 shows the prevalence of current smoking by LGA in Gippsland Region. The LGAs of Baw Baw (S) and Latrobe (C) had a significantly higher proportion of current smokers compared with Victoria.

# Table 2.8: Smoking status, by LGA, in Gippsland Region, Victoria, 2014

	Cur	Current smoker			Ex-smoke	er	Non-smoker			
	%	95%	6 CI	%	95% CI		%	95% CI		
LGA		LL	UL		LL	UL		LL	UL	
Bass Coast (S)	16.3	10.7	23.9	36.8	26.8	48.1	46.9	36.3	57.8	
Baw Baw (S)	29.7	22.0	38.7	19.4	15.5	24.1	50.6	42.8	58.4	
East Gippsland (S)	11.8	7.6	17.7	28.0	20.0	37.7	59.3	49.3	68.6	
Latrobe (C)	24.4	16.8	33.9	22.7	17.2	29.3	52.1	42.6	61.4	
South Gippsland (S)	10.4	7.2	14.8	31.5	25.2	38.6	57.9	50.7	64.7	
Wellington (S)	14.8	10.3	20.8	26.4	21.6	31.9	58.	51.9	65.1	
Gippsland Region	20.0	16.2	24.5	25.9	23.1	29.0	53.6	49.1	58.0	
Victoria	13.1	12.3	14.0	24.8	23.9	25.7	61.5	60.4	62.6	

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here. Table 2.9 shows the prevalence of current smoking by LGA in the Grampians Region. The LGA of Ararat (RC) had a significantly higher proportion of current smokers compared with Victoria.

### Table 2.9: Smoking status, by LGA, in Grampians Region, Victoria, 2014

	Cur	rent smo	oker	E	x-smoke	er	Nc	on-smol	ker
	%	95%	6 CI	%	95%	% CI	%	<b>95</b> 9	% CI
LGA		LL	UL		LL	UL		LL	UL
Ararat (RC)	22.1	16.4	29.1	26.8	20.7	34.0	50.6	43.8	57.3
Ballarat (C)	15.0	9.9	22.0	25.7	20.2	32.0	57.5	49.9	64.8
Golden Plains (S)	18.7	12.5	26.9	26.7	22.1	31.8	54.2	46.5	61.8
Hepburn (S)	19.8	12.6	29.7	22.8	16.6	30.5	57.2	47.2	66.7
Hindmarsh (S)	17.2	11.4	25.2	22.9	18.6	27.8	59.3	51.5	66.6
Horsham (RC)	9.2	5.8	14.4	22.7	18.5	27.5	67.5	61.6	72.8
Moorabool (S)	15.6	10.8	22.0	31.6	25.3	38.7	52.7	45.2	60.1
Northern Grampians (S)	16.6	11.1	24.0	26.0	19.6	33.5	57.2	48.8	65.1
Pyrenees (S)	16.8*	10.1	26.8	32.8	25.1	41.6	49.8	40.0	59.7
West Wimmera (S)	14.6	10.0	20.9	26.4	21.3	32.3	58.9	51.8	65.6
Yarriambiack (S)	12.1	8.3	17.4	27.4	18.3	38.9	60.3	49.4	70.3
Grampians Region	15.7	12.6	19.4	26.9	23.9	30.1	56.3	52.2	60.4
Victoria	13.1	12.3	14.0	24.8	23.9	25.7	61.5	60.4	62.6

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 2.10 shows the prevalence of current smoking by LGA in Hume Region. The LGAs of Mansfield (S), Moira (S) and Murrindindi (S) had a significantly higher proportion of current smokers compared with Victoria.

# Table 2.10: Smoking status, by LGA, in Hume Region, Victoria, 2014

	Cur	rent sm	oker	F	Ex-smok	er	N	on-smol	ker
	%	95%	% CI	%	95%	% CI	%	95%	% CI
LGA		LL	UL		LL	UL		LL	UL
Alpine (S)	12.7*	6.3	23.9	27.8	20.9	35.9	58.9	48.4	68.6
Benalla (RC)	14.6	9.7	21.4	31.9	23.5	41.7	52.9	43.5	62.1
Greater Shepparton (C)	12.9	8.7	18.7	25.0	19.8	31.0	62.0	54.7	68.8
Indigo (S)	10.8*	5.2	20.9	29.7	22.0	38.6	59.4	49.5	68.6
Mansfield (S)	29.2	18.4	43.0	26.5	22.1	31.6	43.9	31.8	56.7
Mitchell (S)	12.2	7.7	18.8	33.2	25.5	42.0	54.0	45.1	62.6
Moira (S)	22.2	14.9	31.6	25.8	20.7	31.6	51.5	42.7	60.2
Murrindindi (S)	24.4	17.2	33.4	24.4	19.0	30.7	50.2	41.6	58.8
Strathbogie (S)	13.6	8.6	20.8	28.6	22.2	36.0	57.3	48.8	65.3
Towong (S)	13.5	8.1	21.5	27.9	22.9	33.6	58.0	50.1	65.6
Wangaratta (RC)	18.9*	11.0	30.4	26.1	21.2	31.8	54.9	44.4	65.0
Wodonga (RC)	18.3	12.6	25.8	25.6	21.2	30.5	55.8	48.3	63.0
Hume Region	16.1	13.8	18.7	27.3	24.7	30.0	56.3	53.0	59.5
Victoria	13.1	12.3	14.0	24.8	23.9	25.7	61.5	60.4	62.6

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 2.11 shows the prevalence of current smoking by LGA in Loddon Mallee Region. The LGAs of Campaspe (S) and Loddon (S) had a significantly higher proportion of current smokers compared with Victoria.

# Table 2.11: Smoking status, by LGA, in Loddon Mallee Region, Victoria, 2014

	Cur	rent sm	oker	E	x-smoke	er	No	on-smok	ær
	%	95%	% CI	%	95%	% CI	%	95%	% CI
LGA		LL	UL		LL	UL		LL	UL
Buloke (S)	18.5*	11.1	29.4	22.2	16.6	29.0	58.8	48.5	68.4
Campaspe (S)	21.9	14.7	31.3	23.2	18.6	28.6	54.0	45.4	62.4
Central Goldfields (S)	20.8	13.6	30.5	26.8	19.1	36.1	52.3	42.3	62.2
Gannawarra (S)	12.0*	7.0	19.9	16.0	13.2	19.2	71.8	64.6	78.0
Greater Bendigo (C)	13.0	8.7	19.2	22.2	18.4	26.5	62.9	56.1	69.3
Loddon (S)	23.0	17.1	30.2	21.7	14.2	31.6	55.0	45.2	64.4
Macedon Ranges (S)	8.0	5.6	11.3	25.3	20.9	30.2	66.1	61.0	70.9
Mildura (RC)	18.7	11.7	28.6	23.8	17.6	31.5	57.3	47.8	66.3
Mount Alexander (S)	10.6	6.9	16.1	25.2	19.5	31.9	63.6	57.0	69.8
Swan Hill (RC)	15.1	9.2	23.9	23.5	18.8	29.0	60.9	52.7	68.6
Loddon Mallee Region	15.1	12.4	18.3	23.3	21.2	25.4	60.6	57.1	64.0
Victoria	13.1	12.3	14.0	24.8	23.9	25.7	61.5	60.4	62.6

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below: \* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

# What does Map 2.1 tell us?

In Map 2.1 the 79 LGAs have been ranked according to the proportion of adults who were current smokers. The LGAs were then divided into 4 groups of 16 LGAs (labelled poorest, fair, good and very good results) with decreasing proportions of current smokers and a final group of 15 LGAs with the best results (i.e. the smallest proportions of current smokers).



# Map 2.1: Proportion of adults who are current smokers, by LGA, Victoria, 2014

Note: The local government area (LGA) ID is based on the alphabetical order of the LGA names (see Table iii, page 17).

The relationship was investigated between socioeconomic status (SES) and the age-adjusted prevalence of smoking status, using total annual household income as a measure of SES (Figure 2.3). The proportion of current smokers decreased with increasing total annual household income in both men and women.





Data are age-adjusted to the 2011 population of Victoria. 95% CI = 95 per cent confidence interval. Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

Table 2.12 shows the prevalence of smoking among men according to selected socioeconomic determinants. When compared with all Victorian men, a significantly higher proportion of current smokers were reported among men with the following characteristics:

- did not complete a high school education
- total annual household income of less than \$40,000.

Table 2.13 shows the prevalence of smoking among women according to selected socioeconomic determinants. When compared with all Victorian women, a significantly higher proportion of current smokers were reported among women with the following characteristics:

- did not complete a high school education
- total annual household income of less than \$40,000.

Table 2.12: Smoking status, by selected socioeconomic determinants in males, Victoria, 2014

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	Lun	rent smo	oker	Ш	X-SMOK		Ž	on-smok	LD D
	%	95%	6 CI	%	953	% CI	%	95%	Ū
		ΓΓ	UL		LL	UL		ΓΓ	UL
All males	14.7	13.4	16.1	28.2	26.9	29.6	56.6	54.9	58.3
Country of birth									
Australia	15.2	13.7	16.8	27.1	25.6	28.6	57.2	55.3	59.2
Overseas	13.1	10.6	16.2	31.2	28.2	34.4	55.1	51.3	58.8
Language spoken at home									
English	14.7	13.2	16.3	28.4	27.0	29.9	56.4	54.4	58.3
Language other than English	14.8	12.6	17.4	27.6	24.6	30.8	56.9	53.4	60.3
Area of Victoria									
Rural	13.7	12.3	15.4	28.4	26.8	30.1	57.4	55.3	59.4
Metropolitan	18.0	15.7	20.7	27.3	25.3	29.5	53.9	50.9	56.8
Education level									
Did not complete high school	22.7	18.2	28.0	30.0	25.2	35.3	46.7	41.5	52.0
Completed high school, or TAFE, or trade certificate, or diploma	18.1	16.2	20.2	31.2	29.2	33.4	50.1	47.6	52.7
University, or some other tertiary institute degree, including postgraduate diploma or degree	7.3	6.0	0.6	24.3	22.3	26.5	68.0	65.5	70.4
Employment status									
Employed	14.6	13.0	16.5	26.1	24.3	27.9	58.9	56.5	61.1
Unemployed	20.6	15.3	27.1	31.0	22.7	40.7	47.2	39.1	55.5
Not in labour force	19.1	15.3	23.6	28.9	24.9	33.4	51.3	46.3	56.3
Total annual household income									
< \$40,000	23.2	19.0	28.0	29.0	24.9	33.4	47.4	42.1	52.7
\$40,000 to < \$100,000	15.0	12.8	17.6	27.7	25.5	30.1	56.9	53.8	59.8
≥ \$100,000	10.9	8.8	13.4	28.2	25.8	30.7	60.7	57.5	63.7

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Note that estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

	Cur	rent smo	ker	Û	k-smoke	-	No	n-smok	er
	%	95%	Ū	%	95%	CI	%	95%	Ū
		ΓΓ	UL		LL	UL		ΓΓ	٥L
All females	11.6	10.6	12.5	21.9	20.7	23.1	65.9	64.5	67.3
Country of birth									
Australia	12.8	11.7	14.0	24.6	23.1	26.1	62.0	60.3	63.6
Overseas	8.3	6.8	10.0	15.5	13.9	17.2	75.8	73.5	77.9
Language spoken at home									
English	12.5	11.4	13.7	24.5	23.2	25.8	62.3	60.7	63.9
Language other than English	8.9	7.4	10.7	13.4	11.0	16.1	77.4	74.5	80.1
Area of Victoria									
Rural	11.2	10.1	12.3	21.1	19.7	22.6	67.2	65.5	68.8
Metropolitan	13.0	11.4	14.6	24.7	22.7	26.8	61.6	59.3	639
Education level									
Did not complete high school	24.5	20.3	29.3	20.7	18.2	23.6	54.4	49.7	59.0
Completed high school, or TAFE, or trade certificate, or diploma	13.8	12.5	15.3	24.3	22.7	26.0	61.1	59.2	63.0
University, or some other tertiary institute degree, including postgraduate diploma or degree	7.3	6.0	8.8	21.6	19.4	24.0	70.5	67.9	72.9
Employment status									
Employed	11.1	9.9	12.5	23.4	21.4	25.5	62.3	66.9	61.1
Unemployed	16.2	12.2	21.1	24.1	18.8	30.3	59.5	52.6	65.9
Not in labour force	12.6	11.0	14.3	20.2	18.5	22.0	66.8	64.5	68.9
Total annual household income									
< \$40,000	19.8	17.0	22.8	22.1	18.8	25.8	57.7	53.9	61.4
\$40,000 to < \$100,000	12.5	10.7	14.6	23.1	21.2	25.2	63.7	61.1	66.2
≥ \$100,000	7.5	6.1	9.1	29.6	26.1	33.3	62.7	59.0	66.4

Table 2.13: Smoking status, by selected socioeconomic determinants in females, Victoria, 2014

Data were age-standardised to the 2011 Victorian population.

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

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

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Table 2.14 shows the prevalence of smoking among men according to modifiable risk factors and chronic conditions. When compared with all Victorian men, a significantly higher proportion of current smokers were reported among men with the following characteristics:

- high or very high levels of psychological distress
- reported being in fair or poor health
- underweight.

Table 2.15 shows the prevalence of smoking among women according to modifiable risk factors contributing to chronic disease. When compared with all Victorian women, a significantly higher proportion of current smokers were reported among women with the following characteristics:

- high or very high levels of psychological distress
- did not meet either guideline for fruit or vegetable consumption
- increased lifetime risk of alcohol-related harm
- reported being in fair or poor health
- underweight.

# Table 2.14: Smoking status, by selected modifiable risk factors in males, Victoria, 2014

	Curr	ent smo	ker	ш	x-smok€	er.	No	n-smok	er
	%	95%	C	%	95%	6 CI	%	95%	CI
		Ц	٦L		Н	٦C		Н	٦
All males	14.7	13.4	16.1	28.2	26.9	29.6	56.6	54.9	58.3
Psychological distress <sup>a</sup>									
Low (K10 score < 16)	12.7	11.1	14.5	27.5	26.0	29.1	59.4	57.2	61.5
Moderate (K10 score 16–21)	15.5	13.0	18.3	29.4	26.6	32.4	54.6	51.2	58.1
High / very high (K10 score 22+)	24.7	20.6	29.4	30.8	26.0	36.1	43.8	38.6	49.2
Physical activity <sup>b</sup>									
Sedentary	14.3	10.1	19.7	26.2	21.3	31.8	59.4	52.9	65.5
Insufficient time (< 150 min) and/or sessions (< 2)	15.6	13.8	17.6	29.2	27.2	31.2	54.9	52.4	57.3
Sufficient time (≥ 150 min) and sessions (≥ 2)	12.0	10.1	14.1	28.6	26.6	30.8	58.8	56.2	61.4
Met fruit / vegetable guidelines <sup>c</sup>									
Both guidelines	8.5*	5.1	13.9	33.4	25.7	42.1	57.4	48.8	65.5
Vegetable guidelines <sup>d</sup>	9.7	6.5	14.1	29.2	22.9	36.4	60.6	53.1	67.5
Fruit guidelines <sup>d</sup>	12.2	10.3	14.3	27.1	25.2	29.0	60.1	57.5	62.6
Neither	16.3	14.6	18.1	28.8	6.9	30.7	54.5	52.2	56.8
Lifetime risk of alcohol-related harm $^{ m e}$									
Abstainer / no longer drinks alcohol	12.5	9.9	15.6	21.7	18.1	25.8	65.2	60.8	69.4
Reduced risk	9.5	7.2	12.5	23.5	20.4	26.9	66.5	62.6	70.3
Increased risk	15.7	14.2	17.4	30.9	29.3	32.5	52.9	50.8	54.9

Data were age-standardised to the 2011 Victorian population.

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

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

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

<sup>a</sup> Based on the Kessler 10 scale for psychological distress.

<sup>b</sup> DoH (2014) guidelines.

c NHMRC (2013) guidelines.

<sup>d</sup> Includes those meeting both guidelines.

NHMRC (2009) guidelines.

<sup>f</sup> Body mass index (BMI) = Weight (kg) / Height (m<sup>2</sup>).

Table 2.14: Smoking status, by selected modifiable risk factors in males, Victoria, 2014 (continued)

	Curr	ent smo	ker	ш	x-smok∈	jr.	No	n-smok	er
	%	95%	C	%	95%	6 CI	%	95%	CI
		Ц	٥L		Ц	٨L		Ч	٦C
Self-reported health									
Excellent/very good	10.3	8.6	12.3	26.8	24.7	29.0	62.5	59.9	65.0
Good	16.0	13.9	18.5	27.8	25.9	29.8	55.8	53.0	58.5
Fair/poor	19.7	16.8	22.9	31.3	28.0	34.8	48.1	44.1	52.1
Body weight status based on BMI <sup>f</sup>									
Underweight (BMI < 18.5 kg/m²)	28.5	16.9	43.9	15.1*	7.8	27.4	56.4	41.4	70.3
Normal range (18.5 ≥ BMI < 25 kg/m²)	15.4	13.4	17.7	24.3	22.2	26.4	59.9	57.1	62.6
Pre-obese (25 ≥ BMI < 30 kg/m²)	14.5	12.4	16.8	28.9	26.7	31.2	56.0	53.2	58.9
Obese (BMI ≥ 30 kg/m²)	12.7	10.3	15.6	34.7	31.3	38.2	51.9	47.9	55.9
Blood pressure status (excluding pregnancy induce	ed hypert	ension)							
Doctor diagnosed hypertension	15.5	11.7	20.1	31.1	27.5	35.0	52.0	46.9	57.1
Normal range	15.1	13.7	16.6	26.5	25.0	28.0	58.1	56.2	60.0
Blood glucose status (excluding gestational diabet	es)								
Doctor diagnosed diabetes	14.6*	8.7	23.4	29.1	21.9	37.5	55.8	45.3	65.8
Normal range	14.6	13.3	16.0	27.7	26.4	29.1	57.1	55.4	58.8

Data were age-standardised to the 2011 Victorian population.

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

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

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below: \* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

<sup>a</sup> Based on the Kessler 10 scale for psychological distress.

<sup>b</sup> DoH (2014) guidelines.

NHMRC (2013) guidelines.

<sup>d</sup> Includes those meeting both guidelines.

NHMRC (2009) guidelines.
 Podv mass index (BMI) = Weight (Vol

Table 2.15: Smoking status, by selected modifiable risk factors in females, Victoria, 2014

	Cur	rent sm	oker		Ex-smok	er	Z	on-smok	čer
	%	95	% CI	%	95	% CI	%	95%	° CI
		Ц	٥L		Η	٩L		Ц	٥L
All females	11.6	10.6	12.5	21.9	20.7	23.1	65.9	64.5	67.3
Psychological distress <sup>a</sup>									
Low (K10 score < 16)	7.7	6.9	8.7	22.8	21.3	24.5	68.8	67.1	70.5
Moderate (K10 score 16–21)	13.1	11.3	15.1	20.9	19.1	22.8	65.4	62.8	67.8
High / very high (K10 score 22+)	22.0	19.0	25.2	20.2	17.2	23.6	57.3	53.5	61.1
Physical activity <sup>b</sup>									
Sedentary	14.3	10.2	19.7	14.4	11.2	18.3	71.2	65.4	76.5
Insufficient time (<150 min) and/or sessions (<2)	11.7	10.6	13.0	21.2	19.5	23.0	66.5	64.5	68.4
Sufficient time (≥ 150 min) and sessions (≥ 2)	10.0	8.6	11.7	24.2	22.5	26.1	65.1	62.8	67.2
Met fruit / vegetable guidelines <sup>c</sup>									
Both guidelines	8.3*	4.7	14.2	24.5	20.2	29.5	66.6	60.4	72.2
Vegetable guidelines <sup>d</sup>	9.8	6.7	14.1	24.6	21.0	28.6	65.2	60.3	69.7
Fruit guidelines <sup>d</sup>	8.7	7.6	9.9	21.8	20.3	23.4	68.8	67.0	70.7
Neither	14.5	13.0	16.1	22.1	20.2	24.1	62.9	60.7	65.1
Lifetime risk of alcohol-related harm $^{\circ}$									
Abstainer / no longer drinks alcohol	8.7	7.3	10.4	14.1	12.4	16.0	76.9	74.5	79.1
Reduced risk	8.1	6.6	9.9	20.3	17.4	23.6	71.1	67.7	74.3
Increased risk	13.9	12.6	15.3	28.0	26.3	29.8	57.5	55.6	59.5

Data were age-standardised to the 2011 Victorian population.

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

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

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

<sup>a</sup> Based on the Kessler 10 scale for psychological distress.

<sup>b</sup> DoH (2014) guidelines.

NHMRC (2013) guidelines.

<sup>d</sup> Includes those meeting both guidelines.

NHMRC (2009) guidelines.

<sup>f</sup> Body mass index (BMI) = Weight (kg) / Height ( $m^2$ ).

Table 2.15: Smoking status, by selected modifiable risk factors in females, Victoria, 2014 (continued)

	Curr	ent smo	sker	ш	x-smok∈	ŝr	N	on-smok	er
	%	95%	c CI	%	95%	° CI	%	95%	Ū
		Ч	Ч		Ц	٦L		Ч	Ы
Self-reported health									
Excellent/very good	8.6	7.4	9.9	21.6	20.1	23.3	69.1	67.2	71.0
Good	10.9	9.6	12.3	22.6	20.5	24.9	65.8	63.4	68.1
Fair/poor	20.2	17.4	23.3	21.2	19.0	23.6	58.3	55.0	61.6
Body weight status based on BMI <sup>f</sup>									
Underweight (BMI < 18.5 kg/m²)	19.1	13.9	25.7	14.3	10.1	19.8	66.0	58.9	72.5
Normal range (18.5 ≥ BMI < 25 kg/m²)	10.3	9.1	11.6	19.8	18.0	21.6	69.4	67.4	71.4
Pre-obese (25 ≥ BMI < 30 kg/m²)	10.7	9.1	12.6	24.0	21.6	26.6	64.7	61.8	67.5
Obese (BMI ≥ 30 kg/m²)	13.0	10.5	16.0	28.3	24.9	31.9	58.4	54.4	62.2
Blood pressure status (excluding pregnancy induc	ed hypert	ension)							
Doctor diagnosed hypertension	16.5	11.3	23.4	21.2	18.8	23.9	61.8	55.3	67.8
Normal range	11.6	10.6	12.6	21.7	20.4	23.1	66.1	64.6	67.6
Blood glucose status (excluding gestational diabet	es)								
Doctor diagnosed diabetes	18.4*	9.9	31.9	18.5	14.3	23.4	62.8	50.8	73.4
Normal range	11.6	10.6	12.5	22.0	20.8	23.2	65.9	64.4	67.3

Data were age-standardised to the 2011 Victorian population.

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

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

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution. Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported. <sup>a</sup> Based on the Kessler 10 scale for psychological distress.

<sup>b</sup> DoH (2014) guidelines.

NHMRC (2013) guidelines.

<sup>d</sup> Includes those meeting both guidelines. NHMRC (2009) guidelines.

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Figure 2.4 shows the relationship between current smoking and self-reported health in men. The proportion of men who are current smokers increased with declining self-reported health and was highest in those who reported fair or poor health.





Data are age-adjusted to the 2011 population of Victoria.

95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

Figure 2.5 shows the relationship between current smoking and self-reported health in women. The proportion of women who are current smokers increased with declining self-reported health and was highest in women who reported fair or poor health.





Data are age-adjusted to the 2011 population of Victoria.

95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.


## **Smoking frequency**

Some people who smoke only do so occasionally. For most purposes, the Victorian Population Health Survey combines daily and occasional smoking to report on 'current' smoking. However, Table 2.16 and Figure 2.6 show the prevalence of daily compared with occasional smoking, by age group and sex. The data show that the majority of current smoking was in fact 'daily' rather than 'occasional' smoking. A higher proportion of women 45–54 years of age were daily smokers compared with all Victorian women.

		D	aily smoke	er	Occo	Occasional smoker		
		%	95%	% CI	%	95%	6 CI	
	(years)	-	LL	UL	-	LL	UL	
Males	18–24	11.1	7.5	16.3	6.7	4.2	10.6	
	25–34	14.0	10.3	18.7	3.7*	2.1	6.3	
	35–44	10.8	8.9	13.0	4.9	3.5	6.9	
	45–54	13.3	11.4	15.5	3.2	2.3	4.4	
	55–64	12.2	10.7	13.8	1.8	1.2	2.5	
	65–74	7.2	6.1	8.6	1.8	1.2	2.5	
	75–84	4.1	3.1	5.4	0.6*	0.3	1.2	
	85+	1.4*	0.7	3.0	**			
	Victoria	11.2	10.0	12.4	3.5	2.9	4.3	
Females	18–24	7.4	4.8	11.2	4.8	2.9	7.7	
	25–34	7.9	6.0	10.3	5.1	3.3	7.8	
	35–44	10.1	8.7	11.7	2.8	2.0	4.0	
	45–54	11.8	10.4	13.4	3.6	2.8	4.6	
	55–64	9.4	8.3	10.7	1.6	1.1	2.2	
	65–74	5.8	4.9	6.9	1.3	0.9	1.8	
	75–84	2.6	2.0	3.4	0.8*	0.5	1.6	
	85+	1.2*	0.5	2.7	**			
	Victoria	8.4	7.6	9.1	3.2	2.6	3.9	
Persons	18–24	9.3	6.9	12.4	5.8	4.1	8.1	
	25–34	10.9	8.8	13.5	4.4	3.1	6.1	
	35–44	10.4	9.2	11.8	3.9	3.0	5.0	
	45–54	12.5	11.3	13.9	3.4	2.8	4.1	
	55–64	10.8	9.8	11.8	1.7	1.3	2.1	
	65–74	6.5	5.7	7.3	1.5	1.2	1.9	
	75–84	3.3	2.7	4.0	0.7	0.4	1.2	
	85+	1.3*	0.7	2.2	**			
	Victoria	9.8	9.1	10.5	3.4	2.9	3.9	

### Table 2.16: Smoking frequency, by age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below: \* Estimate has a RSE 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.



Figure 2.6: Proportion (%) of the population who smoke daily, by age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. 95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

Table 2.17 reports the prevalence of daily and occasional smoking by departmental region and sex. There was a significantly higher prevalence of 'daily' smoking among men who lived in Gippsland Region compared with all Victorian men. There was a significantly higher prevalence of 'daily' smoking among women who lived in Gippsland and Loddon Mallee Regions compared with all Victorian women. Overall, there was a significantly higher prevalence of 'daily' smoking among men and women who lived in rural Victoria compared with their metropolitan counterparts.

### Table 2.17: Smoking frequency, by Department of Health and Human Services region and sex, Victoria, 2014

	D	aily smok	er	Occa	sional sm	noker
	%	95%	% CI	%	955	% CI
Region		LL	UL		LL	UL
Males (18+ years)						
Eastern Metropolitan	8.6	6.3	11.6	3.3*	2.0	5.5
North & West Metropolitan	10.3	8.5	12.5	3.8	2.8	5.0
Southern Metropolitan	11.2	8.8	14.3	3.6	2.3	5.6
All metropolitan regions	10.1	8.8	11.6	3.6	2.9	4.5
Barwon-South Western	12.7	8.6	18.2	**		
Gippsland	19.5	14.3	26.0	**		
Grampians	15.4	10.6	21.9	2.4*	1.4	4.1
Hume	15.0	11.8	18.9	4.5*	2.5	8.1
Loddon Mallee	12.8	10.0	16.1	2.9*	1.3	6.3
All rural regions	14.7	12.6	17.0	3.4	2.1	5.3
Victoria	11.2	10.0	12.4	3.5	2.9	4.3
Females (18+ years)						
Eastern Metropolitan	5.2	3.9	7.0	2.4*	1.4	4.3
North & West Metropolitan	8.1	7.0	9.4	4.0	2.9	5.4
Southern Metropolitan	9.3	7.7	11.3	3.4	2.4	4.9
All metropolitan regions	7.7	6.9	8.7	3.4	2.7	4.2
Barwon-South Western	5.9	4.2	8.1	2.5*	1.2	4.8
Gippsland	14.1	10.9	18.1	2.3	1.5	3.5
Grampians	11.1	8.9	13.7	2.2	1.5	3.4
Hume	10.2	8.3	12.5	2.4*	1.4	3.9
Loddon Mallee	13.6	9.6	18.7	2.4*	0.9	6.2
All rural regions	10.6	9.2	12.1	2.4	1.8	3.2
Victoria	8.4	7.6	9.1	3.2	2.6	3.9
People (18+ years)						
Eastern Metropolitan	6.9	5.5	8.6	2.9	2.0	4.2
North & West Metropolitan	9.2	8.1	10.5	3.9	3.1	4.8
Southern Metropolitan	10.3	8.8	12.0	3.5	2.7	4.7
All metropolitan regions	8.9	8.1	9.8	3.5	3.0	4.1
Barwon-South Western	9.3	6.9	12.3	3.0*	1.5	6.0
Gippsland	16.8	13.6	20.6	3.2*	1.3	7.4
Grampians	13.4	10.4	17.1	2.3	1.7	3.3
Hume	12.6	10.7	14.8	3.5	2.2	5.3
Loddon Mallee	12.6	10.2	15.5	2.4*	1.3	4.5
All rural regions	12.6	11.4	14.0	2.9	2.1	3.9
Victoria	9.8	9.1	10.5	3.4	2.9	3.9

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

# Smoking frequency by departmental region and local government area

HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MANSFIELD MARIB' RNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONEE VALLEY MOOR/ BOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NILLUMBIK NORTH STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOOL WELLING TON WEST WIMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARRIAME ACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDARA BRIN BANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMITE DAREBI HORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MANSFIEL MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONEE VALLE MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NILLUMB NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUTH GIPP STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOOL WE MMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARF ACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDAF BANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMI1 DARE BIN EAST GIPPS FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI GREATER DANDELLONG REATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON IOREATER DANDELTONG TREATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON FIELD MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE VALLEY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI LUMIJIK NORTHERN GRAMPIANS FORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT SLAND STONNINGTON STRATHBOGIE INGTON WEST WIMMERA WHITEHO IAMBIACK ALPINE ARARAT BALLARAT E SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOC WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGE S COAST BAW BAW BAYSIDE BENALLA BOROONI ARA BRIMBANK BULOKE CAMPASPE CARDINE, CASEY CENTRAL COSEFIE DECODEC-OTWAY CORANGAMIN DARE BIN EAST GIPPSLATID FRANKSTON GANNAWARA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BER DIGO GREATER DANDENONG GREATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON BAY HORSHAM HUME INDIGO KINGSTON KNOX LATPOBE LODDON MACEDON RANGES MANNINGHAM MAN FIELD MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MORA MONASH MOONE VALLEY MOORABOOL MORELAND MORNINGTOT PENINSULA MOUNT ALEX (NOER MC/NE MURRINDINDI NI LUMI IK NORTHERN GRAMPIANS PORT PHILLUP PYRENEES QUEENSCLIEFE SOUTHERN DAMPIANS SOUT GIPP SLAND STONNINGTON STRATHBOGIE SUFF COAST SWAN HILD TOWONG WANGARATTA WARNAMBOC WELLINGTON WEST WIMMERA WHITEHOUSE THITTLESEA WODONGA WANDHAM YARRA YARRA RANGE YARF MABBIACK ALPINE ARARAT BALLARATEBANYI DE BASS COAST BAW BAW BAYSIDE BENALLA BOROONI ARA BRIMBANK BULOKE CAMPASPE CARDINA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANG MIL DARE BIN EAST GIPPSLAND FOM KSTON GANNAWARKA GLENELGA GOLDFIELDS COLAC-OTWAY CORANG MIL DARE BIN EAST GIPPSLAND FOM KSTON GANNAWARKA GLENELGR GOLDFIELDS COLAC-OTWAY CORANG MIL DARE BIN EAST GIPPSLAND FOM KSTON GANNAWARKA GLENELGR GOLDFIELDS COLAC-OTWAY CORANG MIL DARE BIN EAST GIPPSLAND FOM KSTON GANNAWARKA GLENELGR GOLDFIELDS COLAC-OTWAY CORANG MIL DARE BIN EAST GIPPSLAND FOM KSTON GANNAWARKA GLENELGR GOLDFIELDS COLAC-OTWAY CORANG MIL DARE BIN EAST GIPPSLAND FOM KSTON GANNAWARKA GLENELGR ALPINE HON HENDING HAM SH DIGC GREATER DANDENONG GREATER GEELON FOR SHEPPARTON HEPBUR HINDMARSH HOBSON BAY YORSHAM HUME INDIGO KINGSTON INFOLMATER FOR SHEPPARTON HEPBUR HINDMARSH HOBSON BAY YORSHAM HUME INDIGO KINGSTON INFOLMATION FOR MILLAR BLEDDON MACEDON PLAINS GREATER BEN DIGC GREATER DANDENONG MAROONDAH MELBOU'NE MENTON MILDURA MITCHELL MOIRA MONASH MOONE VALLEY MARADOS MORELAND MORNINGTON PENINGHAM MAN FIELD MARIBARDOS MAROONDAH MELBOU'NE MENTON MILDURA MITCHELL MOIRA MONASH MOONE VALLEY MARADOS MORELAND MORNINGTON PENINGUNA MURCHEN MURCHEN MONASH MOONE VALLEY MARADOS MORELAND MORNINGTON PENINGUNA ALEY ANDER MO 5COL BRIMBANK BULOKE CAMPASPE CARDIN SEY CENTR C-OTWAY CORANGAMI MORELAND MORNI **JULA MOUNT ALEX** VALLEY NOORA ANDER MOYNE MURRINDINDI NI MPIANS POR NEES QUEENSCL LUMBIK NORTHERN GE AN P **OGIE SURF COAS GIPPSLAND STONNINGTON** TRATHP WELLINGTON WEST WIMMERA ITEHORSE WHITTLESE WYNDHAM YARRA YARRA RANGE YARRIAMBIACK ALPINE ARARAT BALLARAT BANYULE BASS **BAW BAYSIDE BENALLA BOROONI** DAREBIN EAST GIPPSLAND FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI BAY HORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MAN! FIELD MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE VALLEY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI LUMBIK NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT GIPPSLAND STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOC WELLINGTON WEST WIMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGE YARRIAMBIACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONI ARA BRIMBANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMIT

Table 2.18 shows the frequency of smoking behaviour by LGA in Eastern Metropolitan Region. Adults who lived in the LGAs of Boroondara (C) and Whitehorse (C) had a significantly lower prevalence of 'daily' smoking compared with all Victorian adults.

#### Table 2.18: Smoking frequency, by LGA, in Eastern Metropolitan Region, Victoria, 2014

	D	aily smoke	er	Occc	isional sm	oker
	%	95%	% CI	%	95%	6 CI
LGA		LL	UL		LL	UL
Boroondara (C)	3.3*	1.4	7.3	4.0*	1.7	8.8
Knox (C)	11.0*	6.6	17.8	2.3*	0.9	5.8
Manningham (C)	6.7*	3.2	13.4	2.2*	1.0	4.5
Maroondah (C)	11.1*	6.4	18.4	**		
Monash (C)	6.6*	3.9	10.9	4.2*	2.0	8.9
Whitehorse (C)	3.0*	1.7	5.3	**		
Yarra Ranges (S)	7.4	4.8	11.3	**		
Eastern Metropolitan Region	6.9	5.5	8.6	2.9	2.0	4.2
Victoria	9.8	9.1	10.5	3.4	2.9	3.9

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.
\*\* PSE sense to a structure of the sense to a structure o

Table 2.19 shows the frequency of smoking behaviour by LGA in North & West Metropolitan Region. Adults who lived in the LGA of Yarra (C) had a significantly lower prevalence of 'daily' smoking compared with all Victorian adults.

### Table 2.19: Smoking frequency, by LGA, in North & West Metropolitan Region, Victoria, 2014

	С	Daily smoke	er	Occasional smoker				
	%	95%	% CI	%	95% CI			
LGA		LL	UL	-	LL	UL		
Banyule (C)	7.9*	4.6	13.2	**				
Brimbank (C)	13.4	10.0	17.8	4.1*	2.1	7.9		
Darebin (C)	8.6*	4.3	16.6	3.4*	1.3	8.5		
Hobsons Bay (C)	7.4	5.5	9.9	4.4*	2.0	9.4		
Hume (C)	11.4	7.8	16.2	4.1*	2.2	7.4		
Maribyrnong (C)	9.6*	5.6	15.9	6.1*	2.8	12.7		
Melbourne (C)	7.1*	3.7	13.2	0.9*	0.4	2.0		
Melton (S)	9.5	6.9	12.9	2.3*	1.1	4.7		
Moonee Valley (C)	5.9	3.8	9.2	6.7*	3.2	13.6		
Moreland (C)	9.0	5.5	14.2	6.2*	3.0	12.2		
Nillumbik (S)	6.9*	4.1	11.5	3.8*	1.6	8.6		
Whittlesea (C)	11.1	8.0	15.3	3.9*	2.1	7.4		
Wyndham (C)	9.4	6.8	13.0	3.6*	1.9	7.0		
Yarra (C)	5.1	3.5	7.3	9.3*	4.4	18.3		
North & West Metropolitan Region	9.2	8.1	10.5	3.9	3.1	4.8		
Victoria	9.8	9.1	10.5	3.4	2.9	3.9		

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 2.20 shows the frequency of smoking behaviour by LGA in Southern Metropolitan Region. Adults who lived in the LGAs of Cardinia (S) and Frankston (C) had a significantly higher prevalence of 'daily' smoking compared with all Victorian adults. By contrast adults who lived in the LGAs of Port Phillip (C) and Stonnington (C) had a significantly lower prevalence of 'daily' smoking compared with all Victorian adults.

### Table 2.20: Smoking frequency, by LGA, in Southern Metropolitan Region, Victoria, 2014

	E	Daily smoke	er	Occasional smoker			
	%	95%	% CI	%	95%	% CI	
LGA		LL	UL		LL	UL	
Bayside (C)	5.6*	2.4	12.5	**			
Cardinia (S)	16.5	11.9	22.5	1.9*	0.9	4.0	
Casey (C)	13.3	9.1	18.9	3.0*	1.6	5.6	
Frankston (C)	14.9	10.9	20.1	2.3*	0.8	5.9	
Glen Eira (C)	13.2	8.4	20.0	5.1*	2.6	9.5	
Greater Dandenong (C)	11.3	7.0	17.8	3.2*	1.5	6.8	
Kingston (C)	8.2	5.3	12.5	5.8*	2.6	12.3	
Mornington Peninsula (S)	9.6*	5.6	16.1	**			
Port Phillip (C)	4.4	2.9	6.6	3.0*	1.4	6.3	
Stonnington (C)	4.2*	2.1	8.2	**			
Southern Metropolitan Region	10.3	8.8	12.0	3.5	2.7	4.7	
Victoria	9.8	9.1	10.5	3.4	2.9	3.9	

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 2.21 shows the frequency of smoking behaviour by LGA in Barwon-South Western Region. Adults who lived in the LGA of Glenelg (S) had a significantly higher prevalence of 'daily' smoking compared with all Victorian adults.

### Table 2.21: Smoking frequency, by LGA, in Barwon-South Western Region, Victoria, 2014

	C	aily smoke	er	Occasional smoker			
	%	95%	% CI	%	95%	6 CI	
LGA		LL	UL		LL	UL	
Colac-Otway (S)	12.7*	7.3	21.1	0.9*	0.4	2.1	
Corangamite (S)	9.8*	5.8	16.3	**			
Glenelg (S)	15.4	10.9	21.5	0.6*	0.3	1.4	
Greater Geelong (C)	9.0	5.7	13.8	3.2*	1.2	8.2	
Moyne (S)	10.7*	6.1	18.2	1.9*	0.8	4.5	
Queenscliffe (B)	5.2*	2.6	9.9	**			
Southern Grampians (S)	7.3*	4.3	12.1	**			
Surf Coast (S)	6.1*	3.4	10.7	3.9*	2.0	7.7	
Warrnambool (C)	7.2*	3.8	13.1	**			
Barwon-South Western Region	9.3	6.9	12.3	3.0*	1.5	6.0	
Victoria	9.8	9.1	10.5	3.4	2.9	3.9	

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 2.22 shows the frequency of smoking behaviour by LGA in Gippsland Region. Adults who lived in the LGAs of Baw Baw (S) and Latrobe (C) had a significantly higher prevalence of 'daily' smoking compared with all Victorian adults.

#### Table 2.22: Smoking frequency, by LGA, in Gippsland Region, Victoria, 2014

	ŗ	Daily smoke	er	Occasional smoker				
	%	95% Cl		%	95%	6 CI		
LGA		LL UL			LL	UL		
Bass Coast (S)	14.9	9.5	22.6	1.4*	0.7	2.8		
Baw Baw (S)	19.7	12.3	30.1	**				
East Gippsland (S)	9.3*	5.5	15.2	2.5*	1.2	5.3		
Latrobe (C)	22.4	15.1	32.1	1.9*	1.0	3.7		
South Gippsland (S)	8.5	5.6	12.5	2.0*	0.8	4.7		
Wellington (S)	14.3	9.8	20.3	**				
Gippsland Region	16.8	13.6	20.6	3.2*	1.3	7.4		
Victoria	9.8	9.1	10.5	3.4	2.9	3.9		

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 2.23 shows the frequency of smoking behaviour by LGA in Grampians Region. Adults who lived in the LGA of Ararat (RC) had a significantly higher prevalence of 'daily' smoking compared with all Victorian adults.

### Table 2.23: Smoking frequency, by LGA, in Grampians Region, Victoria, 2014

	P	aily smoke	er	Occasional smoker				
	%	95%	6 CI	%	95%	% CI		
LGA		LL	UL		LL	UL		
Ararat (RC)	20.6	15.0	27.6	**				
Ballarat (C)	13.4	8.5	20.5	1.6*	0.8	3.2		
Golden Plains (S)	14.6	8.9	23.1	4.1*	1.9	8.6		
Hepburn (S)	14.6*	8.6	23.5	5.2*	2.1	12.6		
Hindmarsh (S)	15.2	9.6	23.0	2.1*	0.8	5.2		
Horsham (RC)	7.5*	4.4	12.6	1.7*	0.6	4.3		
Moorabool (S)	11.7	8.0	16.7	**				
Northern Grampians (S)	13.6	8.7	20.8	**				
Pyrenees (S)	13.0*	7.0	23.0	**				
West Wimmera (S)	9.3	6.0	14.0	5.3*	2.6	10.7		
Yarriambiack (S)	10.9	7.2	16.1	1.2*	0.5	3.1		
Grampians Region	13.4	10.4	17.1	2.3	1.7	3.3		
Victoria	9.8	9.1	10.5	3.4	2.9	3.9		

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.
\*\* PSE prostorthan an any elite 50 per cent; point estimate (%) is unreliable because at record

Table 2.24 shows the frequency of smoking behaviour by LGA in Hume Region. Adults who lived in the LGAs of Mansfield (S), Moira (S) and Murrindindi (S) had a significantly higher prevalence of 'daily' smoking compared with all Victorian adults.

#### Table 2.24: Smoking frequency, by LGA, in Hume Region, Victoria, 2014

	D	aily smoke	er	Occo	asional sm	oker
	%	95%	6 CI	%	95%	% CI
LGA		LL	UL		LL	UL
Alpine (S)	11.5*	5.3	23.1	1.2*	0.5	2.7
Benalla (RC)	11.8	7.6	17.7	**		
Greater Shepparton (C)	7.7	5.4	10.9	5.1*	2.2	11.5
Indigo (S)	9.9*	4.5	20.3	0.9*	0.4	2.2
Mansfield (S)	25.0*	14.0	40.6	4.2*	1.6	10.5
Mitchell (S)	10.0*	5.8	16.6	2.2*	1.0	5.0
Moira (S)	19.7	12.9	28.9	**		
Murrindindi (S)	20.0	13.3	28.9	4.4*	1.9	9.8
Strathbogie (S)	12.3	7.4	19.5	**		
Towong (S)	11.8*	6.7	19.9	1.7*	0.8	3.6
Wangaratta (RC)	16.3*	8.9	28.0	**		
Wodonga (RC)	14.2	9.4	21.0	**		
Hume Region	12.6	10.7	14.8	3.5	2.2	5.3
Victoria	9.8	9.1	10.5	3.4	2.9	3.9

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}\,$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 2.25 shows the frequency of smoking behaviour by LGA in Loddon Mallee Region. Adults who lived in the LGAs of Campaspe (S), Central Goldfields (S) and Loddon (S) had a significantly higher prevalence of 'daily' smoking compared with all Victorian adults.

#### Table 2.25: Smoking frequency, by LGA, in Loddon Mallee Region, Victoria, 2014

	ļ	Daily smoke	er	Occ	asional sm	oker
	%	95%	% CI	%	95%	6 CI
LGA		LL	UL		LL	UL
Buloke (S)	15.4*	8.7	25.7	**		
Campaspe (S)	19.4	12.6	28.7	**		
Central Goldfields (S)	20.1	13.0	29.9	**		
Gannawarra (S)	10.7*	5.8	18.8	1.3*	0.6	3.0
Greater Bendigo (C)	10.7	7.0	15.9	**		
Loddon (S)	20.1	14.9	26.6	**		
Macedon Ranges (S)	6.7	4.6	9.7	**		
Mildura (RC)	16.9*	10.0	27.1	1.8*	0.7	4.3
Mount Alexander (S)	8.0	5.5	11.5	**		
Swan Hill (RC)	9.3	5.8	14.5	**		
Loddon Mallee Region	12.6	10.2	15.5	2.4*	1.3	4.5
Victoria	9.8	9.1	10.5	3.4	2.9	3.9

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{\ast}~$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.



3. Fruit and vegetable consumption, takeaway meals and snacks, and consumption of sugar-sweetened and artificially sweetened soft drinks

C.M.

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# Key findings

Vegetable intake







## Fruit intake





## Fruit and vegetable consumption

Daily intake of fruit and vegetables is used as a proxy measure of the quality of a person's diet in Australia and internationally. New Australian dietary guidelines were introduced in 2013, altering some of the serving sizes and recommendations for fruit and vegetable consumption based on sex and age. Analysis of the Victorian Population Health Survey 2014 data has been undertaken using the 2013 Australian guidelines. Table 3.1 shows the differences between the two sets of guidelines.

## Australian dietary guidelines

The 2013 Australian guidelines recommend a minimum daily vegetable intake of 5½ serves for men 18 years of age or 51–70 years of age, six serves for men 19–50 years of age and five serves for men 71 years of age or older. The recommended minimum daily vegetable intake for women 18 years of age or older is five serves, where a serve is defined as half a cup of cooked vegetables or a cup of green leafy or raw salad vegetables (NHMRC 2013). The recommended minimum daily fruit intake is two serves for people 12–18 years of age and two serves for those 18 years of age or older, where a serve is defined as one medium piece or two small pieces of fruit or one cup of diced pieces (NHMRC 2013).

## Table 3.1: Australian adult dietary guidelines for vegetable and fruit consumption, by sex and age group, 2003<sup>a</sup> and 2013<sup>b</sup> Guidelines

		Guidelines								
		NHMRC (200	3)		NHMRC (2013)					
		Serve	es/day		Serves/day					
	Age group (years)	Vegetables (75g/serve)	Fruit (150g serve)	Age group (years)	Vegetables and legumes/ beans (75g/serve)	Fruit (150g serve)				
Men	12–18	4	3	18	5.5	2				
	19+	5	2	19–50	6	2				
				51–70	5.5	2				
				71+	5	2				
Women	12–18	4	3	18	5	2				
	19+	5	2	19–50	5	2				
				51–70	5	2				
				71+	5	2				

<sup>a</sup> NHMRC (2003) guidelines

<sup>b</sup> NHMRC (2013) guidelines



## Daily vegetable consumption

Table 3.2 and Figure 3.1 show daily vegetable consumption in serves per day, by age group and sex. The proportion of adults who consumed 'less than one serve' of vegetables daily was 5.8 per cent among all Victorian adults but was significantly higher among men (7.3 per cent) compared with women (4.4 per cent).

A significantly higher proportion of women and adults 75 years of age or older reported consuming 'less than one serve' of vegetables daily compared with all women and adults respectively.

		<1	serve/c	day	1–2	serves/	'day	3–4	serves,	/day	5+ s	5+ serves/day		
	Age	%	95%	% CI	%	95%	6 CI	%	95%	% CI	%	955	% CI	
	(years)		LL	UL		LL	UL		LL	UL		LL	UL	
Males	18–24	11.9	8.2	16.9	63.3	56.7	69.4	20.2	15.3	26.2	4.1*	2.3	7.2	
	25–34	4.6*	2.6	8.2	71.3	65.7	76.4	20.1	15.8	25.1	3.3*	1.8	6.1	
	35–44	7.2	5.5	9.4	66.7	63.2	70.1	19.5	16.8	22.6	5.4	4.0	7.2	
	45–54	6.8	5.4	8.5	67.4	64.5	70.2	19.9	17.5	22.4	4.0	3.1	5.4	
	55–64	6.1	5.0	7.4	64.7	62.3	67.0	22.2	20.2	24.3	5.2	4.3	6.3	
	65–74	6.2	5.1	7.5	62.0	59.7	64.3	24.2	22.2	26.2	5.5	4.5	6.6	
	75–84	9.6	7.8	11.8	57.7	54.5	60.7	23.0	20.5	25.8	6.1	4.8	7.6	
	85+	11.9	7.6	17.9	55.3	48.9	61.6	23.3	18.5	29.0	5.6*	3.0	10.2	
	Victoria	7.3	6.4	8.3	65.8	64.1	67.4	20.9	19.5	22.3	4.6	4.0	5.3	
Females	18–24	4.6*	2.5	8.4	62.7	56.3	68.6	26.0	20.9	31.8	5.4*	3.3	8.9	
	25–34	3.3*	2.0	5.5	56.3	51.3	61.2	28.2	23.8	33.1	10.5	7.9	13.7	
	35–44	4.0	3.0	5.2	53.2	50.6	55.8	32.8	30.4	35.3	9.1	7.8	10.7	
	45–54	4.1	3.3	5.2	51.7	49.4	54.1	32.9	30.7	35.1	10.1	8.9	11.5	
	55–64	3.4	2.7	4.2	44.1	42.0	46.3	36.6	34.6	38.7	13.9	12.5	15.5	
	65–74	5.8	4.8	6.9	44.6	42.5	46.7	34.7	32.8	36.7	13.0	11.7	14.5	
	75–84	8.3	6.9	10.0	49.3	46.7	51.9	29.1	26.8	31.5	10.0	8.5	11.8	
	85+	7.7	5.2	11.0	52.0	47.1	56.8	28.4	24.2	33.0	6.8	5.0	9.2	
	Victoria	4.4	3.8	5.1	52.7	51.1	54.2	31.3	29.9	32.8	10.0	9.2	10.8	
Persons	18–24	8.3	6.1	11.4	63.0	58.4	67.3	23.0	19.4	27.1	4.8	3.3	6.9	
	25–34	4.0	2.7	5.9	63.8	60.0	67.5	24.1	21.0	27.6	6.9	5.3	8.9	
	35–44	5.6	4.6	6.8	59.9	57.7	62.0	26.2	24.4	28.2	7.3	6.3	8.4	
	45–54	5.4	4.6	6.4	59.5	57.6	61.3	26.5	24.8	28.2	7.1	6.3	8.1	
	55–64	4.7	4.1	5.5	54.2	52.5	55.8	29.6	28.1	31.1	9.6	8.8	10.6	
	65–74	6.0	5.2	6.8	52.6	51.0	54.2	29.9	28.4	31.3	9.5	8.7	10.5	
	75–84	8.9	7.7	10.2	53.2	51.1	55.2	26.3	24.6	28.1	8.2	7.1	9.4	
	85+	9.4	7.0	12.5	53.4	49.5	57.2	26.3	23.0	29.8	6.3	4.7	8.4	
	Victoria	5.8	5.3	6.4	59.1	57.9	60.2	26.2	25.2	27.2	7.4	6.9	7.9	

# Table 3.2: Proportion (%) of the population consuming vegetables (serves per day), by age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}~$  Estimate has a RSE 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.



Figure 3.1: Proportion (%) of the population consuming 5+ serves per day of vegetables, by age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. 95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

Table 3.3 shows daily vegetable consumption in serves per day by departmental region and sex. The proportion of adults who reported consuming 'less than one serve' of vegetables daily was significantly higher among adults who lived in North & West Metropolitan Region compared with all Victorian adults. In contrast, the proportion of adults who reported consuming 'less than one serve' of vegetables daily was significantly lower among women who lived in the Gippsland and Loddon Mallee regions compared with all Victorian women. A significantly lower proportion of women who lived in the rural regions reported consuming 'less than one serve' of vegetables daily compared with all Victorian women. Table 3.3: Proportion (%) of the population consuming vegetables (serves per day), by Department of Health and Human Services region and sex, Victoria, 2014

	<1 serve/day		1–2	1–2 serves/day			3–4 serves/day			5+ serves/day		
	%	959	% CI	%	95%	6 CI	%	95%	% CI	%	95%	% CI
Region		LL	UL		LL	UL		LL	UL		LL	UL
Males (18+ years)												
Eastern Metropolitan	5.5	3.7	8.0	65.4	61.1	69.5	23.7	20.0	27.8	4.3	2.8	6.4
North & West Metropolitan	9.4	7.8	11.2	66.7	63.9	69.4	17.6	15.5	19.9	4.5	3.5	5.6
Southern Metropolitan	7.1	5.2	9.6	64.5	60.6	68.3	22.8	19.6	26.3	4.1	2.9	5.9
All metropolitan regions	7.7	6.6	8.9	65.8	63.7	67.7	20.8	19.1	22.5	4.3	3.6	5.1
Barwon-South Western	4.6*	2.6	8.0	68.6	62.4	74.2	19.1	15.0	24.0	6.6*	3.6	11.7
Gippsland	11.4*	6.7	18.9	57.3	50.2	64.2	23.7	18.7	29.6	4.9	3.5	6.8
Grampians	5.8	3.7	8.8	68.9	63.3	74.0	18.4	14.4	23.2	6.1	3.8	9.5
Hume	5.9	4.0	8.7	66.2	61.1	71.0	21.0	17.1	25.5	4.9	3.5	6.9
Loddon Mallee	4.6	3.1	6.9	68.1	62.5	73.2	22.1	17.5	27.5	4.6	3.4	6.3
All rural regions	6.2	4.8	8.0	66.2	63.3	68.9	20.8	18.7	23.0	5.5	4.3	6.9
Victoria	7.3	6.4	8.3	65.8	64.1	67.4	20.9	19.5	22.3	4.6	4.0	5.3
Females (18+ years)												
Eastern Metropolitan	4.1	2.8	5.9	54.7	50.9	58.5	31.2	27.8	34.9	9.1	7.6	10.9
North & West Metropolitan	6.1	4.9	7.5	56.1	53.5	58.6	27.2	25.1	29.4	8.6	7.4	10.0
Southern Metropolitan	4.5	3.4	5.9	52.1	48.7	55.5	31.5	28.3	34.9	10.0	8.4	11.8
All metropolitan regions	4.9	4.2	5.8	54.4	52.6	56.2	29.7	28.0	31.4	9.3	8.4	10.2
Barwon-South Western	2.6*	1.4	4.7	47.6	40.6	54.7	36.4	30.8	42.4	12.4	8.1	18.5
Gippsland	1.8	1.2	2.7	49.6	44.2	55.1	35.7	30.6	41.1	11.3	8.9	14.1
Grampians	3.1	2.2	4.6	45.0	39.3	50.8	38.9	33.3	44.9	12.1	10.1	14.5
Hume	4.6	2.8	7.5	46.9	42.9	51.0	34.9	31.2	38.7	12.6	10.5	15.1
Loddon Mallee	2.5	1.8	3.4	47.6	42.3	52.8	33.9	29.3	38.8	13.4	10.5	17.1
All rural regions	2.9	2.3	3.7	47.4	44.7	50.1	36.0	33.5	38.5	12.4	10.8	14.1
Victoria	4.4	3.8	5.1	52.7	51.1	54.2	31.3	29.9	32.8	10.0	9.2	10.8

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}\,$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

# Table 3.3: Proportion (%) of the population consuming vegetables (serves per day), by Department of Health and Human Services region and sex, Victoria, 2014 (continued)

	<1 serve/day		1–2 serves/day		3–4 serves/day			5+ serves/day				
	%	95%	% CI	%	95%	% CI	%	95%	% CI	%	95%	6 CI
Region		LL	UL		LL	UL		LL	UL		LL	UL
People (18+ years)												
Eastern Metropolitan	4.8	3.6	6.2	59.8	56.9	62.7	27.6	25.0	30.3	6.8	5.7	8.1
North & West Metropolitan	7.7	6.7	8.8	61.3	59.4	63.2	22.5	20.9	24.0	6.6	5.8	7.5
Southern Metropolitan	5.8	4.7	7.1	58.2	55.6	60.7	27.3	25.0	29.7	7.1	6.1	8.3
All metropolitan regions	6.3	5.6	7.0	59.9	58.6	61.3	25.3	24.1	26.5	6.8	6.3	7.5
Barwon-South Western	3.6	2.3	5.5	57.9	53.2	62.5	27.9	24.3	31.8	9.5	6.6	13.6
Gippsland	6.9*	4.0	11.6	53.4	48.8	57.9	29.5	25.9	33.5	8.3	6.7	10.1
Grampians	4.4	3.2	5.9	56.9	52.7	60.9	28.8	25.1	32.8	9.0	7.5	10.9
Hume	5.2	3.9	7.1	56.6	53.2	59.9	28.0	25.1	31.0	8.8	7.4	10.3
Loddon Mallee	3.6	2.7	4.9	57.6	53.7	61.4	28.3	25.0	31.9	9.0	7.4	10.9
All rural regions	4.6	3.8	5.6	56.6	54.7	58.6	28.4	26.8	30.1	9.0	8.0	10.2
Victoria	5.8	5.3	6.4	59.1	57.9	60.2	26.2	25.2	27.2	7.4	6.9	7.9

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}~$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

# Daily consumption of vegetables by departmental region and local government area

HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MANSFIELD MARIB' RNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONEE VALLEY MOOR/ BOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NILLUMBIK NORTH STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOOL WELLING TON WEST WIMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARRIAME ACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDARA BRIN BANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMITE DAREBI HORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MANSFIEL MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONEE VALLE MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NILLUMB NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUTH GIPP STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOOL WE MMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARF ACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDAF BANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMI1 FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI **BIN EAST GIPPS** GREATER DANDERIONG CREATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON IORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MAN MARIBYRNONG MAROOLIDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE EY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI IK NORTHEEN GRAMPIANS CORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT LUM SLAN<del>D STO</del>NNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOC INGTON WEST WILMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGE IAMBIACK ALPINE ARARAT BALLARAT BANY RELEASS COAST BAW BAW BAYSIDE BENALLA BOROONI BRIMBANK BULOKE CAMPASPE CARDINAL CASEY CENTRAL CODEFIELDS COAC-OTWAY CORANGAMIT BIN EAST GIPPSLATID FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI GREATER DANDENONG GREATER GEELONG GREATER SHEPPARTON HEPBURI HINDMARSH HOBSON HORSHAM HUME INDIGO KINGSTON KNOX LALPOBE LODDON MACEDON RANGES MANNINGHAM MAN MARIBYRNONG MAROONINAH MELBOURNE MELTON MILDURA MITCHELL MORA MONASH MOONE EY MOORABOOL MORELAND MORNINGTOT PENINSULA MOUNT ALEX (NDER MC INE MURRINDINDI NII IK NORTHERN GRAMPIANS PORT PHILLUP PYRENEES QUEENSCLIEFT SOUTHERN CRAMPIANS SOUT SLAND STONMINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRA MARBOOL INGTON WEST WIMMERA WHITCHORSE WHITTLESEA WODONGA WANDHAM YARRA YARRA RANGE MABIACK ALPINE ARARAT BALLARATBANY HE BASS COAST BAW BAW BAYSIDE BENALLA BOROONI BIN EAST GIPPSLAND FOR PARTE CARDING CASEY CEMTRAL GOLDFIELDS COLAC-OTWAY CORANG MIL BIN EAST GIPPSLAND FOR STON GANNAWARKA GLEN BAR GLENELG GOLDEN PLAINS GREATER BEN GREATER DANDENONG GREATER CEPLON GREATER SHEPPARTON HEPBURI HINDMARSH HOBSON IORSHAM HUME INDIGO KINGSTON INFOLONO GREATER CEPLON GREATER SHEPPARTON HEPBURI HINDMARSH HOBSON IORSHAM HUME INDIGO KINGSTON INFOLONO GREATER CEPLON GREATER SHEPPARTON HEPBURI HINDMARSH HOBSON IORSHAM HUME INDIGO KINGSTON INFOLONO GREATER CEPLON GREATER SHEPPARTON HEPBURI HINDMARSH HOBSON IORSHAM HUME INDIGO KINGSTON INFOLONO GREATER CEPLON GREATER SHEPPARTON HEPBURI HINDMARSH HOBSON IORSHAM HUME INDIGO KINGSTON INFOLONO GREATER CEPLON GREATER SHEPPARTON HEPBURI HINDMARSH HOBSON IORSHAM HUME INDIGO KINGSTON INFOLONO GREATER CEPLON GREATER SHEPPARTON HEPBURI HINDMARSH HOBSON IORSHAM HUME INDIGO KINGSTON INFOLONO GREATER MORE MONASH MOONE EY MARADOCH MAROONDAH MELBOUNNE MENTON MILDURA MITCHELL MOIRA MONASH MOONE EY MARADOCH MAROONDAH MELBOUNNE MENTON MILDURA MITCHELL MOIRA MONASH MOONE EY MARADOCH MAROONDAH MELBOUNNE MENTON MILDURA MITCHELL MORA MONASH MOONE IAMBIACK ALPINE ARARAT BALLARAT S COAST BAW BAW BAYSIDE BENALLA BOROONI DAR LUM **ULA MOUNT ALEX** MORELAND MORNU ANDER MOYNE MURRINDINDI NI VALLEY NOORA **NEES QUEENSCL** MPIANS POR LUMBIK NORTHERN GR **OGIE SURF COAS GIPPSLAND STONNINGTON** TRATH WELLINGTON WEST WIMMERA HITEHORSE WHITTLESE NGA WYNDHAM YARRA YARRA RANGE YARRIAMBIACK ALPINE ARARAT BALLARAT BANYULE BASS AW BAW BAYSIDE BENALLA BOROONI DIGO GREATER DANDENONG GREATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON BAY HORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MAN! FIELD MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE VALLEY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI LUMBIK NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT GIPPSLAND STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOC WELLINGTON WEST WIMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGE YARRIAMBIACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONI ARA BRIMBANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMIT

Table 3.4 shows daily vegetable consumption in serves per day by LGA in Eastern Metropolitan Region. The proportion of adults who reported consuming 'three or four serves' of vegetables daily was significantly higher among those who lived in the LGA of Whitehorse (C) compared with all Victorian adults.

# Table 3.4: Proportion (%) of the population consuming vegetables (serves per day), by LGA, Eastern Metropolitan Region, Victoria, 2014

	<1	serve/c	day	1–2 :	serves/	'day	3–4	serves	/day	5+ s	erves/	'day
	%	95%	% CI	%	95%	6 CI	%	95%	% CI	%	959	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Boroondara (C)	3.0*	1.3	6.5	60.5	53.7	67.0	28.9	23.1	35.6	6.7	4.4	9.8
Knox (C)	4.8*	2.5	9.0	65.0	57.3	72.1	25.8	19.5	33.4	3.4*	2.1	5.6
Manningham (C)	7.5*	3.7	14.5	62.7	54.6	70.2	19.8	14.4	26.5	9.0	5.5	14.5
Maroondah (C)	4.0*	1.6	9.6	60.9	51.7	69.4	28.2	20.6	37.4	6.5	4.1	10.4
Monash (C)	4.9*	2.8	8.3	58.8	52.3	65.0	27.6	22.4	33.6	7.2*	4.3	11.6
Whitehorse (C)	3.9*	2.1	7.1	52.3	44.7	59.9	34.5	27.5	42.3	7.9	5.1	12.0
Yarra Ranges (S)	5.9*	2.2	14.9	60.1	51.1	68.5	26.0	19.0	34.5	7.1	4.9	10.0
Eastern Metropolitan Region	4.8	3.6	6.2	59.8	56.9	62.7	27.6	25.0	30.3	6.8	5.7	8.1
Victoria	5.8	5.3	6.4	59.1	57.9	60.2	26.2	25.2	27.2	7.4	6.9	7.9

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 3.5 shows daily vegetable consumption in serves per day by LGA in North & West Metropolitan Region. The proportion of adults who reported consuming 'less than one serve' of vegetables daily was significantly higher among adults who lived in the LGA of Whittlesea (C) compared with all Victorian adults. The proportion of adults who reported consuming 'one or two serves' of vegetables daily was significantly higher among those who lived in the LGAs of Brimbank (C) and Wyndham (C) compared with all Victorian adults.

Table 3.5: Proportion (%) of the population consuming vegetables (serves per day), by LGA, North & West
Metropolitan Region, Victoria, 2014

	<1	serve/c	day	1–2	serves	/day	3–4	serves	/day	5+ serves/day		'day
	%	95%	% CI	%	95%	% CI	%	95%	% CI	%	95	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Banyule (C)	2.9*	1.6	5.3	62.5	55.9	68.7	26.3	20.8	32.6	7.3	4.8	10.9
Brimbank (C)	8.4	5.9	11.8	68.1	62.4	73.3	15.8	11.8	20.8	4.1*	2.1	8.0
Darebin (C)	7.6	5.4	10.8	59.0	52.3	65.4	24.4	19.5	30.0	7.5	4.9	11.2
Hobsons Bay (C)	7.2*	3.8	13.1	56.9	48.0	65.3	25.4	18.6	33.7	8.2*	4.5	14.6
Hume (C)	9.5*	5.8	15.4	58.3	52.1	64.3	25.0	20.3	30.3	5.7	3.9	8.3
Maribyrnong (C)	6.8	4.5	10.4	65.7	59.4	71.6	19.1	14.4	25.0	6.1	4.1	9.1
Melbourne (C)	7.3*	4.0	12.7	54.3	47.1	61.3	24.8	19.3	31.2	12.1	8.2	17.4
Melton (S)	7.4	5.0	10.8	64.6	58.4	70.4	21.3	16.4	27.3	4.9	3.4	6.9
Moonee Valley (C)	5.8*	3.3	10.0	58.8	51.9	65.3	24.3	19.3	30.2	9.3	6.1	14.2
Moreland (C)	5.6	3.8	8.2	60.5	54.1	66.6	23.2	18.4	29.0	6.7*	4.0	11.0
Nillumbik (S)	3.0*	1.4	6.1	59.2	52.3	65.7	28.0	22.3	34.5	8.8	6.0	12.8
Whittlesea (C)	13.9	10.1	18.9	61.8	55.9	67.4	17.3	13.4	22.2	5.7	3.5	9.0
Wyndham (C)	6.9	4.7	10.0	66.9	61.5	71.8	21.4	17.1	26.3	3.4*	2.0	5.5
Yarra (C)	4.1	2.8	5.9	61.0	52.3	69.0	25.0	17.9	33.7	8.7	5.8	12.9
North & West Metropolitan Region	7.7	6.7	8.8	61.3	59.4	63.2	22.5	20.9	24.0	6.6	5.8	7.5
Victoria	5.8	5.3	6.4	59.1	57.9	60.2	26.2	25.2	27.2	7.4	6.9	7.9

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 3.6 shows daily vegetable consumption in serves per day by LGA in Southern Metropolitan Region. The proportion of adults who reported consuming 'three or four serves' of vegetables daily was significantly higher among those who lived in the LGA of Bayside (C) compared with all Victorian adults.

# Table 3.6: Proportion (%) of the population consuming vegetables (serves per day), by LGA, Southern Metropolitan Region, Victoria, 2014

	<1	serve/c	day	1–2 :	serves	/day	3–4	serves	/day	5+ s	erves/	'day
	%	95%	% CI	%	95%	% CI	%	95%	6 CI	%	959	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Bayside (C)	2.0*	0.9	4.3	51.0	41.7	60.3	39.9	31.0	49.4	6.4*	3.8	10.4
Cardinia (S)	5.9*	3.2	10.6	58.2	51.5	64.6	28.1	22.5	34.5	6.5	4.2	9.8
Casey (C)	9.6	5.9	15.1	60.6	54.2	66.7	21.4	17.0	26.6	5.9	3.8	8.9
Frankston (C)	7.9	5.0	12.1	55.9	49.1	62.4	25.5	19.9	32.0	9.5	6.3	14.0
Glen Eira (C)	5.5	3.5	8.5	55.4	47.9	62.6	31.0	24.3	38.6	7.3	4.6	11.4
Greater Dandenong (C)	5.0*	3.0	8.4	65.7	58.8	72.1	21.8	16.3	28.4	4.0*	2.3	6.8
Kingston (C)	2.9*	1.6	5.1	60.2	52.1	67.8	27.9	21.2	35.8	6.9	4.3	10.7
Mornington Peninsula (S)	6.7*	3.2	13.6	51.4	41.9	60.8	33.3	25.5	42.2	7.8*	4.0	14.9
Port Phillip (C)	4.0	2.6	6.2	58.3	47.5	68.3	27.3	18.1	39.0	9.2	6.4	12.8
Stonnington (C)	2.3*	1.4	3.8	60.4	52.7	67.6	25.7	19.8	32.6	10.5*	6.3	17.0
Southern Metropolitan Region	5.8	4.7	7.1	58.2	55.6	60.7	27.3	25.0	29.7	7.1	6.1	8.3
Victoria	5.8	5.3	6.4	59.1	57.9	60.2	26.2	25.2	27.2	7.4	6.9	7.9

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 3.7 shows daily vegetable consumption in serves per day by LGA in Barwon-South Western Region. The proportion of adults who reported consuming 'five or more serves' of vegetables daily was significantly higher among those who lived in the LGA of Queenscliffe (B) compared with all Victorian adults.

## Table 3.7: Proportion (%) of the population consuming vegetables (serves per day), by LGA, Barwon-South Western Region, Victoria, 2014

	<1:	serve/c	lay	1–2 :	serves/	'day	3–4	serves	/day	5+ s	erves/	day
	%	95%	6 CI	%	95%	6 CI	%	95%	6 CI	%	95%	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Colac-Otway (S)	1.7*	1.0	3.0	56.3	45.8	66.3	31.4	22.5	41.8	9.5*	4.9	17.5
Corangamite (S)	3.2*	1.4	6.9	59.1	52.0	65.9	26.2	21.1	31.9	11.3	7.0	17.6
Glenelg (S)	5.0*	2.8	8.8	57.8	49.9	65.4	24.6	18.8	31.4	7.2	4.7	10.8
Greater Geelong (C)	3.9*	2.1	7.2	58.0	50.4	65.2	27.6	22.2	33.7	9.5*	5.1	16.8
Moyne (S)	2.7*	1.0	6.9	57.4	49.1	65.3	27.7	22.4	33.8	11.5*	6.4	19.9
Queenscliffe (B)	0.9*	0.3	2.3	48.4	34.1	62.9	38.0	25.1	52.8	12.6	8.3	18.6
Southern Grampians (S)	4.4*	1.8	10.5	57.8	49.1	66.1	28.7	22.7	35.5	8.6*	4.7	15.1
Surf Coast (S)	4.1*	2.1	8.1	55.5	46.5	64.2	31.0	23.7	39.5	9.0	5.7	13.8
Warrnambool (C)	1.6*	0.8	3.3	58.4	50.5	66.0	28.4	22.4	35.3	10.4*	5.8	17.8
Barwon-South Western Region	3.6	2.3	5.5	57.9	53.2	62.5	27.9	24.3	31.8	9.5	6.6	13.6
Victoria	5.8	5.3	6.4	59.1	57.9	60.2	26.2	25.2	27.2	7.4	6.9	7.9

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below: \* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 3.8 shows daily vegetable consumption in serves per day by LGA in Gippsland Region. The proportion of adults who reported consuming 'less than one serve' of vegetables daily was significantly higher among those who lived in the LGA of Latrobe (C) compared with all Victorian adults.

# Table 3.8: Proportion (%) of the population consuming vegetables (serves per day), by LGA, Gippsland Region, Victoria, 2014

	<1:	serve/c	lay	1–2	serves/	/day	3–4	serves	/day	5+ s	erves/	'day
	%	95% CI		%	95% CI		%	95% CI		%	959	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Bass Coast (S)	2.2*	1.3	3.6	52.2	41.1	63.2	32.0	22.0	43.9	11.1	6.9	17.3
Baw Baw (S)	**			56.2	47.1	64.9	28.2	21.9	35.4	8.3	5.8	11.6
East Gippsland (S)	2.2*	1.1	4.2	63.9	56.2	71.0	25.8	19.2	33.8	7.4	5.2	10.5
Latrobe (C)	14.4*	7.6	25.7	46.0	37.2	55.0	28.6	21.0	37.6	8.2	5.0	13.2
South Gippsland (S)	2.8*	1.4	5.4	56.0	48.3	63.3	30.3	23.4	38.1	10.2	6.6	15.4
Wellington (S)	3.8*	2.3	6.2	54.8	46.0	63.3	33.7	25.9	42.4	6.8*	4.1	11.1
Gippsland Region	6.9*	4.0	11.6	53.4	48.8	57.9	29.5	25.9	33.5	8.3	6.7	10.1
Victoria	5.8	5.3	6.4	59.1	57.9	60.2	26.2	25.2	27.2	7.4	6.9	7.9

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 3.9 shows daily vegetable consumption in serves per day by LGA in Grampians Region. The proportion of adults who reported consuming 'less than one serve' of vegetables daily was significantly lower among those who lived in the LGAs of Pyrenees (S) and West Wimmera (S) compared with all Victorian adults.

# Table 3.9: Proportion (%) of the population consuming vegetables (serves per day), by LGA, Grampians Region, Victoria, 2014

	<1	serve/c	day	1–2	serves/	'day	3–4	serves	/day	5+ s	erves/	'day
	%	95%	% CI	%	95%	6 CI	%	95%	6 CI	%	95	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Ararat (RC)	6.3*	3.5	11.2	54.9	46.4	63.2	25.7	19.9	32.5	12.9*	7.0	22.6
Ballarat (C)	4.3*	2.3	7.8	54.1	46.7	61.4	31.0	24.5	38.3	9.7	6.8	13.5
Golden Plains (S)	4.0*	2.2	6.9	52.1	44.4	59.8	34.1	26.9	42.0	9.6	6.7	13.6
Hepburn (S)	5.4*	2.7	10.5	60.0	51.5	67.9	27.9	21.2	35.7	6.4	4.3	9.4
Hindmarsh (S)	**			57.1	48.7	65.1	27.1	20.9	34.4	11.3	7.6	16.5
Horsham (RC)	**			60.3	47.9	71.5	25.7	18.2	35.0	9.2*	4.1	19.4
Moorabool (S)	5.4	3.4	8.5	64.2	58.4	69.6	22.5	18.0	27.8	6.6	4.4	9.7
Northern Grampians (S)	**			62.8	53.6	71.1	22.1	16.5	29.0	9.4*	5.0	17.1
Pyrenees (S)	2.2*	1.2	3.8	64.7	56.8	72.0	23.5	17.6	30.5	8.4	5.4	12.7
West Wimmera (S)	1.8*	0.9	3.5	55.6	46.0	64.7	29.1	22.8	36.2	12.7*	7.6	20.7
Yarriambiack (S)	6.1*	2.9	12.1	53.7	43.6	63.6	30.4	21.2	41.6	9.0	6.1	13.2
Grampians Region	4.4	3.2	5.9	56.9	52.7	60.9	28.8	25.1	32.8	9.0	7.5	10.9
Victoria	5.8	5.3	6.4	59.1	57.9	60.2	26.2	25.2	27.2	7.4	6.9	7.9

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 3.10 shows daily vegetable consumption in serves per day by LGA in Hume Region. The proportion of adults who reported consuming 'three or four serves' of vegetables daily was significantly higher among those who lived in the LGA of Indigo (S) compared with all Victorian adults.

# Table 3.10: Proportion (%) of the population consuming vegetables (serves per day), by LGA, Hume Region, Victoria, 2014

	<1	serve/c	lay	1–2 :	serves/	'day	3–4	serves	/day	5+ s	erves/	day
	%	95%	6 CI	%	95%	6 CI	%	95%	% CI	%	959	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Alpine (S)	2.4	1.5	3.9	66.1	57.5	73.8	19.4	14.5	25.5	11.6	7.1	18.5
Benalla (RC)	3.2*	1.5	6.5	55.6	46.0	64.8	25.2	18.5	33.4	12.6*	7.2	21.2
Greater Shepparton (C)	5.1*	2.4	10.7	56.9	48.5	64.9	28.7	22.0	36.4	8.5	5.2	13.5
Indigo (S)	**			41.5	32.9	50.8	41.2	31.5	51.7	10.8	7.6	15.2
Mansfield (S)	2.8*	1.6	4.8	52.9	40.6	64.9	34.8	23.7	47.9	7.3	5.1	10.5
Mitchell (S)	3.1*	1.4	6.6	60.7	52.5	68.3	23.5	18.1	30.0	8.6	5.8	12.7
Moira (S)	6.9*	3.7	12.5	50.6	41.8	59.3	32.9	23.7	43.7	8.9	5.5	14.0
Murrindindi (S)	**			56.0	46.9	64.7	32.0	23.5	42.0	5.9	4.2	8.3
Strathbogie (S)	3.0*	1.8	5.0	60.8	53.0	68.1	25.0	18.6	32.8	10.2*	6.1	16.5
Towong (S)	**			52.3	42.3	62.1	32.5	24.0	42.4	11.1	7.5	16.2
Wangaratta (RC)	4.3*	2.2	8.3	56.8	47.5	65.5	30.6	22.8	39.8	6.7	4.5	9.9
Wodonga (RC)	7.7*	3.9	14.6	57.9	50.2	65.2	25.0	19.1	31.9	8.3	5.8	11.6
Hume Region	5.2	3.9	7.1	56.6	53.2	59.9	28.0	25.1	31.0	8.8	7.4	10.3
Victoria	5.8	5.3	6.4	59.1	57.9	60.2	26.2	25.2	27.2	7.4	6.9	7.9

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}\,$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 3.11 shows daily vegetable consumption in serves per day by LGA in Loddon Mallee Region. The proportion of adults who reported consuming 'five or more serves' of vegetables daily was significantly higher among those who lived in the LGA of Mount Alexander (S) compared with all Victorian adults.

# Table 3.11: Proportion (%) of the population consuming vegetables (serves per day), by LGA, Loddon Mallee Region, Victoria, 2014

	<1	serve/o	day	1–2	serves/	/day	3–4	serves	/day	5+ s	erves/	day
	%	959	% CI	%	95%	% CI	%	95%	6 CI	%	959	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Buloke (S)	**			61.7	52.5	70.0	24.2	17.7	32.1	8.9	5.5	14.0
Campaspe (S)	3.6*	1.4	9.3	61.1	52.1	69.5	27.5	20.5	35.8	7.3*	3.9	13.1
Central Goldfields (S)	6.8*	2.9	15.0	57.3	47.1	66.9	24.8	17.2	34.4	10.5*	5.5	19.3
Gannawarra (S)	3.5*	1.8	6.7	58.3	45.1	70.3	22.5	16.5	29.8	8.8*	5.1	14.8
Greater Bendigo (C)	2.6*	1.5	4.4	56.6	49.2	63.8	29.7	23.6	36.6	9.3	6.1	13.9
Loddon (S)	6.0*	2.5	13.7	51.5	40.0	62.9	27.8	19.9	37.4	7.1	5.1	10.0
Macedon Ranges (S)	5.5*	2.5	11.7	57.8	50.6	64.6	25.0	20.8	29.7	10.4	7.1	14.9
Mildura (RC)	4.9*	2.2	10.3	59.8	50.4	68.6	28.6	20.4	38.5	6.0	3.9	9.1
Mount Alexander (S)	**			52.5	40.9	63.9	29.7	19.9	41.9	15.1	10.1	22.0
Swan Hill (RC)	4.0*	2.1	7.5	53.3	43.6	62.8	32.2	23.4	42.5	9.0*	5.0	15.7
Loddon Mallee Region	3.6	2.7	4.9	57.6	53.7	61.4	28.3	25.0	31.9	9.0	7.4	10.9
Victoria	5.8	5.3	6.4	59.1	57.9	60.2	26.2	25.2	27.2	7.4	6.9	7.9

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below: \* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.



## Daily fruit consumption

Table 3.12 and Figure 3.2 show daily fruit consumption in serves per day, by age group and sex. The proportion of adults who reported consuming 'less than two serves' of fruit daily was 51.2 per cent among all Victorian adults but was significantly higher among men (55.5 per cent) compared with women (47.1 per cent).

The proportion of adults who consumed 'less than two serves' of fruit daily was significantly lower among women and people 65–84 years of age compared with all Victorian women and adults, respectively.

# Table 3.12: Proportion (%) of the population consuming fruit (serves per day), by age group and sex, Victoria, 2014

		< 2	2 serves/de	ау	2+	2+ serves/day		
		%	95%	6 CI	%	95%	6 CI	
	(years)		LL	UL		LL	UL	
Males	18–24	54.0	47.3	60.5	46.0	39.4	52.6	
	25–34	56.7	50.6	62.5	42.1	36.3	48.1	
	35–44	57.4	53.7	60.9	42.4	38.9	46.0	
	45–54	53.7	50.6	56.7	44.4	41.4	47.5	
	55–64	57.8	55.4	60.3	41.5	39.0	44.0	
	65–74	55.3	52.9	57.7	43.1	40.8	45.5	
	75–84	50.9	47.8	54.1	47.0	43.9	50.2	
	85+	55.8	49.4	61.9	41.8	35.8	48.1	
	Victoria	55.5	53.7	57.3	43.5	41.7	45.2	
Females	18–24	43.4	37.0	49.9	56.5	49.9	62.8	
	25–34	49.4	44.4	54.4	49.1	44.1	54.1	
	35–44	51.1	48.5	53.8	48.0	45.4	50.7	
	45–54	50.0	47.6	52.4	49.1	46.8	51.5	
	55–64	46.6	44.5	48.8	52.3	50.2	54.4	
	65–74	41.3	39.3	43.4	57.4	55.3	59.5	
	75–84	39.6	37.0	42.2	58.7	56.1	61.3	
	85+	43.6	38.9	48.5	54.1	49.2	58.8	
	Victoria	47.1	45.5	48.6	51.9	50.3	53.5	
Persons	18–24	48.8	44.1	53.5	51.1	46.4	55.7	
	25–34	53.0	49.1	56.9	45.6	41.7	49.5	
	35–44	54.2	52.0	56.4	45.3	43.0	47.5	
	45–54	51.8	49.9	53.7	46.8	44.9	48.7	
	55–64	52.1	50.5	53.8	47.0	45.4	48.6	
	65–74	47.8	46.2	49.3	50.8	49.3	52.4	
	75–84	44.8	42.8	46.9	53.3	51.3	55.3	
	85+	48.8	44.9	52.6	48.9	45.0	52.7	
	Victoria	51.2	50.0	52.4	47.8	46.6	49.0	

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.



Figure 3.2: Proportion (%) of the population consuming 2+ serves per day of fruit, by age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. 95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

Table 3.13 shows daily fruit consumption in serves per day by departmental region and sex. The proportion of adults who reported consuming 'less than two serves' of fruit daily was significantly higher among women and adults who lived in Loddon Mallee Region compared with all Victorian women and adults, respectively. Table 3.13: Proportion (%) of the population consuming fruit (serves per day), by Department of Health and Human Services region and sex, Victoria, 2014

	< 2	< 2 serves/day % 95% CI		2+ serves/day		
	%			%	95	95% CI
Region		LL	UL		LL	UL
Males (18+ years)						
Eastern Metropolitan	56.4	52.0	60.7	42.0	37.8	46.3
North & West Metropolitan	54.5	51.5	57.5	44.4	41.4	47.4
Southern Metropolitan	54.2	50.2	58.2	45.1	41.2	49.2
All metropolitan regions	55.0	52.9	57.1	44.0	41.9	46.1
Barwon-South Western	47.7	40.4	55.1	50.8	43.4	58.2
Gippsland	57.5	50.4	64.3	41.6	34.9	48.7
Grampians	56.9	50.5	63.1	41.9	35.7	48.3
Hume	62.0	56.6	67.1	37.4	32.3	42.7
Loddon Mallee	62.4	57.0	67.5	36.8	31.7	42.2
All rural regions	56.7	53.6	59.8	42.3	39.2	45.4
Victoria	55.5	53.7	57.3	43.5	41.7	45.2
Females (18+ years)						
Eastern Metropolitan	45.4	41.5	49.5	53.9	49.9	57.9
North & West Metropolitan	46.4	43.8	49.0	52.2	49.6	54.8
Southern Metropolitan	49.3	45.9	52.6	49.7	46.4	53.1
All metropolitan regions	47.1	45.3	49.0	51.8	49.9	53.6
Barwon-South Western	42.4	35.6	49.4	57.1	50.0	63.8
Gippsland	46.2	41.0	51.5	52.2	46.8	57.5
Grampians	45.3	40.9	49.8	53.9	49.5	58.3
Hume	45.5	41.7	49.4	54.0	50.1	57.8
Loddon Mallee	54.5	49.6	59.5	44.8	39.9	49.8
All rural regions	46.6	43.9	49.2	52.7	50.0	55.4
Victoria	47.1	45.5	48.6	51.9	50.3	53.5
People (18+ years)						
Eastern Metropolitan	50.8	47.8	53.8	48.1	45.1	51.1
North & West Metropolitan	50.3	48.3	52.3	48.4	46.4	50.4
Southern Metropolitan	51.6	49.0	54.2	47.6	44.9	50.2
All metropolitan regions	50.9	49.5	52.3	48.0	46.6	49.4
Barwon-South Western	44.9	39.9	50.1	54.0	48.9	59.1
Gippsland	52.1	47.6	56.6	46.7	42.2	51.2
Grampians	51.4	47.2	55.5	47.6	43.5	51.8
Hume	53.7	50.2	57.3	45.7	42.2	49.3
Loddon Mallee	58.5	54.8	62.1	40.8	37.2	44.4
All rural regions	51.7	49.6	53.8	47.4	45.3	49.5
Victoria	51.2	50.0	52.4	47.8	46.6	49.0

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

## Daily consumption of fruit by departmental region and local government area

HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MANSFIELD MARIB' RNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONEE VALLEY MOOR/ BOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NILLUMBIK NORTI STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOOL WELLING TON WEST WIMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARRIAME ACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDARA BRIN HORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MANSFIEL MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONEE VALLE MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NILLUMB NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUTH GIPPS MMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARF ACK ALPINE A RARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDAF BANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMIT BIN EAST GIPPS FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI GREATER DANDELIONG CREATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON IORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MAN MARIBYRNONG MAROOLIDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE EY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI IK NORTHERN GRAMPIANS CORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT LUM SLAND STONNINGTON STRATHBOGIE INGTON WEST WIMMERA WHITEHO IAMBIACK ALPINE ARARAT BALLARAT GIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOO RSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGE INGLON WEST WINNERA MITTERATION CONTRACTOR OF A STORY O S COAST BAW BAW BAYSIDE BENALLA BOROONI ARA LUM DARE **JULA MOUNT ALEX** MORELAND MORNU VALLEY N MPIANS POP **NEES QUEENSCL** LUMBIK NORTHERN GI PHILLI **OGIE SURF COAS GIPPSLAND STONNINGTON** TRATH AN WELLINGTON WEST WIMMERA ITEHORSE WHITTLESE YARRIAMBIACK ALPINE ARARAT BALLARAT BANYULE BASS W BAW BAYSIDE BENALLA BOROONI BAY HORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MAN FIELD MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE VALLEY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI LUMBIK NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT GIPPSLAND STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOC WELLINGTON WEST WIMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGE YARRIAMBIACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONI ARA BRIMBANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMIT
Table 3.14 shows daily fruit consumption in serves per day by LGA in Eastern Metropolitan Region. The proportion of adults who reported consuming 'less than two serves' of fruit daily was not significantly different among those who lived in Eastern Metropolitan Region compared with all Victorian adults.

#### Table 3.14: Proportion (%) of the population consuming fruit (serves per day), by LGA, Eastern Metropolitan Region, Victoria, 2014

	<	2 serves/dc	ıy	2+ serves/day				
	%	95%	6 CI	%	95%	6 CI		
LGA		LL	UL		LL	UL		
Boroondara (C)	55.1	48.5	61.5	44.7	38.3	51.3		
Knox (C)	50.5	42.4	58.7	48.9	40.7	57.1		
Manningham (C)	47.3	39.6	55.0	52.5	44.7	60.1		
Maroondah (C)	53.0	43.9	61.9	46.8	37.9	55.9		
Monash (C)	50.6	44.0	57.1	46.5	40.0	53.1		
Whitehorse (C)	45.5	38.2	53.0	54.3	46.9	61.6		
Yarra Ranges (S)	53.6	44.6	62.3	43.9	35.2	52.9		
Eastern Metropolitan Region	50.8	47.8	53.8	48.1	45.1	51.1		
Victoria	51.2	50.0	52.4	47.8	46.6	49.0		

Data were age-standardised to the 2011 Victorian population.

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Table 3.15 shows daily fruit consumption in serves per day by LGA in North & West Metropolitan Region. The proportion of adults who reported consuming 'less than two serves' of fruit daily was significantly lower among those who lived in the LGA of Nillumbik (S) compared with all Victorian adults.

## Table 3.15: Proportion (%) of the population consuming fruit (serves per day), by LGA, North & West Metropolitan Region, Victoria, 2014

	<	2 serves/dc	іу	2+ serves/day				
	%95% CI			%	%95			
LGA		LL	UL		LL	UL		
Banyule (C)	51.1	43.3	58.9	47.7	40.0	55.5		
Brimbank (C)	54.5	48.4	60.6	44.1	38.1	50.3		
Darebin (C)	49.2	41.5	56.9	50.4	42.6	58.1		
Hobsons Bay (C)	46.0	37.3	54.8	53.6	44.8	62.3		
Hume (C)	53.9	47.5	60.2	44.3	38.1	50.7		
Maribyrnong (C)	53.2	45.9	60.3	44.7	37.7	52.0		
Melbourne (C)	44.7	38.3	51.3	53.7	47.0	60.2		
Melton (S)	55.3	47.8	62.5	43.8	36.6	51.3		
Moonee Valley (C)	49.8	42.9	56.8	49.7	42.8	56.7		
Moreland (C)	47.9	40.6	55.3	49.7	42.4	57.1		
Nillumbik (S)	42.1	35.2	49.4	57.3	50.0	64.3		
Whittlesea (C)	51.1	45.3	56.9	47.4	41.6	53.2		
Wyndham (C)	55.5	49.4	61.4	43.5	37.5	49.6		
Yarra (C)	51.8	43.2	60.4	47.3	38.7	55.9		
North & West Metropolitan Region	50.3	48.3	52.3	48.4	46.4	50.4		
Victoria	51.2	50.0	52.4	47.8	46.6	49.0		

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Table 3.16 shows daily fruit consumption in serves per day by LGA in Southern Metropolitan Region. The proportion of adults who reported consuming 'two or more serves' of fruit daily was significantly higher among those who lived in the LGA of Bayside (C) compared with all Victorian adults.

## Table 3.16: Proportion (%) of the population consuming fruit (serves per day), by LGA, Southern Metropolitan Region, Victoria, 2014

	<	2 serves/dc	ıy	2+ serves/day				
	%	95%	6 CI	%	95%	6 CI		
LGA		LL	UL		LL	UL		
Bayside (C)	35.4	29.2	42.0	63.3	56.2	69.8		
Cardinia (S)	48.8	42.2	55.4	50.2	43.6	56.8		
Casey (C)	57.0	50.5	63.2	42.0	35.7	48.5		
Frankston (C)	47.6	41.3	54.0	51.5	45.2	57.8		
Glen Eira (C)	57.4	50.0	64.5	42.3	35.2	49.7		
Greater Dandenong (C)	57.8	51.0	64.4	40.6	34.1	47.4		
Kingston (C)	47.1	38.8	55.4	52.4	44.0	60.6		
Mornington Peninsula (S)	50.8	43.4	58.1	48.7	41.4	56.1		
Port Phillip (C)	51.1	41.1	60.9	48.7	38.8	58.6		
Stonnington (C)	48.6	40.5	56.8	50.2	42.1	58.3		
Southern Metropolitan Region	51.6	49.0	54.2	47.6	44.9	50.2		
Victoria	51.2	50.0	52.4	47.8	46.6	49.0		

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here. Table 3.17 shows daily fruit consumption in serves per day by LGA in Barwon-South Western Region. The proportion of adults who reported consuming 'two or more serves' of fruit daily was significantly higher among those who lived in the LGAs of Queenscliffe (B), Surf Coast (S) and Warrnambool (C) compared with all Victorian adults.

#### Table 3.17: Proportion (%) of the population consuming fruit (serves per day), by LGA, Barwon-South Western Region, Victoria, 2014

	<	2 serves/dc	іу	2+ serves/day				
	%	95%	6 CI	%	95%	6 CI		
LGA		LL	UL	-	LL	UL		
Colac-Otway (S)	53.9	43.6	63.8	45.7	35.7	55.9		
Corangamite (S)	54.7	45.8	63.2	44.9	36.3	53.7		
Glenelg (S)	54.6	46.8	62.3	41.4	34.5	48.6		
Greater Geelong (C)	43.7	35.9	51.8	55.1	47.1	63.0		
Moyne (S)	53.8	44.9	62.4	46.0	37.4	54.8		
Queenscliffe (B)	35.4	27.0	44.7	64.4	55.0	72.7		
Southern Grampians (S)	53.5	43.5	63.1	45.9	36.3	55.9		
Surf Coast (S)	35.5	28.6	43.1	64.3	56.7	71.2		
Warrnambool (C)	41.3	33.6	49.5	57.9	49.7	65.6		
Barwon-South Western Region	44.9	39.9	50.1	54.0	48.9	59.1		
Victoria	51.2	50.0	52.4	47.8	46.6	49.0		

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Table 3.18 shows daily fruit consumption in serves per day by LGA in Gippsland Region. The proportion of adults who reported consuming 'less than two serves' of fruit daily was not significantly different among those who lived in Gippsland Region compared with all Victorian adults.

# Table 3.18: Proportion (%) of the population consuming fruit (serves per day), by LGA, Gippsland Region, Victoria, 2014

		< 2 serves/	day		2+ serves/day				
	%	% 95% CI			9	5% CI			
LGA		LL	UL		LL	UL			
Bass Coast (S)	53.3	42.2	64.0	46.4	35.7	57.4			
Baw Baw (S)	52.2	42.8	61.5	47.1	37.9	56.6			
East Gippsland (S)	49.5	38.9	60.1	49.2	38.7	59.9			
Latrobe (C)	52.6	43.1	61.9	45.3	36.2	54.7			
South Gippsland (S)	50.2	41.9	58.6	49.4	41.1	57.8			
Wellington (S)	55.8	47.1	64.2	43.5	35.2	52.2			
Gippsland Region	52.1	47.6	56.6	46.7	42.2	51.2			
Victoria	51.2	50.0	52.4	47.8	46.6	49.0			

Data were age-standardised to the 2011 Victorian population.

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Table 3.19 shows daily fruit consumption in serves per day by LGA in Grampians Region. The proportion of adults who reported consuming 'less than two serves' of fruit daily was not significantly different among those who lived in Grampians Region compared with all Victorian adults.

# Table 3.19: Proportion (%) of the population consuming fruit (serves per day), by LGA, Grampians Region, Victoria, 2014

	<	2 serves/dc	ıy	2+ serves/day				
	%	95%	6 CI	%	95% CI			
LGA		LL	UL		LL	UL		
Ararat (RC)	56.0	46.6	65.0	40.7	32.1	49.9		
Ballarat (C)	48.4	41.3	55.5	50.8	43.6	57.9		
Golden Plains (S)	59.2	51.6	66.3	40.5	33.4	48.1		
Hepburn (S)	54.9	44.6	64.7	43.8	34.0	54.1		
Hindmarsh (S)	55.0	45.7	64.0	44.7	35.8	54.1		
Horsham (RC)	51.8	38.4	64.9	47.5	34.4	60.9		
Moorabool (S)	54.8	47.5	61.8	43.7	36.9	50.7		
Northern Grampians (S)	54.6	45.1	63.9	44.7	35.4	54.3		
Pyrenees (S)	47.8	38.9	56.9	51.8	42.8	60.7		
West Wimmera (S)	52.8	43.8	61.5	45.9	37.2	54.9		
Yarriambiack (S)	62.4	55.0	69.2	37.1	30.2	44.4		
Grampians Region	51.4	47.2	55.5	47.6	43.5	51.8		
Victoria	51.2	50.0	52.4	47.8	46.6	49.0		

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Table 3.20 shows daily fruit consumption in serves per day by LGA in Hume Region. The proportion of adults who reported consuming 'less than two serves' of fruit daily was not significantly different among those who lived in Hume Region compared with all Victorian adults.

# Table 3.20: Proportion (%) of the population consuming fruit (serves per day), by LGA, Hume Region, Victoria, 2014

	<	2 serves/dc	зy	2+ serves/day				
	%	95%	6 CI	%	95% CI			
LGA		LL	UL		LL	UL		
Alpine (S)	44.1	36.2	52.3	55.1	46.9	63.0		
Benalla (RC)	52.4	42.9	61.8	46.7	37.4	56.3		
Greater Shepparton (C)	56.6	48.7	64.1	43.3	35.7	51.1		
Indigo (S)	51.0	40.8	61.1	48.5	38.4	58.7		
Mansfield (S)	53.5	40.6	65.8	44.1	31.8	57.0		
Mitchell (S)	50.8	41.5	59.9	48.9	39.7	58.2		
Moira (S)	49.4	40.3	58.6	49.5	40.4	58.6		
Murrindindi (S)	57.8	48.3	66.7	41.8	32.9	51.3		
Strathbogie (S)	43.6	35.2	52.3	56.2	47.5	64.6		
Towong (S)	51.7	43.4	59.9	47.0	38.8	55.3		
Wangaratta (RC)	56.5	45.0	67.4	43.3	32.4	54.8		
Wodonga (RC)	55.8	48.1	63.3	43.2	35.7	50.9		
Hume Region	53.7	50.2	57.3	45.7	42.2	49.3		
Victoria	51.2	50.0	52.4	47.8	46.6	49.0		

Data were age-standardised to the 2011 Victorian population.

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Table 3.21 shows daily fruit consumption in serves per day by LGA in Loddon Mallee Region. The proportion of adults who reported consuming 'less than two serves' of fruit daily was significantly higher among those who lived in the LGAs of Campaspe (S), Central Goldfields (S) and Macedon Ranges (S) compared with all Victorian adults.

## Table 3.21: Proportion (%) of the population consuming fruit (serves per day), by LGA, Loddon Mallee Region, Victoria, 2014

	<	2 serves/do	y	2+	2+ serves/day		
	% 95% CI			%	95%	6 CI	
LGA		LL	UL		LL	UL	
Buloke (S)	57.1	47.8	66.0	42.4	33.6	51.7	
Campaspe (S)	63.2	55.1	70.5	36.5	29.1	44.5	
Central Goldfields (S)	63.6	55.9	70.7	35.4	28.3	43.1	
Gannawarra (S)	61.0	52.2	69.2	38.2	30.1	47.0	
Greater Bendigo (C)	56.8	49.4	63.9	42.4	35.3	49.8	
Loddon (S)	56.9	44.7	68.3	42.0	30.7	54.2	
Macedon Ranges (S)	62.1	54.8	68.8	37.4	30.6	44.7	
Mildura (RC)	56.7	47.5	65.5	41.8	33.0	51.1	
Mount Alexander (S)	57.5	47.7	66.7	42.4	33.1	52.2	
Swan Hill (RC)	56.4	49.3	63.3	43.2	36.4	50.3	
Loddon Mallee Region	58.5	54.8	62.1	40.8	37.2	44.4	
Victoria	51.2	50.0	52.4	47.8	46.6	49.0	

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.



#### Compliance with the 2013 Australian fruit and vegetable consumption guidelines

The trend over time of the age-adjusted prevalence of compliance with the Australian guidelines for fruit and vegetable consumption was investigated (Table 3.22). For the period 2003–2012, the analysis of the Victorian Population Health Survey data was undertaken using the 2003 Australian guidelines, whereas for the 2013–2014 period, the 2013 Australian guidelines have been used. An analysis of trends over time has not been undertaken due to the introduction of the latest Australian guidelines.

		Met both fruit and vegetable consumption guidelines		Met cor guid	Met vegetable consumption guidelines only <sup>c</sup>			1et frui nsumpt elines c	t ion only <sup>c</sup>	Did no and cor gu	Did not meet fruit and vegetable consumption guidelines			
		%	95%	6 CI	%	95%	% CI	%	95%	6 CI	%	95%	% CI	
			LL	UL		LL	UL		LL	UL		LL	UL	
Males	2003ª	5.7	4.7	6.8	9.7	8.4	11.2	43.2	40.8	45.6	52.3	49.9	54.8	
	2004ª	3.1	2.3	4.0	3.8	3.0	4.8	43.0	40.6	45.4	55.0	52.6	57.4	
	2005ª	4.3	3.3	5.5	6.3	5.1	7.6	42.2	39.8	44.7	55.4	52.9	57.9	
	2006ª	5.0	3.9	6.5	6.9	5.7	8.5	38.8	36.4	41.3	57.4	54.9	59.8	
	2007ª	3.1	2.4	4.0	5.4	4.4	6.5	38.5	36.0	41.1	56.6	54.0	59.2	
	2008 <sup># a</sup>	3.2	2.8	3.6	5.1	4.6	5.7	41.7	40.4	43.0	54.7	53.4	56.1	
	2009ª	3.5	2.7	4.4	4.9	4.1	5.9	45.7	43.4	48.0	50.8	48.5	53.1	
	2010ª	3.5	2.8	4.5	5.3	4.3	6.4	45.1	42.5	47.7	51.7	49.1	54.2	
	2011–12 <sup># a</sup>	3.2	2.7	3.7	4.5	3.9	5.1	40.0	38.5	41.6	56.9	55.3	58.4	
	2012ª	2.3	1.7	3.2	4.3	3.2	5.7	39.8	37.0	42.6	56.9	54.0	59.8	
	2013 <sup>+ b</sup>	2.8	1.8	4.5	3.3	2.2	4.9	43.0	38.7	47.3	53.8	49.4	58.2	
	<b>2014</b> <sup># b</sup>	1.7	1.4	2.1	2.6	2.1	3.1	43.5	41.7	45.2	54.0	52.2	55.8	
Females	2003ª	10.5	9.4	11.7	13.6	12.4	15.0	57.6	55.6	59.5	39.1	37.2	41.1	
	2004ª	8.1	7.1	9.2	10.0	9.0	11.2	59.4	57.5	61.3	38.2	36.3	40.0	
	2005ª	9.9	8.9	11.1	12.8	11.6	14.0	57.3	55.3	59.3	39.7	37.7	41.7	
	2006ª	9.2	8.2	10.4	13.3	12.1	14.7	53.2	51.2	55.2	41.3	39.3	43.3	
	2007ª	7.5	6.6	8.5	10.2	9.2	11.3	51.7	49.6	53.7	44.4	42.4	46.4	
	2008 <sup>#a</sup>	8.0	7.5	8.6	10.7	10.1	11.3	54.1	53.0	55.2	41.9	40.8	42.9	
	2009ª	8.8	7.8	9.9	11.2	10.1	12.4	57.9	56.0	59.8	38.6	36.7	40.4	
	2010ª	7.2	6.3	8.2	10.0	9.0	11.1	54.4	52.3	56.4	41.6	39.6	43.7	
	2011–12 <sup># a</sup>	7.0	6.5	7.5	9.7	9.1	10.3	50.5	49.2	51.8	45.5	44.2	46.8	
	2012ª	6.1	5.2	7.1	8.9	7.8	10.1	51.0	48.4	53.5	45.4	42.8	48.0	
	2013 <sup>+ b</sup>	8.3	6.6	10.3	9.9	8.1	12.0	57.1	53.4	60.7	39.8	36.3	43.4	
	2014 <sup># b</sup>	6.9	6.3	7.6	10.0	9.2	10.8	51.9	50.3	53.5	43.4	41.9	45.0	

#### Table 3.22: Compliance with fruit and vegetable consumption guidelines,<sup>a,b</sup> by sex, Victoria, 2003–2014

Data were age-standardised to the 2011 Victorian population.

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

<sup>a</sup> NHMRC (2003) guidelines.

<sup>b</sup> NHMRC (2013) guidelines.

<sup>c</sup> Includes those meeting both guidelines.

Survey sample size: # ~34,000; † ~3,600; remaining surveys ~7,500

# Table 3.22: Compliance with fruit and vegetable consumption guidelines,<sup>a,b</sup> by sex, Victoria, 2003–2014 (continued)

		Met both fruit and vegetable consumption guidelines		Met cor guid	Met vegetable consumption guidelines only <sup>c</sup>			Met fruit consumption guidelines only <sup>c</sup>			Did not meet fruit and vegetable consumption guidelines		
		%	95% CI		%	95%	6 CI	%	95%	6 CI	%	95%	6 CI
			LL	UL		LL	UL		LL	UL		LL	UL
Persons	2003ª	8.1	7.4	8.9	11.7	10.8	12.7	50.7	49.1	52.2	45.5	43.9	47.0
	2004ª	5.7	5.0	6.4	7.0	6.3	7.8	51.5	50.0	53.0	46.3	44.8	47.9
	2005ª	7.2	6.5	8.1	9.6	8.8	10.5	50.0	48.4	51.6	47.3	45.7	48.9
	2006ª	7.1	6.3	8.0	10.1	9.2	11.1	46.2	44.6	47.8	49.1	47.5	50.7
	2007ª	5.3	4.8	6.0	7.8	7.1	8.6	45.3	43.7	46.9	50.3	48.7	52.0
	2008 <sup># a</sup>	5.7	5.3	6.0	8.0	7.6	8.4	48.1	47.2	48.9	48.1	47.3	49.0
	2009ª	6.2	5.5	6.9	8.1	7.4	8.9	52.1	50.6	53.6	44.4	42.9	45.9
	2010ª	5.4	4.8	6.1	7.7	7.0	8.5	49.9	48.2	51.5	46.5	44.9	48.2
	2011–12 <sup># a</sup>	5.1	4.8	5.5	7.2	6.8	7.6	45.4	44.4	46.4	51.0	50.0	52.0
	2012ª	4.2	3.7	4.9	6.6	5.8	7.5	45.5	43.6	47.4	51.0	49.0	53.0
	2013 <sup>+ b</sup>	5.6	4.6	6.9	6.6	5.5	8.0	50.0	47.1	53.0	46.8	43.9	49.8
	2014 <sup># b</sup>	4.4	4.0	4.8	6.4	5.9	6.8	47.8	46.6	49.0	48.6	47.4	49.8

Data were age-standardised to the 2011 Victorian population.

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

<sup>a</sup> NHMRC (2003) guidelines.

<sup>b</sup> NHMRC (2013) guidelines.

<sup>c</sup> Includes those meeting both guidelines.

Survey sample size: # ~34,000; † ~3,600; remaining surveys ~7,500

Table 3.23 and Figure 3.3 show the proportion of adults who met the 2013 Australian guidelines for fruit and vegetable consumption, by age group and sex. The proportion of adults who did not comply with either set of guidelines was 48.6 per cent among all Victorian adults. A significantly higher proportion of men did not comply with either set of guidelines (54.0 per cent) compared with women (43.4 per cent). The proportion of women who did not meet fruit and vegetable consumption guidelines was significantly higher among women 35–44 years of age compared with all Victorian women.

By contrast the proportion who did not meet fruit and vegetable consumption guidelines was significantly lower among women and adults 65–84 years of age compared with all Victorian women and adults, respectively.

# Table 3.23: Proportion (%) of the population complying with fruit and vegetable consumption guidelines,<sup>a</sup> by age group and sex, Victoria, 2014

Age 9			Met both fruit and vegetable consumption guidelines		Met vegetable consumption guidelines only <sup>b</sup>			Met fruit consumption guidelines only <sup>b</sup>			Did no and cor gu	Did not meet fruit and vegetable consumption guidelines		
	Age	%	959	% CI	%	959	% CI	%	95%	6 CI	%	95%	6 CI	
	(years)		LL	UL		LL	UL		LL	UL		LL	UL	
Males	18–24	1.5*	0.6	3.7	1.5*	0.6	3.7	46.0	39.4	52.6	53.8	47.2	60.4	
	25–34	**			**			42.1	36.3	48.1	56.0	49.9	61.9	
	35–44	1.6*	1.0	2.7	2.6	1.7	3.9	42.4	38.9	46.0	55.8	52.2	59.4	
	45–54	1.7	1.1	2.7	2.6	1.8	3.7	44.4	41.4	47.5	52.2	49.1	55.2	
	55–64	1.7	1.3	2.3	2.5	1.9	3.3	41.5	39.0	44.0	55.9	53.4	58.4	
	65–74	2.1	1.6	2.8	3.8	3.0	4.8	43.1	40.8	45.5	52.5	50.2	54.9	
	75–84	4.2	3.1	5.6	6.1	4.8	7.6	47.0	43.9	50.2	47.1	44.0	50.2	
	85+	4.4*	2.1	9.1	5.6*	3.0	10.2	41.8	35.8	48.1	53.3	47.0	59.6	
	Victoria	1.7	1.4	2.1	2.6	2.1	3.1	43.5	41.7	45.2	54.0	52.2	55.8	
Females	18–24	4.1*	2.3	7.3	5.4*	3.3	8.9	56.5	49.9	62.8	41.3	35.0	47.8	
	25–34	6.1	4.2	8.7	10.5	7.9	13.7	49.1	44.1	54.1	44.7	39.8	49.7	
	35–44	6.3	5.2	7.6	9.1	7.8	10.7	48.0	45.4	50.7	48.0	45.4	50.6	
	45–54	7.1	6.1	8.3	10.1	8.9	11.5	49.1	46.8	51.5	46.4	44.0	48.8	
	55-64	10.4	9.1	11.8	13.9	12.5	15.5	52.3	50.2	54.4	42.5	40.4	44.6	
	65–74	9.2	8.0	10.4	13.0	11.7	14.5	57.4	55.3	59.5	37.0	35.0	39.1	
	75–84	7.7	6.3	9.3	10.0	8.5	11.8	58.7	56.1	61.3	36.1	33.6	38.7	
	85+	5.4	3.7	7.7	6.8	5.0	9.2	54.1	49.2	58.8	39.4	34.8	44.3	
	Victoria	6.9	6.3	7.6	10.0	9.2	10.8	51.9	50.3	53.5	43.4	41.9	45.0	

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}~$  Estimate has a RSE 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.

<sup>a</sup> NHMRC (2013) guidelines.

# Table 3.23: Proportion (%) of the population complying with fruit and vegetable consumption guidelines,<sup>a</sup> by age group and sex, Victoria, 2014 (continued)

Age		Met both fruit and vegetable consumption guidelines			Met cor guid	Met vegetable consumption guidelines only <sup>b</sup>			1et frui Isumpt elines d	t ion only <sup>b</sup>	Did not meet fro and vegetable consumption guidelines		
	group	%	95%	% CI	%	95%	% CI	- %	95% Cl		%	95%	% CI
	(years)		LL	UL		LL	UL		LL	UL		LL	UL
Persons	18–24	2.8	1.7	4.5	3.4	2.2	5.3	51.1	46.4	55.7	47.7	43.1	52.4
	25–34	3.4	2.3	4.9	5.9	4.5	7.8	45.6	41.7	49.5	50.4	46.4	54.3
	35–44	4.0	3.3	4.8	5.9	5.1	6.9	45.3	43.0	47.5	51.9	49.6	54.1
	45–54	4.5	3.8	5.2	6.4	5.6	7.3	46.8	44.9	48.7	49.2	47.3	51.2
	55–64	6.1	5.4	6.9	8.3	7.5	9.2	47.0	45.4	48.6	49.0	47.4	50.7
	65–74	5.9	5.3	6.7	8.8	7.9	9.7	50.8	49.3	52.4	44.1	42.6	45.7
	75–84	6.0	5.1	7.1	8.2	7.1	9.4	53.3	51.3	55.3	41.2	39.2	43.2
	85+	5.0	3.5	7.1	6.3	4.7	8.4	48.9	45.0	52.7	45.3	41.5	49.2
	Victoria	4.4	4.0	4.8	6.4	5.9	6.8	47.8	46.6	49.0	48.6	47.4	49.8

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}~$  Estimate has a RSE 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.

<sup>a</sup> NHMRC (2013) guidelines.



# Figure 3.3: Proportion (%) of the population complying with both fruit and vegetable consumption guidelines, by age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. 95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

Table 3.24 shows the proportion of adults who met the 2013 Australian fruit and vegetable consumption guidelines, by departmental region and sex. The proportion of adults who did not meet fruit and vegetable consumption guidelines was similar across all regions among men and women but was significantly higher in Loddon Mallee Region compared with all men, women and adults.

# Table 3.24: Proportion (%) of the population complying with fruit and vegetable consumption guidelines,<sup>a</sup> by Department of Health and Human Services region and sex, Victoria, 2014

	Met and cor gu	both t veget sump uidelin	fruit able tion es	Met con guide	vegeto Isumpt elines o	able tion only <sup>b</sup>	N cor guid	1et fru Isumpt elines (	it tion only <sup>b</sup>	Did no and cor gu	ot mee veget nsumpt uidelin	t fruit able tion es
	%	95%	% CI	%	95%	6 CI	%	95%	% CI	%	95%	6 CI
Region		LL	UL		LL	UL		LL	UL		LL	UL
Males (18+ years)												
Eastern Metropolitan	1.9*	1.0	3.4	2.6	1.6	4.1	42.0	37.8	46.3	55.0	50.6	59.3
North & West Metropolitan	1.9	1.3	2.9	2.7	2.0	3.7	44.4	41.4	47.4	52.9	49.9	55.9
Southern Metropolitan	1.0	0.7	1.5	2.1	1.3	3.3	45.1	41.2	49.2	52.5	48.5	56.5
All metropolitan regions	1.6	1.2	2.2	2.4	1.9	3.1	44.0	41.9	46.1	53.4	51.3	55.5
Barwon-South Western	1.6*	0.8	2.9	2.7*	1.6	4.5	50.8	43.4	58.2	46.8	39.5	54.3
Gippsland	1.5*	0.8	2.5	1.9	1.2	3.0	41.6	34.9	48.7	56.7	49.6	63.5
Grampians	2.5*	1.2	5.1	3.6*	2.1	6.1	41.9	35.7	48.3	55.3	48.9	61.5
Hume	2.3	1.5	3.4	2.8	2.0	3.9	37.4	32.3	42.7	60.1	54.7	65.3
Loddon Mallee	2.0	1.2	3.1	3.0	2.0	4.5	36.8	31.7	42.2	60.9	55.5	66.0
All rural regions	1.9	1.5	2.5	2.8	2.2	3.4	42.3	39.2	45.4	55.4	52.3	58.5
Victoria	1.7	1.4	2.1	2.6	2.1	3.1	43.5	41.7	45.2	54.0	52.2	55.8
Females (18+ years)												
Eastern Metropolitan	6.7	5.4	8.4	9.1	7.6	10.9	53.9	49.9	57.9	42.8	38.8	46.8
North & West Metropolitan	5.8	4.8	7.0	8.6	7.4	10.0	52.2	49.6	54.8	42.9	40.3	45.5
Southern Metropolitan	6.6	5.5	7.9	10.0	8.4	11.8	49.7	46.4	53.1	44.9	41.5	48.3
All metropolitan regions	6.3	5.7	7.1	9.3	8.4	10.2	51.8	49.9	53.6	43.6	41.7	45.4
Barwon-South Western	10.1*	6.1	16.4	12.4	8.1	18.5	57.1	50.0	63.8	40.1	33.4	47.1
Gippsland	7.9	5.9	10.6	11.3	8.9	14.1	52.2	46.8	57.5	42.3	37.1	47.6
Grampians	8.5	7.0	10.4	12.1	10.1	14.5	53.9	49.5	58.3	41.5	37.1	46.0
Hume	9.0	7.2	11.3	12.6	10.5	15.1	54.0	50.1	57.8	41.6	37.9	45.5
Loddon Mallee	9.1	6.6	12.4	13.4	10.5	17.1	44.8	39.9	49.8	49.5	44.4	54.6
All rural regions	9.0	7.6	10.8	12.4	10.8	14.1	52.7	50.0	55.4	42.8	40.2	45.5
Victoria	6.9	6.3	7.6	10.0	9.2	10.8	51.9	50.3	53.5	43.4	41.9	45.0

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

<sup>a</sup> NHMRC (2013) guidelines.

# Table 3.24: Proportion (%) of the population complying with fruit and vegetable consumptionguidelines,<sup>a</sup> by Department of Health and Human Services region and sex, Victoria, 2014 (continued)

	Met and cor gi	t both f veget nsumpt uidelin	ruit able tion es	Met con guide	veget isump elines	able tion only <sup>b</sup>	N cor guid	1et fru Isumpt elines	it tion only <sup>b</sup>	Did no and cor gu	ot mee vegeto isumpt uidelin	t fruit able tion es
	%	95%	% CI	%	95%	% CI	%	95%	% CI	%	95%	6 CI
Region		LL	UL		LL	UL		LL	UL		LL	UL
People (18+ years)												
Eastern Metropolitan	4.4	3.5	5.5	6.0	5.0	7.1	48.1	45.1	51.1	48.7	45.7	51.7
North & West Metropolitan	3.9	3.3	4.6	5.7	5.0	6.6	48.4	46.4	50.4	47.8	45.8	49.8
Southern Metropolitan	3.9	3.3	4.6	6.1	5.2	7.2	47.6	44.9	50.2	48.5	45.9	51.2
All metropolitan regions	4.1	3.6	4.5	5.9	5.4	6.5	48.0	46.6	49.4	48.4	46.9	49.8
Barwon-South Western	5.9	3.6	9.4	7.6	5.2	11.0	54.0	48.9	59.1	43.3	38.3	48.5
Gippsland	4.9	3.6	6.5	6.8	5.4	8.5	46.7	42.2	51.2	49.7	45.2	54.2
Grampians	5.5	4.4	6.8	7.8	6.5	9.4	47.6	43.5	51.8	48.6	44.5	52.8
Hume	5.7	4.6	6.9	7.7	6.6	9.1	45.7	42.2	49.3	50.8	47.3	54.4
Loddon Mallee	5.5	4.2	7.2	8.2	6.6	10.1	40.8	37.2	44.4	55.3	51.5	58.9
All rural regions	5.5	4.7	6.5	7.6	6.8	8.6	47.8	46.6	49.0	49.2	47.1	51.2
Victoria	4.4	4.0	4.8	6.4	5.9	6.8	47.8	46.6	49.0	48.6	47.4	49.8

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

<sup>a</sup> NHMRC (2013) guidelines.

# Fruit and vegetable consumption by departmental region and local government area

HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MANSFIELD MARIB' RNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONEE VALLEY MOOR/ BOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NILLUMBIK NORTH STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOOL WELLING TON WEST WIMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARRIAME ACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDARA BRIN BANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMITE DAREBI HORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MANSFIEL MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONEE VALLE MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NILLUMB NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUTH GIPP STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOOL WE MMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARF CK ALPINE / RARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDAF BANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMI1 **BIN EAST GIPPS** FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI REATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON NGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MAN GREATER DANDELIONG IORSHAM HUME INDIGO K MARIBYRNONG MAROOLIDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE EY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI IK NORTHEEN GRAMPIANS CORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT LUM SLAN<del>D STO</del>NNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOC INGTON WEST WILMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGE IAMBIACK ALPINE ARARAT BALLARAT BANY RELEASS COAST BAW BAW BAYSIDE BENALLA BOROONI BRIMBANK BULOKE CAMPASPE CARDINAL CASEY CENTRAL CODEFIELDS COAC-OTWAY CORANGAMIT BIN EAST GIPPSLATID FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI GREATER DANDENONG GREATER GEELONG GREATER SHEPPARTON HEPBURI HINDMARSH HOBSON HORSHAM HUME INDIGO KINGSTON KNOX LALPOBE LODDON MACEDON RANGES MANNINGHAM MAN MARIBYRNONG MAROONINAH MELBOURNE MELTON MILDURA MITCHELL MORA MONASH MOONE EY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEX (NDER MC INE MURRINDINDI NII IK NORTHERN GRAMPIANS PORT PHILLUP PYRENEES QUEENSCLIEFT SOUTHERN CRAMPIANS SOUT SLAND STONMINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRA MARBOOL INGTON WEST WIMMERA WHITCHORSE WHITTLESEA WODONGA WANDHAM YARRA YARRA RANGE MABIACK ALPINE ARARAT BALLARATBANY HE BASS COAST BAW BAW BAYSIDE BENALLA BOROONI BIN EAST GIPPSLAND FOR MARAT BALLARATBANY HE BASS COAST BAW BAW BAYSIDE BENALLA BOROONI BIN EAST GIPPSLAND FOR STON GANNAWARKA GLEN FRA GOLDFIELDS COLAC-OTWAY CORANG MIT BIN EAST GIPPSLAND FOR STON GANNAWARKA GLEN FRA GLENELG GOLDEN PLAINS GREATER BEN GREATER DANDENONG GREATER CEPLON GREATER SHEPPARTON HEPBUR. HINDMARSH HOBSON HORSHAM HUME INDIGO KINGSTON INFORMAWARKA GLEN FRA GLENELG GOLDEN PLAINS GREATER BEN GREATER DANDENONG GREATER CEPLON GREATER SHEPPARTON HEPBUR. HINDMARSH HOBSON HORSHAM HUME INDIGO KINGSTON INFORMAWARKA GLEN FRA GLENELG GOLDEN PLAINS GREATER BEN HORSHAM HUME INDIGO KINGSTON INFORMAWARKA GLEN FRA GLENELG MON HANDING HAMANSH HOBSON HORSHAM HUME INDIGO KINGSTON INFORMAWARKA GLEN FRA GLENELG MON PLAINS GREATER BEN HORSHAM HUME INDIGO KINGSTON INFORMAWARKA GLEN FRA GLENELG MON PLAINS GREATER BEN HORSHAM HUME INDIGO KINGSTON INFORMATION MARKA GLEN FRA MANNINGHAM MAN DI MARIBYRNONG MAROONDAH MELBOUNNE MENTON MILDURA MITCHELL MOIRA MONASH MOONE EY MARADOCT MORELAND MORNINGTON PENINGHAM MANNINGHAM MANNINGHAM MANNINGHAM MANNINGHAM MANNINGHAM MONNINGHAM MANNING MAROONDAH MELBOUNNE MENTON MILDURA MITCHELL MOIRA MONASH MOONE EY MARA IAMBIACK ALPINE ARARAT BALLARAT S COAST BAW BAW BAYSIDE BENALLA BOROONI DAR LUM **JULA MOUNT ALEX** MORELAND MORNU ANDER MOYNE MURRINDINDI NI VALLEY NOORA **NEES QUEENSCL** MPIANS POR **OGIE SURF COAS GIPPSLAND STONNINGTON** TRATH WELLINGTON WEST WIMMERA HITEHORSE WHITTLESE NGA WYNDHAM YARRA YARRA RANGE YARRIAMBIACK ALPINE ARARAT BALLARAT BANYULE BASS W BAW BAYSIDE BENALLA BOROONI DIGO GREATER DANDENONG GREATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON BAY HORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MAN! FIELD MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE VALLEY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI LUMBIK NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT GIPPSLAND STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOC WELLINGTON WEST WIMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGE YARRIAMBIACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONI ARA BRIMBANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMIT

Table 3.25 shows the proportion of adults who met the 2013 Australian fruit and vegetable consumption guidelines by LGA in Eastern Metropolitan Region. The proportion of adults who did not meet fruit and vegetable consumption guidelines was similar across all LGAs in Eastern Metropolitan Region compared with all Victorian adults.

#### Table 3.25: Proportion (%) of the population complying with fruit and vegetable consumption guidelines,<sup>a</sup> by LGA, Eastern Metropolitan Region, Victoria, 2014

	Met and cor gi	t both f l vegeto nsumpt uidelino	ruit able ion es	Met cor guide	veget isump <sup>1</sup> elines	able tion only <sup>b</sup>	۲ cor guid	1et frui nsumpt elines o	it :ion only <sup>b</sup>	Did n and cor gr	ot mee l vegeto nsumpt uidelino	t fruit able :ion es
	%	95%	6 CI	%	959	% CI	%	95%	6 CI	%	95%	6 CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Boroondara (C)	4.6	3.0	7.2	5.8	3.9	8.4	44.7	38.3	51.3	53.5	47.0	60.0
Knox (C)	1.8*	1.0	3.1	3.4*	2.1	5.6	48.9	40.7	57.1	48.8	40.6	56.9
Manningham (C)	7.7*	4.4	13.2	9.0	5.5	14.5	52.5	44.7	60.1	45.3	37.7	53.1
Maroondah (C)	3.8*	1.9	7.7	6.3	3.9	10.1	46.8	37.9	55.9	50.6	41.6	59.6
Monash (C)	3.9*	2.1	7.5	5.7*	3.4	9.5	46.5	40.0	53.1	48.1	41.6	54.6
Whitehorse (C)	6.2	3.9	9.7	6.8	4.4	10.2	54.3	46.9	61.6	43.9	36.6	51.4
Yarra Ranges (S)	3.5	2.3	5.3	5.7	4.0	8.2	43.9	35.2	52.9	50.9	42.0	59.7
Eastern Metropolitan Region	4.4	3.5	5.5	6.0	5.0	7.1	48.1	45.1	51.1	48.7	45.7	51.7
Victoria	4.4	4.0	4.8	6.4	5.9	6.8	47.8	46.6	49.0	48.6	47.4	49.8

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

<sup>a</sup> NHMRC (2013) guidelines.

Table 3.26 shows the proportion of adults who met the 2013 Australian fruit and vegetable consumption guidelines by LGA in North & West Metropolitan Region. The proportion of adults who did not meet fruit and vegetable consumption guidelines was significantly lower among those who lived in the LGA of Nillumbik (S) compared with all Victorian adults.

# Table 3.26: Proportion (%) of the population complying with vegetable and fruit consumption guidelines,<sup>a</sup> by LGA, North & West Metropolitan Region, Victoria, 2014

	Met and cor gi	t both f l vegete nsumpt uideline	ruit able tion es	Met cor guid	veget Isump <sup>-</sup> elines	able tion only <sup>b</sup>	۱ cor guid	1et frui nsumpt elines o	it ion only <sup>b</sup>	Did no and cor gi	ot mee veget nsumpt uidelin	t fruit able :ion es
	%	95%	% CI	%	95	% CI	%	95%	6 CI	%	95%	6 CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Banyule (C)	3.8	2.5	5.9	5.3	3.7	7.6	47.7	40.0	55.5	49.5	41.7	57.3
Brimbank (C)	3.2*	1.4	7.4	4.0*	2.0	7.9	44.1	38.1	50.3	53.5	47.3	59.5
Darebin (C)	4.2*	2.5	6.8	7.2	4.7	10.9	50.4	42.6	58.1	45.5	37.5	53.6
Hobsons Bay (C)	3.2	2.1	4.9	7.1*	3.6	13.5	53.6	44.8	62.3	40.6	32.3	49.5
Hume (C)	3.6*	2.1	6.0	5.5	3.7	8.1	44.3	38.1	50.7	51.5	45.1	57.9
Maribyrnong (C)	3.4*	1.9	5.9	5.1	3.3	7.9	44.7	37.7	52.0	50.2	42.9	57.4
Melbourne (C)	5.6*	3.3	9.5	8.6	5.5	13.3	53.7	47.0	60.2	41.5	35.1	48.1
Melton (S)	2.4*	1.4	4.0	4.4	3.0	6.4	43.8	36.6	51.3	52.2	44.8	59.5
Moonee Valley (C)	5.8	3.6	9.3	7.6	4.6	12.2	49.7	42.8	56.7	46.9	39.9	53.9
Moreland (C)	5.0*	2.6	9.4	6.1*	3.5	10.4	49.7	42.4	57.1	46.0	38.8	53.5
Nillumbik (S)	4.5	2.9	6.8	7.0	4.8	10.2	57.3	50.0	64.3	39.2	32.4	46.4
Whittlesea (C)	3.4*	1.8	6.4	4.5*	2.7	7.6	47.4	41.6	53.2	49.1	43.3	55.0
Wyndham (C)	2.5*	1.4	4.5	3.4*	2.0	5.5	43.5	37.5	49.6	53.8	47.7	59.7
Yarra (C)	4.3	2.8	6.7	7.9	5.1	12.1	47.3	38.7	55.9	47.9	39.4	56.4
North & West Metropolitan Region	3.9	3.3	4.6	5.7	5.0	6.6	48.4	46.4	50.4	47.8	45.8	49.8
Victoria	44	40	4.8	64	59	6.8	478	46.6	49.0	48.6	474	49.8

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

<sup>a</sup> NHMRC (2013) guidelines.

Table 3.27 shows the proportion of adults who met the 2013 Australian fruit and vegetable consumption guidelines by LGA in Southern Metropolitan Region. The proportion of adults who did not meet fruit and vegetable consumption guidelines was significantly lower among those who lived in the LGA of Bayside (C) compared with all Victorian adults.

## Table 3.27: Proportion (%) of the population complying with fruit and vegetable consumption guidelines<sup>,a</sup> by LGA, Southern Metropolitan Region, Victoria, 2014

	Met and cor gi	t both f l vegeta nsumpt uidelina	ruit able ion es	Met cor guid	veget Isump <sup>.</sup> elines	able tion only <sup>b</sup>	۱ cor guid	1et frui nsumpt elines o	it tion only <sup>b</sup>	Did no and cor gu	ot mee vegeta nsumpt uidelina	t fruit able ;ion es
	%	95%	6 CI	%	959	% CI	%	95%	% CI	%	95%	6 CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Bayside (C)	5.8*	3.4	9.9	6.4*	3.8	10.4	63.3	56.2	69.8	34.6	28.5	41.3
Cardinia (S)	4.7*	2.8	7.7	6.3	4.1	9.6	50.2	43.6	56.8	46.4	39.8	53.1
Casey (C)	3.8*	2.3	6.2	5.7	3.6	8.7	42.0	35.7	48.5	53.7	47.2	60.1
Frankston (C)	4.9*	3.0	8.0	7.7	5.0	11.6	51.5	45.2	57.8	44.1	38.0	50.3
Glen Eira (C)	3.2	2.0	5.0	5.6	3.4	9.1	42.3	35.2	49.7	54.8	47.3	62.1
Greater Dandenong (C)	2.0*	1.0	4.0	3.0*	1.7	5.1	40.6	34.1	47.4	55.0	48.2	61.6
Kingston (C)	2.8*	1.5	4.9	6.4	3.9	10.1	52.4	44.0	60.6	43.1	35.1	51.4
Mornington Peninsula (S)	3.0	1.9	4.6	4.4	3.0	6.3	48.7	41.4	56.1	48.8	41.4	56.2
Port Phillip (C)	5.6	3.9	8.1	8.0	5.5	11.7	48.7	38.8	58.6	48.4	38.4	58.6
Stonnington (C)	6.1*	3.5	10.3	9.2*	5.3	15.3	50.2	42.1	58.3	44.9	37.1	53.1
Southern Metropolitan Region	3.9	3.3	4.6	6.1	5.2	7.2	47.6	44.9	50.2	48.5	45.9	51.2
Victoria	4.4	4.0	4.8	6.4	5.9	6.8	47.8	46.6	49.0	48.6	47.4	49.8

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

α NHMRC (2013) guidelines.

Table 3.28 shows the proportion of adults who met the 2013 Australian fruit and vegetable consumption guidelines by LGA in Barwon-South Western Region. The proportion of adults who did not meet fruit and vegetable consumption guidelines was significantly lower among those who lived in the LGAs of Queenscliffe (B) and Surf Coast (S) compared with all Victorian adults.

## Table 3.28: Proportion (%) of the population complying with fruit and vegetable consumption guidelines,<sup>a</sup> by LGA, Barwon-South Western Region, Victoria, 2014

	Met and cor gu	both f veget sumpt uidelin	fruit able tion es	Met con guide	veget isumpt elines	able tion only <sup>b</sup>	N cor guid	1et frui nsumpt elines (	it tion only <sup>b</sup>	Did no and cor gu	ot mee vegete nsumpt uideline	t fruit able ion es
	%	95%	% CI	%	959	% CI	%	95%	% CI	%	95%	6 CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Colac-Otway (S)	6.8*	2.8	15.6	8.3*	4.0	16.6	45.7	35.7	55.9	52.2	42.0	62.2
Corangamite (S)	7.4*	4.2	12.9	9.5	5.9	14.8	44.9	36.3	53.7	52.4	43.7	61.1
Glenelg (S)	5.2*	3.0	8.7	7.2	4.7	10.8	41.4	34.5	48.6	51.0	43.2	58.7
Greater Geelong (C)	5.5*	2.2	12.7	7.1*	3.5	13.8	55.1	47.1	63.0	42.5	34.7	50.6
Moyne (S)	6.3*	3.6	10.9	11.2*	6.1	19.6	46.0	37.4	54.8	48.5	39.7	57.3
Queenscliffe (B)	6.8	4.3	10.6	8.6	5.9	12.4	64.4	55.0	72.7	33.6	25.3	43.0
Southern Grampians (S)	4.2	2.7	6.4	5.7	3.9	8.2	45.9	36.3	55.9	51.9	42.0	61.7
Surf Coast (S)	6.3*	3.7	10.4	7.1	4.4	11.2	64.3	56.7	71.2	34.5	27.6	42.1
Warrnambool (C)	7.8*	3.7	15.6	9.4*	5.0	16.9	57.9	49.7	65.6	39.2	31.6	47.4
Barwon-South Western Region	5.9	3.6	9.4	7.6	5.2	11.0	54.0	48.9	59.1	43.3	38.3	48.5
Victoria	4.4	4.0	4.8	6.4	5.9	6.8	47.8	46.6	49.0	48.6	47.4	49.8

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

<sup>a</sup> NHMRC (2013) guidelines.

Table 3.29 shows the proportion of adults who met the 2013 Australian fruit and vegetable consumption guidelines by LGA in Gippsland Region. The proportion of adults who did not meet fruit and vegetable consumption guidelines was similar across all LGAs in Gippsland Region compared with all Victorian adults.

#### Table 3.29: Proportion (%) of the population complying with fruit and vegetable consumption guidelines,<sup>a</sup> by LGA, Gippsland Region, Victoria, 2014

	Met and cor gi	t both f l veget nsumpt uidelin	ruit able tion es	Met cor guid	veget isumpt elines	able tion only <sup>b</sup>	۲ cor guid	1et frui nsumpt elines o	it ion only <sup>b</sup>	Did no and cor gi	ot mee vegete nsumpt uideline	t fruit able iion es
	%	95%	% CI	%	959	% CI	%	95%	6 CI	%	95%	6 CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Bass Coast (S)	7.6*	4.0	14.1	10.3	6.3	16.5	46.4	35.7	57.4	49.6	38.8	60.5
Baw Baw (S)	5.2	3.3	8.0	6.8	4.7	9.8	47.1	37.9	56.6	50.4	41.1	59.8
East Gippsland (S)	3.5	2.3	5.1	5.0	3.4	7.2	49.2	38.7	59.9	47.7	37.2	58.4
Latrobe (C)	5.5*	2.8	10.6	6.9*	3.9	11.9	45.3	36.2	54.7	50.5	41.1	59.8
South Gippsland (S)	5.4*	3.2	8.8	7.6	5.0	11.2	49.4	41.1	57.8	47.5	39.2	55.9
Wellington (S)	2.9*	1.7	4.7	5.6	3.4	9.0	43.5	35.2	52.2	52.6	43.8	61.2
Gippsland Region	4.9	3.6	6.5	6.8	5.4	8.5	46.7	42.2	51.2	49.7	45.2	54.2
Victoria	4.4	4.0	4.8	6.4	5.9	6.8	47.8	46.6	49.0	48.6	47.4	49.8

Data were age-standardised to the 2011 Victorian population.

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

<sup>a</sup> NHMRC (2013) guidelines.

Table 3.30 shows the proportion of adults who met the 2013 Australian fruit and vegetable consumption guidelines by LGA in Grampians Region. The proportion of adults who did not meet fruit and vegetable consumption guidelines was similar across all LGAs in Grampians Region compared with all Victorian adults.

#### Table 3.30: Proportion (%) of the population complying with fruit and vegetable consumption guidelines,<sup>a</sup> by LGA, Grampians Region, Victoria, 2014

	Met and cor gı	t both f veget nsumpt uidelin	fruit able tion es	Met cor guid	veget sump elines	able tion only <sup>b</sup>	۱ cor guid	1et fru nsumpt elines (	it tion only <sup>b</sup>	Did n and cor gu	ot mee vegeta sumpt uidelina	t fruit able :ion es
	%	959	% CI	%	955	% CI	%	95%	% CI	%	95%	6 CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Ararat (RC)	7.4*	3.5	14.9	9.1*	4.9	16.3	40.7	32.1	49.9	54.4	45.0	63.4
Ballarat (C)	5.3	3.4	8.2	8.6	6.1	12.0	50.8	43.6	57.9	44.5	37.5	51.8
Golden Plains (S)	5.7	3.8	8.3	7.8	5.5	10.9	40.5	33.4	48.1	57.1	49.5	64.3
Hepburn (S)	4.3	2.8	6.4	6.1	4.0	9.1	43.8	34.0	54.1	53.0	42.7	63.0
Hindmarsh (S)	7.7	5.1	11.7	9.6	6.7	13.6	44.7	35.8	54.1	53.0	43.7	62.1
Horsham (RC)	8.1*	3.2	18.8	9.2*	4.1	19.4	47.5	34.4	60.9	50.1	36.8	63.3
Moorabool (S)	4.7*	2.8	7.7	5.9	3.8	8.9	43.7	36.9	50.7	53.0	45.8	60.1
Northern Grampians (S)	4.7	3.0	7.4	6.0	4.1	8.7	44.7	35.4	54.3	52.9	43.4	62.2
Pyrenees (S)	6.0*	3.4	10.3	7.6	4.8	11.9	51.8	42.8	60.7	45.5	36.6	54.7
West Wimmera (S)	8.9*	5.2	14.9	9.9	6.0	15.8	45.9	37.2	54.9	51.4	42.5	60.3
Yarriambiack (S)	4.1*	2.5	6.7	8.2	5.4	12.3	37.1	30.2	44.4	57.9	50.7	64.7
Grampians Region	5.5	4.4	6.8	7.8	6.5	9.4	47.6	43.5	51.8	48.6	44.5	52.8
Victoria	4.4	4.0	4.8	6.4	5.9	6.8	47.8	46.6	49.0	48.6	47.4	49.8

Data were age-standardised to the 2011 Victorian population.

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

<sup>a</sup> NHMRC (2013) guidelines.

Table 3.31 shows the proportion of adults who met the 2013 Australian fruit and vegetable consumption guidelines by LGA in Hume Region. The proportion of adults who did not meet fruit and vegetable consumption guideliness was similar across all LGAs in Hume Region compared with all Victorian adults.

## Table 3.31: Proportion (%) of the population complying with fruit and vegetable consumption guidelines,<sup>a</sup> by LGA, Hume Region, Victoria, 2014

	Met and cor gı	both f veget sumpt uidelin	ruit able tion es	Met con guide	veget Isump <sup>*</sup> elines	able tion only <sup>b</sup>	۱ cor guid	1et fru nsumpt elines (	it tion only <sup>b</sup>	Did no and cor gi	ot mee   vegeta nsumpt uidelina	t fruit able :ion es
	%	95%	% CI	%	959	% CI	%	95%	% CI	%	95%	6 CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Alpine (S)	7.8*	4.0	14.6	10.4*	6.0	17.4	55.1	46.9	63.0	41.9	33.7	50.5
Benalla (RC)	10.7*	5.6	19.3	12.1*	6.7	20.7	46.7	37.4	56.3	50.8	41.3	60.2
Greater Shepparton (C)	5.2*	2.9	9.1	6.8*	4.1	11.1	43.3	35.7	51.1	54.3	46.3	62.0
Indigo (S)	5.1	3.5	7.2	9.0	6.2	13.0	48.5	38.4	58.7	46.5	36.6	56.8
Mansfield (S)	5.2	3.5	7.6	7.3	5.0	10.4	44.1	31.8	57.0	51.1	38.5	63.6
Mitchell (S)	6.2*	3.7	10.3	8.6	5.8	12.7	48.9	39.7	58.2	44.7	35.9	53.8
Moira (S)	4.8*	2.4	9.3	7.2*	4.4	11.7	49.5	40.4	58.6	46.4	37.4	55.7
Murrindindi (S)	3.8	2.5	5.9	5.7	4.0	8.1	41.8	32.9	51.3	55.8	46.4	64.8
Strathbogie (S)	7.0*	3.5	13.2	9.1*	5.2	15.4	56.2	47.5	64.6	41.0	32.8	49.8
Towong (S)	7.2*	4.1	12.1	10.0	6.6	15.0	47.0	38.8	55.3	48.8	40.6	57.1
Wangaratta (RC)	3.7*	2.1	6.4	5.4	3.6	8.1	43.3	32.4	54.8	54.6	43.2	65.6
Wodonga (RC)	6.1	4.0	9.3	8.0	5.6	11.3	43.2	35.7	50.9	53.7	46.0	61.2
Hume Region	5.7	4.6	6.9	7.7	6.6	9.1	45.7	42.2	49.3	50.8	47.3	54.4
Victoria	4.4	4.0	4.8	6.4	5.9	6.8	47.8	46.6	49.0	48.6	47.4	49.8

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}~$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

<sup>a</sup> NHMRC (2013) guidelines.

Table 3.32 shows the proportion of adults who met the 2013 Australian fruit and vegetable consumption guidelines by LGA in Loddon Mallee Region. The proportion of adults who did not meet fruit and vegetable consumption guidelines was significantly higher among those who lived in the LGAs of Campaspe (S), Central Goldfields (S) and Macedon Ranges (S) compared with all Victorian adults.

## Table 3.32: Proportion (%) of the population complying with fruit and vegetable consumption guidelines,<sup>a</sup> by LGA, Loddon Mallee Region, Victoria, 2014

	Met and cor gi	t both f l veget nsump uidelin	fruit able tion es	Met cor guide	veget isump elines	able tion only <sup>b</sup>	۱ cor guid	Met fru nsumpt elines	it tion only <sup>b</sup>	Did no and cor gi	ot mee vegeta nsumpt uidelina	t fruit able tion es
	%	959	% CI	%	955	% CI	%	95%	% CI	%	95%	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Buloke (S)	5.5*	2.8	10.5	8.1*	4.9	13.2	42.4	33.6	51.7	54.5	45.4	63.4
Campaspe (S)	4.0	2.5	6.4	6.8*	3.6	12.7	36.5	29.1	44.5	60.0	51.4	68.1
Central Goldfields (S)	5.7*	2.7	11.7	9.6*	4.7	18.7	35.4	28.3	43.1	59.4	51.6	66.7
Gannawarra (S)	4.5*	2.7	7.3	8.5*	4.9	14.6	38.2	30.1	47.0	50.4	37.5	63.3
Greater Bendigo (C)	5.5*	3.0	9.7	8.6	5.5	13.0	42.4	35.3	49.8	53.4	46.0	60.6
Loddon (S)	4.5	2.9	6.9	6.3	4.4	8.8	42.0	30.7	54.2	55.0	42.9	66.5
Macedon Ranges (S)	7.0	4.5	10.7	9.1	6.0	13.5	37.4	30.6	44.7	59.3	51.7	66.5
Mildura (RC)	4.2*	2.4	7.3	5.9	3.8	9.0	41.8	33.0	51.1	54.7	45.5	63.5
Mount Alexander (S)	9.8*	5.5	17.1	13.9	9.0	20.8	42.4	33.1	52.2	52.4	42.8	61.8
Swan Hill (RC)	5.4*	2.8	10.1	7.9*	4.1	14.8	43.2	36.4	50.3	52.8	44.9	60.6
Loddon Mallee Region	5.5	4.2	7.2	8.2	6.6	10.1	40.8	37.2	44.4	55.3	51.5	58.9
Victoria	4.4	4.0	4.8	6.4	5.9	6.8	47.8	46.6	49.0	48.6	47.4	49.8

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

<sup>a</sup> NHMRC (2013) guidelines.

#### What do Maps 3.1 and 3.2 tell us?

In Map 3.1 and Map 3.2 the 79 LGAs have been ranked according to the proportion of adults who eat the recommended serves of fruit and vegetables respectively, according to the Australian guidelines. The LGAs were then divided into 4 groups of 16 LGAs (labelled poorest, fair, good and very good results) with increasing proportions of people who eat the recommended serves of fruit and vegetables and a final group of 15 LGAs with the best results (i.e. the biggest proportions of adults who eat the recommended serves of fruit and vegetables).



Map 3.1: Proportion of the population meeting the 2013 Australian vegetable consumption guidelines, by LGA, Victoria, 2014



Note: The local government area (LGA) ID is based on the alphabetical order of the LGA names (see Table iii, page 17).

Map 3.2: Proportion of the population meeting the 2013 Australian fruit consumption guidelines, by LGA, Victoria, 2014



Note: The local government area (LGA) ID is based on the alphabetical order of the LGA names (see Table iii, page 17).

The relationship was investigated between SES and the proportion of males and females who met both fruit and vegetable consumption guidelines, using total annual household income as a measure of SES (Figure 3.4). The proportion of females who met both fruit and vegetable consumption guidelines increased significantly with increasing total annual household income.





Data are age-adjusted to the 2011 population of Victoria.

95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

<sup>a</sup> NHMRC (2013).

Table 3.33 shows the proportion of men who met the 2013 Australian fruit and vegetable consumption guidelines according to selected socioeconomic determinants. When compared with all Victorian men, a significantly higher proportion of men with a total annual household income of less than \$40,000 did not comply with either set of guidelines. A significantly lower proportion of men with a university or other tertiary education degree did not comply with either set of guidelines compared with all Victorian men.

Table 3.34 shows the proportion of women who met the 2013 Australian fruit and vegetable consumption guidelines according to selected socioeconomic determinants. When compared with all Victorian women, a significantly higher proportion of women who did not complete high school did not comply with either set of guidelines. A significantly lower proportion of women who had a total annual household income of \$100,000 or more did not comply with either set of guidelines compared with all Victorian women.

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All males	1.7	1.4	2.1	2.6	2.1	3.1	43.5	41.7	45.2	54.0	52.2	55.8
Country of birth												
Australia	1.7	1.4	2.1	2.5	2.1	3.0	42.4	40.3	44.4	55.4	53.4	57.5
Overseas	2.1*	1.2	3.8	3.0	1.9	4.8	46.5	42.7	50.4	50.1	46.3	54.0
Language spoken at home												
English	1.6	1.4	2.0	2.6	2.2	3.2	43.3	41.3	45.4	54.3	52.2	56.4
Language other than English	2.0*	11	3.8	2.4*	1.4	4.1	45.1	41.4	48.8	51.5	47.7	55.2
Education level												
Did not complete high school	1.3*	0.7	2.5	2.0*	1.2	3.3	36.1	31.0	41.4	60.5	55.1	65.6
Completed high school, or TAFE, or trade certificate, or diploma	1.6	1.2	2.1	2.4	1.9	3.0	41.3	38.8	43.8	56.4	53.8	58.9
University, or some other tertiary institute degree, including postgraduate diploma or degree	2.3	1.5	3.4	3.1	2.2	4.4	49.1	45.9	52.2	48.7	45.6	51.9
Employment status												
Employed	1.5	1.1	2.0	2.2	1.7	2.8	45.5	43.1	47.9	52.5	50.1	54.8
Unemployed	0.2	0.1	0.7	1.3	0.6	3.0	28.6	21.8	36.6	63.0	55.0	70.3
Not in labour force	2.1	1.3	3.5	2.8	1.9	4.2	38.1	33.5	42.9	58.3	53.5	63.0
Total annual household income												
< \$40,000	1.6*	1.0	2.7	3.0	2.0	4.4	33.3	28.9	38.0	62.4	57.6	67.0
\$40,000 to < \$100,000	2.1	1.4	3.3	2.9	2.0	4.0	45.9	42.7	49.1	52.4	49.2	55.5
≥ \$100,000	2.1	1.5	3.0	2.9	2.1	4.0	47.1	43.8	50.4	51.6	48.3	55.0
Data were age-standardised to the 2011 Victorian population. LL/LU 95% CI = lower/upper limit of 95 per cent confidence interval.			ж.	lative stand RSE betwee	ard error ( n 25 and 5	RSE) = stand 0 per cent; p	ard error/po	oint estim te (%) sho	ate * 100; int ould be interp	erpretation oreted with	below: caution.	
Note that estimates may not add to 100 per cent due to a proportion of 'don't kn say' responses, not reported here.	iow' or 'refi	used to	* 0	RSE greater NHMRC (207	than, or e 13) quidelir	qual to 50 pe nes.	er cent; poir	it estimat	e (%) is unrel	liable, henc	e not repoi	ted.

Estimates that are (statistically) significantly different from the corresponding estimate for Victoria are identified by colour as follows: above or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Table 3.34: Proportion (%) of adult females complying with fruit and vegetable consumption guidelines,<sup>a</sup> by selected socioeconomic determinants, Victo

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All females	6.9	6.3	7.6	10.0	9.2	10.8	51.9	50.3	53.5	43.4	41.9	45.0
Country of birth												
Australia	7.8	7.1	8.7	11.3	10.4	12.3	52.0	50.2	53.7	43.2	41.5	45.0
Overseas	5.0	4.0	6.2	7.2	5.9	8.8	51.6	48.1	55.0	44.2	40.7	47.6
Language spoken at home												
English	7.8	7.0	8.7	11.3	10.4	12.3	52.0	50.2	53.7	43.3	41.5	45.0
Language other than English	4.1	3.2	5.3	5.7	4.5	7.1	53.1	49.8	56.3	42.7	39.4	46.0
Education level												
Did not complete high school	4.4	3.2	5.9	6.9	5.2	9.1	43.3	38.1	48.6	51.3	45.9	56.7
Completed high school, or TAFE, or trade certificate, or diploma	6.9	5.9	8.0	10.2	0.6	11.6	50.3	48.1	52.4	44.6	42.4	46.7
University, or some other tertiary institute degree, including postgraduate diploma or degree	8.8	7.8	10.0	12.3	11.0	13.8	56.3	53.6	59.0	39.3	36.6	42.0
Employment status												
Employed	8.1	6.5	10.1	11.2	9.5	13.2	52.9	50.2	55.5	43.0	40.3	45.6
Unemployed	3.4	2.1	5.6	5.6	3.9	8.2	42.5	35.5	49.9	51.7	44.6	58.6
Not in labour force	6.3	5.3	7.6	9.4	8.1	10.9	50.1	47.3	52.8	44.5	41.8	47.2
Total annual household income												
< \$40,000	6.7	4.7	9.5	9.6	7.3	12.5	45.8	41.4	50.3	49.4	44.9	53.9
\$40,000 to < \$100,000	7.6	6.5	8.8	10.4	9.2	11.9	50.4	47.7	53.2	45.8	43.1	48.6
≥ \$100,000	9.3	7.8	11.1	13.5	11.6	15.6	58.0	54.1	61.9	37.4	33.6	41.3
Data were age-standardised to the 2011 Victorian population.			Re	lative stand	ard error (I	RSE) = stand	dard error/p	oint estim	100; inte	erpretation	below:	

Date

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

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

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported. \* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

NHMRC (2013) guidelines.

<sup>b</sup> Includes those meeting both guidelines.

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Table 3.35 shows the proportion of men who did not meet the 2013 Australian fruit or vegetable consumption guidelines according to modifiable risk factors which contribute to chronic disease. When compared with all Victorian men who did not meet the 2013 Australian fruit or vegetable consumption guidelines, a significantly higher proportion of men were reported with the following characteristics:

- insufficient time and/or less than two days' muscle-strengthening sessions
- current smokers
- reported being in good, fair or poor health
- were obese.

Table 3.36 shows the proportion of women who did not meet the 2013 Australian fruit or vegetable consumption guidelines according to modifiable risk factors which contribute to chronic disease. When compared with all Victorian women who did not meet the 2013 Australian fruit or vegetable consumption guidelines, a significantly higher proportion of women were reported with the following characteristics:

- high, or very high, levels of psychological distress
- sedentary
- current smokers
- reported being in fair or poor health.

# Table 3.35: Proportion (%) of adult males not complying with fruit or vegetable consumption guidelines,<sup>a</sup> by selected modifiable risk factors, Victoria, 2014

	Did not meet fruit and vegetable consumption guidelines <sup>b</sup>		
	%	95%	CI
		LL	UL
All males	54.0	52.2	55.8
Psychological distress <sup>c</sup>			
Low (K10 score < 16)	52.6	50.3	54.8
Moderate (K10 score 16–21)	56.2	52.5	59.8
High / very high (K10 score 22+)	59.1	53.8	64.2
Physical activity <sup>d</sup>			
Sedentary	63.6	2.8	73.1
Insufficient time (< 150 min) and/or sessions (< 2)	60.6	58.1	63.0
Sufficient time (≥ 150 min) and sessions (≥ 2)	45.7	43.0	48.5
Smoking status			
Current smoker	60.4	56.1	64.6
Ex-smoker	55.8	50.9	60.6
Non-smoker	51.8	49.5	54.1
Lifetime risk of alcohol-related harm <sup>e</sup>			
Abstainer / no longer drinks alcohol	54.8	50.0	59.5
Reduced risk	54.3	49.0	59.4
Increased risk	54.3	52.2	56.3
Self-reported health			
Excellent/very good	44.9	42.2	47.7
Good	59.3	56.4	62.0
Fair/poor	61.5	57.4	65.3
Body weight status based on BMI <sup>f</sup>			
Underweight (BMI < 18.5 kg/m²)	55.5	40.9	69.3
Normal range (18.5 ≥ BMI < 25 kg/m²)	49.8	46.9	52.6
Pre-obese (25 ≥ BMI < 30 kg/m²)	54.0	50.9	57.0
Obese (BMI ≥ 30 kg/m²)	60.8	56.6	64.9
Blood pressure status (excluding pregnancy induced hypertension)			
Doctor diagnosed hypertension	56.7	51.3	61.9
Normal range	53.3	51.3	55.3
Blood glucose status (excluding gestational diabetes)			
Doctor diagnosed diabetes	53.7	43.5	63.5
Normal range	53.9	52.1	55.8

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

<sup>a</sup> NHMRC (2013) guidelines.

<sup>b</sup> Includes those meeting both guidelines.

<sup>c</sup> Based on the Kessler 10 scale for psychological distress.

<sup>d</sup> DoH (2014) guidelines.

e NHMRC (2009) guidelines.

<sup>f</sup> Body mass index (BMI) = Weight (kg) / Height (m<sup>2</sup>).

# Table 3.36: Proportion (%) of adult females not complying with fruit or vegetable consumption guidelines,<sup>a</sup> by selected modifiable risk factors, Victoria, 2014

	Did not meet fruit and vegetable consumption guidelines <sup>b</sup>		
	%	95%	6 CI
		LL	UL
All females	43.4	41.9	45.0
Psychological distress <sup>c</sup>			
Low (K10 score < 16)	40.9	38.9	43.1
Moderate (K10 score 16–21)	45.9	42.9	49.0
High / very high (K10 score 22+)	50.1	46.3	53.9
Physical activity <sup>d</sup>			
Sedentary	65.9	58.4	72.7
Insufficient time (< 150 min) and/or sessions (< 2)	46.7	44.5	48.8
Sufficient time (≥ 150 min) and sessions (≥ 2)	36.7	34.3	39.1
Smoking status			
Current smoker	55.2	51.1	59.2
Ex-smoker	42.9	37.8	48.2
Non-smoker	41.3	39.5	43.2
Lifetime risk of alcohol-related harm <sup>e</sup>			
Abstainer / no longer drinks alcohol	43.8	40.5	47.2
Reduced risk	41.9	38.1	45.8
Increased risk	44.3	42.2	46.4
Self-reported health			
Excellent/very good	36.6	34.3	38.9
Good	46.0	43.5	48.5
Fair/poor	53.1	49.7	56.5
Body weight status based on BMI <sup>f</sup>			
Underweight (BMI < 18.5 kg/m²)	49.2	41.3	57.1
Normal range (18.5 ≥ BMI < 25 kg/m²)	40.7	38.4	42.9
Pre-obese (25 ≥ BMI < 30 kg/m²)	45.1	41.5	48.7
Obese (BMI ≥ 30 kg/m²)	47.2	43.2	51.3
Blood pressure status (excluding pregnancy induced hypertension)			
Doctor diagnosed hypertension	41.7	36.7	46.9
Normal range	43.2	41.5	44.9
Blood glucose status (excluding gestational diabetes)			
Doctor diagnosed diabetes	42.8	31.1	55.3
Normal range	43.5	42.0	45.1

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

<sup>a</sup> NHMRC (2013) guidelines.

<sup>b</sup> Includes those meeting both guidelines.

<sup>c</sup> Based on the Kessler 10 scale for psychological distress.

<sup>d</sup> DoH (2014) guidelines.

<sup>e</sup> NHMRC (2009) guidelines.

<sup>f</sup> Body mass index (BMI) = Weight (kg) / Height (m<sup>2</sup>).

Figure 3.5 shows the relationship between the proportion of men who met the fruit and vegetable consumption guidelines and body mass index. The proportion of men who met fruit and vegetable consumption guidelines decreased with increasing BMI.

# Figure 3.5: Proportion (%) of males complying with both fruit and vegetable consumption guidelines,<sup>a</sup> by category of body mass index, Victoria, 2014



Data are age-adjusted to the 2011 population of Victoria.

95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

<sup>a</sup> NHMRC (2013).
Figure 3.6 shows the relationship between the proportion of women who met the fruit and vegetable consumption guidelines and BMI. The proportion of women who met the fruit and vegetable consumption guidelines decreased with increasing BMI.





Data are age-adjusted to the 2011 population of Victoria.

95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

<sup>a</sup> NHMRC (2013).

# Key findings

#### Consumption of take-away meals or snacks







#### Take-away meals or snacks

Respondents were asked about their frequency of consuming take-away meals or snacks in the week preceding the survey. Take-away meals or snacks included burgers, pizza, chicken or chips from fast food stores or local take-away places.

Table 3.37 and Figure 3.7 show the proportion of the population who reported consuming takeaway meals or snacks during the preceding week, by frequency, age group and sex. Overall, 16.6 per cent of people reported not ('never') consuming take-away meals or snacks during the preceding week. The proportion of women who reported not consuming take-away meals or snacks during the preceding week was significantly higher compared with the proportion of men. The proportion of men who consumed take-away meals or snacks more than three times during the preceding week was significantly higher compared with the proportion of women. The proportion of 18-24-year-old men, women and people who consumed take-away meals or snacks more than three times during the preceding week was significantly higher compared with the proportion of all Victorian men, women and people, respectively.

			Never		> 0 to ≤	1times	s/week	>1to ≤	3 times	s/week	> 3 t	imes/w	veek
	Age	%	95%	6 CI	%	95%	6 CI	%	95%	6 CI	%	95%	6 CI
	(years)		LL	UL		LL	UL		LL	UL		LL	UL
Males	18–24	4.5*	2.3	8.7	65.9	59.6	71.7	22.4	17.7	27.8	7.1	4.3	11.3
	25–34	7.8	5.2	11.5	67.6	61.5	73.1	19.7	15.0	25.5	4.6	2.8	7.4
	35–44	6.9	5.1	9.1	76.3	73.1	79.2	14.7	12.3	17.4	2.0	1.3	2.9
	45–54	12.2	10.4	14.2	74.6	71.9	77.2	10.9	9.1	13.1	2.1	1.4	3.1
	55–64	18.8	16.9	20.9	74.3	72.0	76.4	5.6	4.5	6.9	1.0	0.6	1.6
	65–74	27.8	25.7	30.0	68.1	65.8	70.2	3.0	2.3	3.9	0.5*	0.3	1.0
	75–84	38.2	35.2	41.3	58.0	54.9	61.1	2.6	1.8	3.8	0.2*	0.1	0.4
	85+	47.0	40.7	53.3	49.0	42.6	55.4	1.7*	0.8	3.4	**		
	Victoria	14.1	13.1	15.1	70.0	68.3	71.6	12.8	11.4	14.2	2.8	2.2	3.6
Females	18–24	8.2	5.3	12.4	71.2	64.8	76.9	16.9	12.3	22.9	3.4*	1.7	6.5
	25-34	6.3	4.4	8.9	80.2	76.2	83.6	12.2	9.5	15.5	1.1*	0.5	2.8
	35–44	9.7	8.2	11.4	83.2	81.1	85.1	6.3	5.2	7.6	0.5*	0.2	1.2
	45–54	16.7	15.1	18.6	78.6	76.6	80.5	4.3	3.4	5.4	0.3*	0.2	0.6
	55–64	27.7	25.9	29.7	69.0	67.0	70.9	2.6	2.0	3.4	0.4*	0.2	0.7
	65–74	36.7	34.7	38.8	60.8	58.7	62.9	1.1	0.7	1.7	0.0*	0.0	0.1
	75–84	53.6	51.0	56.3	44.3	41.7	47.0	0.9*	0.5	1.5	0.2*	0.1	0.4
	85+	62.3	57.5	66.8	34.1	29.7	38.8	**			**		
	Victoria	18.9	18.0	19.8	72.6	71.3	73.9	7.2	6.2	8.3	0.9	0.6	1.4
Persons	18–24	6.3	4.4	9.0	68.5	64.1	72.6	19.7	16.3	23.6	5.3	3.5	7.8
	25–34	7.0	5.4	9.2	73.9	70.2	77.2	15.9	13.1	19.2	2.9	1.9	4.4
	35–44	8.3	7.1	9.6	79.8	77.9	81.5	10.4	9.1	11.9	1.2	0.9	1.8
	45–54	14.5	13.2	15.9	76.6	75.0	78.2	7.6	6.5	8.7	1.2	0.8	1.7
	55–64	23.4	22.0	24.8	71.6	70.1	73.0	4.0	3.4	4.8	0.7	0.4	1.0
	65–74	32.6	31.1	34.1	64.1	62.6	65.7	2.0	1.6	2.5	0.3*	0.2	0.5
	75–84	46.5	44.5	48.5	50.7	48.6	52.7	1.7	1.3	2.3	0.2*	0.1	0.3
	85+	55.8	51.9	59.6	40.4	36.6	44.3	1.2*	0.7	2.2	**		
	Victoria	16.6	16.0	17.3	71.2	70.1	72.3	9.9	9.1	10.8	1.9	1.5	2.3

### Table 3.37: Proportion (%) of the adult population who eat take-away meals or snacks, by frequency, age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}~$  Estimate has a RSE 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.



Figure 3.7: Proportion (%) of the adult population who eat take-away meals or snacks >3 times/week, by age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. 95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

Table 3.38 shows the proportion of the population who reported consuming take-away meals or snacks during the preceding week, by frequency, departmental region and sex. A significantly higher proportion of women who lived in the metropolitan regions reported not ('never') consuming take-away meals or snacks during the preceding week compared with their rural counterparts. A significantly lower proportion of men and women who lived in Loddon Mallee Region reported not consuming take-away meals or snacks during the preceding week compared with all Victorian men and women, respectively. A significantly lower proportion of women who lived in Barwon-South Western Region reported not consuming take-away meals or snacks during the preceding week compared with all Victorian women. Overall, the proportion who consumed take-away meals or snacks more than three times during the preceding week was similar in men, women and people in all departmental regions compared with the proportion of all Victorian men, women and people, respectively.

### Table 3.38: Proportion (%) of the adult population who eat take-away meals or snacks, by frequency, Department of Health and Human Services region and sex, Victoria, 2014

		Never		>0t	o ≤1tir week	nes/	>1to	o ≤ 3 tir week	mes/	> 3 ti	imes/v	veek
	%	95%	6 CI	%	95%	6 CI	%	95%	% CI	%	959	% CI
Region		LL	UL		LL	UL		LL	UL		LL	UL
Males (18+ years)												
Eastern Metropolitan	13.4	11.4	15.7	72.1	68.0	75.9	12.7	9.6	16.6	1.6*	0.8	3.2
North & West Metropolitan	15.6	13.9	17.5	68.4	65.6	71.2	12.4	10.4	14.8	3.2	2.2	4.6
Southern Metropolitan	15.2	13.1	17.7	68.2	64.3	71.9	13.9	11.0	17.3	2.4*	1.4	4.2
All metropolitan regions	14.9	13.7	16.1	69.4	67.4	71.3	12.9	11.3	14.6	2.6	2.0	3.5
Barwon-South Western	11.0	8.9	13.6	75.0	68.5	80.5	10.7	6.9	16.3	**		
Gippsland	11.4	8.6	14.9	66.1	59.1	72.5	15.8	10.6	23.0	4.9*	2.2	10.8
Grampians	13.7	9.7	19.0	67.7	61.2	73.6	16.1	11.3	22.4	2.3*	1.3	3.9
Hume	14.3	10.3	19.6	72.4	66.5	77.7	11.2	7.6	16.1	1.9*	1.0	3.6
Loddon Mallee	11.1	9.5	13.0	71.8	65.1	77.6	10.1	6.6	15.3	6.0*	2.4	14.2
All rural regions	12.2	10.7	13.8	71.1	68.1	74.0	12.4	10.3	14.9	3.6*	2.2	5.8
Victoria	14.1	13.1	15.1	70.0	68.3	71.6	12.8	11.4	14.2	2.8	2.2	3.6
Females (18+ years)												
Eastern Metropolitan	19.0	16.9	21.3	74.0	70.5	77.3	6.6	4.3	10.1	**		
North & West Metropolitan	20.7	19.2	22.2	68.8	66.4	71.2	9.2	7.4	11.3	0.9*	0.4	2.0
Southern Metropolitan	20.8	19.0	22.8	71.1	68.4	73.7	6.2	4.6	8.2	1.3*	0.6	2.6
All metropolitan regions	20.3	19.3	21.3	70.8	69.2	72.4	7.7	6.5	9.0	0.8*	0.5	1.4
Barwon-South Western	13.6	11.8	15.5	78.1	73.4	82.1	4.6*	2.6	7.9	3.2*	1.3	8.0
Gippsland	16.3	12.6	20.8	75.3	70.3	79.7	7.0	4.4	10.8	0.4*	0.1	0.9
Grampians	17.6	13.1	23.2	76.0	70.2	81.0	5.9*	3.4	9.9	0.3*	0.1	0.7
Hume	16.2	14.1	18.5	78.2	75.2	80.9	4.5	3.0	6.7	**		
Loddon Mallee	14.4	12.6	16.4	80.6	78.0	82.9	3.8	2.7	5.4	**		
All rural regions	15.3	14.0	16.8	77.9	75.9	79.7	5.1	4.1	6.3	1.2*	0.7	2.3
Victoria	18.9	18.0	19.8	72.6	71.3	73.9	7.2	6.2	8.3	0.9	0.6	1.4

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

### Table 3.38: Proportion (%) of the adult population who eat take-away meals or snacks, by frequency,Department of Health and Human Services region and sex, Victoria, 2014 (continued)

		Never		> 0 t	o≤1tir week	nes/	>1tc	o≤3tiı week	mes/	>3t	imes/v	veek
	%	95%	6 CI	%	95%	6 CI	%	959	% CI	%	95%	6 CI
Region		LL	UL		LL	UL		LL	UL		LL	UL
People (18+ years)												
Eastern Metropolitan	16.4	14.9	17.9	73.0	70.3	75.5	9.6	7.6	12.1	0.9*	0.4	1.6
North & West Metropolitan	18.3	17.1	19.5	68.6	66.7	70.3	10.8	9.4	12.3	2.0	1.4	2.8
Southern Metropolitan	18.2	16.7	19.7	69.6	67.2	71.9	9.9	8.2	12.0	1.8	1.2	2.9
All metropolitan regions	17.7	16.9	18.5	70.0	68.7	71.3	10.2	9.2	11.3	1.7	1.3	2.2
Barwon-South Western	12.4	11.0	14.0	76.4	72.4	80.0	7.7	5.4	10.8	2.9*	1.3	6.7
Gippsland	13.8	11.5	16.6	70.5	66.0	74.6	11.6	8.3	16.0	2.8*	1.2	6.1
Grampians	15.6	12.5	19.3	71.9	67.6	75.8	11.0	8.1	14.8	1.3*	0.8	2.1
Hume	15.4	12.8	18.4	75.2	71.6	78.4	7.8	5.8	10.6	1.3*	0.8	2.2
Loddon Mallee	12.8	11.6	14.1	76.0	72.0	79.6	7.0	4.9	9.8	3.6*	1.5	8.4
All rural regions	13.8	12.8	14.8	74.4	72.5	76.1	8.8	7.5	10.2	2.5	1.6	3.7
Victoria	16.6	16.0	17.3	71.2	70.1	72.3	9.9	9.1	10.8	1.9	1.5	2.3

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}\,$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

# Eating take-away meals or snacks, by frequency, departmental region and local government area

HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MANSFIELD MARIB' RNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONEE VALLEY MOOR/ BOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NILLUMBIK NORTI STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOOL WELLING TON WEST WIMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARRIAME ACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDARA BRIN HORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MANSFIEL MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONEE VALLE MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NILLUMB NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUTH GIPPS MMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARF ACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDAF BANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMIT BIN EAST GIPPS FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI GREATER DANDELIONG CREATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON IORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MAN MARIBYRNONG MAROOLIDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE EY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI IK NORTHERN GRAMPIANS CORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT LUM SLAND STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOC INGTON WEST WILMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGE IAMBIACK ALPINE ARARAT BALLARAT BANY 25 2455 COAST BAW BAW BAYSIDE BENALLA BOROONI WELLINGTON WEST WINNERAT BALLARAT BALLARAT BANY RES ON STATUS OF S **JULA MOUNT ALEX** MORELAND MORNIN MPIANS POP **NEES QUEENSCL** LUMBIK NORTHERN GI PHILLI OGIE SURF COAS **GIPPSLAND STONNINGTON** TRATH AN WELLINGTON WEST WIMMERA ITEHORSE WHITTLESE YARRIAMBIACK ALPINE ARARAT BALLARAT BANYULE BASS BAY HORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MAN FIELD MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE VALLEY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI LUMBIK NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT GIPPSLAND STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOC WELLINGTON WEST WIMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGE YARRIAMBIACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONI ARA BRIMBANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMI

Table 3.39 shows the proportion of the population who reported consuming take-away meals or snacks during the preceding week, by frequency, in the LGAs of Eastern Metropolitan Region. A significantly higher proportion of adults who lived in the LGA of Boroondara (C) reported not consuming take-away meals or snacks during the preceding week compared with all Victorian adults. In contrast, a significantly lower proportion of adults who lived in the LGA of Maroondah (C) reported not consuming take-away meals or snacks during the preceding week compared with all Victorian adults.

### Table 3.39: Proportion (%) of the adult population who eat take-away meals or snacks, by frequency and LGA, Eastern Metropolitan Region, Victoria, 2014

		Never		> 0 t	:o ≤1tir week	nes/	>1tc	o≤3tiı week	mes/	> 3 t	imes/v	veek
	%	95%	% CI	%	95%	6 CI	%	959	% CI	%	95%	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Boroondara (C)	23.4	19.0	28.4	68.2	61.4	74.2	7.2*	3.7	13.4	**		
Knox (C)	15.8	12.3	20.1	72.3	64.6	78.9	10.4*	5.7	18.2	**		
Manningham (C)	15.7	12.9	19.0	76.1	69.9	81.3	7.9*	4.2	14.4	**		
Maroondah (C)	11.4	9.3	14.0	72.8	63.0	80.7	14.7*	8.0	25.4	**		
Monash (C)	16.6	13.1	20.9	70.5	64.3	76.0	12.0	7.9	18.0	**		
Whitehorse (C)	14.9	11.1	19.7	75.0	67.9	81.0	9.5*	5.3	16.3	**		
Yarra Ranges (S)	13.4	11.0	16.2	81.7	78.1	84.7	4.0*	2.4	6.5	**		
Eastern Metropolitan Region	16.4	14.9	17.9	73.0	70.3	75.5	9.6	7.6	12.1	0.9*	0.4	1.6
Victoria	16.6	16.0	17.3	71.2	70.1	72.3	9.9	9.1	10.8	1.9	1.5	2.3

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 3.40 shows the proportion of the population who reported consuming take-away meals or snacks during the preceding week, by frequency, in the LGAs of North & West Metropolitan Region. A significantly higher proportion of adults who lived in the LGAs of Maribyrnong (C), Melbourne (C), Moreland (C) and Yarra (C) reported not consuming take-away meals or snacks during the preceding week compared with all Victorian adults.

### Table 3.40: Proportion (%) of the adult population who eat take-away meals or snacks, by frequency and LGA, North & West Metropolitan Region, Victoria, 2014

		Never		> 0 t	:o≤1tir week	nes/	>1tc	o≤3tin week	mes/	> 3 t	imes/v	veek
	%	95%	6 CI	%	95%	6 CI	%	95	% CI	%	95%	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Banyule (C)	16.6	13.2	20.7	71.1	64.0	77.2	10.0*	5.7	16.8	**		
Brimbank (C)	16.4	12.9	20.5	67.8	61.9	73.2	12.7	8.9	17.8	2.2*	1.0	4.8
Darebin (C)	19.2	15.6	23.4	67.1	59.2	74.1	12.1*	6.7	21.0	**		
Hobsons Bay (C)	17.8	13.1	23.7	70.0	62.1	76.8	8.1*	4.5	14.1	**		
Hume (C)	17.8	14.1	22.3	67.9	61.7	73.5	9.8	6.7	14.3	4.4*	1.9	9.9
Maribyrnong (C)	21.9	18.4	26.0	67.1	60.1	73.4	8.1*	4.5	14.4	**		
Melbourne (C)	25.4	20.6	30.9	62.2	55.2	68.7	10.6	6.5	16.8	**		
Melton (S)	15.7	11.7	20.7	64.2	56.7	71.1	17.0	11.2	24.9	2.9*	1.3	6.4
Moonee Valley (C)	19.6	15.8	24.0	72.6	66.6	77.9	7.4*	4.2	12.7	**		
Moreland (C)	21.7	17.7	26.4	65.8	58.9	72.1	10.5*	6.3	17.1	**		
Nillumbik (S)	13.3	10.6	16.4	69.8	61.9	76.7	16.0	10.1	24.3	0.0		
Whittlesea (C)	14.6	11.6	18.3	72.0	66.4	77.0	11.9	8.3	16.8	**	0.4	4.2
Wyndham (C)	12.8	9.9	16.6	74.3	68.7	79.3	10.4	6.9	15.2	**	0.7	5.7
Yarra (C)	28.7	24.1	33.7	64.9	58.3	71.0	5.9*	2.6	12.8	**	0.1	2.3
North & West Metropolitan Region	18.3	17.1	19.5	68.6	66.7	70.3	10.8	9.4	12.3	2.0	1.4	2.8
Victoria	16.6	16.0	17.3	71.2	70.1	72.3	9.9	9.1	10.8	1.9	1.5	2.3

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 3.41 shows the proportion of the population who reported consuming take-away meals or snacks during the preceding week, by frequency, in the LGAs of Southern Metropolitan Region. A significantly higher proportion of adults who lived in the LGAs of Port Phillip (C) and Stonnington (C) reported not consuming take-away meals or snacks during the preceding week compared with all Victorian adults.

### Table 3.41: Proportion (%) of the adult population who eat take-away meals or snacks, by frequency and LGA, Southern Metropolitan Region, Victoria, 2014

		Never		> 0 t	o≤1tir week	nes/	>1tc	o ≤ 3 tir week	nes/	> 3 t	imes/v	veek
	%	95%	6 CI	%	95%	6 CI	%	95%	% CI	%	95%	6 CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Bayside (C)	19.7	13.9	27.2	69.8	61.1	77.3	6.1*	2.4	14.5	**		
Cardinia (S)	13.4	10.0	17.8	72.1	65.5	77.9	12.0	7.8	18.0	**		
Casey (C)	14.9	12.1	18.1	67.0	60.6	72.8	17.2	12.2	23.6	**		
Frankston (C)	14.0	10.3	18.8	72.2	65.9	77.7	9.9	6.4	15.1	3.2*	1.4	6.8
Glen Eira (C)	18.6	14.7	23.2	72.6	66.1	78.3	5.9*	3.2	10.6	**		
Greater Dandenong (C)	17.6	14.1	21.7	69.1	62.5	75.0	9.6	6.1	14.9	**		
Kingston (C)	15.3	11.0	20.8	70.3	62.0	77.4	11.7*	6.6	20.0	**		
Mornington Peninsula (S)	20.5	14.6	27.9	69.2	60.9	76.4	6.8*	3.5	12.8	**		
Port Phillip (C)	27.5	21.7	34.2	66.8	58.8	73.9	5.0*	1.9	12.3	0.6*	0.2	1.5
Stonnington (C)	25.5	21.2	30.3	69.5	63.8	74.8	4.9*	2.4	9.9	**		
Southern Metropolitan Region	18.2	16.7	19.7	69.6	67.2	71.9	9.9	8.2	12.0	1.8	1.2	2.9
Victoria	16.6	16.0	17.3	71.2	70.1	72.3	9.9	9.1	10.8	1.9	1.5	2.3

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 3.42 shows the proportion of the population who reported consuming take-away meals or snacks during the preceding week, by frequency, in the LGAs of Barwon-South Western Region. A significantly lower proportion of adults who lived in the LGAs of Greater Geelong (C) and Southern Grampians (S) reported not consuming takeaway meals or snacks during the preceding week compared with all Victorian adults.

### Table 3.42: Proportion (%) of the adult population who eat take-away meals or snacks, by frequency and LGA, Barwon-South Western Region, Victoria, 2014

		Never		> 0 t	:o≤1tir week	nes/	>1tc	o≤3tiı week	mes/	> 3 t	imes/v	veek
	%	95%	% CI	%	95%	% CI	%	95	% CI	%	959	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Colac-Otway (S)	11.7	8.3	16.3	70.1	58.8	79.4	14.6*	7.0	28.0	**		
Corangamite (S)	14.8	10.7	20.0	82.1	76.5	86.6	2.4*	0.9	6.1	**		
Glenelg (S)	13.0	9.2	18.0	75.3	67.8	81.5	7.1*	3.7	13.3	**		
Greater Geelong (C)	11.6	9.6	14.0	76.6	70.3	81.9	7.0*	4.0	12.1	4.1*	1.5	10.4
Moyne (S)	13.3	10.4	16.9	72.3	63.4	79.7	12.2*	6.4	22.0	1.9*	0.8	4.7
Queenscliffe (B)	20.5	13.5	29.8	74.5	63.5	83.1	**			**		
Southern Grampians (S)	12.2	9.3	15.7	74.9	65.2	82.6	11.0*	5.1	22.2	**		
Surf Coast (S)	13.7	10.7	17.3	77.3	70.5	82.8	8.7*	4.7	15.5	**		
Warrnambool (C)	14.9	10.4	20.7	76.2	70.1	81.4	8.1*	4.7	13.8	**		
Barwon-South Western Region	12.4	11.0	14.0	76.4	72.4	80.0	7.7	5.4	10.8	2.9*	1.3	6.7
Victoria	16.6	16.0	17.3	71.2	70.1	72.3	9.9	9.1	10.8	1.9	1.5	2.3

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 3.43 shows the proportion of the population who reported consuming take-away meals or snacks during the preceding week, by frequency, in the LGAs of Gippsland Region. A significantly lower proportion of adults who lived in the LGAs of Baw Baw (S) and Wellington (S) reported not consuming take-away meals or snacks during the preceding week compared with all Victorian adults

### Table 3.43: Proportion (%) of the adult population who eat take-away meals or snacks, by frequency and LGA, Gippsland Region, Victoria, 2014

		Never		> 0 t	o≤1tir week	nes/	>1tc	o≤3tir week	mes/	>3t	imes/v	veek
	%	95%	6 CI	%	95%	6 CI	%	959	% CI	%	95%	6 CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Bass Coast (S)	16.2*	8.7	28.1	70.9	60.1	79.8	11.8*	5.1	25.2	**		
Baw Baw (S)	9.3	7.0	12.2	78.8	71.3	84.7	10.0*	5.6	17.3	**		
East Gippsland (S)	18.2	11.0	28.6	67.1	58.0	75.1	12.9*	6.1	25.3	**		
Latrobe (C)	14.7	10.2	20.8	65.8	56.2	74.2	11.3*	5.2	22.9	**		
South Gippsland (S)	13.5	9.0	19.7	75.2	67.2	81.8	9.9*	5.2	18.1	**		
Wellington (S)	12.7	10.0	15.9	69.5	59.5	78.0	14.2*	7.2	26.1	3.2*	1.2	8.3
Gippsland Region	13.8	11.5	16.6	70.5	66.0	74.6	11.6	8.3	16.0	2.8*	1.2	6.1
Victoria	16.6	16.0	17.3	71.2	70.1	72.3	9.9	9.1	10.8	1.9	1.5	2.3

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below: \* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

KSE between 25 and 50 per cent, point estimate (%) should be interpreted with caution.

Table 3.44 shows the proportion of the population who reported consuming take-away meals or snacks during the preceding week, by frequency, in the LGAs of Grampians Region. A significantly lower proportion of adults who lived in the LGAs of Hindmarsh (S) and West Wimmera (S) reported not consuming take-away meals or snacks during the preceding week compared with all Victorian adults.

### Table 3.44: Proportion (%) of the adult population who eat take-away meals or snacks, by frequency and LGA, in Grampians Region, Victoria, 2014

		Never		> 0 t	:o ≤1tir week	nes/	>1tc	o≤3tiı week	nes/	>3t	imes/v	veek
	%	95%	% CI	%	95%	6 CI	%	95	% CI	%	95%	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Ararat (RC)	15.1	9.3	23.7	65.0	56.4	72.8	14.6	8.9	22.8	5.0*	1.8	12.9
Ballarat (C)	17.2	11.9	24.2	69.9	62.2	76.7	11.9	7.2	18.9	**		
Golden Plains (S)	15.4	10.3	22.4	71.1	63.0	78.0	11.7*	6.3	20.7	**		
Hepburn (S)	16.2	13.1	19.8	77.9	71.7	83.1	4.6*	1.8	11.3	**		
Hindmarsh (S)	11.0	7.9	15.0	77.1	67.2	84.6	10.8*	5.0	21.6	**		
Horsham (RC)	13.4*	7.7	22.2	67.0	56.0	76.4	17.7*	8.8	32.4	**		
Moorabool (S)	12.6	9.4	16.9	76.8	70.1	82.4	7.9*	4.4	13.8	**		
Northern Grampians (S)	12.9*	7.6	21.1	77.0	67.5	84.3	8.9*	4.1	18.2	**		
Pyrenees (S)	13.3	10.1	17.2	79.6	72.7	85.1	6.2*	2.7	13.7	**		
West Wimmera (S)	10.1	7.6	13.2	82.6	78.3	86.2	5.6*	3.4	9.2	**		
Yarriambiack (S)	12.8	9.5	16.9	80.9	74.4	86.1	3.8*	1.4	9.7	**		
Grampians Region	15.6	12.5	19.3	71.9	67.5	75.8	11.0	8.1	14.8	1.3*	0.8	2.1
Victoria	16.6	16.0	17.3	71.2	70.1	72.3	9.9	9.1	10.8	1.9	1.5	2.3

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 3.45 shows the proportion of the population who reported consuming take-away meals or snacks during the preceding week, by frequency, in the LGAs of Hume Region. A significantly lower proportion of adults who lived in the LGAs of Moira (S), Wangaratta (RC) and Wodonga (RC) reported not consuming take-away meals or snacks during the preceding week compared with all Victorian adults.

### Table 3.45: Proportion (%) of the adult population who eat take-away meals or snacks, by frequency and LGA, Hume Region, Victoria, 2014

		Never		> 0 t	:o ≤1tir week	nes/	>1tc	o≤3tir week	mes/	>3t	imes/w	veek
	%	95%	% CI	%	95%	% CI	%	959	% CI	%	95%	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Alpine (S)	13.4	10.8	16.5	79.5	69.8	86.6	2.4*	1.0	5.9	**		
Benalla (RC)	14.2	10.9	18.2	75.5	66.5	82.7	8.3*	3.3	19.0	**		
Greater Shepparton (C)	17.0	12.9	22.1	72.6	64.0	79.8	9.4*	4.4	18.9	**		
Indigo (S)	15.3	10.7	21.3	73.8	63.6	82.0	9.6*	3.9	21.6	**		
Mansfield (S)	16.0	12.9	19.7	82.4	78.5	85.7	**			**		
Mitchell (S)	18.6	11.4	29.0	72.2	61.0	81.1	8.0*	4.0	15.3	**		
Moira (S)	10.7	8.7	13.0	76.9	70.5	82.3	10.1	6.3	16.0	**		
Murrindindi (S)	19.0	12.0	28.6	72.1	62.2	80.3	7.3*	3.3	15.5	**		
Strathbogie (S)	15.9	12.0	20.6	79.0	73.7	83.5	4.9*	2.8	8.5	**		
Towong (S)	14.9	11.2	19.6	75.6	68.2	81.7	4.6*	2.2	9.7	**		
Wangaratta (RC)	11.7	9.1	14.9	74.6	63.7	83.0	13.4*	6.5	25.6	**		
Wodonga (RC)	11.4	8.2	15.7	81.4	75.9	86.0	4.6*	2.6	8.1	**		
Hume Region	15.4	12.8	18.4	75.2	71.6	78.4	7.8	5.8	10.6	1.3*	0.8	2.2
Victoria	16.6	16.0	17.3	71.2	70.1	72.3	9.9	9.1	10.8	1.9	1.5	2.3

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}\,$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 3.46 shows the proportion of the population who reported consuming take-away meals or snacks during the preceding week, by frequency, in the LGAs of Loddon Mallee Region. A significantly lower proportion of adults who lived in the LGAs of Campaspe (S), Central Goldfields (S), Gannawarra (S) and Greater Bendigo (C) reported not consuming take-away meals or snacks during the preceding week compared with all Victorian adults.

### Table 3.46: Proportion (%) of the adult population who eat take-away meals or snacks, by frequency and LGA, Loddon Mallee Region, Victoria, 2014

		Never		> 0 t	o≤1tir week	nes/	>1tc	o≤3tir week	nes/	> 3 t	imes/w	veek
	%	95%	% CI	%	95%	6 CI	%	95%	% CI	%	95%	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Buloke (S)	13.3	8.3	20.6	82.9	75.5	88.5	1.8*	0.9	3.7	**		
Campaspe (S)	10.4	8.6	12.5	79.7	72.2	85.6	5.5*	2.6	11.3	**		
Central Goldfields (S)	8.7	6.7	11.2	71.3	60.4	80.2	15.3*	8.0	27.3	**		
Gannawarra (S)	8.2	6.6	10.2	87.7	84.0	90.6	2.7*	1.1	6.5	**		
Greater Bendigo (C)	12.0	9.4	15.1	75.0	66.4	82.1	8.1*	4.3	14.7	**		
Loddon (S)	16.3*	8.2	29.9	77.9	65.1	86.9	**			**		
Macedon Ranges (S)	13.8	11.1	17.0	79.3	73.4	84.2	5.5*	2.4	11.8	**		
Mildura (RC)	14.4	11.6	17.8	71.9	63.6	78.9	8.1*	4.1	15.2	**		
Mount Alexander (S)	20.1	15.7	25.4	69.5	60.3	77.3	7.9*	3.6	16.3	**		
Swan Hill (RC)	14.2	10.2	19.4	78.9	71.0	85.1	2.6*	1.1	6.2	**		
Loddon Mallee Region	12.8	11.6	14.1	76.0	72.0	79.6	7.0	4.9	9.8	3.6*	1.5	8.4
Victoria	16.6	16.0	17.3	71.2	70.1	72.3	9.9	9.1	10.8	1.9	1.5	2.3

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 3.47 shows the male population who eat take-away meals or snacks, by frequency and selected socioeconomic determinants. When compared with all Victorian men, a significantly higher proportion of men reported consuming take-away meals or snacks during the preceding week with the following characteristics:

- born overseas
- speak a language other than English at home.

Table 3.48 shows the female population who eat take-away meals or snacks, by frequency and selected socioeconomic determinants. When compared with all Victorian women, a significantly higher proportion of women reported consuming take-away meals or snacks during the preceding week with the following characteristics:

- born overseas
- speak a language other than English at home
- completed a university degree or other tertiary institute degree.

Table 3.47: Proportion (%) of the adult male population who eat take-away meals or snacks, by frequency and selected socioeconomic determinants, Victoria, 2014

		Never		> 0 to ≤	1 times,	/week	> 1 to ≤	3 times	/week	> 3 ti	mes/we	iek
	%	95%	° CI	%	95%	Ū	%	95%	CI	%	95%	Ū
		F	Ч		E	Ч		F	٦	I	E	Ъ
All males	14.1	13.1	15.1	70.0	68.3	71.6	12.8	11.4	14.2	2.8	2.2	3.6
Country of birth												
Australia	12.4	11.5	13.5	70.1	68.0	72.0	14.3	12.6	16.1	2.9	2.2	3.8
Overseas	17.6	15.2	20.1	70.2	66.7	73.5	9.3	7.2	12.1	2.5*	1.5	4.1
Language spoken at home												
English	12.1	11.3	13.1	71.3	69.4	73.1	13.7	12.2	15.4	2.5	1.9	3.4
Language other than English	20.8	18.3	23.7	65.0	61.3	68.4	10.1	7.8	13.1	3.6	2.4	5.6
Education level												
Did not complete high school	15.8	12.7	19.4	65.6	59.5	71.2	13.5	8.8	20.2	4.4*	2.1	8.9
Completed high school, or TAFE, or trade certificate, or diploma	12.5	11.2	14.0	67.7	65.2	70.1	16.2	14.1	18.6	3.3	2.4	4.4
University, or some other tertiary institute degree, including postgraduate diploma or degree	15.0	13.3	16.9	74.1	71.4	76.7	8.6	6.9	10.7	2.0*	1:1	3.5
Employment status												
Employed	13.6	12.0	15.2	70.1	67.8	72.3	13.4	11.8	15.1	2.6	2.0	3.5
Unemployed	18.2	13.4	24.3	62.3	53.6	70.2	13.3	7.3	23.0	6.0	2.7	12.7
Not in labour force	16.8	13.7	20.3	68.2	63.2	72.7	11.6	8.0	16.6	3.1	1.3	7.3
Total annual household income												
< \$40,000	17.1	13.9	21.0	65.4	60.2	70.3	13.1	9.9	17.3	4.1*	2.0	8.1
\$40,000 to < \$100,000	13.4	11.6	15.3	72.0	69.1	74.7	11.7	9.7	14.1	2.7	1.8	3.8
≥ \$100,000	13.1	11.3	15.1	72.7	69.6	75.6	12.3	10.1	14.9	1.9*	1:1	3.1

Data were age-standardised to the 2011 Victorian population.

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

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

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 3.48: Proportion (%) of the adult female population who eat take-away meals or snacks, by frequency and selected socioeconomic determinants, Victoria, 2014

		Never		> 0 to	≤1 times	/week	> 1 to ≤	3 times	s/week	> 3 t	imes/we	sek
	%	95	% CI	%	95%	CI	%	95%	° CI	%	95%	ū
		Ц	Ъ		Ц	٦		Ц	Ч		Ц	٦
All females	18.9	18.0	19.8	72.6	71.3	73.9	7.2	6.2	8.3	0.9	0.6	1.4
Country of birth												
Australia	17.2	16.2	18.3	74.4	73.0	75.9	7.0	6.1	8.2	<b>%</b> 0.9*	0.6	1.5
Overseas	22.5	21.0	24.0	68.1	64.9	71.1	8.0	5.6	11.3	0.8*	0.3	1.8
Language spoken at home												
English	17.6	16.6	18.7	75.0	73.5	76.3	6.3	5.4	7.4	0.7*	0.4	1.1
Language other than English	24.4	22.7	26.1	64.9	61.9	67.8	8.8	6.6	11.5	1.4*	0.7	2.8
Education level												
Did not complete high school	18.2	15.5	21.3	71.4	66.6	75.8	7.5	4.8	11.6	2.6*	1.0	6.4
Completed high school, or TAFE, or trade certificate, or diploma	17.7	16.4	18.9	72.7	70.8	74.6	8.4	7.0	10.1	0.7*	0.4	1.4
University, or some other tertiary institute degree, including postgraduate diploma or degree	21.5	20.0	23.1	7.17	69.6	73.8	5.6	4.3	7.4	0.7*	0.4	1.4
Employment status												
Employed	17.1	15.3	19.1	74.6	72.2	76.9	7.2	5.9	8.6	0.8	0.4	1.5
Unemployed	19.0	14.3	24.7	67.3	59.8	74.1	12.9	8.2	19.6	0.2	0.1	0.6
Not in labour force	21.1	19.3	22.9	70.7	68.3	73.0	6.4	4.9	8.1	1.2	0.6	2.4
Total annual household income												
< \$40,000	18.9	17.3	20.7	71.8	68.3	75.1	7.2	4.9	10.4	*		
\$40,000 to < \$100,000	16.7	15.2	18.3	74.3	71.8	76.6	7.7	6.1	9.8	1.0*	0.5	2.0
≥ \$100,000	22.0	19.6	24.6	71.4	68.1	74.4	6.0	4.2	8.4	.0.6*	0.2	1.4
Data were age-standardised to the 2011 Victorian population. 11 / 11 95%, C1 = [hwer/unner limit of 65 ner cent confidence interval			E ES	timates may sponses, not	/ not add t reported }	o 100 per cel Jere.	nt due to a p	oroportior	of 'don't kne	ow' or 'refu:	sed to say'	

Note that estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to

say' responses, not reported here.

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

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

## **Key findings**

#### Consumption of sugar-sweetened soft drinks





A significantly higher proportion of women who lived in the rural regions consumed sugar-sweetened soft drinks daily compared with women who lived in metropolitan regions



Excellent/ very good



Good



Fair/poor

The proportion of the adult population who consumed sugar-sweetened soft drinks daily was highest among men and women with fair or poor self-reported health status



#### Consumption of sugarsweetened soft drinks

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

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

Recent public health interest has focused on the associations between consumption of added sugars and adverse health outcomes. The consumption of sugar-sweetened beverages is not only associated with weight gain but also with increased risk of other health problems such as dental caries, high blood pressure, type 2 diabetes and cardiovascular disease. Survey participants were asked how often they consumed cordial, soft drinks, flavoured mineral water, energy drinks or sports drinks. Figure 3.8 and Table 3.49 show proportions of the adult population who consumed, or did not consume, sugar-sweetened soft drinks daily, by age group and sex. Overall, 11.2 per cent of Victorian people reported consuming sugar-sweetened drinks on a daily basis. The proportion who reported consuming these drinks daily was significantly higher in men than women. The proportion who drank these soft drinks daily was significantly lower in men 55 years of age or older, 55-74-yearold women and people 55 years of age or older compared with all Victorian men, women and people, respectively. The proportion who drank these soft drinks daily was significantly higher in 25-34-year-old men and women compared with all Victorian men and women, respectively.



Figure 3.8: Proportion (%) of adult population who consumed sugar-sweetened soft drinks daily, by age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. 95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

### Table 3.49: Proportion (%) of adult population who consumed, or did not consume, sugar-sweetened soft drinks daily, by age group and sex, Victoria, 2014

		Consume sof	ed sugar-sv ft drinks do	weetened aily	Did not sweeten	t consume ed soft drir	sugar- nks daily
		%	95%	% CI	%	95%	6 CI
	(years)		LL	UL		LL	UL
Males	18–24	18.0	13.8	23.2	81.0	75.8	85.3
	25–34	22.1	17.2	27.9	77.1	71.2	82.1
	35–44	15.9	13.5	18.7	83.4	80.6	85.8
	45–54	12.9	11.0	15.1	86.2	84.0	88.2
	55–64	11.1	9.6	12.7	87.4	85.6	88.9
	65–74	10.2	8.8	11.7	88.6	87.0	90.0
	75–84	9.4	7.6	11.5	87.5	85.2	89.5
	85+	8.5	5.8	12.1	87.7	83.4	91.0
	Victoria	15.3	13.9	16.8	83.5	82.0	84.9
Females	18–24	7.0	4.7	10.2	91.7	88.2	94.2
	25–34	11.6	8.9	14.9	87.8	84.4	90.5
	35–44	7.7	6.5	9.1	91.3	89.9	92.6
	45–54	5.9	4.9	7.1	93.8	92.7	94.8
	55–64	4.7	3.9	5.7	94.2	93.1	95.1
	65–74	4.1	3.4	4.9	94.0	92.9	94.9
	75–84	6.1	5.0	7.4	91.9	90.3	93.1
	85+	5.9	4.1	8.3	90.2	87.1	92.7
	Victoria	7.2	6.5	8.1	91.7	90.8	92.5
Persons	18–24	12.6	10.1	15.7	86.2	83.1	88.9
	25–34	16.8	13.9	20.2	82.5	79.1	85.4
	35–44	11.8	10.4	13.3	87.4	85.8	88.8
	45–54	9.4	8.3	10.6	90.1	88.8	91.2
	55–64	7.8	7.0	8.8	90.8	89.8	91.8
	65–74	6.9	6.1	7.7	91.5	90.6	92.3
	75–84	7.6	6.6	8.8	89.8	88.5	91.0
	85+	7.0	5.4	9.0	89.1	86.7	91.2
	Victoria	11.2	10.4	12.1	87.6	86.8	88.5

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Table 3.50 shows the proportion of adults who consumed, or did not consume, sugar-sweetened soft drinks daily, by departmental region and sex. The proportion of adults who consumed sugarsweetened soft drinks daily was significantly higher in men living in Gippsland Region compared with all Victorian men. A significantly higher proportion of women who lived in the rural regions in general and Grampians Region and Hume Region in particular consumed sugarsweetened soft drinks daily compared with all Victorian women.

Table 3.50: Proportion (%) of adult population who consumed, or did not consume, sugar-sweetened soft drinks daily, by Department of Health and Human Services region and sex, Victoria, 2014

	Consu	med sugar-swe soft drinks dail	etened Y	Did not cons sof	ume sugar t drinks dai	-sweetened ily
	%	95%	6 CI	%	95%	6 CI
Region		LL	UL		LL	UL
Males (18+ years)						
Eastern Metropolitan	13.8	10.8	17.6	85.0	81.2	88.1
North & West Metropolitan	14.7	12.7	17.1	84.2	81.8	86.3
Southern Metropolitan	15.0	11.9	18.8	83.7	79.9	87.0
All metropolitan regions	14.6	13.0	16.4	84.3	82.5	85.9
Barwon-South Western	15.1	10.5	21.2	83.6	77.5	88.3
Gippsland	23.2	17.4	30.2	75.8	68.8	81.6
Grampians	17.1	13.4	21.5	81.6	77.1	85.4
Hume	19.1	15.2	23.7	78.8	74.0	82.9
Loddon Mallee	15.4	10.6	21.8	83.8	77.4	88.6
All rural regions	17.6	15.3	20.1	81.1	78.5	83.5
Victoria	15.3	13.9	16.8	83.5	82.0	84.9

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

 Table 3.50: Proportion (%) of adult population who consumed, or did not consume, sugar-sweetened soft

 drinks daily, by Department of Health and Human Services region and sex, Victoria, 2014 (continued)

	Consu	med sugar-swe soft drinks dail	eetened y	Did not cons so	sume sugar· ft drinks dai	-sweetened ily
	%	95%	% CI	%	95%	6 CI
Region		LL	UL		LL	UL
Females (18+ years)						
Eastern Metropolitan	6.0	4.2	8.4	92.9	90.4	94.7
North & West Metropolitan	7.2	5.9	8.7	91.8	90.2	93.2
Southern Metropolitan	5.9	4.6	7.6	93.4	91.7	94.8
All metropolitan regions	6.4	5.6	7.4	92.6	91.6	93.5
Barwon-South Western	8.7*	5.3	14.1	90.5	85.2	94.0
Gippsland	9.9	6.4	15.1	89.4	84.2	93.0
Grampians	11.5	8.4	15.7	87.8	83.6	91.0
Hume	11.1	8.9	13.7	88.0	85.3	90.2
Loddon Mallee	9.4	6.9	12.8	86.7	81.7	90.5
All rural regions	10.0	8.4	11.9	88.6	86.6	90.3
Victoria	7.2	6.5	8.1	91.7	90.8	92.5
People (18+ years)						
Eastern Metropolitan	9.8	7.9	12.0	9.8	86.8	90.9
North & West Metropolitan	11.0	9.7	12.4	11.0	86.6	89.3
Southern Metropolitan	10.4	8.6	12.6	10.4	86.4	90.5
All metropolitan regions	10.5	9.5	11.5	10.5	87.4	89.4
Barwon-South Western	11.9	8.9	15.8	11.9	83.2	90.2
Gippsland	16.4	12.9	20.7	16.4	78.5	86.3
Grampians	14.2	11.7	17.1	14.2	81.9	87.3
Hume	15.0	12.7	17.7	15.0	80.7	85.8
Loddon Mallee	12.5	9.5	16.2	12.5	81.4	88.6
All rural regions	13.8	12.3	15.3	13.8	83.3	86.4
Victoria	11.2	10.4	12.1	87.6	86.8	88.5

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

#### Daily consumption of sugar-sweetened soft drinks by departmental region and local government area

HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MANSFIELD MARIB' RNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONEE VALLEY MOOR/ BOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NILLUMBIK NORTI STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOOL WELLING TON WEST WIMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARRIAME ACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDARA BRIN HORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MANSFIEL MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONEE VALLE MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NILLUMB NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUTH GIPPS IMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARF ACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDAF BANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMIT BIN EAST GIPPS FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI GREATER DANDELIONG CREATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON IORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MAN MARIBYRNONG MAROOLIDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE EY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI IK NORTHERN GRAMPIANS SORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT SLAND STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOC INGTON WEST WILMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGE IAMBIACK ALPINE ARARAT BALLARAT BANY ET SOST ON THE BAW BAY SIDE BENALLA CODANI LUM IAMBIACK ALPINE ARARAT BALLARAT BANY CEDASS COAST BAW BAW BAYSIDE BENALLA BOROONI BRIMBANK BULOKE CAMPASPE CARDININ, CISEY CENTRAL COLDENEL DO COLC-OTWAY CORANGAMIT BIN EAST GIPPSLAID FRANKSTON GANNAWARA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI GREATER DANDENONG GREATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON HORSHAM HUME INDIGO KINGSTON KNOX LALPOBE LODDON MACEDON RANGES MANNINGHAM MAN D MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MORA MONASH MOONE EY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEX MOER MANNE MURRINDINDI NI HIK NORTHERN GRAMPIANS PORT PHILLUP PYRENEES QUEENSCLIEFE SOUTHERN CHAMPIANS SOUT SLAND STONNINGTON STRATHBOGIE SURF COAST SWAN HILD TOWONG WANGARATTA WARNAMBOO LINGTON WEST WIMMERA WHITCHORSE WHITTLESEA WODONGA WANDHAM YARRA YARRA RANGE MARIBIACK ALPINE ARARAT BALLARATEBANY HE BASS COAST BAW BAW BAYSIDE BENALLA BORONI BRIMBANK BULOKE CAMPASPE CARDINA CASEY CEMTRAT GOLDFIELDS COLAC-OTWAY CORANG HIM BIACK ALPINE ARARAT BALLARATEBANY HE BASS COAST BAW BAW BAYSIDE BENALLA BORONI BRIMBANK BULOKE CAMPASPE CARDINA CASEY CEMTRAT GOLDFIELDS COLAC-OTWAY CORANG HIM BIACK ALPINE ARARAT BALLARATEBANY HE BASS COAST BAW BAW BAYSIDE BENALLA BORONI BRIMBANK BULOKE CAMPASPE CARDINA CASEY CEMTRAT GOLDFIELDS COLAC-OTWAY CORANG HIM BIACK ALPINE ARARAT BALLARATEBANY HE BASS COAST BAW BAW BAYSIDE BENALLA BORONI BIN EAST GIPPSLAND FEATER CEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON HORSHAM HUME INDIGO KINGSTON HANGA LA ROBE LODDON MACEDON PANGES MANNINGHAM MAN D MARIBYRNONG MAROONDAH MELBOU HIM MARTIN MILDURA MITCHELL MORA MONASH MOONE HORSHAM HUME INDIGO KINGSTON HANGA LA ROBE LODDON MACEDON PANGES MANNINGHAM MAN D MARIBYRNONG MAROONDAH MELBOU HIM MANDA MARCH A GLENELG MORA MONASH MOONE HARIBYRNONG MAROONDAH MELBOU HIM MARTIN MILDURA MITCHELL MORA MONASH MOONE HARIBYRNONG MAROONDAH MELBOU HIM MARTIN MILDURA MITCHELL MORA MONASH MOONE HARIBYRNONG MAROONDAH MELBOU HIM MARTIN MILDURA MITCHELL MORA MONASH MOONE ARA LUM DARE **JULA MOUNT ALEX** MORELAND MORNIN VALLEY N ANDER MOYNE MURRINDINDI NI MPIANS POP **NEES QUEENSCL** LUMBIK NORTHERN GI PHILLI OGIE SURF COAS **GIPPSLAND STONNINGTON** TRATH AN WELLINGTON WEST WIMMERA ITEHORSE WHITTLESE YARRIAMBIACK ALPINE ARARAT BALLARAT BAY HORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MAN FIELD MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE VALLEY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI LUMBIK NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT GIPPSLAND STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOC WELLINGTON WEST WIMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGE YARRIAMBIACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONI ARA BRIMBANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMI

Table 3.51 shows the proportion of adults who consumed, or did not consume, sugar-sweetened soft drinks daily by LGA in Eastern Metropolitan Region. The proportion of adults who consumed sugar-sweetened soft drinks daily was significantly higher among those who lived in the LGA of Maroondah (C) compared with all Victorian adults.

### Table 3.51: Proportion (%) of adult population who consumed, or did not consume, sugar-sweetened soft drinks daily, by LGA, Eastern Metropolitan Region, Victoria, 2014

	Consume	ed sugar-sv ft drinks do	weetened aily	Did no <sup>.</sup> sweeten	t consume ed soft drir	sugar- nks daily
	%	95%	% CI	%	95%	6 CI
LGA		LL	UL		LL	UL
Boroondara (C)	5.2*	2.8	9.5	92.6	88.2	95.5
Knox (C)	8.5*	4.6	14.9	90.0	83.5	94.1
Manningham (C)	8.2*	4.3	15.0	90.2	83.5	94.4
Maroondah (C)	21.4	14.1	31.0	78.0	68.3	85.3
Monash (C)	10.2	6.5	15.7	89.0	83.6	92.8
Whitehorse (C)	7.3*	3.3	15.5	91.8	83.9	96.0
Yarra Ranges (S)	10.7	6.8	16.3	88.5	82.9	92.4
Eastern Metropolitan Region	9.8	7.9	12.0	89.0	86.8	90.9
Victoria	11.2	10.4	12.1	87.6	86.8	88.5

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 3.52 shows the proportion of adults who consumed, or did not consume, sugar-sweetened soft drinks daily by LGA in North & West Metropolitan Region. The proportion of adults who consumed sugar-sweetened soft drinks daily was significantly lower among those who lived in the LGA of Maribyrnong (C) compared with all Victorian adults.

### Table 3.52: Proportion (%) of adult population who consumed, or did not consume, sugar-sweetened soft drinks daily, by LGA, North & West Metropolitan Region, Victoria, 2014

	Consume	ed sugar-sv ft drinks do	weetened iily	Did not sweetene	consume ed soft drir	sugar- nks daily
	%	95%	6 CI	%	95%	6 CI
LGA		LL	UL		LL	UL
Banyule (C)	11.9	7.6	18.3	86.8	80.4	91.3
Brimbank (C)	9.8	6.8	13.9	89.4	85.2	92.5
Darebin (C)	11.8*	6.6	20.2	86.5	78.2	91.9
Hobsons Bay (C)	8.9	5.5	14.1	90.5	85.3	94.0
Hume (C)	15.8	11.2	21.9	83.7	77.6	88.3
Maribyrnong (C)	5.5*	3.3	9.1	92.0	87.3	95.0
Melbourne (C)	6.9*	4.2	11.4	92.3	87.9	95.2
Melton (S)	14.3	10.2	19.8	85.5	80.0	89.6
Moonee Valley (C)	9.4	5.7	15.0	90.0	84.4	93.7
Moreland (C)	10.9	6.7	17.2	87.8	81.3	92.2
Nillumbik (S)	8.6	5.5	13.3	90.5	85.9	93.7
Whittlesea (C)	14.0	10.2	19.1	85.0	79.9	89.0
Wyndham (C)	15.0	10.6	20.8	83.8	78.0	88.3
Yarra (C)	7.7*	3.4	16.3	91.6	83.2	96.0
North & West Metropolitan Region	11.0	9.7	12.4	88.0	86.6	89.3
Victoria	11.2	10.4	12.1	87.6	86.8	88.5

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below: \* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) should be interpreted with earth.

Table 3.53 shows the proportion of adults who consumed, or did not consume, sugar-sweetened soft drinks daily by LGA in Southern Metropolitan Region. The proportion of adults who consumed sugar-sweetened soft drinks daily was significantly lower among those who lived in the LGAs of Bayside (C) and Glen Eira (C) compared with all Victorian adults.

### Table 3.53: Proportion (%) of adult population who consumed, or did not consume, sugar-sweetened soft drinks daily, by LGA, Southern Metropolitan Region, Victoria, 2014

	Consume	ed sugar-sv ft drinks do	weetened aily	Did not sweetene	: consume ed soft drir	sugar- nks daily
	%	95%	% CI	%	95%	6 CI
LGA		LL	UL		LL	UL
Bayside (C)	3.1*	1.8	5.1	95.8	93.8	97.2
Cardinia (S)	14.7	10.3	20.4	84.8	79.0	89.2
Casey (C)	15.9	10.6	23.3	83.2	75.9	88.6
Frankston (C)	15.4	10.5	21.9	84.0	77.4	88.9
Glen Eira (C)	5.6*	3.1	9.9	93.7	89.4	96.3
Greater Dandenong (C)	7.3*	4.2	12.5	91.1	85.1	94.8
Kingston (C)	11.4*	6.3	20.0	87.2	78.7	92.6
Mornington Peninsula (S)	9.9*	5.6	16.9	89.6	82.6	93.9
Port Phillip (C)	5.3*	2.5	11.1	93.6	87.9	96.7
Stonnington (C)	8.9*	4.2	17.8	90.9	82.1	95.6
Southern Metropolitan Region	10.4	8.6	12.6	88.6	86.4	90.5
Victoria	11.2	10.4	12.1	87.6	86.8	88.5

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below: \* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) should be interpreted with eaders.

Table 3.54 shows the proportion of adults who consumed, or did not consume, sugar-sweetened soft drinks daily by LGA in Barwon-South Western Region. The proportion of adults who consumed sugar-sweetened soft drinks daily was significantly higher among those who lived in the LGA of Colac-Otway (S) compared with all Victorian adults.

### Table 3.54: Proportion (%) of adult population who consumed, or did not consume, sugar-sweetened soft drinks daily, by LGA, Barwon-South Western Region, Victoria, 2014

	Consume sol	ed sugar-sv ft drinks do	weetened aily	Did not sweeten	t consume ed soft drir	sugar- 1ks daily
	%	95%	6 CI	%	95%	6 CI
LGA		LL	UL		LL	UL
Colac-Otway (S)	22.5	13.9	34.3	76.5	64.8	85.2
Corangamite (S)	15.9	11.6	21.4	81.5	74.1	87.1
Glenelg (S)	11.2*	6.3	19.1	87.3	79.5	92.4
Greater Geelong (C)	11.5	7.3	17.6	88.1	82.0	92.3
Moyne (S)	13.5*	8.0	21.8	85.9	77.6	91.5
Queenscliffe (B)	7.0*	3.0	15.3	90.8	81.5	95.6
Southern Grampians (S)	15.0*	8.3	25.6	81.0	70.8	88.2
Surf Coast (S)	8.7*	4.9	15.0	89.1	82.5	93.5
Warrnambool (C)	7.5*	4.0	13.5	89.9	83.2	94.1
Barwon-South Western Region	11.9	8.9	15.8	87.1	83.2	90.2
Victoria	11.2	10.4	12.1	87.6	86.8	88.5

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{\ast}~$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 3.55 shows the proportion of adults who consumed, or did not consume, sugar-sweetened soft drinks daily by LGA in Gippsland Region. The proportion of adults who consumed sugarsweetened soft drinks daily was significantly higher among those who lived in the LGA of Wellington (S) compared with all Victorian adults.

### Table 3.55: Proportion (%) of adult population who consumed, or did not consume, sugar-sweetened soft drinks daily, by LGA, Gippsland Region, Victoria, 2014

	Consume sol	ed sugar-sv ft drinks do	veetened iily	Did no <sup>.</sup> sweeten	t consume ed soft drir	sugar- nks daily
	%	95%	6 CI	%	95%	6 CI
LGA		LL	UL		LL	UL
Bass Coast (S)	16.1*	8.3	29.1	83.7	70.8	91.6
Baw Baw (S)	12.8	7.8	20.3	86.4	78.9	91.5
East Gippsland (S)	19.0*	10.5	31.8	80.5	67.8	89.0
Latrobe (C)	16.0*	9.6	25.6	82.7	73.2	89.3
South Gippsland (S)	15.0	9.3	23.2	83.3	75.2	89.1
Wellington (S)	20.6	12.6	31.7	78.9	67.8	86.9
Gippsland Region	16.4	12.9	20.7	82.7	78.5	86.3
Victoria	11.2	10.4	12.1	87.6	86.8	88.5

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 3.56 shows the proportion of adults who consumed, or did not consume, sugar-sweetened soft drinks daily by LGA in Grampians Region. The proportion of adults who consumed sugarsweetened soft drinks daily was significantly higher among those who lived in the LGAs of Golden Plains (S) and Yarriambiack (S) compared with all Victorian adults.

### Table 3.56: Proportion (%) of adult population who consumed, or did not consume, sugar-sweetened soft drinks daily, by LGA, Grampians Region, Victoria, 2014

	Consume sof	ed sugar-sv t drinks do	weetened aily	Did no sweeten	t consume ed soft drir	sugar- nks daily
	%	95%	% CI	%	95%	6 CI
LGA		LL	UL		LL	UL
Ararat (RC)	14.0	9.0	21.2	85.7	78.6	90.7
Ballarat (C)	13.0	8.9	18.5	86.3	80.8	90.4
Golden Plains (S)	19.6	13.2	28.0	79.7	71.3	86.2
Hepburn (S)	11.6*	6.9	18.8	86.9	79.8	91.8
Hindmarsh (S)	7.9	5.0	12.3	90.8	86.4	93.9
Horsham (RC)	14.4*	7.9	24.7	85.1	74.9	91.6
Moorabool (S)	16.8	11.5	24.0	81.3	74.0	86.9
Northern Grampians (S)	17.9	12.1	25.8	81.1	73.3	87.1
Pyrenees (S)	12.5	8.1	18.8	86.7	80.5	91.1
West Wimmera (S)	12.6	8.1	19.0	79.8	67.2	88.4
Yarriambiack (S)	20.2	12.7	30.4	79.1	68.9	86.6
Grampians Region	14.2	11.7	17.1	84.8	81.9	87.3
Victoria	11.2	10.4	12.1	87.6	86.8	88.5

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 3.57 shows the proportion of adults who consumed, or did not consume, sugar-sweetened soft drinks daily by LGA in Hume Region. The proportion of adults who consumed sugarsweetened soft drinks daily was significantly higher among those who lived in the LGAs of Benalla (RC) and Murrindindi (S) compared with all Victorian adults

### Table 3.57: Proportion (%) of adult population who consumed, or did not consume, sugar-sweetened soft drinks daily, by LGA, Hume Region, Victoria, 2014

	Consume sof	ed sugar-sv ft drinks do	weetened aily	Did not sweetene	consume ed soft drii	sugar- nks daily
	%	95%	% CI	%	95%	6 CI
LGA		LL	UL		LL	UL
Alpine (S)	12.5*	5.1	27.4	80.3	64.9	90.0
Benalla (RC)	20.4	13.1	30.5	79.0	69.0	86.4
Greater Shepparton (C)	13.3	8.4	20.3	85.4	78.4	90.4
Indigo (S)	15.0*	8.3	25.7	83.7	73.2	90.6
Mansfield (S)	20.7*	10.1	37.9	77.5	60.8	88.4
Mitchell (S)	16.8	10.9	25.0	82.7	74.5	88.6
Moira (S)	17.3	11.3	25.6	81.0	72.6	87.2
Murrindindi (S)	21.1	13.9	30.7	77.0	67.3	84.5
Strathbogie (S)	13.8*	8.0	22.7	85.8	76.9	91.6
Towong (S)	12.8*	7.6	20.8	86.4	78.5	91.7
Wangaratta (RC)	19.2*	11.1	31.0	80.0	68.3	88.1
Wodonga (RC)	11.6	7.7	16.9	86.7	80.5	91.1
Hume Region	15.0	12.7	17.7	83.4	80.7	85.8
Victoria	11.2	10.4	12.1	87.6	86.8	88.5

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 3.58 shows the proportion of adults who consumed, or did not consume, sugar-sweetened soft drinks daily by LGA in Loddon Mallee Region. The proportion of adults who consumed sugarsweetened soft drinks daily was significantly higher among those who lived in the LGAs of Buloke (S) and Loddon (S) compared with all Victorian adults.

### Table 3.58: Proportion (%) of adult population who consumed, or did not consume, sugar-sweetened soft drinks daily, by LGA, Loddon Mallee Region, Victoria, 2014

	Consume so	ed sugar-sv ft drinks do	weetened iily	Did not sweetene	consume ed soft drii	sugar- nks daily
	%	95%	6 CI	%	95%	6 CI
LGA		LL	UL		LL	UL
Buloke (S)	24.3	16.2	34.7	75.3	64.9	83.3
Campaspe (S)	17.5	11.1	26.6	81.6	72.6	88.1
Central Goldfields (S)	16.9	10.8	25.5	81.7	73.1	87.9
Gannawarra (S)	15.0*	7.7	27.2	78.7	61.8	89.4
Greater Bendigo (C)	10.4*	5.3	19.5	87.6	78.9	93.1
Loddon (S)	21.9*	13.0	34.5	77.3	64.8	86.3
Macedon Ranges (S)	11.0*	6.6	17.8	87.1	80.5	91.8
Mildura (RC)	9.3	5.9	14.4	86.3	75.9	92.7
Mount Alexander (S)	12.1*	6.1	22.5	87.4	77.1	93.5
Swan Hill (RC)	15.7	9.8	24.2	83.4	74.9	89.4
Loddon Mallee Region	12.5	9.5	16.2	85.4	81.4	88.6
Victoria	11.2	10.4	12.1	87.6	86.8	88.5

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

#### What does Map 3.3 tell us?

In Map 3.3 the 79 LGAs have been ranked according to the proportion of adults who consumed sugar-sweetened soft drinks daily. The LGAs were then divided into 4 groups of 16 LGAs (labelled poorest, fair, good and very good results) with decreasing proportions of adults who consumed sugar-sweetened soft drinks daily and a final group of 15 LGAs with the best results (i.e. the smallest proportions of adults who consumed sugar-sweetened soft drinks daily).



#### Map 3.3: Proportion of adults who consumed sugar-sweetened soft drinks daily, by LGA, 2014

Note: The local government area (LGA) ID is based on the alphabetical order of the LGA names (see Table iii, page 17).
Table 3.59 shows the proportion of men who consumed, or did not consume, sugar-sweetened soft drinks daily, by selected socioeconomic determinants. When compared with all Victorian men, a significantly higher proportion of men consumed sugar-sweetened soft drinks daily with the following characteristics:

- did not complete high school
- total annual household income of less than \$40,000.

Table 3.60 shows the proportion of women who consumed, or did not consume, sugar-sweetened soft drinks daily, by selected socioeconomic determinants. When compared with all Victorian women, a significantly higher proportion of women consumed sugar-sweetened soft drinks daily with the following characteristic:

• did not complete high school.

## Table 3.59: Proportion (%) of adult males who consumed, or did not consume, sugar-sweetened soft drinks daily, by selected socioeconomic determinants, Victoria, 2014

	C suga soft	onsume r-sweet drinks o	ed ened daily	Did r suga soft	not cons r-sweet drinks (	sume cened daily
	%	95%	6 CI	%	95%	% CI
		LL	UL		LL	UL
All males	15.3	13.9	16.8	83.5	82.0	84.9
Country of birth						
Australia	16.8	15.2	18.5	82.2	80.4	83.8
Overseas	12.6	9.6	16.4	86.0	82.2	89.1
Language spoken at home						
English	16.7	15.1	18.5	82.2	80.4	83.8
Language other than English	11.5	9.0	14.7	87.2	84.0	89.9
Education level						
Did not complete high school	25.5	19.9	32.0	73.0	66.6	78.5
Completed high school, or TAFE, or trade certificate, or diploma	17.4	15.5	19.5	81.6	79.5	83.6
University, or some other tertiary institute degree, including postgraduate diploma or degree	10.4	8.3	12.8	88.4	85.9	90.5
Employment status						
Employed	16.2	14.4	18.1	82.7	80.8	84.5
Unemployed	15.5	11.1	21.3	84.4	78.6	88.8
Not in labour force	15.3	11.7	19.8	83.7	79.2	87.4
Total annual household income						
< \$40,000	21.0	17.0	25.6	78.0	73.3	82.0
\$40,000 to < \$100,000	16.4	13.9	19.2	83.0	80.2	85.5
≥ \$100,000	13.5	11.0	16.4	85.4	82.4	88.0

Data were age-standardised to the 2011 Victorian population.

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

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

Estimates that are (statistically) significantly different from the corresponding estimate for Victoria are identified by colour as follows: above or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

# Table 3.60: Proportion (%) of adult females who consumed, or did not consume, sugar-sweetened soft drinks daily, by selected socioeconomic determinants, Victoria, 2014

	C suga soft	onsume ir-sweet drinks o	ed ened daily	Did i sugo soft	not cons ir-sweet drinks	sume tened daily
	%	95%	% CI	%	95%	% CI
		LL	UL		LL	UL
All females	7.2	6.5	8.1	91.7	90.8	92.5
Country of birth						
Australia	8.1	7.2	9.1	90.8	89.7	91.8
Overseas	4.7	3.7	5.9	94.5	93.2	95.5
Language spoken at home						
English	8.5	7.5	9.6	90.4	89.2	91.4
Language other than English	4.2	3.3	5.4	95.0	93.8	96.0
Education level						
Did not complete high school	13.4	10.0	17.7	86.0	81.7	89.4
Completed high school, or TAFE, or trade certificate, or diploma	8.2	7.1	9.5	90.5	89.1	91.6
University, or some other tertiary institute degree, including postgraduate diploma or degree	5.0	3.9	6.4	94.3	92.8	95.4
Employment status						
Employed	6.5	5.5	7.6	92.2	90.8	93.3
Unemployed	10.7	6.8	16.3	88.9	83.2	92.8
Not in labour force	7.5	6.3	8.9	91.3	89.7	92.6
Total annual household income						
< \$40,000	9.8	7.3	13.1	89.4	86.1	92.0
\$40,000 to < \$100,000	8.4	6.8	10.4	90.7	88.8	92.4
≥ \$100,000	5.4	4.0	7.2	93.6	91.6	95.1

Data were age-standardised to the 2011 Victorian population.

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

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

Estimates that are (statistically) significantly different from the corresponding estimate for Victoria are identified by colour as follows: above or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here. The relationship was investigated between SES and the age-adjusted consumption of sugarsweetened soft drinks daily using total annual household income as a measure of SES (Figure 3.9). The proportion of men and women who consumed sugar-sweetened soft drinks daily significantly decreased with increasing total annual household income.





Data are age-adjusted to the 2011 population of Victoria. 95% CI = 95 per cent confidence interval. Estimates are (statistically) significantly different if their 95% CI do NOT overlap. Table 3.61 shows the proportion of men who consumed, or did not consume, sugar-sweetened soft drinks daily, by selected modifiable risk factors and chronic conditions. When compared with all Victorian men, a significantly higher proportion of men consumed sugar-sweetened soft drinks daily with the following characteristics:

- current smoker
- underweight.

Table 3.62 shows the proportion of women who consumed, or did not consume, sugar-sweetened soft drinks daily, by selected modifiable risk factors and chronic conditions. When compared with all Victorian women, a significantly higher proportion of women consumed sugar-sweetened soft drinks daily with the following characteristics:

- did not meet either guideline for fruit or vegetable consumption
- current smoker
- fair or poor self-reported health status.

## Table 3.61: Proportion (%) of adult males who consumed, or did not consume, sugar-sweetened soft drinks daily, by selected modifiable risk factors in males, Victoria, 2014

	C suga soft	consume ir-sweet drinks c	ed ened laily	Did sugar- d	not cons sweeter rinks da	sume ned soft ily
	%	95%	6 CI	%	959	% CI
		LL	UL		LL	UL
All males	15.3	13.9	16.8	83.5	82.0	84.9
Psychological distress <sup>a</sup>						
Low (K10 score < 16)	14.6	12.9	16.4	84.2	82.3	85.9
Moderate (K10 score 16–21)	16.6	13.8	19.9	82.6	79.4	85.4
High / very high (K10 score 22+)	15.6	11.8	20.2	83.3	78.5	87.1
Physical activity <sup>b</sup>						
Sedentary	16.6*	9.2	28.0	82.8	71.5	90.2
Insufficient time (< 150 min) and/or sessions (< 2)	16.8	14.8	19.1	82.1	79.8	84.2
Sufficient time (≥ 150 min) and sessions (≥ 2)	13.5	11.4	15.9	85.4	83.0	87.5
Met fruit / vegetable guidelines <sup>c</sup>						
Both guidelines	5.7*	3.1	10.5	92.7	87.7	95.7
Vegetable guidelines <sup>d</sup>	7.4*	4.3	12.6	91.2	85.9	94.6
Fruit guidelines <sup>d</sup>	11.4	9.7	13.5	87.4	85.4	89.2
Neither	18.5	16.5	20.7	80.4	78.2	82.4
Smoking status						
Current smoker	24.5	20.8	28.6	74.2	70.0	77.9
Ex-smoker	19.0	14.8	24.0	79.9	74.9	84.1
Non-smoker	12.9	11.4	14.6	86.0	84.3	87.6
Lifetime risk of alcohol-related harm <sup>e</sup>						
Abstainer / no longer drinks alcohol	17.9	14.3	22.0	81.6	77.4	85.2
Reduced risk	12.6	9.0	17.4	85.6	80.8	89.4
Increased risk	15.2	13.7	17.0	83.6	81.8	85.2
Self-reported health						
Excellent/very good	13.7	11.7	16.0	85.1	82.7	87.2
Good	15.4	13.2	17.8	83.5	81.1	85.7
Fair/poor	18.0	14.8	21.6	80.7	77.1	83.9

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

 $^{lpha}\,$  Based on the Kessler 10 scale for psychological distress.

<sup>b</sup> DoH (2014) guidelines.

° NHMRC (2013) guidelines.

<sup>d</sup> Includes those meeting both guidelines.

e NHMRC (2009) guidelines.

<sup>f</sup> Body mass index (BMI) = Weight (kg) / Height (m<sup>2</sup>).

#### Table 3.61: Proportion (%) of adult males who consumed, or did not consume, sugar-sweetened soft drinks daily, by selected modifiable risk factors in males, Victoria, 2014 (continued)

	C suga soft	onsume r-sweet drinks c	d ened laily	Did r sugar-s dr	not consume -sweetened soft rinks daily		
	%	95%	6 CI	%	95%	% CI	
		LL	UL		LL	UL	
Body weight status based on BMI <sup>f</sup>							
Underweight (BMI < 18.5 kg/m²)	33.3	21.9	47.1	66.4	52.7	77.9	
Normal range (18.5 ≥ BMI < 25 kg/m²)	13.8	12.0	15.9	84.9	82.7	86.8	
Pre-obese (25 ≥ BMI < 30 kg/m²)	16.3	13.8	19.2	82.4	79.5	85.0	
Obese (BMI ≥ 30 kg/m²)	16.4	12.8	21.0	82.7	78.2	86.4	
Blood pressure status (excluding pregnancy induce	ed hyperte	nsion)					
Doctor diagnosed hypertension	16.7	12.4	22.2	82.4	77.0	86.8	
Normal range	15.7	14.2	17.3	83.1	81.4	84.6	
Blood glucose status (excluding gestational diabet	es)						
Doctor diagnosed diabetes	**			93.2	83.7	97.4	
Normal range	15.8	14.4	17.3	83.0	81.5	84.5	

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

<sup>a</sup> Based on the Kessler 10 scale for psychological distress.

- <sup>b</sup> DoH (2014) guidelines.
- ° NHMRC (2013) guidelines.
- <sup>d</sup> Includes those meeting both guidelines.
- <sup>e</sup> NHMRC (2009) guidelines.
- <sup>f</sup> Body mass index (BMI) = Weight (kg) / Height (m<sup>2</sup>).

# Table 3.62: Proportion (%) of adult females who consumed, or did not consume, sugar-sweetened soft drinks daily, by selected modifiable risk factors in females, Victoria, 2014

	C suga soft	onsume r-sweet drinks c	ed ened daily	Did sugar- d	not cons sweeten rinks da	sume ned soft ily
	%	95%	% CI	%	95%	% CI
		LL	UL		LL	UL
All females	7.2	6.5	8.1	91.7	90.8	92.5
Psychological distress <sup>a</sup>						
Low (K10 score < 16)	6.5	5.5	7.7	92.7	91.5	93.7
Moderate (K10 score 16–21)	7.4	6.1	8.8	91.3	89.7	92.6
High / very high (K10 score 22+)	9.5	7.6	11.9	89.5	87.1	91.6
Physical activity <sup>b</sup>						
Sedentary	10.5*	5.9	18.1	88.8	81.3	93.6
Insufficient time (< 150 min) and/or sessions (< 2)	8.1	6.9	9.3	90.9	89.6	92.1
Sufficient time (≥ 150 min) and sessions (≥ 2)	5.3	4.4	6.5	93.8	92.5	94.8
Met fruit / vegetable guidelines <sup>c</sup>						
Both guidelines	4.9*	2.8	8.6	94.4	90.8	96.6
Vegetable guidelines <sup>d</sup>	4.1	2.6	6.5	95.4	93.0	96.9
Fruit guidelines <sup>d</sup>	4.8	4.0	5.7	94.2	93.2	95.0
Neither	10.3	8.9	11.9	88.7	87.1	90.2
Smoking status						
Current smoker	16.6	13.5	20.2	81.7	78.0	84.9
Ex-smoker	7.1	4.8	10.4	91.9	88.7	94.3
Non-smoker	5.8	5.0	6.6	93.3	92.5	94.1
Lifetime risk of alcohol-related harm <sup>e</sup>						
Abstainer / no longer drinks alcohol	7.5	6.0	9.2	91.6	89.8	93.1
Reduced risk	7.9	6.0	10.4	91.2	88.7	93.2
Increased risk	6.8	5.8	8.0	92.2	91.0	93.3
Self-reported health						
Excellent/very good	5.4	4.4	6.5	93.7	92.6	94.7
Good	7.6	6.4	9.0	91.2	89.7	92.5
Fair/poor	10.8	8.7	13.4	88.3	85.7	90.5

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

 $^{lpha}\,$  Based on the Kessler 10 scale for psychological distress.

<sup>b</sup> DoH (2014) guidelines.

° NHMRC (2013) guidelines.

<sup>d</sup> Includes those meeting both guidelines.

e NHMRC (2009) guidelines.

<sup>f</sup> Body mass index (BMI) = Weight (kg) / Height (m<sup>2</sup>).

#### Table 3.62: Proportion (%) of adult females who consumed, or did not consume, sugar-sweetened soft drinks daily, by selected modifiable risk factors in females, Victoria, 2014 (continued)

	C suga soft	onsume r-sweet drinks o	ed ened daily	Did ı sugar- dı	not consume -sweetened soft trinks daily		
	%	95%	% CI	%	95% CI		
		LL	UL		LL	UL	
Body weight status based on BMI <sup>f</sup>							
Underweight (BMI < 18.5 kg/m²)	8.8*	5.1	14.9	90.2	84.3	94.1	
Normal range (18.5 ≥ BMI < 25 kg/m²)	5.8	4.9	6.9	92.8	91.6	93.8	
Pre-obese (25 ≥ BMI < 30 kg/m²)	7.6	5.8	9.9	91.4	89.1	93.3	
Obese (BMI ≥ 30 kg/m²)	9.7	7.4	12.7	90.0	87.0	92.3	
Blood pressure status (excluding pregnancy induced	d hyperte	nsion)					
Doctor diagnosed hypertension	8.2	5.5	12.0	91.0	87.3	93.8	
Normal range	7.0	6.2	8.0	91.9	90.9	92.7	
Blood glucose status (excluding gestational diabete	es)						
Doctor diagnosed diabetes	2.2	1.5	3.3	97.5	96.4	98.2	
Normal range	7.4	6.6	8.2	91.6	90.7	92.4	

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

<sup>a</sup> Based on the Kessler 10 scale for psychological distress.

- <sup>b</sup> DoH (2014) guidelines.
- ° NHMRC (2013) guidelines.
- <sup>d</sup> Includes those meeting both guidelines.
- e NHMRC (2009) guidelines.
- <sup>f</sup> Body mass index (BMI) = Weight (kg) / Height (m<sup>2</sup>).

The relationship was investigated between consumption of sugar-sweetened soft drinks daily and the prevalence of self-reported health status (Figure 3.10 and Figure 3.11). The proportion of the adult Victorian population who consumed sugarsweetened soft drinks daily was highest among men and women with fair or poor self-reported health status.





Data are age-adjusted to the 2011 population of Victoria.

95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.



# Figure 3.11: Proportion (%) of adult females who consumed sugar-sweetened soft drinks daily, by self-reported health status, Victoria, 2014

Data are age-adjusted to the 2011 population of Victoria. 95% CI = 95 per cent confidence interval. Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

#### Consumption of sugarsweetened and artificially sweetened (diet) soft drinks

Table 3.63 shows the proportion of the adult population who consumed sugar-sweetened or diet soft drinks by frequency, age group and sex. Overall, 30.7 per cent of Victorian people reported consuming sugar-sweetened or diet soft drinks daily, once or several times per week. The proportion who reported consuming these drinks daily, once or several times per week was significantly higher in men than women. The proportion of men, women and people who drank these soft drinks daily, once or several times per week was significantly higher in 18–34-year-olds compared with all Victorian men, women and people, respectively.

#### Table 3.63: Proportion (%) of adult population who consumed sugar-sweetened or diet soft drinks, by frequency, age group and sex, Victoria, 2014

		Co suga soft onco time	onsume r-sweet drinks: e or sev es per w	ed cened daily, veral veek	C suga soft a fort	onsum r-swee drinks: night, r or less	ed tened once nonth	Con soft onc time	Consumed diet soft drinks: daily, once or several times per week			sumed diet drinks: once night, month or less		
	Age	%	95%	6 CI	%	95%	% CI	%	95%	% CI	%	95%	% CI	
	(years)		LL	UL		LL	UL		LL	UL		LL	UL	
Males	18–24	60.2	53.7	66.5	11.1	7.6	16.0	11.3	7.9	16.0	3.1*	1.3	7.1	
	25–34	47.6	41.6	53.8	15.3	11.4	20.3	17.6	13.5	22.5	4.8*	2.7	8.2	
	35–44	40.2	36.7	43.8	15.4	12.9	18.2	21.1	18.3	24.2	4.2	3.0	5.9	
	45–54	31.4	28.6	34.2	16.3	14.1	18.6	20.4	18.0	23.0	4.7	3.5	6.2	
	55–64	27.0	24.9	29.3	15.9	14.1	17.8	19.8	17.9	21.9	6.0	4.9	7.2	
	65–74	22.6	20.6	24.6	13.4	11.9	15.1	16.0	14.3	17.9	6.1	5.0	7.4	
	75–84	22.3	19.7	25.0	12.0	10.2	14.2	13.0	11.0	15.3	4.2	3.2	5.5	
	85+	17.5	13.4	22.5	13.6	9.5	19.3	7.3	4.6	11.3	2.9*	1.5	5.7	
	Victoria	38.1	36.3	39.8	14.5	13.3	15.9	17.4	16.1	18.8	4.6	3.9	5.4	
Females	18–24	41.1	35.0	47.6	20.1	14.9	26.6	11.4	8.3	15.5	5.7*	3.4	9.5	
	25–34	32.1	27.7	36.8	19.7	15.6	24.6	18.4	15.1	22.3	9.5	6.5	13.6	
	35–44	23.1	21.0	25.3	17.8	15.9	20.0	20.9	18.9	23.1	8.7	7.2	10.4	
	45–54	18.9	17.1	20.9	16.2	14.6	18.0	15.6	14.0	17.4	6.9	5.8	8.2	
	55–64	13.6	12.2	15.1	14.0	12.6	15.5	14.6	13.1	16.1	8.3	7.2	9.6	
	65–74	11.0	9.8	12.3	12.5	11.2	13.9	12.2	10.9	13.7	5.6	4.7	6.6	
	75–84	14.3	12.6	16.2	9.8	8.4	11.5	8.0	6.7	9.4	5.1	3.9	6.6	
	85+	15.4	12.0	19.5	8.9	6.7	11.8	4.8	3.1	7.4	2.0*	1.0	4.2	
	Victoria	23.5	22.2	25.0	16.6	15.3	18.0	15.3	14.3	16.4	7.4	6.5	8.4	
Persons	18–24	50.9	46.2	55.6	15.5	12.2	19.5	11.4	8.9	14.3	4.4	2.8	6.8	
	25–34	39.9	36.0	43.8	17.5	14.6	20.9	18.0	15.3	21.0	7.1	5.2	9.7	
	35–44	31.5	29.5	33.7	16.6	15.0	18.4	21.0	19.3	22.9	6.5	5.5	7.6	
	45–54	25.0	23.4	26.8	16.2	14.9	17.7	18.0	16.5	19.5	5.8	5.0	6.8	
	55–64	20.2	18.9	21.6	14.9	13.8	16.1	17.1	15.9	18.4	7.2	6.4	8.0	
	65–74	16.3	15.2	17.5	12.9	11.9	14.0	13.9	12.9	15.1	5.8	5.1	6.6	
	75–84	18.0	16.5	19.6	10.9	9.7	12.1	10.3	9.1	11.6	4.7	3.9	5.6	
	85+	16.3	13.6	19.4	10.9	8.6	13.7	5.9	4.3	8.0	2.4*	1.5	4.0	
	Victoria	30.7	29.6	31.9	15.5	14.6	16.5	16.3	15.5	17.2	6.0	5.5	6.6	

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* Estimate has a RSE 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.
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Table 3.64 shows the proportion of the adult population who consumed sugar-sweetened or diet soft drinks by frequency, departmental region and sex. The proportion of females who reported consuming these drinks daily, once or several times per week was significantly lower in women living in Southern Metropolitan Region compared with all Victorian women. A significantly higher proportion of adults who lived in the rural regions reported consuming these drinks daily, once or several times per week compared with adults in the metropolitan regions.

Table 3.64: Proportion (%) of adult population who consumed sugar-sweetened or diet soft drinks, by frequency, Department of Health and Human Services region and sex, Victoria, 2014

	Consumed sugar-sweetened soft drinks: daily, once or several times per week		Co sugar soft o a f mo	onsum r-swee drinks: fortnig nth or	ed tened once ht, less	Con soft o once time	sumed drinks: e or sev es per v	l diet daily, veral week	Cons soft c a f moi	Consumed diet soft drinks: onco a fortnight, month or less		
	%	95%	% CI	%	95%	% CI	%	95% CI		%	95% CI	
Region		LL	UL		LL	UL		LL	UL		LL	UL
Males (18+ years)												
Eastern Metropolitan	35.5	31.3	39.9	15.2	12.3	18.7	17.4	14.3	21.0	4.7	3.4	6.4
North & West Metropolitan	37.3	34.4	40.4	14.1	12.2	16.2	17.0	14.8	19.4	4.8	3.6	6.3
Southern Metropolitan	38.2	34.4	42.1	14.9	12.0	18.3	16.8	14.3	19.6	4.7	3.4	6.4
All metropolitan regions	37.3	35.2	39.4	14.6	13.2	16.2	17.0	15.5	18.6	4.7	3.9	5.6
Barwon-South Western	41.5	34.4	48.9	13.9	10.0	19.1	19.7	14.2	26.7	6.4*	3.0	13.1
Gippsland	37.6	31.0	44.8	13.0	10.1	16.5	17.6	13.3	23.0	5.4*	2.0	13.5
Grampians	41.8	35.6	48.3	14.8	10.9	19.7	14.1	10.3	19.0	3.9	2.6	5.9
Hume	43.0	38.5	47.6	12.0	9.4	15.3	18.7	14.4	23.9	3.4	2.4	4.8
Loddon Mallee	39.5	33.4	45.8	14.9	11.0	19.8	20.5	16.1	25.7	2.6	1.9	3.7
All rural regions	40.5	37.5	43.6	13.8	12.0	15.8	18.5	16.2	21.1	4.5	3.0	6.5
Victoria	38.1	36.3	39.8	14.5	13.3	15.9	17.4	16.1	18.8	4.6	3.9	5.4

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}\,$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

# Table 3.64: Proportion (%) of adult population who consumed sugar-sweetened or diet soft drinks, byfrequency, Department of Health and Human Services region and sex, Victoria, 2014 (continued)

	Consumed sugar-sweetened soft drinks: daily, once or several times per week Consumed sugar-sweetened soft drinks: once a fortnight, month or less					ed tened once ht, less	Cons soft c once time	sumed drinks: e or sev es per v	diet daily, veral week	Consumed diet soft drinks: once a fortnight, month or less		
	%	95%	% CI	%	95%	% CI	%	95%	% CI	%	959	% CI
Region		LL	UL		LL	UL		LL	UL		LL	UL
Females (18+ years)												
Eastern Metropolitan	23.0	19.4	26.9	18.2	14.8	22.1	14.9	12.3	18.0	6.5	5.0	8.3
North & West Metropolitan	25.0	22.7	27.5	16.6	14.6	18.9	13.8	12.2	15.6	7.1	5.9	8.4
Southern Metropolitan	19.1	16.5	21.8	17.1	14.2	20.5	14.5	12.5	16.8	8.6	6.6	11.1
All metropolitan regions	22.6	21.0	24.3	17.2	15.7	18.9	14.3	13.1	15.5	7.4	6.5	8.4
Barwon-South Western	26.3	19.8	34.1	12.3	9.1	16.5	17.5	13.5	22.5	10.3*	4.9	20.5
Gippsland	23.9	19.3	29.3	14.5	11.5	18.2	19.7	15.4	24.7	6.1	4.6	8.1
Grampians	28.1	22.9	33.9	16.2	11.5	22.4	19.5	16.0	23.4	5.3	4.2	6.7
Hume	28.4	24.7	32.4	14.1	11.2	17.5	15.8	13.2	18.8	6.6	5.2	8.4
Loddon Mallee	27.1	22.5	32.2	13.7	9.9	18.7	21.7	17.3	26.9	6.7	5.0	9.0
All rural regions	26.7	24.2	29.4	14.0	12.2	15.9	18.7	16.9	20.7	7.4	5.3	10.4
Victoria	23.5	22.2	25.0	16.6	15.3	18.0	15.3	14.3	16.4	7.4	6.5	8.4
People (18+ years)												
Eastern Metropolitan	29.0	26.2	32.0	16.7	14.4	19.3	16.1	14.0	18.4	5.6	4.6	6.8
North & West Metropolitan	31.2	29.3	33.1	15.3	13.9	16.8	15.4	14.0	16.9	5.9	5.1	6.9
Southern Metropolitan	28.5	26.0	31.1	15.9	13.8	18.3	15.6	14.0	17.4	6.6	5.4	8.1
All metropolitan regions	29.9	28.5	31.2	15.9	14.8	17.0	15.6	14.6	16.6	6.0	5.4	6.7
Barwon-South Western	33.9	28.9	39.3	13.0	10.3	16.2	18.6	15.0	22.9	8.3*	4.6	14.5
Gippsland	30.5	26.3	35.0	13.8	11.7	16.4	18.7	15.6	22.2	5.9*	3.5	9.9
Grampians	34.6	30.5	39.0	15.5	12.4	19.3	17.0	14.3	20.1	4.6	3.7	5.7
Hume	35.5	32.3	38.8	13.1	11.0	15.4	17.3	14.6	20.4	5.0	4.1	6.1
Loddon Mallee	33.5	29.4	37.9	14.3	11.5	17.7	20.8	17.6	24.4	4.7	3.7	5.9
All rural regions	33.6	31.6	35.7	13.9	12.6	15.2	18.6	17.1	20.2	5.9	4.6	7.6
Victoria	30.7	29.6	31.9	15.5	14.6	16.5	16.3	15.5	17.2	6.0	5.5	6.6

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

#### Consumption of sugar-sweetened or diet soft drinks by frequency, departmental region and local government area

HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MANSFIELD MARIB' RNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONEE VALLEY MOOR/ BOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NILLUMBIK NORTH STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOOL WELLING TON WEST WIMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARRIAME ACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDARA BRIN HORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MANSFIEL MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONEE VALLE MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NILLUMB NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUTH GIPPS STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOOL WE MMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARF ACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDAF BANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMI1 FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI **BIN EAST GIPPS** GREATER DANDERIONG CREATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON IORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MAN MARIBYRNONG MAROOLIDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE EY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI IK NORTHEEN GRAMPIANS CORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT LUM SLAN<del>D STO</del>NNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOC INGTON WEST WILMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGE IAMBIACK ALPINE ARARAT BALLARAT BANY YELBASS COAST BAW BAW BAYSIDE BENALLA BOROONI BRIMBANK BULOKE CAMPASPE CARDINA. CASEY CENTRAL COLDENE DE COLDC-OTWAY CORANGAMIT BIN EAST GIPPSLATID FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI GREATER DANDENONG GREATER GEELONG GREATER SHEPPARTON HEPBURI I HINDMARSH HOBSON HORSHAM HUME INDIGO KINGSTON KNOX LATPOBE LODDON MACEDON RANGES MANNINGHAM MAN! MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MORA MONASH MOONE EY MOORABOOL MORELAND MORNINGTOT PENINSULA MOUNT ALEX (NDER MC THE MURRINDINDI NI ISK NORTHERN GRAMPIANS PORT PHILLUP PENINSULA MOUNT ALEX (NDER MC THE MURRINDINDI NI ISK NORTHERN GRAMPIANS PORT PHILLUP PENINSULA MOUNT ALEX (NDER MC THE MURRINDINDI NI ISK NORTHERN GRAMPIANS PORT PHILLUP PENINSULA MOUNT ALEX (NDER MC THE MURRINDINDI NI ISK NORTHERN GRAMPIANS PORT PHILLUP PENINSULA MOUNT ALEX (NDER MC THE MURRINDINDI NI ISK NORTHERN GRAMPIANS PORT PHILLUP PENINSULA MOUNT ALEX (NDER MC THE MURRINDINDI NI ISK NORTHERN GRAMPIANS PORT PHILLUP PENINSULA MOUNT ALEX (NDER MC THE MURRINDINDI NI ISK NORTHERN GRAMPIANS PORT PHILLUP PENINSULA MOUNT ALEX (NDER MC THE MURRINDINDI NI ISK NORTHERN GRAMPIANS PORT PHILLUP PENINSULA MOUNT ALEX (NDER MC THE MURRINDINDI NI ISK NORTHERN GRAMPIANS PORT PHILLUP PENINSULA MOUNT ALEX (NDER MC THE MURRINDINDI NI ISK NORTHERN GRAMPIANS PORT PHILLUP PENINSULA MOUNT ALEX (NDER MONASATATA WARRA RANGE INGED WEST WIMMERA WHITEHOUSE WHITTLESEA WODONGA WANDHAM YARRA YARRA RANGE INGED WEST WIMMERA WHITEHOUSE WHITTLESEA WODONG AW BAYSIDE BENALLA BOROONI ISK ALPINE ARARAT BALLARATBANY HE BASS COAST BAW BAW BAYSIDE BENALLA BOROONI ISK ALPINE CAMPASPE CARDING CASEY CEMTRAL GOLDFIELDS COLAC-OTWAY CORANG MI ISK GIPPSLAND GON GREATER GEBLON GREATER GEBLON GREATER DANDENDARSH HOBSON IORSHAM HUME INDIGO KINGSTON INFOLONI GREATER MORE ANNINGHAM MANY D MARIBYRNONG MAROONDAH MELBOUNNE MENTON MILDURA MITCHELL MOIRA MONASH MOONE EY MORRADOR MAROONDAH MELBOUNNE MENTON MILDURA MITCHELL MORA MONASH MOONE EY MORRADOR MAROONDAH MELBOUNNE MEN IAMBIACK ALPINE ARARAT BALLARAT S COAST BAW BAW BAYSIDE BENALLA BOROONI DAR LUM **ULA MOUNT ALEX** MORELAND MORNU ANDER MOYNE MURRINDINDI NI VALLEY NOORA **NEES QUEENSCL** MPIANS POR LUMBIK NORTHERN GR **OGIE SURF COAS GIPPSLAND STONNINGTON** TRATH WELLINGTON WEST WIMMERA ITEHORSE WHITTLESE NGA WYNDHAM YARRA YARRA RANGE YARRIAMBIACK ALPINE ARARAT BALLARAT BANYULE BASS W BAW BAYSIDE BENALLA BOROONI DIGO GREATER DANDENONG GREATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON FIELD MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE VALLEY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI LUMBIK NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT GIPPSLAND STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOC WELLINGTON WEST WIMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGE YARRIAMBIACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONI ARA BRIMBANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMIT

Table 3.65 shows the proportion of the adult population who consumed sugar-sweetened or diet soft drinks, by frequency and LGA, in Eastern Metropolitan Region. The proportion of the adult population who consumed these drinks daily, once or several times per week was similar across all LGAs in Eastern Metropolitan Region compared with all Victorian adults.

#### Table 3.65: Proportion (%) of adult population who consumed sugar-sweetened or diet soft drinks, by frequency and LGA, Eastern Metropolitan Region, Victoria, 2014

	Consumed sugar-sweetened soft drinks: daily, once or several times per week			Ca suga soft a fort	onsum r-swee drinks: night, i or less	ed tened once month	Con soft o onco time	sumed drinks: e or sev es per v	l diet daily, veral week	Con soft a fort	l diet once month	
	%	95%	% CI	%95% CI		%	95% CI		%	95% CI		
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Boroondara (C)	26.4	20.1	33.9	15.8	11.2	22.0	16.6	11.6	23.2	4.1*	2.3	7.2
Knox (C)	26.6	19.6	35.1	18.4	12.0	27.1	16.1	11.2	22.7	6.1	4.0	9.2
Manningham (C)	29.5	22.6	37.4	17.0	11.7	24.1	14.4	9.4	21.4	7.6	4.6	12.2
Maroondah (C)	37.7	29.1	47.2	12.2	8.3	17.7	17.5	11.7	25.3	5.5*	2.9	10.3
Monash (C)	27.0	21.6	33.1	16.6	12.2	22.1	17.6	13.3	23.0	5.9	3.8	9.2
Whitehorse (C)	28.1	21.3	36.0	15.0	11.1	19.8	15.9	11.2	22.1	5.8*	3.1	10.3
Yarra Ranges (S)	29.8	22.1	38.8	22.1	14.8	31.6	14.7	9.2	22.6	4.4*	2.7	7.2
Eastern Metropolitan Region	29.0	26.2	32.0	16.7	14.4	19.3	16.1	14.0	18.4	5.6	4.6	6.8
Victoria	30.7	29.6	31.9	15.5	14.6	16.5	16.3	15.5	17.2	6.0	5.5	6.6

Data were age-standardised to the 2011 Victorian population.

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 3.66 shows the proportion of the adult population who consumed sugar-sweetened or diet soft drinks, by frequency and LGA, in North & West Metropolitan Region. The proportion of adults who consumed these drinks daily, once or several times per week was significantly higher among those who lived in the LGAs of Whittlesea (C) and Wyndham (C) compared with all Victorian adults.

#### Table 3.66: Proportion (%) of adult population who consumed sugar-sweetened or diet soft drinks, by frequency and LGA, North & West Metropolitan Region, Victoria, 2014

	Consumed sugar-sweetened soft drinks: daily, once or several times per week		ConsumedConsumedsugar-sweetenedsugar-sweetenedsoft drinks: daily,soft drinks: oncoonce or severala fortnight, montimes per weekor less%95% Cl%%95% Cl			ed tened once month	Con soft onco time	sumed drinks: e or sev es per v	diet daily, veral veek	Consumed diet soft drinks: onc a fortnight, mon or less		
	%	95%	6 CI	%	95%	% CI	%	95%	% CI	%	959	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Banyule (C)	32.9	25.7	40.9	18.2	13.4	24.2	11.2	8.1	15.2	4.6*	2.7	7.6
Brimbank (C)	30.5	24.9	36.8	13.0	9.8	17.1	13.9	10.2	18.5	6.7	4.3	10.4
Darebin (C)	30.5	22.9	39.4	14.4	10.5	19.4	14.4	9.1	21.9	7.1	4.5	11.1
Hobsons Bay (C)	28.2	21.4	36.2	18.6	14.4	23.6	16.7	10.8	25.0	4.0	2.6	6.1
Hume (C)	34.3	28.4	40.8	11.6	8.4	15.8	15.0	10.9	20.3	5.4	3.6	8.0
Maribyrnong (C)	24.3	18.2	31.6	24.5	18.4	31.8	13.1	9.6	17.6	3.6	2.3	5.6
Melbourne (C)	27.3	21.0	34.8	20.0	14.9	26.3	11.7	7.9	16.9	8.0*	4.8	13.0
Melton (S)	36.6	30.1	43.6	8.7	6.1	12.4	19.3	14.2	25.7	5.0*	3.0	8.2
Moonee Valley (C)	26.7	20.8	33.6	19.2	13.9	26.0	16.4	11.6	22.6	6.1*	3.7	9.9
Moreland (C)	28.3	21.8	35.9	14.7	10.8	19.8	17.1	12.1	23.6	6.5	4.1	10.4
Nillumbik (S)	25.1	19.5	31.7	14.2	10.1	19.5	20.0	14.7	26.5	3.9*	2.3	6.4
Whittlesea (C)	39.1	33.6	44.9	13.2	9.6	17.7	15.9	12.1	20.7	5.2	3.2	8.4
Wyndham (C)	37.8	32.5	43.5	9.1	6.7	12.1	19.8	15.6	24.9	3.3	2.1	5.4
Yarra (C)	26.0	18.0	35.9	23.2	14.6	34.8	9.4	6.0	14.5	9.5*	5.0	17.4
North & West Metropolitan Region	31.2	29.3	33.1	15.3	13.9	16.8	15.4	14.0	16.9	5.9	5.1	6.9
Victoria	30.7	29.6	31.9	15.5	14.6	16.5	16.3	15.5	17.2	6.0	5.5	6.6

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below: \* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 3.67 shows the proportion of the adult population who consumed sugar-sweetened or diet soft drinks, by frequency and LGA, in Southern Metropolitan Region. The proportion of adults who consumed these drinks daily, once or several times per week was significantly lower among those who lived in the LGA of Port Phillip (C) compared with all Victorian adults.

#### Table 3.67: Proportion (%) of adult population who consumed sugar-sweetened or diet soft drinks, by frequency and LGA, Southern Metropolitan Region, Victoria, 2014

	Consumed sugar-sweetened soft drinks: daily, once or several times per week		Consumed sugar-sweetened soft drinks: once a fortnight, month or less			Con soft o onco time	sumed drinks: e or sev es per v	l diet daily, veral week	Consumed diet soft drinks: once a fortnight, month or less			
	%	95%	% CI	%	95%	% CI	%	959	% CI	%	959	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Bayside (C)	21.9	14.8	31.1	12.8	8.7	18.4	21.8	14.2	31.8	7.0*	3.6	13.0
Cardinia (S)	34.5	28.2	41.4	13.1	9.1	18.4	16.0	11.6	21.6	4.0*	2.2	7.2
Casey (C)	34.5	28.7	40.8	10.5	7.7	14.2	19.5	15.5	24.3	5.1*	3.0	8.5
Frankston (C)	32.6	26.5	39.4	14.6	10.3	20.3	19.1	14.1	25.3	4.7*	2.8	7.7
Glen Eira (C)	22.9	16.8	30.5	12.3	8.6	17.2	17.5	12.9	23.2	9.6*	5.2	16.8
Greater Dandenong (C)	27.5	21.2	34.7	18.1	12.9	24.8	12.0	8.5	16.7	4.3*	2.3	8.1
Kingston (C)	29.7	22.1	38.6	16.4	10.8	24.1	13.1	9.0	18.5	8.8*	4.9	15.3
Mornington Peninsula (S)	28.8	21.6	37.3	22.7	14.5	33.7	12.3	7.9	18.7	4.9*	2.7	8.5
Port Phillip (C)	17.2	11.5	24.9	25.4	17.1	35.9	8.9	5.9	13.1	10.0*	4.6	20.1
Stonnington (C)	25.3	18.2	34.0	16.1	11.0	23.0	17.1	11.8	24.2	9.0*	5.3	15.0
Southern Metropolitan Region	28.5	26.0	31.1	15.9	13.8	18.3	15.6	14.0	17.4	6.6	5.4	8.1
Victoria	30.7	29.6	31.9	15.5	14.6	16.5	16.3	15.5	17.2	6.0	5.5	6.6

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 3.68 shows the proportion of the adult population who consumed sugar-sweetened or diet soft drinks, by frequency and LGA, in Barwon-South Western Region. The proportion of adults who consumed these drinks daily, once or several times per week was similar across all LGAs in Barwon-South Western Region compared with all Victorian adults.

#### Table 3.68: Proportion (%) of adult population who consumed sugar-sweetened or diet soft drinks, by frequency and LGA, Barwon-South Western Region, Victoria, 2014

	Consumed sugar-sweetened soft drinks: daily, once or several times per week		Consumed sugar-sweetened soft drinks: once a fortnight, month or less			Con soft o once time	sumed drinks: e or sev es per v	diet daily, veral week	Cons soft c a fortr	sumed drinks: night, i or less	diet once month	
	%	695% CI		%	959	% CI	%	95%	% CI	%	955	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Colac-Otway (S)	37.7	28.1	48.4	14.3*	8.3	23.6	23.7	16.0	33.5	3.3*	1.8	5.8
Corangamite (S)	35.2	26.9	44.4	14.0*	7.7	24.2	17.5	12.9	23.4	7.1*	4.2	12.0
Glenelg (S)	30.0	23.4	37.6	16.3	11.9	21.9	19.9	14.9	25.9	3.8*	2.3	6.2
Greater Geelong (C)	35.0	27.4	43.6	12.7	8.7	18.0	18.2	12.7	25.3	10.4*	5.0	20.2
Moyne (S)	33.5	25.9	42.1	12.3	8.1	18.2	15.7	11.4	21.3	5.8*	3.5	9.5
Queenscliffe (B)	33.3	23.5	44.9	11.1*	5.8	20.4	14.8*	7.8	26.3	4.3*	2.6	7.1
Southern Grampians (S)	35.7	27.2	45.2	16.0	10.0	24.5	15.4	9.9	23.1	4.8*	2.6	8.7
Surf Coast (S)	30.2	21.2	41.0	12.1	8.3	17.3	21.8	14.9	30.7	3.8*	2.0	6.8
Warrnambool (C)	27.8	20.7	36.1	13.0	8.8	19.0	20.6	14.5	28.3	5.4	3.4	8.5
Barwon-South Western Region	33.9	28.9	39.3	13.0	10.3	16.2	18.6	15.0	22.9	8.3*	4.6	14.5
Victoria	30.7	29.6	31.9	15.5	14.6	16.5	16.3	15.5	17.2	6.0	5.5	6.6

Data were age-standardised to the 2011 Victorian population.

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 3.69 shows the proportion of the adult population who consumed sugar-sweetened or diet soft drinks, by frequency and LGA, in Gippsland Region. The proportion of adults who consumed these drinks daily, once or several times per week was significantly higher among those who lived in the LGA of Wellington (S) compared with all Victorian adults.

#### Table 3.69: Proportion (%) of adult population who consumed sugar-sweetened or diet soft drinks, by frequency and LGA, Gippsland Region, Victoria, 2014

	Consumed sugar-sweetened soft drinks: daily, once or several times per week				onsum r-swee drinks: night, r or less	ed tened once month	Con soft o onco time	sumed drinks: e or sev es per v	diet daily, /eral veek	Con: soft a a forti	sumed drinks: night, i or less	diet once nonth
	%	95% CI		%	95%	6 CI	%	95% CI		%	95%	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Bass Coast (S)	30.8	21.0	42.8	17.5	10.6	27.5	15.1	10.0	22.2	3.7	2.4	5.6
Baw Baw (S)	26.8	18.4	37.3	13.7	10.0	18.6	15.4	11.4	20.5	5.4	3.4	8.3
East Gippsland (S)	31.2	21.5	42.8	18.3	11.9	27.1	20.4	12.6	31.3	3.3*	2.0	5.4
Latrobe (C)	26.9	19.2	36.3	9.5	6.4	13.8	25.0	17.6	34.3	**		
South Gippsland (S)	29.1	22.4	37.0	14.1	10.3	19.1	16.1	11.7	21.8	5.4*	3.1	9.0
Wellington (S)	41.4	33.3	50.0	15.9	10.7	23.1	14.7	11.3	18.9	6.1*	3.3	11.2
Gippsland Region	30.5	26.3	35.0	13.8	11.7	16.4	18.7	15.6	22.2	5.9*	3.5	9.9
Victoria	30.7	29.6	31.9	15.5	14.6	16.5	16.3	15.5	17.2	6.0	5.5	6.6

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here. Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 3.70 shows the proportion of the adult population who consumed sugar-sweetened or diet soft drinks, by frequency and LGA, in Grampians Region. The proportion of adults who consumed these drinks daily, once or several times per week was significantly higher among those who lived in the LGA of Northern Grampians (S) compared with all Victorian adults.

#### Table 3.70: Proportion (%) of adult population who consumed sugar-sweetened or diet soft drinks, by frequency and LGA, Grampians Region, Victoria, 2014

	Ca suga soft a onca time	onsumed Ir-sweetened drinks: daily, e or several es per week		Consumed sugar-sweetened soft drinks: once a fortnight, month or less			Con soft o once time	sumed drinks: e or sev es per v	diet daily, veral week	Consumed diet soft drinks: once a fortnight, mont or less		
	%	95%	95% CI		959	% CI	%	95%	% CI	%	959	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Ararat (RC)	27.5	21.1	34.9	19.2	12.2	28.7	19.2	13.8	26.1	3.9*	2.3	6.6
Ballarat (C)	36.3	29.1	44.1	17.1	11.7	24.3	14.7	10.3	20.7	4.6	3.2	6.6
Golden Plains (S)	31.5	24.1	39.9	16.8	11.2	24.3	19.6	15.4	24.6	4.1	2.5	6.5
Hepburn (S)	27.8	19.4	38.2	23.0	14.2	34.8	17.4*	10.2	28.0	1.8*	1.0	3.2
Hindmarsh (S)	39.8	31.6	48.6	9.1	6.3	13.1	17.3	13.1	22.6	5.5	3.5	8.5
Horsham (RC)	30.7	20.3	43.5	12.5*	6.9	21.6	18.3	14.0	23.6	6.9*	3.5	13.2
Moorabool (S)	36.3	29.2	44.0	12.4	8.5	17.7	17.6	12.8	23.7	4.8*	2.5	9.1
Northern Grampians (S)	41.8	32.7	51.6	10.3	6.5	16.1	11.3	7.8	16.1	6.7*	3.5	12.2
Pyrenees (S)	35.9	26.7	46.3	15.8*	9.1	26.0	16.8	12.2	22.7	3.8*	2.0	7.1
West Wimmera (S)	32.8	24.4	42.5	13.0	8.4	19.6	17.9	13.6	23.2	6.2	3.9	9.7
Yarriambiack (S)	35.7	26.2	46.4	10.4	7.3	14.6	27.6	18.2	39.5	4.0*	2.3	7.0
Grampians Region	34.6	30.5	39.0	15.5	12.4	19.3	17.0	14.3	20.1	4.6	3.7	5.7
Victoria	30.7	29.6	31.9	15.5	14.6	16.5	16.3	15.5	17.2	6.0	5.5	6.6

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}~$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 3.71 shows the proportion of the adult population who consumed sugar-sweetened or diet soft drinks, by frequency and LGA, in Hume Region. The proportion of adults who consumed these drinks daily, once or several times per week was significantly higher among those who lived in the LGAs of Benalla (RC) and Murrindindi (S) compared with all Victorian adults.

#### Table 3.71: Proportion (%) of adult population who consumed sugar-sweetened or diet soft drinks, by frequency and LGA, Hume Region, Victoria, 2014

	Consumed sugar-sweetened soft drinks: daily, once or several times per week		Ca sugai softa a forti	onsum r-swee drinks: night, r or less	ed tened once month	Con soft c once time	sumed drinks: e or sev es per v	diet daily, veral veek	Con: soft a a forti	Consumed diet soft drinks: once a fortnight, mon or less		
	%	%95% CI		%	95%	% CI	%	95%	6 CI	%	% 95%	
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Alpine (S)	39.4	31.5	47.8	11.8	8.5	16.2	10.6	7.2	15.5	4.3*	1.6	10.8
Benalla (RC)	41.7	33.1	50.8	16.1	10.2	24.6	15.8	10.8	22.5	5.6*	3.1	9.8
Greater Shepparton (C)	36.1	29.3	43.6	10.1	7.2	14.1	16.0	11.2	22.4	6.4*	3.9	10.4
Indigo (S)	35.8	26.4	46.5	15.8	9.8	24.4	14.9	9.0	23.8	4.7*	2.7	8.2
Mansfield (S)	32.3	19.9	47.7	17.0*	9.7	28.0	10.6*	6.1	17.6	4.4*	2.5	7.7
Mitchell (S)	31.0	23.1	40.1	13.4	8.1	21.2	24.7	17.6	33.6	5.3	3.3	8.6
Moira (S)	38.8	29.4	49.1	17.1*	9.3	29.3	19.3	14.2	25.8	5.9*	3.2	10.6
Murrindindi (S)	40.4	32.3	49.0	14.2	10.1	19.5	13.8	9.1	20.5	4.1*	2.4	7.0
Strathbogie (S)	39.7	30.3	49.9	7.0	5.1	9.6	14.6	9.9	20.9	4.9*	2.2	10.4
Towong (S)	34.0	25.8	43.4	16.3	9.8	25.8	13.1	9.2	18.2	6.2*	3.3	11.2
Wangaratta (RC)	36.4	26.1	48.2	8.5	5.6	12.5	17.4	12.5	23.7	3.8*	2.0	7.1
Wodonga (RC)	32.3	25.4	40.0	17.1	11.9	23.9	15.5	10.9	21.5	3.8	2.4	5.8
Hume Region	35.5	32.3	38.8	13.1	11.0	15.4	17.3	14.6	20.4	5.0	4.1	6.1
Victoria	30.7	29.6	31.9	15.5	14.6	16.5	16.3	15.5	17.2	6.0	5.5	6.6

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 3.72 shows the proportion of the adult population who consumed sugar-sweetened or diet soft drinks, by frequency and LGA, in Loddon Mallee Region. The proportion of adults who consumed these drinks daily, once or several times per week was similar across all LGAs in Loddon Mallee Region compared with all Victorian adults.

#### Table 3.72: Proportion (%) of adult population who consumed sugar-sweetened or diet soft drinks, by frequency and LGA, Loddon Mallee Region, Victoria, 2014

	Co sugai soft o onco time	Consumed gar-sweetened oft drinks: daily, once or several imes per week		Co sugai soft o a forti	onsum r-swee drinks: night, r or less	ed tened once month	Con soft c once time	sumed drinks: e or sev es per v	diet daily, veral week	Con: soft a a forti	sumed diet drinks: once night, month or less	
	%	95% CI		%	95%	% CI	%	959	% CI	%	959	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Buloke (S)	39.1	29.7	49.3	15.4	10.2	22.6	16.8	10.1	26.5	5.1*	2.8	8.9
Campaspe (S)	33.3	25.1	42.7	9.1	6.5	12.6	24.5	17.1	33.9	6.8*	3.0	14.7
Central Goldfields (S)	34.9	25.9	45.2	13.2*	7.2	22.7	18.6	12.6	26.6	6.5*	3.3	12.4
Gannawarra (S)	35.1	24.3	47.7	12.9	8.6	19.0	18.6	14.2	23.9	5.9	4.0	8.6
Greater Bendigo (C)	30.4	23.0	39.0	13.6	8.9	20.1	23.2	17.3	30.4	6.0	3.9	9.0
Loddon (S)	36.7	25.8	49.1	12.5	8.4	18.2	21.4	14.1	31.2	3.8	2.4	5.9
Macedon Ranges (S)	34.5	23.5	47.6	23.5*	13.6	37.5	9.7	7.0	13.2	5.3*	3.1	8.7
Mildura (RC)	34.8	26.1	44.5	11.7	8.3	16.2	24.2	16.5	34.0	2.0*	0.9	4.4
Mount Alexander (S)	35.8	24.3	49.1	16.0	11.0	22.7	18.5*	9.1	34.1	2.8*	1.6	4.7
Swan Hill (RC)	35.8	27.1	45.6	12.4*	7.3	20.3	22.8	15.0	33.1	2.7*	1.6	4.4
Loddon Mallee Region	33.5	29.4	37.9	14.3	11.5	17.7	20.8	17.6	24.4	4.7	3.7	5.9
Victoria	30.7	29.6	31.9	15.5	14.6	16.5	16.3	15.5	17.2	6.0	5.5	6.6

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}\,$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.



# 4. Body weight status

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# **Key findings**

**Pre-obesity** 





# Key findings











A significantly higher proportion of women who lived in rural Victoria were obese compared with metropolitan Victoria







The proportion of men and women who were obese significantly increased between 2003 and 2014



#### Introduction

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

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

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

Table 4.1 shows the World Health Organization classifications for adult body weight status based on BMI scores.

## Table 4.1: World Health Organization classifications for adult body weight

BMI Score	Weight category
< 18.5	Underweight
18.5–24.9	Normal
25.0–29.9	Overweight
30.0-34.9	Obese class I
35–39.9	Obese class II
≥ 40.0	Obese class III

#### (WHO 2000; 2013)

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



# Prevalence of pre-obesity and obesity

Table 4.2 and Figure 4.1 show the proportion of the adult population by BMI category, age group and sex. In 2014, 38.4 per cent of Victorian men and 24.3 per cent of women were pre-obese (overweight), while 20.4 per cent of men and 17.2 per cent of women were obese. There was a significantly higher proportion of men who were pre-obese (overweight) and obese compared with their female counterparts.

A significantly lower proportion of 18–24-yearold men, women and people were pre-obese (overweight) and obese compared with all men, women and people, respectively. A significantly higher proportion of 55–74-year-old men, women and people were pre-obese (overweight) compared with all men, women and people, respectively. A significantly higher proportion of 45–54-year-old men were obese compared with all Victorian men. A significantly higher proportion of 55–74-year-old women were obese compared with all Victorian women.

		Body mass index (BMI, kg/m²)												
		Un (< 1	derweig 8.5 kg/ı	ght m²)	(18.5-	Normal -24.9 kg	g/m²)	Pr (25.0-	e-obe: -29.9 k	se g/m²)	(≥ 3	Obese 0.0 kg/	<sup>'</sup> m²)	
	Age	%	95%	6 CI	%	95%	6 CI	%	95%	6 CI	%	95%	% CI	
	(years)		LL	UL		LL	UL		LL	UL		LL	UL	
Males	18–24	3.9*	2.1	6.9	58.4	51.9	64.7	21.3	16.5	27.0	9.4	6.2	13.9	
	25–34	**			38.4	32.8	44.4	38.7	33.0	44.7	19.2	14.4	25.1	
	35–44	0.3*	0.1	0.6	33.4	30.0	36.9	40.5	37.0	44.1	22.6	19.7	25.9	
	45–54	0.4*	0.1	0.9	26.9	24.3	29.6	41.5	38.6	44.5	27.5	24.9	30.4	
	55–64	0.7*	0.4	1.4	26.5	24.3	28.7	44.8	42.3	47.3	23.9	21.9	26.1	
	65–74	0.6*	0.3	1.1	28.3	26.2	30.5	44.5	42.1	46.9	21.9	20.0	23.9	
	75–84	0.7*	0.3	1.3	34.4	31.5	37.4	40.6	37.6	43.7	18.3	16.1	20.9	
	85+	**			46.3	40.1	52.7	33.0	27.1	39.6	9.1	6.3	13.0	
	Victoria	0.9	0.6	1.3	35.8	34.0	37.5	38.4	36.7	40.2	20.4	19.0	21.8	
Females	18–24	6.1	3.9	9.7	58.6	52.0	64.9	15.1	10.8	20.8	5.4	3.4	8.5	
	25–34	2.9*	1.7	4.9	47.6	42.6	52.6	20.7	17.1	25.0	17.0	13.9	20.7	
	35–44	2.1	1.4	3.0	47.0	44.3	49.6	24.0	21.8	26.3	16.6	14.8	18.6	
	45–54	1.9	1.4	2.6	40.5	38.2	42.9	27.5	25.5	29.7	19.7	17.9	21.6	
	55–64	1.4	1.0	2.0	36.0	34.0	38.1	30.2	28.3	32.2	23.6	21.8	25.5	
	65–74	1.4	1.0	1.9	32.8	30.9	34.8	30.6	28.7	32.6	23.5	21.8	25.4	
	75–84	2.6	1.9	3.6	32.7	30.3	35.2	27.4	25.1	29.8	18.1	16.1	20.3	
	85+	3.7	2.4	5.7	41.1	36.4	45.9	19.0	15.6	22.9	10.9	8.2	14.4	
	Victoria	2.7	2.2	3.3	43.7	42.2	45.3	24.3	23.1	25.6	17.2	16.2	18.1	
Persons	18–24	5.0	3.4	7.1	58.5	53.9	63.0	18.3	14.9	22.2	7.4	5.4	10.1	
	25–34	1.6*	1.0	2.6	43.0	39.2	47.0	29.7	26.2	33.4	18.1	15.1	21.5	
	35–44	1.2	0.8	1.7	40.3	38.1	42.5	32.2	30.1	34.3	19.6	17.8	21.5	
	45–54	1.2	0.9	1.6	33.8	32.0	35.6	34.4	32.6	36.3	23.5	21.9	25.2	
	55–64	1.1	0.8	1.5	31.4	29.9	32.9	37.4	35.8	39.0	23.8	22.4	25.2	
	65–74	1.0	0.8	1.4	30.7	29.3	32.2	37.0	35.4	38.5	22.8	21.5	24.1	
	75–84	1.7	1.3	2.3	33.5	31.6	35.4	33.5	31.6	35.4	18.2	16.7	19.8	
	85+	2.4	1.6	3.5	43.3	39.5	47.2	24.9	21.6	28.6	10.1	8.1	12.7	
	Victoria	1.8	1.5	2.2	39.8	38.6	41.0	31.2	30.2	32.3	18.8	17.9	19.6	

#### Table 4.2: Proportion (%) of adult population by BMI category, age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* Estimate has a RSE 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.



#### Figure 4.1: Proportion (%) of obese adult population, by age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. 95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

The trend over time was investigated of the age-adjusted prevalence of underweight, normal weight, pre-obesity (overweight) and obesity (Table 4.3 and Figure 4.2). The proportion of underweight women and people, but not men, significantly declined between 2003 and 2014. The proportion of normal weight men and women also significantly declined. By contrast the prevalence of obesity significantly increased in both men and women. However, the prevalence of pre-obesity (overweight) remained unchanged in both men and women.

	Body mass index (BMI, kg/m²)											
	Uno (< 1	derweig 8.5 kg/r	ght m²)	(18.5-	Normal -24.9 kg	l g/m²)	Pi (25.0∙	re-obes -29.9 kg	se g/m²)	(≥ 3	Obese 0.0 kg/	′m²)
Survey	%	95%	6 CI	%	95%	% CI	%	95%	6 CI	%	95%	% CI
year		LL	UL		LL	UL		LL	UL		LL	UL
Males												
2003	1.8	1.2	2.6	42.6	40.3	44.9	38.9	36.7	41.2	14.2	12.7	15.8
2004	1.6	1.1	2.5	40.6	38.3	42.9	41.2	38.9	43.6	14.0	12.5	15.6
2005	1.6	1.1	2.3	41.2	38.8	43.7	39.1	36.8	41.4	15.1	13.5	16.8
2006	0.7*	0.4	1.1	40.0	37.5	42.5	39.9	37.5	42.3	16.1	14.5	17.8
2007	1.2*	0.7	2.1	39.3	36.9	41.9	40.9	38.4	43.4	15.7	14.1	17.4
2008#	0.9	0.7	1.2	38.8	37.5	40.1	39.8	38.6	41.1	17.2	16.3	18.2
2009	1.4	0.9	2.1	35.6	33.4	37.9	39.6	37.4	41.8	18.4	16.7	20.2
2010	0.6*	0.3	1.0	34.4	32.0	36.9	40.8	38.5	43.3	18.5	16.7	20.5
2011–12#	1.1	0.8	1.5	36.4	34.9	37.9	40.9	39.4	42.4	17.6	16.5	18.7
2012	1.0*	0.5	1.8	33.9	31.2	36.7	43.4	40.5	46.3	18.0	16.0	20.3
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
2014#	0.9	0.6	1.3	35.8	34.0	37.5	38.4	36.7	40.2	20.4	19.0	21.8
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
2014#	2.7	2.2	3.3	43.7	42.2	45.3	24.3	23.1	25.6	17.2	16.2	18.1

#### Table 4.3: Proportion (%) of adult population by BMI category, survey year and sex, Victoria, 2003-2014

a Body mass index (BMI) computed from self-reported height and weight [BMI = weight (kg) / height squared (m<sup>2</sup>)]

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.

Survey sample size: # ~34,000; \* ~3,600; remaining surveys ~7,500.

# Table 4.3: Proportion (%) of adult population by BMI category, survey year and sex, Victoria,2003-2014 (continued)

					Body n	nass inc	idex (BMI, kg/m²)					
	Un (<1	Underweight (< 18.5 kg/m²)		ا (18.5-	Norma -24.9 kç	l g/m²)	Pı (25.0∙	re-obes -29.9 kg	se g/m²)	(≥ 3	Obese 0.0 kg/	m²)
Survey	%	95%	6 CI	%	95%	6 CI	%	95%	6 CI	%	95%	6 CI
year		LL	UL		LL	UL		LL	UL		LL	UL
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
2014#	1.8	1.5	2.2	39.8	38.6	41.0	31.2	30.2	32.3	18.8	17.9	19.6

a Body mass index (BMI) computed from self-reported height and weight [BMI = weight (kg) / height squared (m<sup>2</sup>)] Note that the figures may not add up to 100 per cent due to a proportion of 'don't know' or 'refused responses'.

Note that the figures may not add up to 100 per cent due to a proportion of 'don't know' or 'refused res 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.

Survey sample size: # ~34,000; \* ~3,600; remaining surveys ~7,500.



Figure 4.2: Proportion (%) of adult population by BMI category and survey year, Victoria, 2003-2014

Data are age-standardised to the 2011 Victorian population LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval. BMI computed from self-reported height and weight [BMI = weight (kg) / height squared (m<sup>2</sup>)]. Ordinary least squares regression was used to test for trends over time. Survey sample size: # ~34,000; <sup>+</sup> ~3,600; remaining surveys ~7,500.

Table 4.4 shows the body weight status of Victoria's adult population by BMI category, departmental region and sex. There were no significant differences in the proportion of pre-obese (overweight) men and women whether they lived in rural or metropolitan Victoria. A significantly higher proportion of women who lived in rural Victoria were obese compared with metropolitan Victoria. There was a significantly higher proportion of obese women who lived in Grampians Region and Hume Region compared with all Victorian women.

# Table 4.4: Proportion (%) of adult population by BMI category, Department of Health and Human Services region and sex, Victoria, 2014

	Body mass index (BMI, kg/m²)											
	Un (< 1	derwei 8.5 kg/	ght m²)	ا -18.5)	Norma -24.9 kg	l g/m²)	Pr (25.0-	e-obe -29.9 k	se g/m²)	(≥ 3)	Obese 0.0 kg/	/m²)
	%	95%	6 CI	%	95%	6 CI	%	95%	% CI	%	95%	% CI
Region		LL	UL		LL	UL		LL	UL		LL	UL
Males (18+ years)												
Eastern Metropolitan	1.7*	0.9	3.4	39.7	35.5	44.1	38.3	34.3	42.5	15.6	12.6	19.0
North & West Metropolitan	0.8*	0.4	1.5	35.8	32.9	38.8	37.3	34.6	40.2	21.9	12.6	19.0
Southern Metropolitan	**			37.1	33.2	41.1	39.1	35.2	43.1	19.9	12.6	19.0
All metropolitan regions	0.9	0.6	1.5	37.2	35.1	39.3	38.2	36.2	40.3	19.6	18.0	21.3
Barwon-South Western	**			30.4	23.5	38.2	43.8	36.9	51.0	18.2	14.4	22.7
Gippsland	0.3*	0.1	0.6	31.7	25.3	38.9	42.8	36.0	49.9	19.2	15.5	23.5
Grampians	**			32.3	26.4	38.8	37.4	32.7	42.3	24.7	19.2	31.1
Hume	0.6*	0.2	1.5	32.9	28.0	38.2	36.0	30.7	41.7	26.1	21.5	31.3
Loddon Mallee	0.5*	0.3	0.9	30.3	24.3	37.1	33.8	29.9	37.8	27.4	21.7	34.1
All rural regions	0.9*	0.4	1.8	31.3	28.3	34.4	39.0	36.2	41.9	23.0	20.5	25.6
Victoria	0.9	0.6	1.3	35.8	34.0	37.5	38.4	36.7	40.2	20.4	19.0	21.8
Females (18+ years)												
Eastern Metropolitan	3.3*	1.9	5.6	50.1	46.0	54.1	21.8	18.7	25.2	14.7	12.5	17.3
North & West Metropolitan	2.7	1.9	3.7	41.4	38.9	44.0	24.5	22.5	26.6	17.6	15.9	19.4
Southern Metropolitan	2.6	1.8	3.7	46.1	42.7	49.4	24.7	22.0	27.6	15.1	13.3	17.1
All metropolitan regions	2.8	2.2	3.5	45.1	43.3	47.0	24.0	22.5	25.5	15.9	14.8	17.1
Barwon-South Western	2.0*	1.2	3.5	45.1	38.2	52.2	22.7	17.9	28.2	18.8	15.2	23.2
Gippsland	1.5*	0.9	2.7	36.4	31.1	41.9	26.0	22.0	30.4	20.6	17.5	24.1
Grampians	1.4	0.8	2.2	31.8	27.0	37.1	28.3	23.0	34.2	25.4	20.2	31.3
Hume	4.3*	2.6	7.1	37.3	33.3	41.3	28.5	25.4	31.8	20.9	18.4	23.7
Loddon Mallee	1.6*	1.0	2.8	41.6	36.4	46.9	24.2	20.7	28.0	20.4	17.0	24.3
All rural regions	2.2	1.7	2.8	39.1	36.4	42.0	25.6	23.5	27.8	20.9	19.1	22.8
Victoria	2.7	2.2	3.3	43.7	42.2	45.3	24.3	23.1	25.6	17.2	16.2	18.1

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

# Table 4.4: Proportion (%) of adult population by BMI category, Department of Health and Human Services region and sex, Victoria, 2014 (continued)

		Body mass index (BMI, kg/m²)											
	Un (< 1	derwei 8.5 kg/	ght m²)	ا -18.5	Norma -24.9 k	l g/m²)	Pr (25.0-	re-obe -29.9 k	se g/m²)	(≥ 3	Obese 0.0 kg/	′m²)	
	%	%95% CI		%	95%	6 CI	%	95%	6 CI	%	95%	% CI	
Region		LL	UL		LL	UL		LL	UL		LL	UL	
People (18+ years)													
Eastern Metropolitan	2.5	1.6	3.8	45.0	42.1	48.0	29.8	27.3	32.5	15.1	13.2	17.2	
North & West Metropolitan	1.8	1.3	2.4	38.7	36.7	40.6	30.8	29.1	32.6	19.6	18.2	21.2	
Southern Metropolitan	1.6	1.1	2.3	41.6	39.0	44.2	31.7	29.3	34.3	17.4	15.7	19.4	
All metropolitan regions	1.9	1.5	2.3	41.2	39.9	42.6	30.9	29.7	32.2	17.7	16.7	18.7	
Barwon-South Western	1.3	0.8	2.1	37.8	32.6	43.2	33.0	28.6	37.8	18.5	15.8	21.6	
Gippsland	0.9	0.6	1.4	33.9	29.6	38.5	34.5	30.3	39.0	20.1	17.5	22.9	
Grampians	2.1*	0.8	5.2	32.2	28.2	36.4	32.6	29.0	36.3	25.0	21.2	29.3	
Hume	2.4	1.5	3.9	35.0	31.8	38.4	32.2	29.1	35.6	23.6	20.7	26.7	
Loddon Mallee	1.1	0.7	1.7	36.0	31.8	40.4	28.6	26.1	31.3	24.2	20.5	28.4	
All rural regions	1.5	1.1	2.0	35.3	33.2	37.4	32.1	30.4	34.0	22.0	20.5	23.6	
Victoria	1.8	1.5	2.2	39.8	38.6	41.0	31.2	30.2	32.3	18.8	17.9	19.6	

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.
# Adult population by BMI category, departmental region and local government area

ALPINE ANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMI1 GREATER DANDULONG ORSHAM HUME INDIGO K NGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MAN IDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE MARIBYRNONG MAROO MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI Y MOORABOOL MORELAN **IK NORTHERN GRAMPIANS** STONNINGTON STRATHBO ON WEST WIMMERA WHITEH AMBIACK ALPINE ARARAT BALLARA **RIMBANK BULOK CAMPASPE CARDIN** SEY CENT RRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI DREATER SHEPPARTON HEPBURN HINDMARSH HOBSON BIN EAST GIPPSLAND FRANKSTON GANNAWA GREATER DANDENONG GREATER GEELONG GREATER SHEPPARTON HEPBUR ORSHAM HUME INDIGO RINGSTON KNOX LATROBE LODDON MACEDON RANGE MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL EY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEX (NOER M IK NORTHERN GRAMPIANS PORT PHILLUP PYRENEES QUEENSCLIFF! SOUTH SOUTHERN SLAND STONKINGTON STRATHBOO F COAST SWAN HILD TOWONG WANGARATTA HITTLESEA WODC YARR NDHAM YARRA **BIACK ALPIN** E ARARAT BALLARAT BAW BAW BAYSIDE BENALLA BOR **RIMBANK BUL CAMPASPE CARDIN** LDFIELDS COLAC-OTWAY CORAN BIN EAST GIPPSLAND RA GLENELG GOLDEN PL SHEPPARTON HEPB GREATER DANDENONG GI RSHAM HUME INDIGO KINGSTON ODDON MACEDON VRNONG MAROONDAH **MILDURA MITO IORELAND MORI** A MOUNT ALE VALLEY N WELLINGTON WEST WIMMERA 8

Table 4.5 shows the body weight status of the adult population by BMI category and LGA in Eastern Metropolitan Region. The proportion of adults who were pre-obese (overweight) was significantly lower among those who lived in the LGA of Whitehorse (C) compared with all Victorian adults.

## Table 4.5: Proportion (%) of adult population by BMI category and LGA, Eastern Metropolitan Region, Victoria, 2014

				l	Body n	nass ind	dex (BMI,	kg/m <sup>2</sup>	)			
	Un (< 1	derweig 8.5 kg/	ght m²)	ا -18.5	Norma -24.9 kg	l g/m²)	Pi (25.0∙	re-obe -29.9 k	se g/m²)	(≥ 3	Obese 0.0 kg/	′m²)
	%	95%	6 CI	%	95%	6 CI	%	95%	% CI	%	95%	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Boroondara (C)	4.0*	1.8	8.3	52.2	44.9	59.4	24.3	19.0	30.7	12.5	8.3	18.6
Knox (C)	**			36.2	28.6	44.5	36.0	28.2	44.7	18.2	14.1	23.3
Manningham (C)	1.1*	0.5	2.7	45.0	37.2	53.1	30.0	23.8	37.2	13.9	9.2	20.6
Maroondah (C)	**			40.1	31.6	49.2	31.6	23.4	41.1	16.7	12.0	22.6
Monash (C)	**			47.1	40.6	53.7	31.6	26.1	37.7	14.4	10.5	19.4
Whitehorse (C)	2.9*	1.1	7.5	49.7	43.1	56.4	24.0	19.3	29.4	14.7	10.1	20.8
Yarra Ranges (S)	**			40.8	32.2	50.0	33.1	26.3	40.6	16.4	10.9	24.1
Eastern Metropolitan Region	2.5	1.6	3.8	45.0	42.1	48.0	29.8	27.3	32.5	15.1	13.2	17.2
Victoria	1.8	1.5	2.2	39.8	38.6	41.0	31.2	30.2	32.3	18.8	17.9	19.6

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 4.6 shows the body weight status of the adult population by BMI category and LGA in North & West Metropolitan Region. The proportion of adults who were pre-obese (overweight) was significantly lower among adults who lived in the LGA of Yarra (C) compared with all Victorian adults. The proportion of adults who were obese was significantly higher among those who lived in the LGAs of Hume (C), Melton (S) and Wyndham (C) compared with all Victorian adults.

# Table 4.6: Proportion (%) of adult population by BMI category and LGA, North & West Metropolitan Region, Victoria, 2014

	7				Body n	nass ind	dex (BMI,	kg/m²	)			
	Un (< 1	derwei 8.5 kg/	ght m²)	(18.5-	Norma -24.9 kg	l g/m²)	Pi (25.0-	re-obe -29.9 k	se g/m²)	<b>(</b> ≥ 3	Obese 0.0 kg/	′m²)
	%	95%	% CI	%	95%	% CI	%	95%	% CI	%	95%	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Banyule (C)	1.5*	0.6	3.6	40.2	32.7	48.2	29.5	23.5	36.3	19.8	14.7	26.0
Brimbank (C)	**			41.1	35.1	47.4	28.5	23.2	34.5	19.6	15.5	24.4
Darebin (C)	**			40.7	33.2	48.7	30.1	23.3	37.8	19.3	13.3	27.1
Hobsons Bay (C)	**			34.9	27.3	43.4	30.4	24.4	37.1	21.3	14.5	30.2
Hume (C)	2.4*	1.2	4.8	28.3	22.9	34.3	35.6	29.6	42.1	26.3	21.5	31.8
Maribyrnong (C)	**			42.3	35.2	49.6	34.9	28.0	42.5	11.9	9.0	15.5
Melbourne (C)	2.7*	1.3	5.7	51.3	44.2	58.2	27.6	21.8	34.2	8.2	6.1	11.0
Melton (S)	**			33.1	26.8	40.0	29.8	24.6	35.5	27.2	22.0	33.2
Moonee Valley (C)	2.1*	0.8	5.0	39.2	32.5	46.2	36.4	29.8	43.6	15.7	11.7	20.6
Moreland (C)	2.6*	1.0	6.5	39.4	32.4	46.8	25.0	20.2	30.5	18.0	13.5	23.7
Nillumbik (S)	**			39.2	32.4	46.5	35.6	29.2	42.6	16.5	11.9	22.4
Whittlesea (C)	**			36.6	30.9	42.8	31.6	26.4	37.3	24.1	19.6	29.3
Wyndham (C)	**			32.2	26.6	38.4	32.7	27.7	38.2	25.1	20.0	31.0
Yarra (C)	**			53.2	46.3	60.0	23.5	19.1	28.6	12.1	8.3	17.4
North & West Metropolitan Region	1.8	1.3	2.4	38.7	36.7	40.6	30.8	29.1	32.6	19.6	18.2	21.2
Victoria	18	15	22	39.8	38.6	410	31.2	30.2	32.3	18.8	179	19.6

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}\,$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 4.7 shows the body weight status of the adult population by BMI category and LGA in Southern Metropolitan Region. The proportion of adults who were obese was significantly higher among those who lived in the LGAs of Cardinia (S) and Casey (C) compared with all Victorian adults

# Table 4.7: Proportion (%) of adult population by BMI category and LGA, Southern Metropolitan Region, Victoria, 2014

					Body n	nass ind	dex (BMI,	kg/m <sup>2</sup>	)			
	Un (< 1	derwei 8.5 kg/i	ght m²)	ا (18.5-	Norma -24.9 kg	l g/m²)	Pı (25.0-	re-obe -29.9 k	se g/m²)	(≥ 3	Obese 0.0 kg/	′m²)
	%	95%	6 CI	%	95%	6 CI	%	95%	% CI	%	95%	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Bayside (C)	0.9*	0.4	2.0	49.9	41.0	58.8	30.4	24.1	37.6	11.9*	7.0	19.4
Cardinia (S)	**			39.3	32.8	46.2	28.7	23.2	34.9	24.9	19.6	30.9
Casey (C)	0.6*	0.3	1.5	36.2	30.2	42.6	29.1	23.7	35.3	25.2	20.2	31.0
Frankston (C)	**			36.4	30.4	42.8	34.1	28.2	40.6	19.9	15.8	24.7
Glen Eira (C)	1.1*			46.4	39.3	53.6	30.0	24.2	36.4	14.9	10.7	20.5
Greater Dandenong (C)	**			44.2	37.4	51.1	28.1	22.3	34.8	16.8	12.8	21.8
Kingston (C)	1.4*	0.6	3.2	35.1	27.7	43.3	38.3	29.9	47.3	18.6	13.5	25.1
Mornington Peninsula (S)	**			36.7	28.6	45.6	32.7	25.4	41.0	17.3	10.7	26.8
Port Phillip (C)	1.8*	0.7	4.3	53.7	44.9	62.4	30.1	22.3	39.1	8.2	5.5	11.9
Stonnington (C)	3.3*	1.8	6.1	50.4	42.1	58.7	31.0	23.3	39.8	9.8	6.6	14.4
Southern Metropolitan Region	1.6	1.1	2.3	41.6	39.0	44.2	31.7	29.3	34.3	17.4	15.7	19.4
Victoria	1.8	1.5	2.2	39.8	38.6	41.0	31.2	30.2	32.3	18.8	17.9	19.6

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here. Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) should be interpreted with caldion.

Table 4.8 shows the body weight status of the adult population by BMI category and LGA in Barwon-South Western Region. The proportion of adults who were obese was significantly higher among those who lived in the LGAs of Corangamite (S) and Glenelg (S) compared with all Victorian adults.

# Table 4.8: Proportion (%) of adult population by BMI category and LGA, Barwon-South Western Region, Victoria, 2014

					Body n	nass ind	dex (BMI,	kg/m²	)			
	Un (< 1	derwei 8.5 kg/	ght m²)	ا (18.5-	Norma -24.9 kg	l g/m²)	Pı (25.0-	re-obe -29.9 k	se g/m²)	(≥ 3	Obese 0.0 kg/	′m²)
	%	95%	% CI	%	95%	6 CI	%	95%	6 CI	%	95%	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Colac-Otway (S)	**			27.8	19.9	37.4	35.3	27.8	43.7	19.9	13.6	28.1
Corangamite (S)	4.9*	1.8	12.3	22.4	15.8	30.9	36.6	28.0	46.2	27.5	21.2	34.8
Glenelg (S)	0.4*	0.1	0.9	30.1	23.0	38.3	28.5	22.4	35.6	28.6	22.5	35.5
Greater Geelong (C)	**			41.8	34.0	50.1	32.5	25.7	40.0	16.6	12.5	21.7
Moyne (S)	**			33.8	25.8	42.9	34.8	26.8	43.8	19.9	14.1	27.3
Queenscliffe (B)	0.9*	0.4	2.1	43.8	30.6	57.9	27.2	19.2	37.0	16.3*	7.3	32.4
Southern Grampians (S)	**			30.6	21.7	41.2	33.0	25.5	41.5	20.9	15.2	27.9
Surf Coast (S)	**			41.2	33.0	49.8	30.2	23.1	38.5	14.8	10.7	20.1
Warrnambool (C)	2.3*	1.1	4.9	30.9	23.7	39.2	36.3	28.5	45.0	22.9	17.3	29.7
Barwon-South Western Region	1.3	0.8	2.1	37.8	32.6	43.2	33.0	28.6	37.8	18.5	15.8	21.6
Victoria	1.8	1.5	2.2	39.8	38.6	41.0	31.2	30.2	32.3	18.8	17.9	19.6

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 4.9 shows the body weight status of the adult population by BMI category and LGA in Gippsland Region. The proportion of adults who were preobese (overweight) and obese was not significantly different among those who lived in Gippsland Region compared with all Victorian adults.

#### Table 4.9: Proportion (%) of adult population by BMI category and LGA, Gippsland Region, Victoria, 2014

					Body n	nass inc	dex (BMI,	kg/m <sup>2</sup>	)			
	Uno (< 1	derwei 8.5 kg/i	ght m²)	(18.5-	Norma -24.9 kg	l g/m²)	Pi (25.0-	re-obe -29.9 k	se g/m²)	(≥ 3	Obese 0.0 kg/	′m²)
	%	95%	6 CI	%	95%	6 CI	%	95%	% CI	%	959	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Bass Coast (S)	**			43.7	36.1	51.5	27.9	21.2	35.8	18.7	13.5	25.3
Baw Baw (S)	**			39.5	30.5	49.3	37.9	29.6	47.0	14.8	11.4	19.0
East Gippsland (S)	0.7*	0.4	1.5	34.1	24.3	45.5	31.9	23.9	41.2	22.5	15.0	32.4
Latrobe (C)	**			26.7	19.3	35.8	36.6	28.0	46.2	22.0	16.0	29.4
South Gippsland (S)	**			28.5	21.6	36.6	36.2	28.2	45.1	22.8	18.1	28.4
Wellington (S)	1.4*	0.6	2.9	35.9	27.5	45.3	34.0	25.4	43.7	20.1	16.6	24.2
Gippsland Region	0.9	0.6	1.4	33.9	29.6	38.5	34.5	30.3	39.0	20.1	17.5	22.9
Victoria	1.8	1.5	2.2	39.8	38.6	41.0	31.2	30.2	32.3	18.8	17.9	19.6

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 4.10 shows the body weight status of the adult population by BMI category and LGA in Grampians Region. The proportion of adults who were preobese (overweight) was significantly higher among adults who lived in the LGA of West Wimmera (S) compared with all Victorian adults. The proportion of adults who were obese was significantly higher among those who lived in the LGAs of Moorabool (S), Pyrenees (S) and Yarriambiack (S) compared with all Victorian adults.

## Table 4.10: Proportion (%) of adult population by BMI category and LGA, Grampians Region, Victoria, 2014

					Body n	nass ind	dex (BMI,	kg/m²	)			
	Un (< 1	derwei 8.5 kg/	ght m²)	(18.5-	Norma -24.9 kg	l g/m²)	Pi (25.0-	re-obe -29.9 k	se g/m²)	(≥ 3	Obese 0.0 kg/	′m²)
	%	95%	6 CI	%	95%	6 CI	%	95%	% CI	%	95%	6 CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Ararat (RC)	**			26.7	18.9	36.1	36.6	28.6	45.5	22.3	16.5	29.3
Ballarat (C)	**			30.6	24.0	38.2	34.7	28.3	41.8	25.8	19.3	33.7
Golden Plains (S)	**			41.8	36.0	47.9	27.3	22.8	32.3	22.0	17.5	27.2
Hepburn (S)	**			31.8	22.9	42.2	30.7	22.7	40.0	21.8	14.9	30.6
Hindmarsh (S)	0.5*	0.2	1.3	34.8	26.1	44.5	36.1	27.1	46.0	23.0	17.1	30.3
Horsham (RC)	**			41.4	31.9	51.7	26.6	21.8	32.0	19.6	14.2	26.4
Moorabool (S)	**			30.4	24.0	37.8	31.4	25.0	38.7	27.9	21.5	35.3
Northern Grampians (S)	**			41.9	32.9	51.4	28.0	21.8	35.2	17.4	11.8	25.0
Pyrenees (S)	1.3*	0.5	3.2	24.2	16.3	34.4	35.7	25.3	47.7	30.1	22.6	38.8
West Wimmera (S)	**			24.1	18.3	31.0	45.0	36.0	54.4	22.9	18.1	28.6
Yarriambiack (S)	1.8*	0.8	4.0	27.5	19.5	37.3	38.3	29.1	48.5	25.2	19.9	31.3
Grampians Region	2.1*	0.8	5.2	32.2	28.2	36.4	32.6	29.0	36.4	25.0	21.2	29.3
Victoria	1.8	1.5	2.2	39.8	38.6	41.0	31.2	30.2	32.3	18.8	17.9	19.6

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 4.11 shows the body weight status of the adult population by BMI category and LGA in Hume Region. The proportion of adults who were preobese (overweight) was significantly lower among adults who lived in the LGA of Indigo (S) compared with all Victorian adults. The proportion of adults who were obese was significantly higher among those who lived in the LGAs of Mitchell (S) and Moira (S) compared with all Victorian adults.

#### Table 4.11: Proportion (%) of adult population by BMI category and LGA, Hume Region, Victoria, 2014

					Body n	nass inc	dex (BMI,	kg/m²	)			
	Un (< 1	derwei 8.5 kg/	ght m²)	(18.5-	Norma -24.9 kg	l g/m²)	Pi (25.0∙	re-obe -29.9 k	se g/m²)	(≥ 3	Obese 0.0 kg/	′m²)
	%	95%	6 CI	%	95%	% CI	%	95%	% CI	%	95%	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Alpine (S)	**			41.0	29.0	54.2	30.2	22.1	39.7	13.5	10.1	17.8
Benalla (RC)	**			35.5	27.0	45.0	28.0	21.4	35.7	26.9	19.2	36.3
Greater Shepparton (C)	**			35.0	27.4	43.3	33.1	25.4	41.9	23.4	17.2	31.0
Indigo (S)	1.8*	0.7	4.4	38.7	29.2	49.1	22.2	18.4	26.6	27.7	19.0	38.6
Mansfield (S)	**			49.2	41.6	56.9	27.8	21.3	35.5	16.3	12.1	21.5
Mitchell (S)	**			32.8	25.9	40.5	29.5	23.8	35.9	28.8	22.0	36.8
Moira (S)	**			31.9	22.9	42.4	28.5	22.2	35.7	31.7	23.9	40.7
Murrindindi (S)	**			31.5	23.4	40.9	37.7	30.4	45.5	22.0	14.0	32.9
Strathbogie (S)	**			20.9	15.3	27.9	37.7	26.4	50.5	21.7	13.8	32.3
Towong (S)	2.6*	1.0	6.3	32.0	24.7	40.4	37.5	29.7	46.0	20.7	16.1	26.2
Wangaratta (RC)	**			40.2	31.8	49.3	33.1	26.6	40.3	16.9	11.2	24.6
Wodonga (RC)	**			37.0	30.2	44.4	35.9	29.1	43.3	20.3	16.4	24.9
Hume Region	2.4	1.5	3.9	35.0	31.8	38.4	32.2	29.1	35.6	23.6	20.7	26.7
Victoria	1.8	1.5	2.2	39.8	38.6	41.0	31.2	30.2	32.3	18.8	17.9	19.6

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}\,$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 4.12 shows the body weight status of the adult population by BMI category and LGA in Loddon Mallee Region. The proportion of adults who were obese was significantly higher among those who lived in the LGAs of Campaspe (S) and Swan Hill (RC) compared with all Victorian adults.

# Table 4.12: Proportion (%) of adult population by BMI category and LGA, Loddon Mallee Region, Victoria, 2014

					Body n	nass inc	lex (BMI,	kg/m <sup>2</sup>	)			
	Un (< 1	derwei 8.5 kg/	ght m²)	ا (18.5-	Norma -24.9 kg	l g/m²)	Pı (25.0∙	re-obe -29.9 k	se g/m²)	(≥ 3	Obese 0.0 kg/	′m²)
	%	95%	6 CI	%	95%	6 CI	%	95%	% CI	%	95%	6 CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Buloke (S)	**			33.8	25.1	43.8	34.2	25.1	44.6	21.9	16.1	29.1
Campaspe (S)	**			25.9	18.1	35.6	30.0	22.9	38.4	32.3	24.2	41.7
Central Goldfields (S)	**			41.3	33.1	49.9	25.8	19.9	32.7	23.6	18.5	29.7
Gannawarra (S)	**			42.7	31.0	55.2	25.2	20.1	31.0	14.8	11.3	19.1
Greater Bendigo (C)	1.4*	0.6	3.4	36.8	29.1	45.3	26.8	22.3	31.8	26.6	19.4	35.2
Loddon (S)	**			23.1	15.7	32.7	41.0	29.6	53.5	24.7	16.1	36.0
Macedon Ranges (S)	1.5*	0.5	3.8	35.6	24.5	48.5	31.1	24.0	39.3	14.1	11.1	17.8
Mildura (RC)	0.5*	0.2	1.1	36.9	29.1	45.6	29.0	24.0	34.5	24.2	17.8	32.0
Mount Alexander (S)	0.7*	0.3	1.8	59.2	51.3	66.6	22.3	15.9	30.2	12.9	9.8	16.9
Swan Hill (RC)	0.9*	0.5	1.7	31.9	22.8	42.7	32.8	22.9	44.5	27.9	19.7	37.9
Loddon Mallee Region	1.1	0.7	1.7	36.0	31.8	40.4	28.6	26.1	31.3	24.2	20.5	28.4
Victoria	1.8	1.5	2.2	39.8	38.6	41.0	31.2	30.2	32.3	18.8	17.9	19.6

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here. Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

#### What does Map 4.1 tell us?

In Map 4.1 the 79 LGAs have been ranked according to the proportion of obese adults in each LGA. The LGAs were then divided into 4 groups of 16 LGAs (labelled poorest, fair, good and very good results) with decreasing proportions of obese adults and a final group of 15 LGAs with the best results (i.e. the smallest proportions of obese adults).



#### Map 4.1: Proportion of obese adults measured by BMI, by LGA, 2014

Note: The local government area (LGA) ID is based on the alphabetical order of the LGA names (see Table iii, page 17).

Table 4.13 shows the body weight status of adult males, by BMI category and selected socioeconomic determinants. When compared with all Victorian men, a significantly higher proportion of men were obese with the following characteristics:

- completed high school or TAFE or trade certificate or diploma
- unemployed.

Table 4.14 shows the body weight status of adult females, by BMI category and selected socioeconomic determinants. When compared with all Victorian women, a significantly higher proportion of women were obese with the following characteristics:

- did not complete high school
- total household income of less than \$40,000.

•	•											
					Body n	nass inde)	x (BMI, kę	g/m²)				
	U S	derweig 18.5 kg/n	lht n²)	(18.5-	Normal -24.9 kg	/m²)	Pr (25.0-	e-obese -29.9 kg	e /m²)	(≥ 3	Obese 0.0 kg/n	( <sup>2</sup> )
	%	95%	CI	%	95%	° CI	%	92%	ū	%	95%	Ū
		Н	Ч		3	Ъ		3	٩L		Н	Ч
All males	0.9	0.6	1.3	35.8	34.0	37.5	38.4	36.7	40.2	20.4	19.0	21.8
Country of birth												
Australia	0.9	0.6	1.3	34.0	32.1	36.0	38.6	36.6	40.5	21.9	20.2	23.7
Overseas	1.2*	0.5	2.7	39.3	35.5	43.1	38.9	35.2	42.7	16.9	14.7	19.5
Language spoken at home												
English	0.9	0.6	1.4	35.7	33.7	37.7	37.8	35.9	39.7	21.0	19.5	22.7
Language other than English	1.0*	0.5	2.3	35.7	32.1	39.4	41.1	37.4	44.9	18.1	15.4	21.1
Education level												
Did not complete high school	*			28.8	23.8	34.4	36.1	30.7	41.9	26.4	21.5	32.1
Completed high school, or TAFE, or trade certificate, or diploma	1.0	0.6	1.5	32.9	30.6	35.3	37.8	35.5	40.2	24.2	22.0	26.5
University, or some other tertiary institute degree, including postgraduate diploma or degree	0.7*	0.4	1.5	41.6	38.5	44.7	38.7	35.8	41.7	14.8	12.7	17.1
Employment status												
Employed	0.6	0.3	1.0	36.1	33.8	38.5	40.3	38.0	42.6	19.5	17.8	21.2
Unemployed	1.8	0.7	4.8	25.8	19.8	32.9	34.1	27.8	40.9	29.9	21.9	39.3
Not in labour force	1.8	1.0	3.2	31.2	27.3	35.3	34.7	29.9	39.7	24.6	20.1	29.7
Total annual household income												
< \$40,000	2.3*	1.1	4.6	34.7	29.7	39.9	33.0	28.5	37.8	24.5	20.5	28.9
\$40,000 to < \$100,000	1.2*	0.6	2.4	36.0	33.0	39.2	40.4	37.4	43.5	18.7	16.6	20.9
≥ \$100,000	0.4*	0.1	0.9	37.8	34.6	41.2	40.8	37.6	44.1	18.6	16.1	21.3
bata were age-standardised to the 2011 Victorian population. L/LU 95% CI = lower/upper limit of 95 per cent confidence interval.			ES	cimates may sponses, not	not add t reported }	o 100 per cen 1ere.	it due to a p	roportion	of 'don't kno	w' or 'refus	ed to say'	

Table 4.13: Proportion (%) of adult males, by BMI category and selected socioeconomic determinants, Victoria, 2014

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

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

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

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							•					
					Body n	nass inde)	x (BMI, k	g/m²)				
	Un (< 1	derweig 8.5 kg/m	ht 1 <sup>2</sup> )	(18.5-	Normal -24.9 kg	/m <sup>2</sup> )	PI (25.0-	'e-obes -29.9 kg	e J/m <sup>2</sup> )	(≥ 3(	Obese 0.0 kg/n	( <sup>2</sup> r
	%	95%	Ū	%	95%	c CI	%	95%	CI	%	95%	Ū
		Н	Ы		3	Ы		F	Ч		Η	Ч
All females	2.7	2.2	3.3	43.7	42.2	45.3	24.3	23.1	25.6	17.2	16.2	18.1
Country of birth												
Australia	2.4	1.9	3.0	41.7	39.9	43.5	24.8	23.4	26.3	18.6	17.5	19.8
Overseas	3.5	2.3	5.2	49.7	46.3	53.1	23.0	20.4	25.9	13.3	11.9	14.9
Language spoken at home												
English	2.8	2.2	3.4	42.2	40.4	43.9	24.9	23.5	26.4	17.9	16.9	19.1
Language other than English	2.4	1.6	3.7	47.7	44.5	50.9	22.5	20.1	25.2	14.4	12.6	16.4
Education level												
Did not complete high school	4.0*	1.9	8.2	38.1	33.1	43.4	23.0	19.9	26.4	21.3	18.2	24.7
Completed high school, or TAFE, or trade certificate, or diploma	2.5	2.0	3.3	39.4	37.2	41.5	25.3	23.5	27.2	19.4	18.0	21.0
University, or some other tertiary institute degree, including postgraduate diploma or degree	3.0	2.2	4.0	51.7	49.1	54.3	24.2	22.1	26.3	12.8	11.5	14.3
Employment status												
Employed	2.0	1.5	2.8	44.8	42.2	47.4	25.9	23.6	28.4	16.3	14.8	17.8
Unemployed	3.0	1.7	5.2	40.8	33.6	48.5	21.1	16.2	26.9	17.5	13.4	22.6
Not in labour force	3.5	2.6	4.8	42.4	39.7	45.2	23.6	21.4	25.9	17.9	16.2	19.7
Total annual household income												
< \$40,000	3.0	1.9	4.9	36.0	31.6	40.7	25.5	21.2	30.3	22.1	19.3	25.2
\$40,000 to < \$100,000	2.7	1.9	3.7	45.1	42.4	47.8	25.7	23.5	28.0	18.3	16.7	20.1
≥ \$100,000	3.8	2.4	6.1	49.3	45.7	52.9	25.3	22.5	28.4	14.4	12.3	16.9
Data were age-standardised to the 2011 Victorian population.			Est	imates may	not add t	o 100 per cer	nt due to a p	proportion	of 'don't kno	wv' or 'refus	ed to say'	

Table 4.14: Proportion (%) of adult females, by BMI category and selected socioeconomic determinants, Victoria, 2014

LL/LU 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

Note that estimates may not add to 100 per cent due to a proportion of 'don't know' or 'retused say' responses, not reported here.

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

The relationship was investigated between SES and the age-adjusted proportion (%) of the obese adult population using total annual household income as a measure of SES (Figure 4.3). The proportion of men and women who were obese significantly decreased with increasing total annual household income.





Data are age-adjusted to the 2011 population of Victoria.

95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

Table 4.15 shows the body weight status of adult males, by BMI category, selected modifiable risk factors and chronic conditions. When compared with all Victorian men, a significantly higher proportion of men were obese with the following characteristics:

- high or very high levels of psychological distress
- ex-smoker
- fair or poor self-reported health status
- doctor-diagnosed hypertension
- doctor-diagnosed diabetes.

Table 4.16 shows the body weight status of adult females, by BMI category, selected modifiable risk factors and chronic conditions. When compared with all Victorian women, a significantly higher proportion of women were obese with the following characteristics:

- high or very high levels of psychological distress
- ex-smoker
- fair or poor self-reported health status
- doctor-diagnosed hypertension
- doctor-diagnosed diabetes.

					Body r	nass index	< (BMI, kg	/m²)				
	U (<1	derweig 8.5 kg/m	ht 7 <sup>2</sup> )	(18.5	Normal -24.9 kg	/m²)	PI (25.0-	'e-obes€ -29.9 kg,	) 1/m <sup>2</sup> )	(≥ 3(	Obese 0.0 kg/m	1 <sup>2</sup> )
	%	95%	cI	%	95%	Ū	%	95%	Ū	%	95%	Ū
		3	Ч		Н	٦		Ч	٦L		Н	Ч
All males	0.9	0.6	1.3	35.8	34.0	37.5	38.4	36.7	40.2	20.4	19.0	21.8
Psychological distress <sup>a</sup>												
Low (K10 score < 16)	<b>%</b> 6.0	0.5	1.5	38.1	35.9	40.3	38.2	36.1	40.3	18.7	17.1	20.5
Moderate (K10 score 16–21)	1.0*	0.5	2.0	34.1	30.7	37.8	40.3	36.6	44.1	20.1	17.7	22.6
High / very high (K10 score 22+)	0.6*	0.3	1.4	27.6	23.2	32.5	34.7	30.0	39.7	31.8	27.0	36.9
Physical activity <sup>b</sup>												
Sedentary	*			30.6	21.2	42.0	24.2	19.2	30.1	30.9	21.5	42.1
Insufficient time (< 150 min) and/or sessions (< 2)	1.1*	0.7	1.9	32.7	30.3	35.2	37.5	35.1	40.0	23.5	21.5	25.6
Sufficient time (≥ 150 min) and sessions (≥ 2)	0.6*	0.4	1.1	37.7	35.0	40.3	42.3	39.7	45.1	16.4	14.4	18.5
Met fruit / vegetable guidelines <sup>c</sup>												
Both guidelines	*			51.8	39.1	64.1	34.7	23.7	47.5	10.6	6.9	15.8
Vegetable guidelines <sup>d</sup>	*			49.7	37.9	61.5	36.9	26.3	48.8	11.1	7.6	16.0
Fruit guidelines <sup>d</sup>	0.9*	0.5	1.6	39.2	36.6	41.8	39.0	36.5	41.6	17.0	15.3	18.8
Neither	1.0*	0.6	1.6	33.1	30.8	35.5	38.3	36.0	40.7	23.1	21.1	25.2
Smoking status												
Current smoker	1.4	0.7	3.0	37.6	33.6	41.8	38.2	34.2	42.3	17.7	15.1	20.7
Ex-smoker	0.2	0.1	0.5	29.9	25.4	34.8	41.6	36.9	46.5	25.3	21.9	29.0
Non-smoker	1.0	0.6	1.5	37.7	35.5	39.9	38.4	36.2	40.6	18.0	16.3	19.9

Table 4:15: Proportion (%) of adult male population, by BMI category, selected modifiable risk factors, Victoria, 2014

Data were age-standardised to the 2011 Victorian population.

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

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

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported. RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution. Based on the Kessler 10 scale for psychological distress.

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DoH (2014) guidelines. ٩

NHMRC (2013) guidelines. υ

Includes those meeting both guidelines. σ

NHMRC (2009) guidelines. Φ

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Table 4.15: Proportion (%) of adult male population, by BMI catego	

					Body	nass inde	x (BMI, kg	1/m²)				
	u ∑	derweig 8.5 kg/n	iht n²)	(18.5	Normal -24.9 kg	/m²)	Р (25.0	re-obes –29.9 kg	e /m²)	© ≂)	Obese 0.0 kg/m	( <sup>2</sup> (
	%	95%	6 CI	%	95%	° CI	%	95%	CI	%	92%	Ū
		E	Ы		E	٦		F	٦	I	F	Ъ
Lifetime risk of alcohol-related harm <sup>e</sup>												
Abstainer / no longer drinks alcohol	*			33.8	29.4	38.5	35.6	31.1	40.3	22.1	18.2	26.6
Reduced risk	2.4*	1.0	5.5	38.0	32.7	43.5	32.3	28.4	36.4	22.1	17.6	27.3
Increased risk	0.7	0.5	1.2	35.9	33.9	37.9	39.9	37.9	41.9	19.9	18.4	21.5
Self-reported health												
Excellent/very good	0.9*	0.5	1.6	46.2	43.5	48.9	40.3	37.6	42.9	9.2	7.9	10.7
Good	0.7*	0.4	1.4	33.8	31.0	36.7	40.5	37.7	43.3	20.3	18.3	22.5
Fair/poor	1.4*	0.6	3.0	19.2	16.2	22.6	32.0	28.6	35.6	41.7	37.6	45.8
Blood pressure status (excluding pregnancy induce	d hyperte	nsion)										
Doctor diagnosed hypertension	*			18.5	14.9	22.8	41.1	35.9	46.6	33.8	29.3	38.6
Normal range	0.9	0.6	1.4	40.9	39.0	42.9	38.2	36.4	40.1	15.5	14.1	17.0
Blood glucose status (excluding gestational diabete	es)											
Doctor diagnosed diabetes	0.1*	0.0	0.2	28.5	17.5	42.8	32.6	21.3	46.4	37.2	30.7	44.3
Normal range	1.0	0.7	1.4	36.8	35.0	38.6	38.7	36.9	40.4	19.0	17.7	20.5
Data were age-standardised to the 2011 Victorian population.				H SS +	oetween 25	and 50 per c	ent; point es	timate (%)	should be inte	erpreted with	i caution.	

LL/LU 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

Estimates that are (statistically) significantly different from the corresponding estimate for Victoria say' responses, not reported here.

are identified by colour as follows: above or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.
 <sup>a</sup> Based on the Kessler 10 scale for psychological distress.
 <sup>b</sup> DoH (2014) guidelines.

NHMRC (2013) guidelines.
 <sup>d</sup> Includes those meeting both guidelines.
 NHMRC (2009) guidelines.

					Body r	nass index	(BMI, kg,	/m²)				
	U L>)	derweig 8.5 kg/n	iht n²)	(18.5-	Normal -24.9 kg	/m <sup>2</sup> )	Pr (25.0-	e-obese -29.9 kg	ء /m²)	(≥ 3(	Obese ).0 kg/m	1 <sup>2</sup> )
	%	95%	° CI	%	95%	C	%	92%	Ū	%	95%	Ū
		۲	٦L		Ц	٩L		Ч	٦L		Η	٦L
All females	2.7	2.2	3.3	43.7	42.2	45.3	24.3	23.1	25.6	17.2	16.2	18.
Psychological distress <sup>a</sup>												
Low (K10 score < 16)	2.4	1.8	3.3	46.4	44.2	48.5	24.2	22.5	25.9	14.6	13.4	15.8
Moderate (K10 score 16–21)	2.9	2.1	4.0	42.8	39.8	45.9	24.9	22.4	27.6	18.8	17.0	20.8
High / very high (K10 score 22+)	2.7	1.7	4.3	33.7	30.1	37.5	23.5	20.8	26.5	25.3	22.5	28.2
Physical activity <sup>b</sup>												
Sedentary	8.4*	3.1	20.8	39.1	29.7	49.5	17.9	13.3	23.6	22.6	15.8	31.3
Insufficient time (< 150 min) and/or sessions (< 2)	2.9	2.3	3.8	41.3	39.2	43.5	24.3	22.8	25.9	18.6	17.3	19.9
Sufficient time (≥ 150 min) and sessions (≥ 2)	2.1	1.6	2.9	48.7	46.2	51.2	25.5	23.3	27.8	14.8	13.3	16.3
Met fruit / vegetable guidelines <sup>c</sup>												
Both guidelines	3.1*	1.7	5.5	55.7	50.3	60.9	21.8	18.5	25.6	13.0	10.3	16.2
Vegetable guidelines <sup>d</sup>	2.7	1.6	4.3	52.9	48.6	57.1	23.2	20.2	26.6	14.6	12.2	17.4
Fruit guidelines <sup>d</sup>	2.5	1.9	3.3	46.3	44.2	48.5	23.8	22.2	25.6	15.9	14.6	17.3
Neither	3.0	2.2	4.1	41.0	38.7	43.4	25.0	23.1	27.0	18.6	17.2	20.1
Smoking status												
Current smoker	4.8	3.3	6.9	39.2	35.3	43.2	23.4	20.6	26.5	17.7	15.1	20.7
Ex-smoker	1.6	0.9	2.6	39.9	35.1	44.9	26.6	23.2	30.4	22.2	19.2	25.6
Non-smoker	2.7	2.1	3.4	46.2	44.4	48.1	23.7	22.2	25.3	15.4	14.3	16.5

Table 4:16: Proportion (%) of adult female population, by BMI category and selected modifiable risk factors, Victoria, 2014

Data were age-standardised to the 2011 Victorian population.

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

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

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution. ×

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

<sup>a</sup> Based on the Kessler 10 scale for psychological distress.

DoH (2014) guidelines. ٩

NHMRC (2013) guidelines.

Includes those meeting both guidelines. σ

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					Body I	nass inde	x (BMI, kg	I/m <sup>2</sup> )				
	u ∼	derweig 8.5 kg/m	ht 1 <sup>2</sup> )	(18.5-	Normal -24.9 kg	/m²)	Р (25.0	re-obes –29.9 kg	ء /m²)	(≥ 3(	Obese 0.0 kg/m	1 <sup>2</sup> )
	%	95%	CI	%	95%	CI	%	95%	Ū	%	92%	Ū
		Н	Ч		F	Ъ		H	Ч		Н	٦L
Lifetime risk of alcohol-related harm $^{ m e}$												
Abstainer / no longer drinks alcohol	2.6	1.6	4.2	42.6	39.4	45.8	22.0	19.8	24.3	18.7	16.9	20.6
Reduced risk	3.3*	2.0	5.3	44.5	40.8	48.3	24.8	22.2	27.7	16.7	14.5	19.1
Increased risk	2.6	2.0	3.4	45.4	43.3	47.5	25.2	23.5	27.0	16.4	15.1	17.7
Self-reported health												
Excellent/very good	3.2	2.4	4.3	55.5	53.1	57.9	22.9	20.9	24.9	8.6	7.8	9.6
Good	2.4	1.7	3.4	39.6	37.1	42.1	25.7	23.7	27.8	19.4	17.9	21.1
Fair/poor	2.1	1.3	3.3	26.3	23.3	29.7	24.8	22.2	27.6	31.3	28.5	34.3
Blood pressure status (excluding pregnancy induced	d hyperte	nsion)										
Doctor diagnosed hypertension	0.9	0.6	1.4	29.7	21.6	39.3	22.1	18.6	26.2	33.2	26.7	40.5
Normal range	3.2	2.6	3.9	48.4	46.7	50.1	24.2	22.8	25.6	13.1	12.1	14.1
Blood glucose status (excluding gestational diabete	s)											
Doctor diagnosed diabetes	0.4*	0.2	0.8	22.8*	13.2	36.5	18.9	14.9	23.7	47.8	35.2	60.6
Normal range	2.7	2.3	3.3	44.9	43.3	46.4	24.5	23.2	25.8	15.9	15.0	16.9
Data were age-standardised to the 2011 Victorian population.				* *	oetween 25 zoodtor tho	and 50 per c	ent; point es	timate (%) :	should be inte	rpreted with	caution.	7

Note that estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to ce lurerval. and cent IOMEL/nbbel IILUILOI 20% CI =

Estimates that are (statistically) significantly different from the corresponding estimate for Victoria say' responses, not reported here.

are identified by colour as follows: above or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say'

responses, not reported here. Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

reported. RSE greater than, or equal to 50 per cent; point estimate Based on the Kessler 10 scale for psychological distress.

DoH (2014) guidelines. p Q

NHMRC (2009) guidelines. NHMRC (2013) guidelines.
 Includes those meeting bc
 NHMRC (2009) guidelines.

The relationship was investigated between obesity and self-reported health status (Figure 4.4 and Figure 4.5). The proportion of the adult Victorian population who were obese was highest among men and women with fair or poor health status.





Data are age-adjusted to the 2011 population of Victoria. 95% Cl = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.





Data are age-adjusted to the 2011 population of Victoria. 95% Cl = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

Table 4.17 and Figure 4.6 show the proportion of the adult population who were pre-obese (overweight) or obese, by age group and sex. In 2014, 58.8 per cent of Victorian men and 41.5 per cent of women were pre-obese (overweight) or obese. There was a significantly higher proportion of men who were pre-obese (overweight) or obese compared with their female counterparts. A significantly higher proportion of 45–74-yearold men, women and people were pre-obese (overweight) or obese compared with all men, women and people, respectively.

# Table 4.17: Proportion (%) of adult population who were pre-obese (overweight) or obese, by age group and sex, Victoria, 2014

		Pre-	obese or ol	bese	Not pre	e-obese or	obese
		%	95%	% CI	%	95%	6 CI
	(years)		LL	UL	-	LL	UL
Males	18–24	30.6	25.0	36.9	30.6	55.8	68.4
	25–34	57.9	51.8	63.7	57.9	33.0	44.7
	35–44	63.1	59.6	66.6	63.1	30.3	37.2
	45–54	69.0	66.2	71.7	69.0	24.6	30.0
	55–64	68.7	66.3	71.0	68.7	25.0	29.5
	65–74	66.4	64.1	68.6	66.4	26.7	31.1
	75–84	58.9	55.8	62.0	58.9	32.2	38.1
	85+	42.1	35.9	48.6	42.1	40.6	53.2
	Victoria	58.8	57.1	60.6	36.7	35.0	38.4
Females	18–24	20.5	15.7	26.4	64.7	58.2	70.7
	25–34	37.8	33.2	42.6	50.5	45.5	55.5
	35–44	40.6	38.1	43.2	49.0	46.4	51.7
	45–54	47.2	44.9	49.6	42.4	40.1	44.8
	55–64	53.8	51.7	56.0	37.4	35.4	39.5
	65–74	54.1	52.0	56.2	34.2	32.2	36.3
	75–84	45.5	42.9	48.1	35.4	32.9	37.9
	85+	29.9	25.7	34.5	44.8	40.1	49.7
	Victoria	41.5	40.1	42.9	46.4	44.8	47.9
Persons	18–24	25.7	21.9	30.0	63.5	58.9	67.8
	25–34	47.8	43.9	51.8	44.6	40.7	48.6
	35–44	51.8	49.5	54.0	41.4	39.3	43.7
	45–54	58.0	56.1	59.8	34.9	33.1	36.8
	55–64	61.1	59.5	62.7	32.4	30.9	34.0
	65–74	59.8	58.2	61.3	31.8	30.3	33.3
	75–84	51.7	49.7	53.7	35.2	33.3	37.2
	85+	35.1	31.4	38.9	45.7	41.9	49.6
	Victoria	50.0	48.8	51.1	41.6	40.5	42.8

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. LL/LU 95% CI = lower/upper limit of 95 per cent confidence interval.



Figure 4.6: Proportion (%) of adult population who were pre-obese (overweight) or obese, by age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. 95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

Table 4.18 shows the proportion of the adult population who were pre-obese (overweight) or obese, by departmental region and sex. There were no significant differences in the proportion of pre-obese (overweight) or obese men, whether they lived in rural or metropolitan Victoria. A significantly higher proportion of women who lived in rural Victoria were pre-obese (overweight) or obese compared with those in metropolitan Victoria. There was a significantly higher proportion of pre-obese (overweight) or obese women who lived in Grampians Region and Hume Region compared with all Victorian women.

	Pr	e-obese or obe	ese	Not pi	re-obese or	obese
	%	95%	6 CI	%	95%	% CI
		LL	UL	-	LL	UL
Males (18+ years)						
Eastern Metropolitan	53.9	49.6	58.1	41.4	37.2	45.7
North & West Metropolitan	59.3	56.3	62.2	36.6	33.7	39.6
Southern Metropolitan	58.9	54.9	62.8	37.6	33.8	41.6
All metropolitan regions	57.8	55.7	59.9	38.1	36.1	40.2
Barwon-South Western	62.0	54.7	68.7	31.0	24.1	38.8
Gippsland	62.0	54.9	68.7	32.0	25.5	39.2
Grampians	62.1	55.7	68.1	35.0	29.1	41.4
Hume	62.1	56.7	67.2	33.5	28.5	38.8
Loddon Mallee	61.2	54.5	67.5	30.8	24.8	37.6
All rural regions	61.9	58.9	64.9	32.2	29.2	35.3
Victoria	58.8	57.1	60.6	36.7	35.0	38.4
Females (18+ years)						
Eastern Metropolitan	36.5	32.9	40.3	53.3	49.3	57.3
North & West Metropolitan	42.0	39.7	44.4	44.1	41.6	46.7
Southern Metropolitan	39.8	36.8	43.0	48.6	45.3	51.9
All metropolitan regions	39.9	38.2	41.6	48.0	46.1	49.8
Barwon-South Western	41.5	35.4	47.8	47.1	40.4	54.0
Gippsland	46.6	41.8	51.4	37.9	32.7	43.4
Grampians	53.7	48.0	59.3	33.2	28.3	38.5
Hume	49.4	45.8	53.1	41.6	37.9	45.4
Loddon Mallee	44.5	39.9	49.3	43.2	38.0	48.5
All rural regions	46.5	44.0	49.1	41.3	38.6	44.1
Victoria	41.5	40.1	42.9	46.4	44.8	47.9

Table 4.18: Proportion (%) of adult population who were pre-obese (overweight) or obese, by Department of Health and Human Services region and sex, Victoria, 2014

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

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

Table 4.18: Proportion (%) of adult population who were pre-obese (overweight) or obese, b
Department of Health and Human Services region and sex, Victoria, 2014 (continued)

	Pro	e-obese or obe	ese	Not pr	re-obese or (	obese
	%	95%	6 CI	%	95%	6 CI
		LL	UL		LL	UL
People (18+ years)						
Eastern Metropolitan	44.9	42.1	47.8	47.5	44.6	50.5
North & West Metropolitan	50.5	48.5	52.4	40.4	38.5	42.4
Southern Metropolitan	49.2	46.6	51.8	43.2	40.6	45.8
All metropolitan regions	48.6	47.3	50.0	43.1	41.8	44.5
Barwon-South Western	51.6	46.7	56.5	39.1	34.0	44.5
Gippsland	54.6	50.1	59.0	34.8	30.5	39.3
Grampians	57.6	53.3	61.8	34.2	30.2	38.5
Hume	55.8	52.4	59.1	37.4	34.2	40.8
Loddon Mallee	52.8	48.6	57.0	37.1	32.9	41.5
All rural regions	54.1	52.1	56.1	36.8	34.8	38.9
Victoria	50.0	48.8	51.1	41.6	40.5	42.8

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

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

# Pre-obesity or obesity by departmental region and local government area

ALPINE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMIT ANK BULOKE GREATER DANDULONG ORSHAM HUME INDIGO K NGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MAN IDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE MARIBYRNONG MAROO MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI Y MOORABOOL MORELAN **IK NORTHERN GRAMPIANS STONNINGTON STRATHBO** ON WEST WIMMERA WHITEH AMBIACK ALPINE ARARAT BALLARA **RIMBANK BULOK CAMPASPE CARDIN** SEY CENT RRA GLEN EIRA GLENELG GOLDE OREATER SHEPPARTON HEPBUR BIN EAST GIPPSLAND FRANKSTON GANNAWA GREATER DANDENONG GREATER GEELONG GREATER SHEPPARTON HEPBUR ORSHAM HUME INDIGO RINGSTON KNOX LATROBE LODDON MACEDON RANGE I HINDMARSH HOBSON MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL EY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEX (1992) IK NORTHERN GRAMPIANS PORT PHILLUP PYRENEES QUEENSCLIFF' SOUTH IK SOUTHERN SLAND STONKINGTON STRATHBOO COAST SWAN HILD TOWONG WANGARATTA HITTLESEA WODC NDHAM YARRA **BIACK ALPIN** E ARARAT BALLARAT BAW BAW BAYSIDE BENALLA BOR **RIMBANK BUL** CAMPASPE CARDIN LDFIELDS COLAC-OTWAY CORAN BIN EAST GIPPSLAND RA GLENELG GOLDEN PL SHEPPARTON HEPB GREATER DANDENONG GI ORSHAM HUME INDIGO KINGSTON ODDON MACEDON VRNONG MAROONDAH **MILDURA MITO IORELAND MORI** A MOUNT ALE VALLEY N **OGIE SURF COA** WELLINGTON WEST WIMMERA 8

Table 4.19 shows the proportion of the adult population who were pre-obese (overweight) or obese, by LGA, in Eastern Metropolitan Region. The proportion of adults who were pre-obese (overweight) or obese was significantly lower among those who lived in the LGAs of Boroondara (C) and Whitehorse (C) compared with all Victorian adults.

#### Table 4.19: Proportion (%) of adult population who were pre-obese (overweight) or obese, by LGA, Eastern Metropolitan Region, Victoria, 2014

	Pre-	obese or o	bese	Not pr	e-obese or	obese
	%	95%	6 CI	%	95%	6 CI
LGA		LL	UL		LL	UL
Boroondara (C)	36.9	30.4	43.8	56.2	49.0	63.1
Knox (C)	54.2	45.9	62.3	38.2	30.5	46.5
Manningham (C)	44.0	36.4	51.8	46.2	38.3	54.2
Maroondah (C)	48.3	39.4	57.3	44.1	35.3	53.3
Monash (C)	46.0	39.8	52.3	49.7	43.4	56.0
Whitehorse (C)	38.7	32.5	45.3	52.6	46.3	58.8
Yarra Ranges (S)	49.5	41.1	58.0	41.3	32.6	50.5
Eastern Metropolitan Region	44.9	42.1	47.8	47.5	44.6	50.5
Victoria	50.0	48.8	51.1	41.6	40.5	42.8

Data were age-standardised to the 2011 Victorian population.

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

Table 4.20 shows the proportion of the adult population who were pre-obese (overweight) or obese, by LGA, in North & West Metropolitan Region. The proportion of adults who were pre-obese (overweight) or obese was significantly higher among those who lived in the LGAs of Hume (C) and Wyndham (C) compared with all Victorian adults.

### Table 4.20: Proportion (%) of adult population who were pre-obese (overweight) or obese, by LGA, North & West Metropolitan Region, Victoria, 2014

	Pre-	obese or ol	bese	Not pre	e-obese or	obese
	%	95%	6 CI	%	95%	6 CI
LGA		LL	UL		LL	UL
Banyule (C)	49.3	41.9	56.7	41.7	34.2	49.6
Brimbank (C)	48.0	42.0	54.2	42.5	36.4	48.8
Darebin (C)	49.4	41.2	57.6	42.6	34.9	50.8
Hobsons Bay (C)	51.6	42.9	60.3	35.0	27.4	43.5
Hume (C)	61.9	55.7	67.8	30.6	25.2	36.7
Maribyrnong (C)	46.8	39.6	54.1	44.6	37.4	52.1
Melbourne (C)	35.8	29.7	42.3	54.0	46.9	60.9
Melton (S)	57.0	50.5	63.2	34.6	28.4	41.4
Moonee Valley (C)	52.1	45.1	59.0	41.2	34.5	48.3
Moreland (C)	43.0	36.7	49.5	42.0	34.9	49.4
Nillumbik (S)	52.2	45.0	59.2	40.0	33.1	47.3
Whittlesea (C)	55.7	49.6	61.6	37.9	32.2	44.0
Wyndham (C)	57.9	51.7	63.8	34.1	28.4	40.3
Yarra (C)	35.7	30.5	41.1	56.5	50.3	62.5
North & West Metropolitan Region	50.5	48.5	52.4	40.4	38.5	42.4
Victoria	50.0	48.8	51.1	41.6	40.5	42.8

Data were age-standardised to the 2011 Victorian population.

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

Table 4.21 shows the proportion of the adult population who were pre-obese (overweight) or obese, by LGA, in Southern Metropolitan Region. The proportion of adults who were pre-obese (overweight) or obese was significantly lower among those who lived in the LGA of Port Philip (C) compared with all Victorian adults.

### Table 4.21: Proportion (%) of adult population who were pre-obese (overweight) or obese, by LGA, Southern Metropolitan Region, Victoria, 2014

	Pre-	obese or ol	oese	Not pre	e-obese or	obese
	%	95%	6 CI	%	95%	6 CI
LGA		LL	UL		LL	UL
Bayside (C)	42.3	34.4	50.6	50.9	41.9	59.8
Cardinia (S)	53.6	46.8	60.2	40.2	33.7	47.0
Casey (C)	54.4	48.0	60.6	36.8	30.8	43.2
Frankston (C)	54.0	47.8	60.0	37.2	31.2	43.6
Glen Eira (C)	44.9	38.0	52.0	47.5	40.4	54.7
Greater Dandenong (C)	45.0	38.5	51.6	47.1	40.5	53.7
Kingston (C)	56.8	48.5	64.8	36.5	29.0	44.6
Mornington Peninsula (S)	50.0	40.7	59.4	40.3	31.6	49.7
Port Phillip (C)	38.2	30.0	47.2	55.5	46.6	64.1
Stonnington (C)	40.8	32.6	49.4	53.7	45.2	61.9
Southern Metropolitan Region	49.2	46.6	51.8	43.2	40.6	45.8
Victoria	50.0	48.8	51.1	41.6	40.5	42.8

Data were age-standardised to the 2011 Victorian population.

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

Table 4.22 shows the proportion of the adult population who were pre-obese (overweight) or obese, by LGA, in Barwon-South Western Region. The proportion of adults who were pre-obese (overweight) or obese was significantly higher among those who lived in the LGA of Corangamite (S) compared with all Victorian adults.

#### Table 4.22: Proportion (%) of adult population who were pre-obese (overweight) or obese, by LGA, Barwon-South Western Region, Victoria, 2014

	Pre-	obese or o	bese	Not pro	e-obese or	obese
	%	95%	6 CI	%	95%	6 CI
LGA		LL	UL		LL	UL
Colac-Otway (S)	55.2	45.8	64.2	31.3	22.5	41.6
Corangamite (S)	64.1	55.1	72.2	27.3	19.8	36.2
Glenelg (S)	57.1	49.4	64.5	30.5	23.4	38.6
Greater Geelong (C)	49.1	41.5	56.7	42.5	34.6	50.7
Moyne (S)	54.7	45.7	63.4	36.3	28.0	45.4
Queenscliffe (B)	43.5	31.4	56.4	44.7	31.4	58.7
Southern Grampians (S)	53.9	45.3	62.2	31.3	22.4	41.8
Surf Coast (S)	45.0	37.8	52.4	44.1	35.8	52.8
Warrnambool (C)	59.3	50.9	67.1	33.2	25.8	41.6
Barwon-South Western Region	51.6	46.7	56.5	39.1	34.0	44.5
Victoria	50.0	48.8	51.1	41.6	40.5	42.8

Data were age-standardised to the 2011 Victorian population.

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

Table 4.23 shows the proportion of the adult population who were pre-obese (overweight) or obese, by LGA, in Gippsland Region. The proportion of adults who were pre-obese (overweight) or obese was not significantly different among those who lived in Gippsland Region compared with all Victorian adults.

### Table 4.23: Proportion (%) of adult population who were pre-obese (overweight) or obese, by LGA, Gippsland Region, Victoria, 2014

	Pre-obese or obese			Not pre-obese or obese			
	%	95% CI		%	95% CI		
LGA		LL	UL		LL	UL	
Bass Coast (S)	46.6	39.4	53.9	45.4	38.3	52.7	
Baw Baw (S)	52.7	44.0	61.2	39.8	30.7	49.5	
East Gippsland (S)	54.4	43.9	64.6	34.9	25.0	46.2	
Latrobe (C)	58.6	49.4	67.3	27.2	19.7	36.2	
South Gippsland (S)	59.1	50.6	67.1	29.9	22.9	38.0	
Wellington (S)	54.1	44.8	63.1	37.3	28.8	46.6	
Gippsland Region	54.6	50.1	59.0	34.8	30.5	39.3	
Victoria	50.0	48.8	51.1	41.6	40.5	42.8	

Data were age-standardised to the 2011 Victorian population.

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

Table 4.24 shows the proportion of the adult population who were pre-obese (overweight) or obese, by LGA, in Grampians Region. The proportion of adults who were pre-obese (overweight) or obese was significantly higher among those who lived in the LGAs of Ballarat (C), Moorabool (S), Pyrenees (S), West Wimmera (S) and Yarriambiack (S) compared with all Victorian adults.

### Table 4.24: Proportion (%) of adult population who were pre-obese (overweight) or obese, by LGA, Grampians Region, Victoria, 2014

	Pre	Pre-obese or obese			Not pre-obese or obese			
	%	95% Cl		%	95% CI			
LGA		LL	UL		LL	UL		
Ararat (RC)	58.9	50.2	67.1	28.1	20.2	37.5		
Ballarat (C)	60.6	52.9	67.8	33.1	26.1	40.8		
Golden Plains (S)	49.3	43.9	54.6	42.5	36.7	48.6		
Hepburn (S)	52.5	41.9	62.8	33.3	24.2	43.7		
Hindmarsh (S)	59.1	49.5	68.1	35.3	26.6	45.0		
Horsham (RC)	46.2	39.2	53.3	41.6	32.1	51.9		
Moorabool (S)	59.3	51.9	66.3	32.8	26.1	40.2		
Northern Grampians (S)	45.5	37.2	53.9	44.1	35.2	53.5		
Pyrenees (S)	65.8	55.4	74.9	25.5	17.5	35.6		
West Wimmera (S)	68.0	59.6	75.3	25.1	19.1	32.1		
Yarriambiack (S)	63.5	53.7	72.3	29.4	21.2	39.1		
Grampians Region	57.6	53.3	61.8	34.2	30.2	38.5		
Victoria	50.0	48.8	51.1	41.6	40.5	42.8		

Data were age-standardised to the 2011 Victorian population.

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

Table 4.25 shows the proportion of the adult population who were pre-obese (overweight) or obese, by LGA, in Hume Region. The proportion of adults who were pre-obese (overweight) or obese was not significantly different among those who lived in Hume Region compared with all Victorian adults.

### Table 4.25: Proportion (%) of adult population who were pre-obese (overweight) or obese, by LGA, Hume Region, Victoria, 2014

	Pre-obese or obese			Not pre-obese or obese			
	%	95% CI		% 95%		% CI	
LGA		LL	UL		LL	UL	
Alpine (S)	43.6	35.7	51.8	48.4	39.5	57.5	
Benalla (RC)	54.9	45.7	63.7	38.4	30.0	47.5	
Greater Shepparton (C)	56.6	48.0	64.8	37.5	29.6	46.0	
Indigo (S)	50.0	40.0	60.0	40.5	30.9	50.8	
Mansfield (S)	44.1	36.7	51.8	50.2	42.5	57.8	
Mitchell (S)	58.3	51.1	65.1	33.9	26.9	41.6	
Moira (S)	60.2	50.7	68.9	34.4	25.7	44.3	
Murrindindi (S)	59.7	50.2	68.5	34.9	26.4	44.5	
Strathbogie (S)	59.3	47.3	70.4	23.1	17.0	30.4	
Towong (S)	58.2	50.5	65.5	34.6	27.4	42.7	
Wangaratta (RC)	50.0	41.3	58.7	41.8	33.1	50.9	
Wodonga (RC)	56.3	49.4	62.9	39.9	33.4	46.7	
Hume Region	55.8	52.4	59.1	37.4	34.2	40.8	
Victoria	50.0	48.8	51.1	41.6	40.5	42.8	

Data were age-standardised to the 2011 Victorian population.

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

Table 4.26 shows the proportion of the adult population who were pre-obese (overweight) or obese, by LGA, in Loddon Mallee Region. The proportion of adults who were pre-obese (overweight) or obese was significantly higher among those who lived in the LGAs of Campaspe (S) and Loddon (S) compared with all Victorian adults.

## Table 4.26: Proportion (%) of adult population who were pre-obese (overweight) or obese, by LGA, Loddon Mallee Region, Victoria, 2014

	Pre-obese or obese			Not pre	Not pre-obese or obese			
	%	95% CI		%	95% CI			
LGA		LL	UL		LL	UL		
Buloke (S)	56.1	46.2	65.5	34.0	25.3	44.0		
Campaspe (S)	62.4	52.7	71.1	26.2	18.4	35.9		
Central Goldfields (S)	49.4	41.9	57.0	43.6	36.0	51.5		
Gannawarra (S)	40.0	34.2	46.0	45.4	33.6	57.7		
Greater Bendigo (C)	53.3	45.0	61.4	38.2	30.4	46.7		
Loddon (S)	65.7	55.2	74.9	26.7	18.2	37.5		
Macedon Ranges (S)	45.3	37.4	53.3	37.1	25.9	49.9		
Mildura (RC)	53.2	45.4	60.9	37.4	29.5	46.0		
Mount Alexander (S)	35.2	28.0	43.1	59.9	52.0	67.3		
Swan Hill (RC)	60.7	50.1	70.4	32.8	23.6	43.5		
Loddon Mallee Region	52.8	48.6	57.0	37.1	32.9	41.5		
Victoria	50.0	48.8	51.1	41.6	40.5	42.8		

Data were age-standardised to the 2011 Victorian population.

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

Table 4.27 and Figure 4.7 show the proportion of the obese adult population by category, age group and sex. In 2014, 2.4 per cent of Victorian men and 2.3 per cent of women were class III obese. There was significantly higher proportion of men who were class I obese compared with their female counterparts. A significantly higher proportion of 45–74-year-old men were class I obese compared with all Victorian men. A significantly higher proportion of 55-74-yearold women were class I obese compared with all Victorian women. A significantly higher proportion of 55-64-year-old women were class II obese compared with all Victorian women. There was no significant difference in the proportion of Class III obese men and women by age group.
		OI (30	Obese class I '30 ≥ BMI < 35)		Ob (35	oese clas 5 ≥ BMI < 4	s II 40)	Ob (	ese clas (BMI ≥ 40	s III )
		%	95%	% CI	%	95%	% CI	%	95%	% CI
	(years)		LL	UL		LL	UL		LL	UL
Males	18–24	5.4*	3.3	8.8	2.1*	0.8	5.3	**		
	25–34	9.7	6.6	14.1	4.6*	2.5	8.2	4.9*	2.3	10.1
	35–44	16.3	13.8	19.2	4.3	3.0	6.2	2.0*	1.2	3.5
	45–54	19.9	17.5	22.4	5.4	4.1	7.1	2.2	1.5	3.3
	55–64	17.0	15.2	18.9	5.0	4.1	6.2	1.9	1.3	2.7
	65–74	17.1	15.4	19.0	3.6	2.8	4.5	1.2	0.8	1.8
	75–84	14.4	12.4	16.7	2.7	1.8	4.0	1.2*	0.7	2.0
	85+	7.8	5.2	11.5	**			**		
	Victoria	13.9	12.8	15.0	4.1	3.4	4.9	2.4	1.7	3.4
Females	18–24	3.7*	2.1	6.6	**			**		
	25–34	10.0	7.6	13.0	4.2	2.8	6.4	2.8*	1.7	4.6
	35–44	10.1	8.6	11.7	3.1	2.4	4.1	3.4	2.5	4.6
	45–54	13.0	11.5	14.6	4.8	3.9	5.8	1.9	1.4	2.7
	55–64	15.7	14.2	17.3	5.6	4.7	6.6	2.3	1.8	3.0
	65–74	16.1	14.6	17.7	5.1	4.2	6.2	2.3	1.8	3.1
	75–84	12.2	10.6	14.1	4.1	3.1	5.3	1.8	1.2	2.6
	85+	8.9	6.4	12.2	1.1*	0.6	2.2	**		
	Victoria	11.0	10.3	11.8	3.8	3.3	4.3	2.3	1.9	2.8
Persons	18–24	4.6	3.1	6.7	1.3*	0.6	3.0	1.5*	0.7	3.2
	25–34	9.8	7.8	12.4	4.4	3.0	6.4	3.9*	2.3	6.4
	35–44	13.1	11.7	14.8	3.7	2.9	4.7	2.7	2.1	3.6
	45–54	16.4	15.0	17.9	5.1	4.3	6.0	2.1	1.6	2.7
	55–64	16.3	15.2	17.6	5.3	4.6	6.1	2.1	1.7	2.6
	65–74	16.6	15.4	17.8	4.4	3.8	5.1	1.8	1.5	2.3
	75–84	13.3	11.9	14.7	3.5	2.8	4.3	1.5	1.1	2.1
	85+	8.4	6.6	10.8	1.0*	0.5	2.0	**		
	Victoria	12.4	11.8	13.1	3.9	3.5	4.4	2.4	2.0	2.9

### Table 4.27: Proportion (%) of obese adult population, by category, age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}~$  Estimate has a RSE 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.



Figure 4.7: Proportion (%) of adult population who were obese class I (30≥ BMI <35), by age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. 95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

Table 4.28 shows the proportion of the obese adult population by category, departmental region and sex. A significantly higher proportion of women and people who lived in Grampians Region were obese class I compared with all Victorian women and people, respectively. There was a significantly higher proportion of obese class II women who lived in the rural regions compared with their counterparts living in metropolitan regions.

	Ob (30	Obese class I (30 ≥ BMI < 35)		O (3	Obese class II (35 ≥ BMI < 40)			oese class III (BMI ≥ 40)	
	%	95%	% CI	%	95	% CI	%	95	% CI
		LL	UL		LL	UL		LL	UL
Males (18+ years)									
Eastern Metropolitan	10.8	8.4	13.8	2.6	1.7	4.0	2.1*	0.9	4.5
North & West Metropolitan	14.8	13.0	16.7	4.1	3.2	5.3	3.1*	1.8	5.1
Southern Metropolitan	14.0	11.6	16.8	4.0	2.5	6.3	1.9*	0.8	4.5
All metropolitan regions	13.5	12.2	14.9	3.7	3.0	4.6	2.4	1.6	3.6
Barwon-South Western	11.7	8.8	15.4	5.0	* 2.9	8.6	1.4*	0.7	3.0
Gippsland	12.6	10.4	15.2	4.2'	* 2.0	8.6	2.4*	1.5	3.9
Grampians	18.3	13.5	24.5	5.0	* 2.7	9.1	1.4*	0.7	2.5
Hume	18.6	14.3	23.8	6.0	* 3.6	9.9	1.5*	0.8	2.7
Loddon Mallee	15.0	12.5	17.8	7.7*	3.8	15.0	4.7*	2.1	10.5
All rural regions	15.0	13.2	16.9	5.7	4.2	7.7	2.3	1.5	3.5
Victoria	13.9	12.8	15.0	4.1	3.4	4.9	2.4	1.7	3.4
Females (18+ years)									
Eastern Metropolitan	10.1	8.3	12.2	3.1	2.1	4.6	1.6*	0.8	3.1
North & West Metropolitan	11.4	10.1	12.9	3.8	3.0	4.8	2.4	1.8	3.2
Southern Metropolitan	9.9	8.4	11.5	3.2	2.5	4.2	2.0	1.3	3.1
All metropolitan regions	10.5	9.6	11.4	3.4	2.9	4.0	2.0	1.6	2.6
Barwon-South Western	10.3	7.7	13.7	4.9	3.1	7.6	3.6	2.3	5.8
Gippsland	13.6	10.8	17.0	4.4	3.3	5.8	2.6	1.9	3.5
Grampians	18.2	13.4	24.3	5.5	4.0	7.5	1.7	1.1	2.8
Hume	12.7	10.8	14.8	4.5	3.5	5.9	3.7	2.4	5.6
Loddon Mallee	10.9	9.3	12.7	5.5	4.2	7.3	4.0*	1.9	8.3
All rural regions	12.7	11.3	14.3	5.0	4.2	5.9	3.2	2.4	4.1
Victoria	11.0	10.3	11.8	3.8	3.3	4.3	2.3	1.9	2.8

## Table 4.28: Proportion (%) of adult population by BMI category, Department of Health and Human Services region and sex, Victoria, 2014

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below: \* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

## Table 4.28: Proportion (%) of adult population by BMI category, Department of Health and HumanServices region and sex, Victoria, 2014 (continued)

	Obese clo (30 ≥ BMI •		e class I 3MI < 35)		Obese class II (35 ≥ BMI < 40)			Ot		bese class III (BMI ≥ 40)		
	%	95%	% CI		%	95%	6 CI	,	6	95%	6 CI	
		LL	UL			LL	UL			LL	UL	
People (18+ years)												
Eastern Metropolitan	10.4	8.9	12.2		2.9	2.1	3.8	1.8	8*	1.1	3.1	
North & West Metropolitan	13.0	11.9	14.2		3.9	3.3	4.7	2	.7	2.0	3.7	
Southern Metropolitan	11.9	10.5	13.5		3.6	2.7	4.8	1.	9	1.2	3.1	
All metropolitan regions	12.0	11.2	12.8		3.5	3.1	4.0	2	.2	1.8	2.8	
Barwon-South Western	11.0	9.0	13.4		5.0	3.5	7.1	2	.6	1.7	3.8	
Gippsland	13.2	11.3	15.3		4.4	2.9	6.6	2	.5	1.9	3.4	
Grampians	18.2	14.7	22.4		5.3	3.8	7.3	1.	5	1.0	2.2	
Hume	15.7	13.1	18.7		5.3	3.8	7.3	2	.5	1.8	3.6	
Loddon Mallee	12.9	11.4	14.5		6.9	4.3	10.8	4.	5*	2.5	7.9	
All rural regions	13.8	12.7	15.0		5.4	4.5	6.5	2	.8	2.2	3.5	
Victoria	12.4	11.8	13.1		3.9	3.5	4.4	2	4	2.0	2.9	

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

# Classification of obesity by departmental region and local government area

MMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARR ALPINE ANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMI1 GREATER DANDULONG ORSHAM HUME INDIGO K NGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MAN MARIBYRNONG MAROO IDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI Y MOORABOOL MORELAN IK NORTHER N GRAMPIANS **STONNINGTON STRATHBO** ON WEST WIMERA WHITEH AMBIACK ALPINE ARARAT BALLARA **RIMBANK BULOK CAMPASPE CARDIN** SEY CENT RRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON BIN EAST GIPPSLAND FRANKSTON GANNAWA GREATER DANDENONG GREATER GEELONG PREATER SHEPPARTON HEPBUR ORSHAM HUME INDIGO RUNGSTON KNOX LA POBE LODDON MACEDON RANGE MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL EY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEX (NOER M IK NORTHERN GRAMPIANS PORT PHILLUP PYRENEES QUEENSCLIFF! SOUTH SOUTHERN SLAND STONKINGTON STRATHBOO COAST SWAN HILD TOWONG WANGARATT HITTLESEA WODC NDHAM YARRA **BIACK ALPIN** ARARAT BAW BAW BAYSIDE BENALLA BOI **RIMBANK BUL CAMPASPE CARDIN** LDFIELDS COLAC-OTWAY CORAN RA GLENELG GOLDEN PI SHEPPARTON HEPB RSHAM HUME INDIGO KINGSTON ODDON MACEDON **MILDURA MITO** VRNONG MAROONDAH **IORELAND MORI** A MOUNT ALE WELLINGTON WEST WIMMERA 8

Table 4.29 shows the proportion of the adult population who were obese, by category and LGA, in Eastern Metropolitan Region. There was no significant difference in the proportion of obese adults by category among those who lived in Eastern Metropolitan Region compared with all Victorian adults.

### Table 4.29: Proportion (%) of obese adult population, by category and LGA, Eastern Metropolitan Region, Victoria, 2014

	Ob (30	Obese class I (30 ≥ BMI < 35)			Obese class II (35 ≥ BMI < 40)			Obese class III (BMI ≥ 40)		
	%	95%	% CI		%	95%	6 CI	%	95%	% CI
LGA		LL	UL			LL	UL		LL	UL
Boroondara (C)	9.2	5.8	14.4		**			**		
Knox (C)	11.5	8.3	15.8		3.5	2.2	5.6	3.2*	1.5	6.9
Manningham (C)	9.7*	5.8	15.7	;	3.2*	1.2	8.2	1.1*	0.4	2.7
Maroondah (C)	11.0	7.0	16.8	2	4.8*	2.3	9.6	0.9*	0.4	2.0
Monash (C)	11.7	8.1	16.6		1.9*	0.9	4.0	**		
Whitehorse (C)	10.0	6.5	15.3	2	2.9*	1.5	5.8	**		
Yarra Ranges (S)	9.1	6.7	12.2	2	2.8*	1.7	4.5	**		
Eastern Metropolitan Region	10.4	8.9	12.2		2.9	2.1	3.8	1.8*	1.1	3.1
Victoria	12.4	11.8	13.1		3.9	3.5	4.4	2.4	2.0	2.9

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.
\*\* PS5 and the second state of th

Table 4.30 shows the proportion of the adult population who were obese, by category and LGA, in North & West Metropolitan Region. The proportion of adults who were obese class I was significantly higher among those who lived in the LGA of Hume (C) compared with all Victorian adults.

### Table 4.30: Proportion (%) of obese adult population, by category and LGA, North & West Metropolitan Region, Victoria, 2014

	Ob (30	Obese class I (30 ≥ BMI < 35)		Obese class II (35 ≥ BMI < 40)			O	iss III Ю)	
	%	95%	6 CI	%	95%	6 CI	%	95	% CI
LGA		LL	UL		LL	UL		LL	UL
Banyule (C)	16.0	11.3	22.3	2.2*	1.2	4.2	1.5*	0.7	2.9
Brimbank (C)	12.1	9.2	15.8	5.9*	3.5	9.9	1.5*	0.7	3.0
Darebin (C)	9.5	6.8	13.2	2.9*	1.6	5.1	6.9*	2.6	16.7
Hobsons Bay (C)	14.7	9.8	21.5	**			0.8*	0.3	2.0
Hume (C)	17.4	13.5	22.2	4.4*	2.7	7.1	4.6*	2.4	8.6
Maribyrnong (C)	7.6	5.2	11.1	2.9	1.9	4.5	1.3*	0.6	2.6
Melbourne (C)	5.8	4.1	8.1	1.5*	0.6	3.5	1.0*	0.4	2.4
Melton (S)	16.4	12.3	21.6	6.2	4.0	9.6	4.6*	2.5	8.2
Moonee Valley (C)	11.2	7.7	16.0	2.6*	1.4	4.9	1.8*	0.9	3.6
Moreland (C)	10.5	7.3	14.8	3.6*	2.0	6.4	3.9*	1.6	9.2
Nillumbik (S)	12.5	8.3	18.2	3.1*	1.7	5.6	0.9*	0.4	2.3
Whittlesea (C)	16.5	12.6	21.2	5.5	3.5	8.6	2.2*	1.2	3.9
Wyndham (C)	16.0	12.0	21.2	4.9	3.1	7.5	4.2*	1.9	9.1
Yarra (C)	11.0	7.3	16.3	0.7*	0.3	1.9	**		
North & West Metropolitan Region	13.0	11.9	14.2	3.9	3.3	4.7	2.7	2.0	3.7
Victoria	12.4	11.8	13.1	3.9	3.5	4.4	2.4	2.0	2.9

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 4.31 shows the proportion of the adult population who were obese, by category and LGA, in Southern Metropolitan Region. The proportion of adults who were obese class I was significantly lower among adults who lived in the LGAs of Mornington Peninsula (S) and Port Phillip (C) compared with all Victorian adults. The proportion of adults who were obese class II was significantly lower among those who lived in the LGAs of Port Phillip (C) and Stonnington (C) compared with all Victorian adults.

### Table 4.31: Proportion (%) of obese adult population, by category and LGA, Southern Metropolitan Region, Victoria, 2014

	Obese class I (30 ≥ BMI < 35)		Obe (35	ese cla ≥ BMI <	ss II 40)	Obese clas (BMI ≥ 40			ss III C)	
	%	95%	6 CI	%	95%	% CI		%	95%	6 CI
LGA		LL	UL		LL	UL			LL	UL
Bayside (C)	10.1*	5.5	17.8	1.5*	0.6	3.6		**		
Cardinia (S)	15.8	11.8	20.8	6.5*	3.9	10.8	2	2.6*	1.1	5.7
Casey (C)	16.9	12.4	22.5	6.0*	3.2	11.2	2	2.3*	1.2	4.5
Frankston (C)	12.1	9.0	16.1	4.7*	2.9	7.8	Э	8.0*	1.3	6.8
Glen Eira (C)	11.6	7.8	17.0	2.3*	1.3	4.0		**		
Greater Dandenong (C)	12.9	9.5	17.2	3.2*	1.5	6.7	C	).8*	0.3	1.7
Kingston (C)	12.9	9.0	18.4	3.5*	1.6	7.4		**		
Mornington Peninsula (S)	7.8	5.4	11.1	2.9*	1.6	5.2		**		
Port Phillip (C)	7.0	4.5	10.7	0.9*	0.5	2.0		**		
Stonnington (C)	7.9	4.9	12.5	1.2*	0.4	3.0		**		
Southern Metropolitan Region	11.9	10.5	13.5	3.6	2.7	4.8		1.9	1.2	3.1
Victoria	12.4	11.8	13.1	3.9	3.5	4.4	:	2.4	2.0	2.9

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 4.32 shows the proportion of the adult population who were obese, by category and LGA, in Barwon-South Western Region. The proportion of adults who were obese class I was significantly higher among adults who lived in the LGAs of Corangamite (S) and Glenelg (S) compared with all Victorian adults. The proportion of adults who were obese class II was significantly higher among those who lived in the LGA of Glenelg (S) compared with all Victorian adults.

### Table 4.32: Proportion (%) of obese adult population, by category and LGA, Barwon-South Western Region, Victoria, 2014

	Ob (30	Obese class I (30 ≥ BMI < 35)		Obese class II (35 ≥ BMI < 40)			Obe (I	ese cla: 3MI ≥ 40	ss III O)
	%	95%	6 CI	%	95%	% CI	%	95%	% CI
LGA		LL	UL		LL	UL		LL	UL
Colac-Otway (S)	10.1	6.3	15.7	4.1*	2.5	6.7	**		
Corangamite (S)	18.3	14.0	23.5	7.3*	3.4	14.7	1.9*	1.0	3.6
Glenelg (S)	18.6	13.8	24.7	8.4*	5.1	13.6	**		
Greater Geelong (C)	9.3	6.2	13.7	4.7*	2.6	8.4	2.6*	1.5	4.7
Moyne (S)	14.3	9.1	21.8	4.5	2.8	7.1	**		
Queenscliffe (B)	15.5*	6.7	31.9	0.7*	0.3	1.7	**		
Southern Grampians (S)	15.4	10.6	21.9	3.9*	2.0	7.5	1.6*	0.7	3.6
Surf Coast (S)	11.0	7.8	15.2	2.2*	1.1	4.3	**		
Warrnambool (C)	12.2	8.3	17.6	7.2*	4.1	12.5	3.5*	1.9	6.5
Barwon-South Western Region	11.0	9.0	13.4	5.0	3.5	7.1	2.6	1.7	3.8
Victoria	12.4	11.8	13.1	3.9	3.5	4.4	2.4	2.0	2.9

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 4.33 shows the proportion of the adult population who were obese, by category and LGA, in Gippsland Region. There was no significant difference in the proportion of obese adults by category among those who lived in Gippsland Region compared with all Victorian adults.

### Table 4.33: Proportion (%) of obese adult population, by category and LGA, Gippsland Region, Victoria, 2014

		Obese class I (30 ≥ BMI < 35)		Obese class II (35 ≥ BMI < 40)			OI	iss III ·O)		
		% _	95%	CI	%	95%	% CI	%	95	% CI
LGA			LL	UL		LL	UL		LL	UL
Bass Coast (S)	1	11.9	8.0	17.5	3.9*	1.9	7.7	**		
Baw Baw (S)	9	9.7	7.0	13.4	2.4*	1.3	4.5	2.7*	1.4	4.9
East Gippsland (S)	1	6.1*	9.4	26.3	3.9*	2.2	6.9	2.5*	1.2	4.9
Latrobe (C)	1	13.7	10.0	18.4	5.9*	2.4	13.8	2.4*	1.3	4.6
South Gippsland (S)	1	4.2	10.6	18.8	5.8*	3.4	9.6	2.9*	1.3	6.2
Wellington (S)	1	4.3	11.3	18.0	3.1*	1.9	5.1	2.7*	1.5	4.7
Gippsland Region	1	3.2	11.3	15.3	4.4	2.9	6.6	2.5	1.9	3.4
Victoria	1	2.4	11.8	13.1	3.9	3.5	4.4	2.4	2.0	2.9

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}~$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 4.34 shows the proportion of the adult population who were obese, by category and LGA, in Grampians Region. The proportion of adults who were obese class I was significantly higher among those who lived in the LGAs of Ballarat (C) and Pyrenees (S) compared with all Victorian adults.

### Table 4.34: Proportion (%) of obese adult population, by category and LGA, Grampians Region, Victoria, 2014

	Obese class I (30 ≥ BMI < 35)		Obese class II (35 ≥ BMI < 40)			Obese class III (BMI ≥ 40)			ss III ))	
	%	95%	6 CI	%	95% CI			%	95%	6 CI
LGA		LL	UL		LL	UL			LL	UL
Ararat (RC)	14.6	9.7	21.3	6.2*	3.1	11.8	1	.5*	0.6	3.7
Ballarat (C)	20.4	14.4	28.1	4.8*	2.5	9.2		**		
Golden Plains (S)	15.0	11.8	18.9	3.1	2.0	4.8	3	8.9*	1.6	9.5
Hepburn (S)	14.9	9.0	23.7	4.8*	2.5	9.3		**		
Hindmarsh (S)	14.2	9.9	19.9	6.4*	3.1	12.6	2	2.4*	1.2	4.9
Horsham (RC)	13.2	8.7	19.4	5.7*	3.3	9.8	C	).7*	0.3	2.0
Moorabool (S)	17.7	12.7	24.0	7.0*	3.7	13.1	3	3.2*	1.3	7.8
Northern Grampians (S)	13.7	8.6	21.2	2.7*	1.3	5.4		**		
Pyrenees (S)	22.0	15.5	30.3	6.9*	4.0	11.7	1	.2*	0.6	2.6
West Wimmera (S)	17.3	12.9	22.7	3.3*	1.8	6.0	2	2.4*	1.3	4.3
Yarriambiack (S)	17.5	12.7	23.7	5.5	3.3	8.9	4	2.1*	0.8	5.3
Grampians Region	18.2	14.7	22.4	5.3	3.8	7.3		1.5	1.0	2.2
Victoria	12.4	11.8	13.1	3.9	3.5	4.4	:	2.4	2.0	2.9

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 4.35 shows the proportion of the adult population who were obese, by category and LGA, in Hume Region. The proportion of adults who were obese class I was significantly higher among those who lived in the LGAs of Mitchell (S) and Moira (S) compared with all Victorian adults.

#### Table 4.35: Proportion (%) of obese adult population, by category and LGA, Hume Region, Victoria, 2014

	Ob (30	Obese class I (30 ≥ BMI < 35)		Obese class II (35 ≥ BMI < 40)			Obese class III (BMI ≥ 40)			
	%	95%	6 CI	%	959	% CI	%	95	% CI	
LGA		LL	UL		LL	UL		LL	UL	
Alpine (S)	7.7	5.6	10.5	4.5*	2.4	8.4	1.3*	0.6	2.8	
Benalla (RC)	19.2	12.7	27.9	6.4*	2.7	14.4	**			
Greater Shepparton (C)	13.8	9.5	19.6	6.9*	3.0	15.4	2.7*	1.2	6.0	
Indigo (S)	18.9	11.6	29.2	2.5*	1.2	5.0	**			
Mansfield (S)	11.4	7.9	16.2	2.6	1.6	4.2	2.3*	0.9	5.5	
Mitchell (S)	21.0	13.8	30.5	5.3	3.3	8.4	2.6*	1.1	6.1	
Moira (S)	20.1	13.8	28.2	5.6*	3.0	10.4	6.0*	2.8	12.6	
Murrindindi (S)	12.5	8.5	18.1	**			1.4*	0.7	3.1	
Strathbogie (S)	12.5	7.6	19.9	8.1*	3.3	18.9	1.0*	0.4	2.3	
Towong (S)	15.2	11.1	20.5	4.0*	2.4	6.7	1.4*	0.6	3.3	
Wangaratta (RC)	13.0	7.8	20.7	3.3*	1.7	6.3	0.7*	0.3	1.4	
Wodonga (RC)	14.1	10.8	18.3	4.9	3.0	7.8	1.3*	0.7	2.5	
Hume Region	15.7	13.1	18.7	5.3	3.8	7.3	2.5	1.8	3.6	
Victoria	12.4	11.8	13.1	3.9	3.5	4.4	2.4	2.0	2.9	

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 4.36 shows the proportion of the adult population who were obese, by category and LGA, in Loddon Mallee Region. The proportion of adults who were obese class II was significantly higher among adults who lived in the LGAs of Campaspe (S) and Loddon (S) compared with all Victorian adults. The proportion of adults who were obese class III was significantly higher among those who lived in the LGA of Greater Bendigo (C) compared with all Victorian adults.

### Table 4.36: Proportion (%) of obese adult population, by category and LGA, Loddon Mallee Region, Victoria, 2014

	Obese class I (30 ≥ BMI < 35)		ss I 35)	Obe (35 ≩	ese cla ≥ BMI <	ss II 40)	Obese class III (BMI ≥ 40)			
	%	95%	6 CI	%	95%	95% CI		%	95%	6 CI
LGA		LL	UL		LL	UL			LL	UL
Buloke (S)	15.8	10.5	23.1	4.7	3.1	7.1	1.	4*	0.7	2.9
Campaspe (S)	16.5	11.5	23.1	10.7*	5.7	19.4	:	**		
Central Goldfields (S)	14.3	10.8	18.7	5.6*	2.6	11.5	3	.7*	1.8	7.5
Gannawarra (S)	7.8	5.4	10.9	6.6	4.1	10.4	0	.4*	0.2	1.2
Greater Bendigo (C)	11.8	9.1	15.1	7.9*	3.3	18.0	6	.8*	3.0	14.7
Loddon (S)	11.5	8.4	15.6	11.8*	5.0	25.1	1	4*	0.6	3.0
Macedon Ranges (S)	9.6	7.3	12.6	3.5*	2.1	5.8	:	**		
Mildura (RC)	14.6	11.3	18.6	5.8*	2.9	11.2	:	**		
Mount Alexander (S)	10.0	7.1	13.9	2.3*	1.4	3.8	C	.7*	0.3	1.5
Swan Hill (RC)	20.2	13.0	30.0	6.3*	3.1	12.1	:	**		
Loddon Mallee Region	12.9	11.4	14.5	6.9	4.3	10.8	4	.5*	2.5	7.9
Victoria	12.4	11.8	13.1	3.9	3.5	4.4	2	.4	2.0	2.9

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.



# 5. Physical activity



# **Key findings**

### Meeting the physical activity guidelines





### 41.4%

of Victorian adults undertook adequate physical activity (measured in both sufficient time and sessions) to meet the national guidelines



A significantly higher proportion of men undertook adequate physical activity compared with women





A higher proportion of women who lived in the metropolitan regions engaged in sedentary behaviour compared with their rural counterparts



### Introduction

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

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

- time spent walking (for more than 10 minutes at a time) for recreation or exercise, or to get to and from places
- time spent doing vigorous household chores (excluding gardening)
- time spent doing vigorous activities other than household chores and gardening (for example, tennis, jogging, cycling or keep-fit exercises)
- number of muscle-strengthening physical activities (for example, free weights, using weight machines, exercises like push-ups/sit-ups, lifting, carrying or digging).

## Australia's physical activity and sedentary behaviour guidelines

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) or 75 or more minutes of vigorous physical activity and doing muscle-strengthening activities on at least two days on a regular basis over one week is believed to be 'sufficient' for health benefits and is the recommended threshold of physical activity for adults between 18 and 64 years of age according to Australia's physical activity and sedentary behaviour guidelines (DoH 2014). These national guidelines also recommend minimising the amount of time spent in prolonged sitting and to break up long periods of sitting as often as possible. The guidelines recommend that people 65 years of age or older should accumulate at least 30 minutes of moderate-intensity physical activity on most days (Table 5.1).

#### Table 5.1: Australia's physical activity and sedentary behaviour guidelines, Department of Health, 2014

Physical activity guidelines

#### Age: 18–64 years

Doing any physical activity is better than doing none. If you currently do no physical activity, start by doing some, and gradually build up to the recommended amount.

Be active on most, preferably all, days every week.

Accumulate 150 to 300 minutes (2 ½ to 5 hours) of moderate intensity physical activity or 75 to 150 minutes (1 ½ to 2 ½ hours) of vigorous intensity physical activity, or an equivalent combination of both moderate and vigorous activities, each week.

Do muscle strengthening activities on at least 2 days each week.

#### Age: 65 years and older

Being physically active for 30 minutes every day is achievable and even a slight increase in activity can make a difference to your health and wellbeing.

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 takes into consideration both physical activity time (150 or more minutes of moderate-intensity or 75 minutes or more of vigorous physical activity) and musclestrengthening sessions (two sessions).

A person who satisfied both criteria (time and number of muscle-strengthening sessions) was classified as doing 'sufficient' physical activity to achieve an added health benefit in the analysis that follows for adults between 18 and 64 years of age. For people 65 years of age or older 'sufficient' physical activity was defined as completing 30 minutes of moderate-intensity physical activity every day. 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 5.2 outlines the definitions of sufficient physical activity by age group, as applied to the Victorian Population Health Survey 2014.

#### Table 5.2: Definition of sufficient physical activity

Physical activity	Age group (years)								
category	18–64	65 or over							
Sedentary	0 minutes of moderate or vigorous intensity physical activity and 0 muscle strengthening sessions	0 minutes							
Insufficient	Less than 150 minutes of moderate intensity or 75 minutes of vigorous intensity physical activity, or an equivalent combination of both moderate and vigorous activities and/or less than 2 days muscle strengthening activities each week	Less than 30 minutes of moderate intensity physical activity every day							
Sufficient	150 minutes of moderate intensity or 75 minutes of vigorous intensity physical activity, or an equivalent combination of both moderate and vigorous activities and muscle strengthening activities on at least 2 days each week	30 minutes of moderate intensity physical activity every day							

# Australian physical activity guidelines

Table 5.3 and Figure 5.1 show the physical activity levels of the Victorian population categorised by whether the level of physical activity met the 2014 Australian guidelines, by age group and sex. Overall, there was a significantly higher proportion of women who engaged in sedentary behaviour compared with men. There were significantly higher proportions of men and women 65 years of age or older who reported sedentary behaviour compared with all Victorian men and women, respectively. There was a significantly lower proportion of women 25–34 years of age who reported sedentary behaviour compared with all Victorian women.

		S	Sedentar	ŗy	Insuffi min) an	cient tim d/or sess	ie (<150 sions (<2)	Sufficient time (≥150 min) and sessions (≥2)				
	Age	%	95%	% CI	%	95%	% CI	%	959	% CI		
	(years)		LL	UL		LL	UL		LL	UL		
Males	18–24	**			34.0	28.3	40.3	63.1	56.7	69.0		
	25–34	1.1*	0.5	2.8	54.6	48.5	60.5	42.1	36.2	48.2		
	35–44	2.5	1.6	3.8	58.2	54.6	61.7	36.1	32.6	39.6		
	45–54	2.5	1.7	3.7	59.1	56.0	62.0	34.3	31.5	37.3		
	55–64	4.4	3.5	5.6	61.1	58.6	63.5	30.0	27.8	32.4		
	65–74	4.9	3.9	6.0	22.1	20.1	24.2	67.1	64.8	69.3		
	75–84	8.9	7.2	10.9	29.9	27.1	32.8	53.6	50.5	56.7		
	85+	12.7	9.1	17.4	33.7	28.0	39.8	42.7	36.4	49.1		
	Victoria	3.1	2.7	3.6	48.9	47.1	50.6	44.1	42.4	45.9		
Females	18–24	1.9*	0.7	4.7	51.1	44.5	57.6	43.6	37.2	50.2		
	25–34	1.8*	0.9	3.6	58.8	53.8	63.6	36.9	32.2	41.8		
	35–44	3.6	2.7	4.9	58.1	55.5	60.7	35.0	32.5	37.5		
	45–54	2.8	2.1	3.8	59.6	57.3	61.9	32.4	30.2	34.6		
	55–64	3.2	2.5	4.0	61.8	59.8	63.9	29.7	27.8	31.7		
	65–74	6.6	5.6	7.7	23.2	21.5	25.0	61.3	59.2	63.4		
	75–84	13.4	11.6	15.4	30.0	27.7	32.5	43.2	40.6	45.9		
	85+	21.6	17.9	25.8	26.9	22.9	31.4	29.5	25.4	34.0		
	Victoria	4.1	3.6	4.6	52.0	50.4	53.5	38.6	37.1	40.1		
Persons	18–24	1.4*	0.6	3.2	42.3	37.8	47.0	53.6	48.9	58.2		
	25–34	1.4*	0.8	2.5	56.7	52.7	60.5	39.5	35.7	43.4		
	35–44	3.1	2.4	3.9	58.2	55.9	60.4	35.5	33.4	37.7		
	45–54	2.7	2.1	3.4	59.4	57.4	61.2	33.3	31.5	35.2		
	55–64	3.8	3.2	4.5	61.5	59.9	63.0	29.9	28.4	31.4		
	65–74	5.8	5.1	6.6	22.7	21.4	24.0	64.0	62.4	65.5		
	75–84	11.3	10.0	12.7	30.0	28.2	31.8	48.1	46.0	50.1		
	85+	17.8	15.1	20.9	29.8	26.4	33.4	35.1	31.4	38.9		
	Victoria	3.6	3.3	4.0	50.4	49.2	51.5	41.4	40.2	42.5		

#### Table 5.3: Physical activity status, $^{\rm a}$ by age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* Estimate has a RSE 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.



### Figure 5.1: Proportion (%) of the adult population who were categorised as 'sedentary',<sup>a</sup> by age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. 95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap. <sup>a</sup> DoH (2014) guidelines.

Table 5.4 shows physical activity levels categorised by whether the level of physical activity met the 2014 Australian guidelines, by departmental region and sex. There was a significantly lower proportion of men who lived in Southern Metropolitan Region who engaged in sedentary behaviour compared with all Victorian men. There were significantly lower proportions of women who lived in Barwon-South Western Region, Gippsland Region and Loddon Mallee Region who engaged in sedentary behaviour compared with all Victorian women. Overall, there was a significantly higher proportion of women who lived in the metropolitan regions who engaged in sedentary behaviour compared with their rural counterparts. There was a significantly lower proportion of women who lived in rural regions who engaged in sedentary behaviour compared with all Victorian women. There were no significant differences between the regions in the proportions of men or women who engaged in sufficient physical activity compared with all Victorian men and women, respectively.

### Table 5.4: Physical activity status,<sup>a</sup> by Department of Health and Human Services region and sex, Victoria, 2014

	Sedentary			Ins (<15	ufficient 0 min) a essions (	time nd/or <2)	Sufficient time (≥150 min) and sessions (≥2)		
	<b>ل</b>	os،		ی م⁄	) ۵۵۵ ۵۵۵	~~/ // Cl	%	) ۵۵۵ مح	~~/ % Cl
	70			70			- '0'		
Males (18+ years)			UL		LL	UL			UL
Eastern Metropolitan	2.5	1.8	3.5	49.1	44.8	53.5	45.7	41.4	50.0
North & West Metropolitan	4.4	3.5	5.5	50.4	47.5	53.3	41.6	38.7	44.4
Southern Metropolitan	1.8	1.3	2.5	46.7	42.7	50.7	47.2	43.2	51.2
All metropolitan regions	3.1	2.6	3.6	48.8	46.7	50.9	44.5	42.4	46.5
Barwon-South Western	4.2*	1.7	10.0	45.2	38.3	52.3	46.0	38.9	53.2
Gippsland	3.7	2.7	5.2	46.0	39.2	53.0	45.8	39.1	52.8
Grampians	2.8	2.1	3.8	51.6	45.8	57.4	40.4	34.8	46.3
Hume	2.6	1.9	3.5	53.9	48.7	59.1	39.8	34.8	45.0
Loddon Mallee	2.8	1.9	3.9	50.2	43.7	56.7	43.2	36.8	49.8
All rural regions	3.3	2.4	4.7	49.1	45.9	52.2	43.2	40.1	46.4
Victoria	3.1	2.7	3.6	48.9	47.1	50.6	44.1	42.4	45.9
Females (18+ years)									
Eastern Metropolitan	4.6	3.3	6.5	49.7	45.7	53.6	41.5	37.6	45.5
North & West Metropolitan	5.1	4.3	6.0	53.2	50.6	55.7	36.3	33.8	38.9
Southern Metropolitan	4.0	3.1	5.2	52.2	48.8	55.5	38.4	35.2	41.7
All metropolitan regions	4.5	3.9	5.1	52.0	50.2	53.8	38.4	36.6	40.2
Barwon-South Western	2.4	1.7	3.4	54.4	48.1	60.6	38.0	32.0	44.4
Gippsland	2.7	2.1	3.3	51.8	46.4	57.1	38.2	33.0	43.7
Grampians	2.6	1.8	3.7	50.7	45.0	56.5	41.3	35.6	47.2
Hume	4.4	2.8	6.9	49.4	45.5	53.3	41.1	37.1	45.2
Loddon Mallee	2.6	2.1	3.3	50.7	45.4	56.0	39.2	34.1	44.6
All rural regions	2.9	2.5	3.5	51.6	48.9	54.3	39.4	36.8	42.0
Victoria	4.1	3.6	4.6	52.0	50.4	53.5	38.6	37.1	40.1

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

## Table 5.4: Physical activity status,<sup>a</sup> by Department of Health and Human Services region and sex,Victoria, 2014 (continued)

	Sedentary			Insut (<150 se:	fficient min) aı ssions (	time nd/or <2)	Sufi (≥15 se	ime and ≥2)	
	%	95%	6 CI	%	95%	6 CI	%	95%	% CI
		LL	UL		LL	UL		LL	UL
People (18+ years)									
Eastern Metropolitan	3.6	2.8	4.6	49.4	46.4	52.3	43.6	40.6	46.5
North & West Metropolitan	4.8	4.2	5.4	51.6	49.6	53.5	39.0	37.1	41.0
Southern Metropolitan	2.9	2.4	3.6	49.4	46.8	52.1	42.7	40.1	45.4
All metropolitan regions	3.8	3.4	4.2	50.3	48.9	51.7	41.4	40.1	42.8
Barwon-South Western	3.3*	1.8	6.1	49.7	44.5	54.9	42.0	37.0	47.1
Gippsland	3.2	2.6	4.0	48.9	44.5	53.4	41.8	37.4	46.3
Grampians	2.7	2.1	3.4	50.9	46.7	55.0	41.0	37.0	45.3
Hume	3.6	2.6	4.8	51.6	48.3	55.0	40.4	37.1	43.8
Loddon Mallee	2.7	2.2	3.4	50.4	46.1	54.7	41.3	37.1	45.6
All rural regions	3.2	2.6	3.9	50.3	48.2	52.4	41.3	39.3	43.4
Victoria	3.6	3.3	4.0	50.4	49.2	51.5	41.4	40.2	42.5

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

# Physical activity status by departmental region and local government area

IMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARF ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDAR BANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMI A C FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI **BIN EAST GIPPS** GREATER DANDESONG REATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON ORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MAN MARIBYRNONG MAROOLDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE EY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NII NK NORTHERN GRAMPIANS CORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT LUM LAND STONNINGTON STRATHBOSIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOO INGT ON WEST WILLIMERA WHITEHNRSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGI IAMBIACK ALPINE ARARAT BALLARAT BANY SRIMBANK BULOKE CAMPASPE CARDINA, CASEY CENTRAL CODDELED & COLDC-OTWAY CORANGAMIT BIN EAST GIPPSLATID FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BET GREATER DANDENONG GREATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON IORSHAM HUME INDIGO KINGSTON KNOX LALROBE LODDON MACEDON RANGES MANNINGHAM MAN MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MORA MONASH MOONE Y MOORABOOL MORELAND MORNINGTO PENINSULA MOUNT ALEX NDER MONNE MURRINDINDI NI NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFF SOUTHERN O LUMBIK RAMPIANS SOUT SLAND STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WAR INGTON WEST WIMMERA WHITEHOUSE WHITELESEA WODONGA WANDHAM YARRA YARR MABIACK ALPINE ARARAT BALLARATBANY WE BASS COAST BAW BAW BAYSIDE BENALLA E E BASS COAST BAW BAW BAYSIDE BENALLA BOR CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANG RIMBANK BULOKE CAMPASPE CARDIN BIN EAST GIPPSLAND FRANKSTON GANNAWARKA GLEN FIRA GLENELG GOLDEN PL GREATER DANDENONG GREATER GEBLOM GREATER SHEPPARTON HEPBUP HIM GREATER SHEPPARTON HEPBU HINDMARSH HOBSON ROBE LODDON MACEDON ORSHAM HUME INDIGO KINGSTON **ANGES MANNINGHAM MAN** RIBYRNONG MAROONDAH MEL TON MILDURA MITO ELL MOIRA MONASH MORELAND MORN **JULA MOUNT ALE** NDER MOYNE MURRINDINDI NI NDA **NEES QUEENSCL** MPIANS PO OGIE SURF COAS GIPPSLAND STONNINGTON WONG WANGARATTA WARRNAMBOO CONGA WYNDHAM WELLINGTON WEST WIMMERA IITEHORSE

Table 5.5 presents physical activity status by LGA in Eastern Metropolitan Region. The proportion of adults who engaged in sedentary behaviour was similar across all LGAs in Eastern Metropolitan Region compared with all Victorian adults. However, the proportion of adults who engaged in sufficient physical activity was significantly higher among those who lived in the LGA of Boroondara (C) compared with all Victorian adults.

#### Table 5.5: Physical activity status<sup>a</sup> in people, by LGA, Eastern Metropolitan Region, Victoria, 2014

	Se	Sedentary			Insuf (<150 ses	ficient min) a ssions (	time nd/or <2)	Suf (≥15 se	ficient 0 min) ssions	time and (≥2)
	%	95% CI			%	95% CI		%	95%	% CI
LGA		LL	UL			LL	UL		LL	UL
Boroondara (C)	3.2*	1.6	6.5		40.4	33.6	47.6	55.1	47.9	62.1
Knox (C)	3.1*	1.8	5.1		49.7	41.9	57.5	44.2	36.6	52.1
Manningham (C)	4.2	2.7	6.6		51.4	43.2	59.4	41.4	33.6	49.7
Maroondah (C)	2.5	1.6	4.0		54.2	45.2	63.0	36.1	27.9	45.2
Monash (C)	5.2*	2.7	9.7		49.9	43.6	56.2	40.2	34.0	46.6
Whitehorse (C)	3.5	2.2	5.6		51.8	44.6	58.9	42.1	35.2	49.3
Yarra Ranges (S)	2.7*	1.6	4.6		52.8	43.8	61.6	41.3	32.7	50.5
Eastern Metropolitan Region	3.6	2.8	4.6		49.4	46.4	52.3	43.6	40.6	46.5
Victoria	3.6	3.3	4.0		50.4	49.2	51.5	41.4	40.2	42.5

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

Table 5.6 presents physical activity status by LGA in North & West Metropolitan Region. The proportion of adults who reported sedentary behaviour was significantly higher among those who lived in the LGAs of Brimbank (C) and Darebin (C) compared with all Victorian adults.

#### Table 5.6: Physical activity status<sup>a</sup> in people, by LGA, North & West Metropolitan Region, Victoria, 2014

	Sedentary			Insufficient time (<150 min) and/or sessions (<2)				Sufficient time (≥150 min) and sessions (≥2)			
	%	95%	% CI	%	95% CI			%	95%	6 CI	
LGA		LL	UL		LL	UL			LL	UL	
Banyule (C)	3.9*	2.3	6.4	52.8	45.1	60.4		41.3	33.8	49.2	
Brimbank (C)	8.2	5.5	12.2	50.9	45.4	56.3		34.8	30.0	39.8	
Darebin (C)	6.2	4.2	9.0	51.8	44.0	59.6		39.6	32.1	47.7	
Hobsons Bay (C)	3.1	2.0	4.7	48.5	40.5	56.6		43.7	35.7	52.0	
Hume (C)	5.6	3.6	8.6	46.7	40.5	53.1		41.4	35.3	47.7	
Maribyrnong (C)	4.5	3.1	6.7	50.0	42.7	57.3		40.7	33.7	48.2	
Melbourne (C)	2.5*	1.4	4.3	46.7	39.7	53.7		46.2	39.3	53.3	
Melton (S)	2.1*	1.1	4.1	59.5	52.2	66.5		34.0	27.3	41.4	
Moonee Valley (C)	2.2	1.4	3.5	55.3	48.4	62.1		38.3	31.7	45.3	
Moreland (C)	5.1	3.4	7.4	52.3	44.9	59.6		38.5	31.5	46.0	
Nillumbik (S)	5.1*	2.3	10.8	44.9	38.2	51.7		46.8	39.7	53.9	
Whittlesea (C)	5.2	3.6	7.5	56.5	50.5	62.3		31.4	26.0	37.2	
Wyndham (C)	5.7*	3.4	9.4	55.1	48.9	61.0		35.2	29.5	41.3	
Yarra (C)	3.0	1.9	4.7	48.8	38.1	59.7		45.9	35.3	56.9	
North & West Metropolitan Region	4.8	4.2	5.4	51.6	49.6	53.5		39.0	37.1	41.0	
Victoria	3.6	3.3	4.0	50.4	49.2	51.5		41.4	40.2	42.5	

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}~$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

Table 5.7 presents physical activity status by LGA in Southern Metropolitan Region. The proportion of adults who reported sedentary behaviour was significantly lower among those who lived in the LGAs of Bayside (C), Glen Eira (C), Port Phillip (C) and Stonnington (C) compared with all Victorian adults.

#### Table 5.7: Physical activity status<sup>a</sup> in people, by LGA, Southern Metropolitan Region, Victoria, 2014

	Se	Sedentary			Insuf (<150 ses	ficient min) a ssions (	time nd/or <2)	Suff (≥15 ses	ficient time 0 min) and ssions (≥2)		
	%	95%	95% CI		%	95%	6 CI	%	95%	6 CI	
LGA		LL	UL			LL	UL		LL	UL	
Bayside (C)	0.6*	0.3	1.3		46.1	36.9	55.5	49.4	40.1	58.7	
Cardinia (S)	3.6	2.3	5.7		50.4	43.8	57.1	39.1	32.8	45.9	
Casey (C)	3.9*	2.4	6.4		51.1	44.6	57.5	39.3	33.0	46.0	
Frankston (C)	4.0	2.5	6.4		51.2	44.7	57.6	39.1	33.0	45.6	
Glen Eira (C)	1.6*	0.9	2.7		52.6	45.1	60.0	43.2	35.9	50.8	
Greater Dandenong (C)	5.5	3.4	8.9		53.0	45.8	60.0	33.7	27.2	40.9	
Kingston (C)	3.5*	1.7	7.1		51.4	43.3	59.4	39.1	31.4	47.3	
Mornington Peninsula (S)	2.2*	1.3	3.6		53.0	44.7	61.2	41.9	33.9	50.3	
Port Phillip (C)	1.2*	0.5	2.8		35.8	26.8	45.8	58.8	49.0	67.9	
Stonnington (C)	1.2*	0.6	2.2		47.7	39.6	56.0	48.6	40.4	56.8	
Southern Metropolitan Region	2.9	2.4	3.6		49.4	46.8	52.1	42.7	40.1	45.4	
Victoria	3.6	3.3	4.0		50.4	49.2	51.5	41.4	40.2	42.5	

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

Table 5.8 shows physical activity status by LGA in Barwon-South Western Region. The proportion of adults who engaged in sedentary behaviour was similar across all LGAs in Barwon-South Western Region compared with all Victorian adults. However, the proportion of adults who engaged in sufficient physical activity was significantly higher among those who lived in the LGA of Surf Coast (S) compared with all Victorian adults.

#### Table 5.8: Physical activity status<sup>a</sup> in people, by LGA, Barwon-South Western Region, Victoria, 2014

	Se	Sedentary			Insuf (<150 ses	ficient min) a ssions (	time nd/or (<2)	S (†	uffic 150 sess	icient time 0 min) and ssions (≥2)	
	%	95%	95% CI		%	95%	6 CI	%		95% CI	
LGA		LL	UL			LL	UL			LL	UL
Colac-Otway (S)	2.7*	1.6	4.6		51.0	41.0	60.9	40.	3	30.8	50.6
Corangamite (S)	4.6	3.2	6.7		53.8	44.9	62.4	34.	2	26.5	42.8
Glenelg (S)	3.7	2.4	5.8		53.0	45.2	60.7	33.	4	26.9	40.5
Greater Geelong (C)	3.4*	1.4	8.1		50.8	42.7	58.8	41.	2	33.6	49.2
Moyne (S)	3.7*	2.0	6.6		50.4	41.5	59.3	38.	9	30.6	48.0
Queenscliffe (B)	**				39.8	27.3	53.7	54.	9	41.3	67.7
Southern Grampians (S)	2.1	1.3	3.3		55.2	45.6	64.4	35.	4	27.3	44.4
Surf Coast (S)	**				38.8	31.0	47.3	55.	9	47.5	63.9
Warrnambool (C)	2.4*	1.5	4.0		45.4	38.4	52.6	47.	4	40.5	54.5
Barwon-South Western Region	3.3*	1.8	6.1		49.7	44.5	54.9	42.	0	37.0	47.1
Victoria	3.6	3.3	4.0		50.4	49.2	51.5	41.	4	40.2	42.5

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

Table 5.9 shows physical activity status by LGA in Gippsland Region. The proportion of adults who engaged in sedentary behaviour was similar across all LGAs in Gippsland Region compared with all Victorian adults. However, the proportion of adults who engaged in sufficient physical activity was significantly higher among those who lived in the LGA of East Gippsland (S) compared with all Victorian adults..

#### Table 5.9: Physical activity status<sup>a</sup> in people, by LGA, Gippsland Region, Victoria, 2014

	Sedentary				Insuf (<150 ses	ficient min) a ssions (	time nd/or <2)	S∟ (≥΄ s	time and (≥2)			
	%	95%	95% CI		95% CI		%	95% CI		%	95	% CI
LGA		LL	UL			LL	UL		LL	UL		
Bass Coast (S)	2.5*	1.1	5.7		52.8	41.7	63.5	41.3	30.8	52.6		
Baw Baw (S)	2.7	1.8	3.9		47.9	37.9	58.0	43.7	33.6	54.3		
East Gippsland (S)	2.5*	1.5	4.0		38.8	30.7	47.5	54.1	45.5	62.4		
Latrobe (C)	4.4	2.9	6.7		53.0	44.4	61.5	35.4	27.2	44.5		
South Gippsland (S)	2.7*	1.6	4.4		48.9	40.5	57.4	40.5	32.6	49.0		
Wellington (S)	3.7	2.4	5.5		47.0	39.8	54.4	43.8	36.6	51.2		
Gippsland Region	3.2	2.6	4.0		48.9	44.5	53.4	41.8	37.4	46.4		
Victoria	3.6	3.3	4.0		50.4	49.2	51.5	41.4	40.2	42.5		

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported..

Table 5.10 presents physical activity status by LGA in Grampians Region. The proportion of adults who reported sedentary behaviour was significantly lower among those who lived in the LGA of Ararat (RC) compared with all Victorian adults.

#### Table 5.10: Physical activity status<sup>a</sup> in people, by LGA, Grampians Region, Victoria, 2014

	S	edento	ıry	ln: (<1)	sufficier 50 min) sessions	nt time and/or s (<2)	Suf (≥15 se	Sufficient tir (≥150 min) a sessions (≥2		
	%	959	% CI	%	9	5% CI	%	959	% CI	
LGA		LL	UL		LL	UL		LL	UL	
Ararat (RC)	2.1	1.4	3.2	50.	3 41.4	59.1	41.5	33.0	50.5	
Ballarat (C)	2.4*	1.4	4.2	53.	3 46.3	8 61.1	39.6	32.6	47.1	
Golden Plains (S)	3.8	2.4	6.0	50.	5 42.6	58.5	41.5	33.8	49.7	
Hepburn (S)	1.6*	0.9	2.8	50.	7 41.1	60.2	41.7	33.1	50.7	
Hindmarsh (S)	4.6	3.1	6.8	52.	6 43.2	2 61.9	34.0	25.7	43.4	
Horsham (RC)	1.8*	1.0	3.2	44.	5 34.8	3 54.7	48.5	38.6	58.6	
Moorabool (S)	2.5*	1.5	4.3	46.	4 39.2	2 53.6	41.4	34.6	48.6	
Northern Grampians (S)	4.1	2.7	6.2	56.	2 46.8	8 65.2	35.6	26.9	45.3	
Pyrenees (S)	2.9	1.9	4.5	46.	4 38.3	3 54.7	44.2	36.4	52.4	
West Wimmera (S)	6.0*	3.4	10.4	44.	6 36.7	52.8	42.3	34.6	50.4	
Yarriambiack (S)	3.0	1.9	4.7	46.	D 39.9	52.2	46.4	40.4	52.5	
Grampians Region	2.7	2.1	3.4	50.	9 46.7	55.0	41.0	37.0	45.3	
Victoria	3.6	3.3	4.0	50.	4 49.2	2 51.5	41.4	40.2	42.5	

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.
\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

Table 5.11 presents physical activity status by LGA in Hume Region. The proportion of adults who reported sedentary behaviour was significantly lower among those who lived in the LGA of Mansfield (S) compared with all Victorian adults.

#### Table 5.11: Physical activity status<sup>a</sup> in people, by LGA, Hume Region, Victoria, 2014

	Se	Sedentary			Insuf (<150 ses	ficient min) a ssions (	time nd/or <2)	Sufficient time (≥150 min) and sessions (≥2)			
	%	95%	95% CI		%	95%	6 CI	%	959	% CI	
LGA		LL	UL			LL	UL		LL	UL	
Alpine (S)	2.7	1.7	4.3		51.9	40.1	63.5	42.8	31.5	54.9	
Benalla (RC)	3.7*	1.7	7.7		56.8	48.3	64.9	34.8	27.1	43.4	
Greater Shepparton (C)	4.1*	2.0	8.1		50.3	42.2	58.4	42.1	34.4	50.2	
Indigo (S)	2.8	1.8	4.4		44.9	35.4	54.8	49.2	39.5	58.9	
Mansfield (S)	1.3*	0.7	2.4		57.3	47.8	66.4	37.2	28.4	46.9	
Mitchell (S)	3.5	2.3	5.3		54.4	47.3	61.3	38.2	31.3	45.6	
Moira (S)	3.4*	1.6	7.0		55.0	44.9	64.7	35.4	26.3	45.6	
Murrindindi (S)	4.0*	1.5	10.1		46.8	38.6	55.2	41.6	32.7	51.1	
Strathbogie (S)	2.2*	1.3	3.7		56.3	45.5	66.6	36.7	26.9	47.8	
Towong (S)	2.7*	1.5	4.9		44.9	36.8	53.3	48.0	39.8	56.3	
Wangaratta (RC)	2.8	1.8	4.3		52.2	40.9	63.3	40.5	29.8	52.2	
Wodonga (RC)	4.2*	1.8	9.6		49.0	41.5	56.5	42.0	34.4	49.9	
Hume Region	3.6	2.6	4.8		51.6	48.3	55.0	40.4	37.1	43.8	
Victoria	3.6	3.3	4.0		50.4	49.2	51.5	41.4	40.2	42.5	

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

Table 5.12 shows physical activity status by LGA in Loddon Mallee Region. The proportion of adults who engaged in sedentary behaviour was similar across all LGAs in Loddon Mallee Region compared with all Victorian adults

#### Table 5.12: Physical activity status<sup>a</sup> in people, by LGA, Loddon Mallee Region, Victoria, 2014

	s	Sedentary			sufficien 50 min) o sessions	t time and/or (<2)	Suf (≥15 se	time and (≥2)	
	%	95	% CI	%	95	% CI	%	955	% CI
LGA		LL	UL		LL	UL		LL	UL
Buloke (S)	6.7*	3.2	13.4	44	1 35.7	52.8	40.7	31.6	50.5
Campaspe (S)	2.6	1.7	4.1	52.	6 43.4	61.7	41.6	32.7	51.0
Central Goldfields (S)	2.5	1.5	4.0	49.	5 39.9	59.2	39.0	29.7	49.0
Gannawarra (S)	2.8*	1.7	4.5	51.0	6 38.1	64.9	40.5	27.8	54.6
Greater Bendigo (C)	2.6*	1.5	4.4	52.	O 43.8	60.2	40.4	32.5	48.8
Loddon (S)	3.3	2.2	4.9	54.	6 42.5	66.2	39.1	27.9	51.6
Macedon Ranges (S)	2.7*	1.3	5.4	50.	6 38.3	62.8	40.0	28.5	52.7
Mildura (RC)	2.4	1.5	3.6	44.	2 35.1	53.7	45.6	36.4	55.0
Mount Alexander (S)	2.0*	1.1	3.7	59.	3 49.4	68.4	33.0	24.9	42.3
Swan Hill (RC)	3.9	2.6	5.8	47.	6 38.7	56.6	44.4	35.8	53.3
Loddon Mallee Region	2.7	2.2	3.4	50.	4 46.1	54.7	41.3	37.1	45.6
Victoria	3.6	3.3	4.0	50.	4 49.2	51.5	41.4	40.2	42.5

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{\ast}~$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

### What does Map 5.1 tell us?

In Map 5.1 the 79 LGAs have been ranked according to the proportion of adults who reported sedentary behaviour in each LGA. The LGAs were then divided into 4 groups of 16 LGAs (labelled poorest, fair, good and very good results) with decreasing proportions of adults who reported sedentary behaviour and a final group of 15 LGAs with the best results (i.e. the smallest proportions of adults who reported sedentary behaviour). Map 5.1: Proportion of the population who reported sedentary behaviour according to the national guidelines, by LGA, 2014



Note: The local government area (LGA) ID is based on the alphabetical order of the LGA names (see Table iii, page 17).

Table 5.13 shows physical activity status among men by selected socioeconomic determinants. When compared with all Victorian men, there was a significantly higher proportion of men who engaged in sedentary behaviour with the following characteristics:

- did not complete high school
- speak a language other than English at home.

Table 5.14 shows physical activity status among women by selected socioeconomic determinants. When compared with all Victorian women, there was a significantly higher proportion of women who engaged in sedentary behaviour with the following characteristics:

- born overseas
- speak a language other than English at home
- did not complete high school.

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	0,	Sedentar	~		(<2)		se	ssions (≥	2)
	%	95%	CI	%	95%	° CI	%	95%	Ū
		Η	٦		Н	Ъ		Н	٦
All males	3.1	2.7	3.6	48.9	47.1	50.6	44.1	42.4	45.9
Country of birth									
Australia	2.6	2.1	3.1	50.0	48.0	52.0	43.9	41.9	45.9
Overseas	4.1	3.3	5.1	45.7	42.1	49.4	45.6	42.0	49.3
Language spoken at home									
English	2.6	2.2	3.2	49.1	47.1	51.1	44.7	42.7	46.7
Language other than English	5.0	4.0	6.2	48.2	44.6	51.8	42.0	38.5	45.6
Education level									
Did not complete high school	6.0	4.3	8.5	45.8	40.2	51.5	42.1	36.3	48.1
Completed high school, or TAFE, or trade certificate, or diploma	2.8	2.3	3.5	50.9	48.4	53.4	42.3	39.9	44.7
University, or some other tertiary institute degree, including postgraduate diploma or degree	1:5	1.1	2.1	47.1	44.0	50.2	48.8	45.7	51.9
Employment status									
Employed	2.8	2.1	3.6	48.4	46.2	50.7	45.1	42.8	47.4
Unemployed	2.5	0.9	6.4	54.9	47.7	61.9	33.0	27.2	39.3
Not in labour force	3.8	2.8	5.3	52.7	48.0	57.3	39.3	34.9	43.8
Total annual household income									
< \$40,000	3.4	2.7	4.3	53.8	48.7	58.9	37.2	32.3	42.3
\$40,000 to < \$100,000	2.5	1.9	3.2	49.0	45.9	52.1	45.1	42.0	48.2
≥ \$100,000	1.5	1.0	2.3	47.2	43.9	50.5	49.4	46.2	52.7

Data were age-standardised to the 2011 Victorian population.

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

Note that estimates may not add to 100 per cent due to a proportion of 'don't know' or

'refused to say' responses, not reported here.

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here. a DoH (2014) guidelines.
Table 5.14: Physical activity status<sup>a</sup> in females, by selected socioeconomic determinants, Victoria, 2014

				Insui (<150	fficient t min) an	ime d/or	Suft (≥15	iicient tir 0 min) α	ne nd
	0)	sedentar)		Se	ssions (<	5)	Se	ssions (≥′	(2)
	%	95%	C	%	95%	CI	%	95%	C
		Н	٦		Н	٩L		Н	٦C
All females	4.1	3.6	4.6	52.0	50.4	53.5	38.6	37.1	40.1
Country of birth									
Australia	3.1	2.7	3.5	51.0	49.2	52.8	40.9	39.1	42.6
Overseas	6.9	5.4	8.7	53.7	50.3	57.1	33.7	30.4	37.1
Language spoken at home									
English	3.0	2.6	3.4	50.5	48.7	52.2	41.4	39.7	43.2
Language other than English	7.9	6.6	9.5	55.7	52.5	58.9	30.0	27.0	33.1
Education level									
Did not complete high school	6.4	4.8	8.6	57.6	52.6	62.6	28.6	24.3	33.4
Completed high school, or TAFE, or trade certificate, or diploma	3.3	2.8	4.0	53.1	51.0	55.3	38.0	36.0	40.2
University, or some other tertiary institute degree, including postgraduate diploma or degree	2.5	1.8	3.5	48.6	45.9	51.3	45.1	42.4	47.8
Employment status									
Employed	2.9	2.2	3.8	52.5	49.9	55.1	40.7	38.1	43.4
Unemployed	2.7	1:1	6.2	60.3	53.6	66.6	30.2	23.8	37.6
Not in labour force	5.0	4.2	5.9	51.9	49.2	54.6	36.2	33.6	38.9
Total annual household income									
< \$40,000	4.9	3.7	6.4	56.2	51.6	60.7	31.7	27.4	36.4
\$40,000 to < \$100,000	3.6	2.7	4.6	52.3	49.5	55.0	40.4	37.7	43.2
≥ \$100,000	1.9*	1.1	3.3	48.2	44.7	51.7	47.4	43.8	51.0

Data were age-standardised to the 2011 Victorian population.

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

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

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below: \* RSE between 25 and 50 per cent: point estimate (%) should be interpreted with contribu-

RSE between 25 and 50 per cent, point estimate (%) should be interpreted with caution.
 \*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

a DoH (2014) guidelines.

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The relationship was investigated between SES and the age-adjusted prevalence of sedentary behaviour using total annual household income as a measure of SES (Figure 5.2). The proportion of men and women who engaged in sedentary behaviour significantly decreased with increasing total annual household income.





Data are age-adjusted to the 2011 population of Victoria.

95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

<sup>a</sup> DoH (2014) guidelines.

Table 5.15 shows physical activity status among men, by selected modifiable risk factors that contribute to chronic disease. When compared with all Victorian men, there was a significantly higher proportion of men who engaged in sedentary behaviour with the following characteristics:

- high or very high levels of psychological distress
- current smoker
- abstainer from alcohol or no longer drinks
   alcohol
- fair or poor self-reported health status.

Table 5.16 shows physical activity status among women, by selected modifiable risk factors that contribute to chronic disease. When compared with all Victorian women, there was a significantly higher proportion of women who engaged in sedentary behaviour with the following characteristics:

- high or very high levels of psychological distress
- did not meet fruit and vegetable consumption guidelines
- abstainer from alcohol or no longer drinks alcohol
- fair or poor self-reported health status.

				lnsu (<150	fficient 1 min) ar	time nd/or	Suff (≥15	icient tii 0 min) a	a ne
	ע	edentary		Se	SSIONS (*	5)	Se	ssions (2)	5
	%	95%	ū	%	95%	° CI	%	95%	Ū
		님	٦L		Н	٦L		Н	Ы
All males	3.1	2.7	3.6	48.9	47.1	50.6	44.1	42.4	45.9
Psychological distress <sup>b</sup>									
Low (K10 score < 16)	2.6	2.2	3.1	47.0	44.8	49.2	47.2	45.0	49.4
Moderate (K10 score 16–21)	3.6	2.7	4.6	50.6	46.9	54.3	42.6	39.0	46.3
High / very high (K10 score 22+)	5.9	4.0	8.6	57.5	52.2	62.6	31.2	26.3	36.5
Met fruit / vegetable guidelines <sup>c</sup>									
Both guidelines	1.0*	0.5	2.1	27.9	21.0	36.0	69.1	61.1	76.1
Vegetable guidelines <sup>d</sup>	<b>%</b> 6.0	0.5	1.7	35.8	28.5	43.8	60.6	53.0	67.8
Fruit guidelines <sup>d</sup>	2.6	2.1	3.2	41.5	39.0	44.0	52.7	50.2	55.3
Neither	3.7	3.0	4.4	54.7	52.2	57.1	37.9	35.6	40.3
Smoking status									
Current smoker	5.0	3.8	6.8	52.3	48.0	56.5	36.9	32.8	41.3
Ex-smoker	2.8	2.3	3.4	52.2	47.3	57.0	41.4	36.7	46.3
Non-smoker	2.9	2.3	3.6	47.7	45.5	50.0	46.1	43.9	48.3
Lifetime risk of alcohol-related harm $^{ m e}$									
Abstainer / no longer drinks alcohol	5.4	3.9	7.5	50.3	45.6	55.0	39.7	35.1	44.5
Reduced risk	3.3	2.4	4.6	48.0	42.9	53.1	42.7	37.5	48.1
Increased risk	2.5	2.0	3.0	48.7	46.6	50.8	45.6	43.5	47.6

Table 5.15: Physical activity status<sup>a</sup> in males, by selected modifiable risk factors, Victoria, 2014

Data were age-standardised to the 2011 Victorian population.

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

Note that estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here. Estimates that are (statistically) significantly different from the corresponding estimate for Victoria are identified by colour as follows: above or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution. Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

<sup>a</sup> DoH (2014) guidelines.

<sup>b</sup> Based on the Kessler 10 scale for psychological distress.

NHMRC (2013) guidelines.

<sup>d</sup> Includes those meeting both guidelines.

NHMRC (2009) guidelines.
 <sup>f</sup> Body mass index (BMI) = Weight (kg) / Height (m<sup>2</sup>).

Table 5.15: Physical activity status<sup>a</sup> in males, by selected modifiable risk factors, Victoria, 2014 (continued)

	S	edentar	>	lnsu (<15( se	ifficient ) min) ar ssions (	time nd/or 2)	Suf (≥15 se	ficient tii 0 min) a ssions (≥	nd 2)
	%	95%	, CI	%	959	° CI	%	95%	C
		E	٦L		1	Ы		H	Ч
Self-reported health									
Excellent/very good	1.5	1.1	1.9	37.1	34.7	39.7	58.3	55.8	60.8
Good	2.7	2.1	3.4	54.9	52.0	57.8	38.2	35.4	41.1
Fair/poor	6.7	5.2	8.7	60.8	57.0	64.5	28.5	25.0	32.3
Body weight status based on BMI <sup>f</sup>									
Underweight (BMI < 18.5 kg/m²)	*			59.6	45.5	72.2	38.1	25.6	52.5
Normal range (18.5 ≥ BMI < 25 kg/m²)	2.8	2.1	3.6	45.3	42.6	48.1	48.3	45.6	51.0
Pre-obese (25 ≥ BMI < 30 kg/m²)	2.4	2.0	3.0	47.4	44.3	50.5	47.0	43.9	50.1
Obese (BMI ≥ 30 kg/m²)	4.1	3.1	5.5	57.2	52.7	61.6	34.9	30.7	39.4
Blood pressure status (excluding pregnancy induced hyp	ertension)								
Doctor diagnosed hypertension	3.3	2.5	4.3	55.7	50.6	60.6	37.1	32.4	42.1
Normal range	3.0	2.5	3.6	47.7	45.8	49.7	45.2	43.3	47.1
Blood glucose status (excluding gestational diabetes)									
Doctor diagnosed diabetes	4.8	3.3	6.9	50.7	47.3	54.2	41.3	38.3	44.3
Normal range	2.9	2.4	3.4	48.4	46.6	50.2	44.9	43.2	46.7
Data were age-standardised to the 2011 Victorian population.			** RSE greater	than, or equal	to 50 per c	ent; point estim	ate (%) is unre	liable, heno	e not

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

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

Estimates that are (statistically) significantly different from the corresponding estimate for Victoria are identified by colour as follows: above or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

<sup>a</sup> DoH (2014) guidelines. reported.

<sup>b</sup> Based on the Kessler 10 scale for psychological distress.

NHMRC (2013) guidelines. υ

<sup>d</sup> Includes those meeting both guidelines.

NHMRC (2009) guidelines.
 <sup>6</sup> Body mass index (BMI) = Weight (kg) / Height (m<sup>2</sup>).

	S	edentary		Insu (<150 se	ifficient t ) min) an :ssions (<	ime id/or 2)	Suff (≥15 ses	icient tir 0 min) aı ssions (≥	an br
	%	95%	ū	%	95%	C	%	95%	Ū
		H	Ч		H	Ы	I	H	٦L
All females	4.1	3.6	4.6	52.0	50.4	53.5	38.6	37.1	40.1
Psychological distress <sup>b</sup>									
Low (K10 score < 16)	3.6	3.0	4.4	51.1	49.0	53.3	41.4	39.3	43.5
Moderate (K10 score 16–21)	4.3	3.6	5.2	52.3	49.2	55.3	38.4	35.4	41.5
High / very high (K10 score 22+)	6.1	4.8	7.7	56.1	52.5	59.7	28.9	25.7	32.4
Met fruit / vegetable guidelines <sup>c</sup>									
Both guidelines	2.2*	1.2	3.9	44.0	37.7	50.4	50.5	44.2	56.7
Vegetable guidelines <sup>d</sup>	2.1	1.3	3.1	44.6	39.5	49.8	50.3	45.1	55.4
Fruit guidelines <sup>d</sup>	2.9	2.5	3.4	49.0	46.8	51.2	43.5	41.3	45.7
Neither	5.6	4.7	6.6	56.0	53.7	58.3	33.0	30.8	35.2
Smoking status									
Current smoker	4.9	3.8	6.2	52.4	48.5	56.4	34.2	30.4	38.3
Ex-smoker	2.9	2.4	3.5	50.8	46.0	55.6	42.8	38.1	47.7
Non-smoker	4.3	3.7	4.9	52.3	50.4	54.1	38.1	36.3	40.0
Lifetime risk of alcohol-related harm $^{ m e}$									
Abstainer / no longer drinks alcohol	6.7	5.3	8.3	57.4	54.2	60.6	27.9	25.0	31.0
Reduced risk	4.5	3.3	6.1	52.3	48.4	56.1	38.5	34.8	42.4
Increased risk	2.3	1.9	2.8	49.8	47.7	51.8	44.3	42.3	46.4

Table 5.16: Physical activity status<sup>a</sup> in females, by selected modifiable risk factors, Victoria, 2014

Data were age-standardised to the 2011 Victorian population.

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

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

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution. Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

<sup>a</sup> DoH (2014) guidelines.

Based on the Kessler 10 scale for psychological distress. ٩

NHMRC (2013) guidelines.

<sup>d</sup> Includes those meeting both guidelines.

 $^{\rm e}$  NHMRC (2009) guidelines.  $^{\rm f}$  Body mass index (BMI) = Weight (kg) / Height (m^2).

Table 5.16: Physical activity status<sup>a</sup> in females, by selected modifiable risk factors, Victoria, 2014 (continued)

	ŭ	edentar	~	lnsu (<150 se	ifficient ' min) ar ssions (	time d/or 2)	Suf (≝15 se	ficient ti 50 min) o ssions (≥	me 10 d
	%	95%	°C	%	95%	% CI	%	95%	Ū
		H	Ы		3	Ч		Н	Ч
Self-reported health									
Excellent/very good	2.1	1.6	2.6	45.2	42.7	47.6	49.2	46.8	51.7
Good	4.5	3.7	5.4	56.2	53.8	58.6	33.9	31.6	36.3
Fair/poor	7.3	6.0	8.7	58.5	55.0	61.9	26.2	23.0	29.7
Body weight status based on BMI <sup>f</sup>									
Underweight (BMI < 18.5 kg/m²)	6.5*	2.8	14.0	55.0	47.2	62.6	32.7	26.2	39.9
Normal range (18.5 ≥ BMI < 25 kg/m²)	3.4	2.8	4.1	49.0	46.7	51.3	43.3	41.1	45.6
Pre-obese (25 $\ge$ BMI < 30 kg/m <sup>2</sup> )	3.1	2.5	3.8	51.5	47.9	55.1	41.0	37.4	44.6
Obese (BMI ≥ 30 kg/m²)	5.0	3.7	6.7	55.7	51.6	59.7	34.3	30.4	38.4
Blood pressure status (excluding pregnancy induced hyper	rtension)								
Doctor diagnosed hypertension	3.9	3.2	4.8	59.1	52.9	65.0	29.7	25.8	33.9
Normal range	4.2	3.6	4.8	51.1	49.4	52.8	39.9	38.2	41.6
Blood glucose status (excluding gestational diabetes)									
Doctor diagnosed diabetes	5.0	3.5	7.1	54.4	42.5	65.9	31.2	21.0	43.5
Normal range	3.9	3.4	4.4	52.0	50.4	53.5	39.0	37.5	40.6
Data were age-standardised to the 2011 Victorian population.			* RSE betwee	n 25 and 50 pe	r cent; poir	it estimate (%) ;	should be inter	preted with	caution.

LL/LU 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

Estimates that are (statistically) significantly different from the corresponding estimate for 'refused to say' responses, not reported here.

Victoria are identified by colour as follows: above or below

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not

DoH (2014) guidelines. reported. σ

Based on the Kessler 10 scale for psychological distress. ٩

NHMRC (2013) guidelines. U

Includes those meeting both guidelines. σ

NHMRC (2009) guidelines. Φ

Body mass index (BMI) = Weight (kg) / Height ( $m^2$ ).

The relationship was investigated between sedentary behaviour and the age-adjusted prevalence of self-reported health status (Figure 5.3 and Figure 5.4). The proportion of the adult Victorian population who reported sedentary behaviour was highest among men and women with fair or poor health status.





Data are age-adjusted to the 2011 population of Victoria.

95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.





Data are age-adjusted to the 2011 population of Victoria. 95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

## **Key findings** Physical activity associated with occupation





12.8%

of adults engaged

work



A significantly higher proportion of men who lived in the rural regions reported mostly heavy labour or physically demanding work compared with their metropolitan counterparts



### Physical activity associated with occupation

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

Table 5.17 and Figure 5.5 show the type of physical activity undertaken at work among those employed, by age group and sex. The majority of working respondents reported mostly sitting at work, while 18.4 per cent reported mostly standing, 16.0 per cent reported mostly walking and 12.8 per cent reported doing mostly heavy labour or physically demanding work. There was a significantly higher proportion of men engaged in heavy labour or physically demanding work compared with the proportion of women, particularly in those 18–24 years of age, where around one-third (30.5 per cent) of men reported doing mostly heavy labour or physically demanding work. A significantly higher proportion of men and women 35–44 years of age spent time sitting at work compared with all Victorian men and women, respectively.

#### Table 5.17: Predominant type of physical activity undertaken at work among those employed, by age group and sex, Victoria, 2014

			Sitting		S	tandin	g	١	Walking	3	Hec p demo	avy lab hysical anding	our, lly work
	Age	%	95%	6 CI	%	95%	~ CI	%	95%	% CI	%	959	% CI
	(years)		LL	UL		LL	UL		LL	UL		LL	UL
Males	18–24	22.6	15.9	31.2	22.4	16.1	30.3	21.2	15.0	29.0	30.5	22.2	40.3
	25–34	54.4	47.9	60.8	15.0	11.0	20.3	12.1	8.3	17.2	14.7	10.7	19.7
	35–44	58.7	55.0	62.4	12.4	10.2	15.1	10.4	8.5	12.7	15.8	13.2	18.7
	45–54	57.4	54.2	60.6	13.0	11.0	15.2	11.9	10.0	14.2	14.5	12.5	16.8
	55–64	51.4	48.4	54.5	17.8	15.5	20.3	14.8	12.7	17.1	12.8	11.1	14.8
	65–74	51.6	46.5	56.5	17.4	13.9	21.6	15.6	12.2	19.6	11.6	9.1	14.8
	75–84	43.7	32.6	55.5	12.1*	5.4	24.9	17.0*	9.8	27.8	17.6	11.3	26.4
	85+	43.6*	16.8	74.7	**			**			**		
	Victoria	50.2	47.9	52.5	15.5	13.9	17.2	13.9	12.4	15.7	16.8	15.0	18.8
Females	18–24	30.9	22.7	40.6	31.3	23.8	39.8	30.1	22.5	38.9	6.5*	3.5	11.7
	25–34	52.2	45.9	58.4	20.5	15.0	27.2	18.3	14.2	23.3	7.8	5.1	11.9
	35–44	58.8	55.7	61.8	20.1	17.6	22.7	13.6	11.7	15.8	5.5	4.4	7.0
	45–54	53.7	51.0	56.4	21.0	18.9	23.3	15.7	14.0	17.7	6.3	5.2	7.7
	55–64	46.4	43.5	49.3	23.3	20.8	26.0	19.6	17.5	22.0	7.3	6.0	8.9
	65–74	48.1	42.1	54.3	19.4	15.1	24.5	18.5	14.6	23.1	7.7	5.3	11.0
	75–84	42.5	26.5	60.3	24.8*	11.6	45.3	22.1*	12.0	37.1	5.8*	2.8	11.8
	85+	**			0.0			0.0			**		
	Victoria	49.0	46.4	51.6	21.8	19.8	23.9	18.6	16.7	20.6	7.8	6.2	9.7
Persons	18–24	26.4	20.9	32.7	26.4	21.4	32.1	25.2	20.2	30.9	19.6	14.6	26.0
	25–34	53.4	48.8	57.9	17.5	14.0	21.6	14.9	12.0	18.4	11.6	9.0	14.8
	35–44	58.8	56.3	61.2	15.9	14.2	17.8	11.9	10.5	13.4	11.1	9.6	12.8
	45–54	55.7	53.6	57.8	16.8	15.3	18.4	13.7	12.4	15.2	10.6	9.4	12.0
	55–64	49.2	47.1	51.3	20.2	18.5	22.1	17.0	15.4	18.6	10.4	9.2	11.7
	65–74	50.2	46.3	54.0	18.2	15.4	21.4	16.7	14.2	19.7	10.0	8.2	12.3
	75–84	43.4	34.0	53.3	15.5*	8.8	25.7	18.3	12.1	26.8	14.5	9.7	21.1
	85+	46.1*	21.9	72.4	**			**			**		
	Victoria	49.6	47.9	51.3	18.4	17.1	19.7	16.0	14.8	17.3	12.8	11.5	14.1

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}\,$  Estimate has a RSE 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.



Figure 5.5: Proportion (%) of employed population who reported doing heavy labour or physically demanding work, by age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. 95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

Table 5.18 shows the type of physical activity undertaken at work among those employed, by departmental region and sex. Overall, there was a significantly higher proportion of men and women who lived in the metropolitan regions who reported being mostly physically inactive at work (mostly sitting) compared with their rural counterparts. A significantly higher proportion of men, women and people who lived in Eastern Metropolitan Region reported mostly sitting at work compared with the proportion in all Victorian men, women and people, respectively. Table 5.18: Predominant type of physical activity undertaken at work among those employed, by Department of Health and Human Services region and sex, Victoria, 2014

										Hec	ivy lab hysica	our, lly
		Sitting	l	S	tandir	ıg	۱	Valkin	9	demo	anding	work
	%	95%	% CI	%	95%	% CI	%	95%	% CI	%	95%	% CI
Region		LL	UL		LL	UL		LL	UL		LL	UL
Males (18+ years)												
Eastern Metropolitan	61.2	55.2	66.8	13.6	10.0	18.2	9.4	6.4	13.6	13.1	9.2	18.3
North & West Metropolitan	52.1	47.3	56.7	18.6	14.7	23.2	14.1	11.5	17.1	12.0	9.5	15.0
Southern Metropolitan	53.3	47.7	58.7	15.0	11.8	18.9	11.8	8.9	15.5	13.8	10.4	18.1
All metropolitan regions	55.2	52.1	58.2	15.8	13.7	18.1	12.3	10.6	14.3	13.0	11.0	15.3
Barwon-South Western	40.5	32.4	49.1	11.4	8.3	15.3	18.0	12.5	25.2	27.8	20.7	36.3
Gippsland	37.5	28.8	47.0	14.8	10.0	21.3	17.0	12.0	23.6	27.6	20.4	36.2
Grampians	36.5	29.6	43.9	17.7	12.0	25.3	16.4	11.9	22.2	20.8	16.3	26.2
Hume	32.9	28.0	38.2	18.0	13.0	24.4	16.6	12.8	21.3	28.1	22.5	34.6
Loddon Mallee	36.0	29.4	43.2	14.0	10.6	18.2	17.4	12.0	24.7	27.3	20.2	35.7
All rural regions	37.4	33.8	41.2	14.7	12.5	17.1	17.1	14.5	20.0	26.3	22.9	30.0
Victoria	50.2	47.9	52.5	15.5	13.9	17.2	13.9	12.4	15.7	16.8	15.0	18.8
Females (18+ years)												
Eastern Metropolitan	57.9	52.8	62.8	19.4	15.7	23.7	16.9	13.2	21.5	4.0*	2.4	6.6
North & West Metropolitan	50.7	45.8	55.6	22.7	19.5	26.2	14.5	12.0	17.3	9.8	6.6	14.4
Southern Metropolitan	48.0	44.0	51.9	21.4	17.3	26.2	23.1	19.6	27.0	5.4	4.0	7.3
All metropolitan regions	52.2	48.7	55.7	21.1	18.8	23.6	17.2	14.8	19.9	7.4	5.0	10.7
Barwon-South Western	37.9	31.2	45.0	30.3	22.1	40.0	22.1	15.8	30.0	6.9*	4.1	11.2
Gippsland	40.4	33.3	47.8	24.7	18.9	31.5	23.7	18.3	30.1	7.9	4.9	12.6
Grampians	41.5	34.3	49.1	24.3	18.6	31.2	17.3	14.1	21.1	11.6	7.3	17.8
Hume	38.5	33.5	43.7	23.6	19.0	28.8	24.4	19.7	29.8	10.7	7.4	15.3
Loddon Mallee	34.9	30.4	39.7	19.9	14.9	26.1	24.6	18.7	31.7	15.9	11.4	21.8
All rural regions	39.0	35.2	42.9	25.2	21.3	29.5	22.5	19.4	26.0	9.5	7.5	11.8
Victoria	49.0	46.4	51.6	21.8	19.8	23.9	18.6	16.7	20.6	7.8	6.2	9.7

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 5.18: Predominant type of physical activity undertaken at work among those employed, byDepartment of Health and Human Services region and sex, Victoria, 2014 (continued)

		Sitting		S	tandin	g	١	Valkin	9	Hec pl demo	avy lab hysica anding	our, lly work
	%	95%	6 CI	%	95%	6 CI	%	95%	% CI	%	959	% CI
Region		LL	UL		LL	UL		LL	UL		LL	UL
People (18+ years)												
Eastern Metropolitan	60.0	55.9	64.0	16.1	13.4	19.1	13.1	10.6	16.2	8.7	6.4	11.7
North & West Metropolitan	51.5	48.1	54.9	19.6	17.0	22.5	14.4	12.5	16.6	11.5	8.8	14.9
Southern Metropolitan	51.1	47.4	54.8	18.0	15.2	21.1	16.0	12.7	19.8	10.0	7.9	12.5
All metropolitan regions	54.0	51.7	56.3	18.2	16.6	19.9	14.4	13.0	15.9	10.3	8.8	12.1
Barwon-South Western	39.2	33.2	45.5	20.1	14.8	26.7	19.8	15.5	25.0	18.4	13.4	24.6
Gippsland	39.4	33.3	45.9	19.4	15.4	24.1	19.5	15.6	24.1	18.6	14.2	24.0
Grampians	38.5	33.2	44.0	20.6	16.2	25.9	16.8	13.7	20.5	16.7	13.3	20.6
Hume	34.1	30.7	37.7	20.6	16.8	25.0	20.3	16.7	24.5	21.3	16.8	26.5
Loddon Mallee	36.8	32.2	41.6	16.5	13.5	20.1	21.5	17.0	26.9	20.5	15.5	26.5
All rural regions	37.9	35.3	40.6	19.4	17.1	21.8	19.6	17.5	21.8	19.1	16.8	21.7
Victoria	49.6	47.9	51.3	18.4	17.1	19.7	16.0	14.8	17.3	12.8	11.5	14.1

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

# Physical activity at work by departmental region and local government area

IMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARF ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDAF BANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMI1 A FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI **BIN EAST GIPPS** GREATER DANDERONG REATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON ORSHAM HUME INDIGO KANGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MAN MARIBYRNONG MAROOLIDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE EY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NII IK NORTHERN GRAMPIANS CORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT LUM SLAND STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOG INGTON WEST WILMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGE IAMBIACK ALPINE ARARAT BALLARAT BANY SEY CENTRA RIMBANK BULOKE CAMPASPE CARDIN BIN EAST GIPPSLATID FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI GREATER DANDENONG GREATER GEELONG GREATER SHEPPARTON HEPBUR I HINDMARSH HOBSON IORSHAM HUME INDIGO KINGSTON KNOX LA ROBE LODDON MACEDON RANGES MANNINGHAM MAN MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MORA MONASH MOONE EY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEX INDER MOVIE IK NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN O NE MURRINDINDI NI LUM **RAMPIANS SOUT** SLAND STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WAR INGTON WEST WIMMERA WHITEHORSE WHITTLESEA WODONGA WANDHAM YARRA YARRA MABIACK ALPINE ARARAT BALLARATBAN WE BASS COAST BAW BAW BAYSIDE BENALLA E BRIMBANK BULCKE CAMPASPE CARDING CASEY CENTRAL GOLDFIELDS COLAC-OTWAY COR E BASS COAST BAW BAW BAYSIDE BENALLA BOR CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORAN BIN EAST GIPPSLAND FRANKSTON GAN NAWARKA GLEN FIRA GLENELG GOLDEN PLAINS GREATER DANDENONG GREATER GEELOMINGREATER SHEPPARTON HEPBURN HINDMA **VHINDMARSH HOBSON** ROBE LODDON MACEDON ORSHAM HUME INDIGO KINGSTON **ANGES MANNINGHAM MAN** RIBYRNONG MAROONDAH MEL TON MILDURA MITC ELL MOIRA MONASH MORELAND MORN **ULA MOUNT ALE** VALLEY N **NRA** NDER MOYNE MURRINDINDI NI **LEES QUEENSC** MPIANS PO OGIE SURF COAS GIPPSLAND STONNINGTON WONG WANGARATTA WARRNAMBOO DONGA WYNDHAM YARRA YARRA RANGE WELLINGTON WEST WIMMERA ITEHORSE BAW BAW BAYSIDE BENALLA BOROONI

Table 5.19 shows the type of physical activity undertaken at work among those employed, by LGA in Eastern Metropolitan Region. The proportion of adults who reported being mostly physically inactive at work (mostly sitting) was significantly higher among those who lived in the LGAs of Boroondara (C), Manningham (C) and Monash (C) compared with all Victorian adults.

#### Table 5.19: Predominant type of physical activity undertaken at work among those employed, by LGA, Eastern Metropolitan Region, Victoria, 2014

		Sitting		S	tandin	g	۷	Valkin	3	Hea pł demo	ivy lab nysical inding	our, lly work
	%	95%	6 CI	%	95%	% CI	%	95%	% CI	%	95%	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Boroondara (C)	70.8	60.5	79.4	17.8	11.0	27.5	3.4*	1.9	6.2	**		
Knox (C)	54.2	43.4	64.7	12.0	7.8	18.1	19.2	11.7	29.9	10.0*	5.6	17.4
Manningham (C)	65.8	56.4	74.1	16.7	11.4	23.6	12.4*	6.9	21.4	**		
Maroondah (C)	53.6	42.2	64.7	9.6*	5.2	17.0	15.9	9.8	24.8	14.8*	7.1	28.5
Monash (C)	62.2	53.5	70.1	18.3	12.2	26.6	11.3	7.1	17.4	7.3*	3.7	14.1
Whitehorse (C)	57.7	48.5	66.3	20.5	13.5	29.9	11.1	6.8	17.6	**		
Yarra Ranges (S)	44.1	33.5	55.3	11.1	6.9	17.4	25.5	16.2	37.7	12.7*	7.3	21.1
Eastern Metropolitan Region	60.0	55.9	64.0	16.1	13.4	19.1	13.1	10.6	16.2	8.7	6.4	11.7
Victoria	49.6	47.9	51.3	18.4	17.1	19.7	16.0	14.8	17.3	12.8	11.5	14.1

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 5.20 shows the type of physical activity undertaken at work among those employed, by LGA in North & West Metropolitan Region. The proportion of adults who reported being mostly physically inactive at work (mostly sitting) was significantly higher among those who lived in the LGAs of Melbourne (C) and Yarra (C) compared with all Victorian adults.

#### Table 5.20: Predominant type of physical activity undertaken at work among those employed, by LGA, North & West Metropolitan Region, Victoria, 2014

		Sitting	I	S	tandin	g	١	Nalkin	9	Hec pl demc	ivy lab nysica anding	our, lly work
	%	95%	% CI	%	95%	% CI	%	959	% CI	%	959	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Banyule (C)	52.3	42.8	61.7	17.5	10.8	27.3	11.3*	6.8	18.4	12.3*	5.5	25.5
Brimbank (C)	48.6	40.1	57.2	22.0	16.3	29.0	12.6	8.2	19.0	7.8*	4.4	13.3
Darebin (C)	47.7	39.7	55.8	17.3*	10.3	27.6	19.2*	11.2	30.9	9.8*	5.2	18.0
Hobsons Bay (C)	54.7	43.6	65.4	17.2*	10.1	27.8	20.0	12.3	30.8	6.4*	2.7	14.3
Hume (C)	37.8	31.2	44.9	22.8	16.6	30.4	21.1	14.5	29.5	10.5*	6.2	17.3
Maribyrnong (C)	44.7	34.8	55.1	19.3*	10.9	31.9	24.7	16.9	34.6	8.0	6.0	10.7
Melbourne (C)	77.2	68.5	84.0	9.4*	5.4	15.8	4.6*	2.5	8.5	7.6*	3.1	17.5
Melton (S)	42.0	35.1	49.1	13.1	9.0	18.7	25.0	17.4	34.3	12.4	7.5	19.9
Moonee Valley (C)	56.2	45.9	66.0	30.3	21.6	40.6	6.2	3.8	10.0	4.2*	2.2	8.1
Moreland (C)	54.7	44.4	64.5	17.9	11.1	27.7	12.9*	7.1	22.2	6.8*	3.2	14.0
Nillumbik (S)	42.9	33.8	52.4	22.7	15.9	31.5	17.5	11.6	25.7	10.7*	6.4	17.5
Whittlesea (C)	43.6	37.1	50.2	15.6	10.2	23.2	16.3	10.6	24.4	14.3	9.3	21.1
Wyndham (C)	43.0	36.3	50.1	18.0	12.6	25.0	13.0	8.9	18.7	17.6	11.8	25.3
Yarra (C)	68.3	61.6	74.3	18.3	13.5	24.3	7.3*	4.3	12.2	2.1*	0.8	5.3
North & West Metropolitan Region	51.5	48.1	54.9	19.6	17.0	22.5	14.4	12.5	16.6	11.5	8.8	14.9
Victoria	49.6	47.9	51.3	18.4	17.1	19.7	16.0	14.8	17.3	12.8	11.5	14.1

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}\,$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 5.21 shows the type of physical activity undertaken at work among those employed, by LGA in Southern Metropolitan Region. The proportion of adults who reported being mostly physically inactive at work (mostly sitting) was significantly higher among those who lived in the LGAs of Glen Eira (C), Port Phillip (C) and Stonnington (C) compared with all Victorian adults.

#### Table 5.21: Predominant type of physical activity undertaken at work among those employed, by LGA, Southern Metropolitan Region, Victoria, 2014

		Sitting		S	tandin	ıg	١	Valking	9	Hec p demo	avy lab hysical anding	our, ly work
	%	95%	6 CI	%	<b>95</b> 9	% CI	%	95%	6 CI	%	95%	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Bayside (C)	60.5	49.5	70.5	18.3*	9.3	32.9	9.9*	4.4	20.7	**		
Cardinia (S)	36.2	28.5	44.7	16.2	11.0	23.4	28.9	21.8	37.1	15.8	10.3	23.5
Casey (C)	48.5	40.6	56.5	16.2	11.7	22.0	16.0	10.5	23.6	11.6*	6.8	19.0
Frankston (C)	39.5	32.1	47.5	16.3	10.7	24.0	19.5	13.4	27.6	12.8	8.3	19.1
Glen Eira (C)	60.7	51.6	69.1	14.0	9.1	20.9	12.4*	7.0	20.8	7.4*	3.3	15.7
Greater Dandenong (C)	39.9	32.2	48.1	26.5	18.6	36.2	18.0	11.2	27.7	7.0*	3.2	14.6
Kingston (C)	43.5	34.1	53.4	20.3	13.1	30.1	17.4*	9.9	28.6	11.5*	5.9	21.3
Mornington Peninsula (S)	42.0	34.4	50.1	19.4	12.6	28.8	17.7	10.7	27.7	14.9*	8.2	25.6
Port Phillip (C)	64.3	53.3	74.0	20.8	13.3	31.1	3.8*	2.2	6.6	**		
Stonnington (C)	70.2	60.9	78.1	10.5*	6.1	17.4	10.8*	5.8	19.4	**		
Southern Metropolitan Region	51.1	47.4	54.8	18.0	15.2	21.1	16.0	12.7	19.8	10.0	7.9	12.5
Victoria	49.6	47.9	51.3	18.4	17.1	19.7	16.0	14.8	17.3	12.8	11.5	14.1

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 5.22 shows the type of physical activity undertaken at work among those employed, by LGA in Barwon-South Western Region. The proportion of adults who reported being mostly physically inactive at work (mostly sitting) was significantly lower among those who lived in the LGAs of Colac-Otway (S), Corangamite (S), Glenelg (S), Moyne (S) and Queenscliffe (B) compared with all Victorian adults.

#### Table 5.22: Predominant type of physical activity undertaken at work among those employed, by LGA, Barwon-South Western Region, Victoria, 2014

		Sitting		s	tandin	g	١	Valkin	g	Heo p demo	avy lab hysical anding	our, lly work
	%	95%	% CI	%	959	% CI	%	95%	% CI	%	95%	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Colac-Otway (S)	32.6	24.3	42.3	17.2*	9.6	28.9	32.5	22.4	44.6	13.8*	7.6	23.8
Corangamite (S)	33.8	23.7	45.7	26.0	17.1	37.5	13.6	8.6	20.6	21.0	15.6	27.6
Glenelg (S)	31.1	21.7	42.4	18.2	11.4	27.8	25.7	17.7	35.8	21.5	14.5	30.8
Greater Geelong (C)	41.0	32.1	50.5	19.3	11.6	30.4	20.2	13.8	28.4	17.8	10.7	28.2
Moyne (S)	34.6	27.8	42.1	17.3	11.6	25.0	16.7	10.5	25.5	27.2	19.1	37.2
Queenscliffe (B)	35.1	28.1	42.8	34.0	25.2	43.9	19.2*	11.3	30.7	11.2*	4.5	25.1
Southern Grampians (S)	39.0	28.7	50.4	12.9	9.1	18.0	22.2	13.7	33.9	18.5	12.3	26.8
Surf Coast (S)	40.5	29.9	51.9	18.6	11.6	28.5	22.1	13.7	33.7	10.8	6.6	17.3
Warrnambool (C)	39.1	30.0	49.1	29.6	21.2	39.5	13.6	8.2	21.7	11.9	8.1	17.1
Barwon-South Western Region	39.2	33.2	45.5	20.1	14.8	26.7	19.8	15.5	25.0	18.4	13.4	24.6
Victoria	49.6	47.9	51.3	18.4	17.1	19.7	16.0	14.8	17.3	12.8	11.5	14.1

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 5.23 shows the type of physical activity undertaken at work among those employed, by LGA in Gippsland Region. The proportion of adults who reported being mostly physically inactive at work (mostly sitting) was significantly lower among those who lived in the LGAs of Bass Coast (S), South Gippsland (S) and Wellington (S) compared with all Victorian adults.

#### Table 5.23: Predominant type of physical activity undertaken at work among those employed, by LGA, Gippsland Region, Victoria, 2014

		Sitting		S	tandin	g	١	Nalkin	9	Hec pl demo	ivy lab hysical anding	our, lly work
	%	95%	% CI	%	95%	% CI	%	95%	% CI	%	95%	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Bass Coast (S)	22.2	14.7	32.1	32.1	20.2	46.8	21.4	12.9	33.5	17.4	11.3	25.8
Baw Baw (S)	41.4	32.0	51.4	13.8	8.7	21.0	16.5	10.9	24.2	25.0	15.4	37.8
East Gippsland (S)	38.2	27.1	50.6	28.0	17.9	41.0	20.9	12.8	32.2	11.0*	5.5	20.8
Latrobe (C)	47.0	34.4	60.0	13.1	8.1	20.6	11.8	7.8	17.4	21.3*	11.8	35.3
South Gippsland (S)	24.1	18.3	30.9	25.3	17.2	35.5	21.2	13.3	32.0	21.3	13.6	31.8
Wellington (S)	34.8	24.4	46.8	15.9*	8.8	27.1	27.1	17.2	40.0	15.9*	9.4	25.6
Gippsland Region	39.4	33.3	45.9	19.4	15.4	24.1	19.5	15.6	24.1	18.6	14.2	24.0
Victoria	49.6	47.9	51.3	18.4	17.1	19.7	16.0	14.8	17.3	12.8	11.5	14.1

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 5.24 shows the type of physical activity undertaken at work among those employed, by LGA in Grampians Region. The proportion of adults who reported being mostly physically inactive at work (mostly sitting) was significantly lower among those who lived in the LGA of Ararat (RC) compared with all Victorian adults.

#### Table 5.24: Predominant type of physical activity undertaken at work among those employed, by LGA, Grampians Region, Victoria, 2014

		Sitting	I	s	tandin	g	١	Valkin	g	Hec pl demo	avy lab hysica anding	our, lly work
	%	95%	% CI	%	95%	% CI	%	959	% CI	%	959	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Ararat (RC)	33.1	23.0	45.2	21.5	14.1	31.3	17.4	13.2	22.7	26.3	17.3	38.0
Ballarat (C)	39.5	30.4	49.5	23.8	16.4	33.1	14.7	9.4	22.2	9.7*	5.6	16.4
Golden Plains (S)	39.5	29.9	50.0	9.0	6.1	13.1	23.8	15.1	35.5	17.7	11.9	25.6
Hepburn (S)	41.7	27.6	57.3	17.5	10.6	27.5	20.9	12.5	32.8	15.6*	8.5	26.7
Hindmarsh (S)	40.0	28.9	52.3	23.2	14.7	34.7	12.9	8.8	18.6	16.7	11.0	24.7
Horsham (RC)	29.5	19.9	41.2	18.0*	9.6	31.4	13.9	8.4	22.1	29.3*	17.0	45.5
Moorabool (S)	40.4	31.0	50.5	21.1	13.7	31.1	16.3	10.1	25.3	18.3	11.5	27.8
Northern Grampians (S)	25.9	17.4	36.5	15.9	10.5	23.4	20.2*	10.9	34.5	30.1	18.6	44.8
Pyrenees (S)	43.7	31.4	57.0	14.4*	7.0	27.1	15.7	11.0	22.0	18.3	11.1	28.6
West Wimmera (S)	28.9	21.1	38.1	12.2	8.6	17.2	29.4	18.9	42.7	20.4	13.9	29.0
Yarriambiack (S)	37.5	28.1	47.9	12.8	8.5	18.9	21.1	14.5	29.7	21.1	15.5	27.9
Grampians Region	38.5	33.2	44.0	20.6	16.2	25.9	16.8	13.7	20.5	16.7	13.3	20.6
Victoria	49.6	47.9	51.3	18.4	17.1	19.7	16.0	14.8	17.3	12.8	11.5	14.1

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}\,$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 5.25 shows the type of physical activity undertaken at work among those employed, by LGA in Hume Region. The proportion of adults who reported being mostly physically inactive at work (mostly sitting) was significantly lower among adults who lived in the LGAs of Alpine (S), Benalla (RC), Greater Shepparton (C), Mansfield (S), Moira (S), Strathbogie (S), Towong (S), Wangaratta (RC) and Wodonga (RC) compared with all Victorian adults.

#### Table 5.25: Predominant type of physical activity undertaken at work among those employed, by LGA, Hume Region, Victoria, 2014

		Sitting	I	S	tandin	g	١	Valkin	9	Hec pl demo	avy lab hysical anding	our, ly work
	%	95%	6 CI	%	95%	% CI	%	95%	% CI	%	95%	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Alpine (S)	36.3	27.4	46.3	24.5*	13.3	40.5	24.2*	13.8	38.9	12.9	9.9	16.6
Benalla (RC)	26.0	19.2	34.2	33.7	24.0	44.9	15.9	9.7	25.0	22.6	14.8	32.9
Greater Shepparton (C)	31.4	24.5	39.3	22.7	13.9	34.6	21.8	16.1	28.9	18.8*	10.1	32.1
Indigo (S)	45.1	30.2	60.9	24.4*	12.3	42.5	14.0	10.0	19.1	9.7	6.6	14.2
Mansfield (S)	31.7	23.7	40.9	11.1	7.4	16.3	19.2*	10.8	31.6	36.5	24.7	50.2
Mitchell (S)	47.0	36.5	57.7	11.6*	5.7	22.1	11.6*	5.8	21.9	25.2	15.5	38.3
Moira (S)	29.9	23.2	37.6	17.7	11.5	26.4	27.3	18.3	38.6	21.3	13.6	31.7
Murrindindi (S)	41.1	32.2	50.7	12.9*	7.8	20.8	22.9	14.2	34.8	19.5	11.8	30.4
Strathbogie (S)	28.4	21.3	36.7	24.7*	13.2	41.5	12.3	8.5	17.4	28.6	17.4	43.3
Towong (S)	19.8	14.3	26.6	22.6*	13.3	35.9	27.6	17.8	40.1	25.9	18.0	35.8
Wangaratta (RC)	34.5	25.5	44.7	20.4*	11.6	33.3	17.2	11.0	25.9	23.9*	14.1	37.7
Wodonga (RC)	30.0	23.6	37.4	21.7	14.3	31.4	21.3	13.4	32.1	19.0	11.8	29.1
Hume Region	34.1	30.7	37.7	20.6	16.8	25.0	20.3	16.7	24.5	21.3	16.8	26.5
Victoria	49.6	47.9	51.3	18.4	17.1	19.7	16.0	14.8	17.3	12.8	11.5	14.1

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.
 \*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

Table 5.26 shows the type of physical activity undertaken at work among those employed, by LGA in Loddon Mallee Region. The proportion of adults who reported being mostly physically inactive at work (mostly sitting) was significantly lower among those who lived in the LGAs of Buloke (S), Campaspe (S), Central Goldfields (S), Gannawarra (S), Macedon Ranges (S) and Swan Hill (RC) compared with all Victorian adults.

#### Table 5.26: Predominant type of physical activity undertaken at work among those employed, by LGA, Loddon Mallee Region, Victoria, 2014

		Sitting		S	tandin	ıg	٧	Valkin	g	Hec pl demo	avy lab hysical anding	our, lly work
	%	95%	% CI	%	95%	% CI	%	95%	% CI	%	95%	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Buloke (S)	26.8	17.3	39.2	22.8	13.7	35.6	22.0	14.2	32.5	21.6*	12.4	34.9
Campaspe (S)	28.7	19.7	39.8	16.2*	9.0	27.6	30.5	21.0	42.0	22.8	16.0	31.5
Central Goldfields (S)	22.6	16.7	29.8	15.9	10.2	24.0	24.0*	11.7	43.0	23.3*	11.5	41.7
Gannawarra (S)	25.8	18.9	34.1	19.2*	8.7	37.1	28.9*	16.2	46.0	22.1	13.4	34.2
Greater Bendigo (C)	40.3	32.1	49.1	16.5	10.9	24.1	20.6	14.0	29.2	17.9*	10.6	28.7
Loddon (S)	40.7	28.2	54.6	11.1*	4.5	24.9	20.4*	11.9	32.7	18.2*	10.6	29.4
Macedon Ranges (S)	33.7	27.2	40.9	11.6	8.4	15.8	26.3	18.4	36.2	21.0	13.0	32.1
Mildura (RC)	41.4	31.4	52.2	22.8	17.1	29.7	18.3*	9.8	31.5	15.8*	7.6	29.9
Mount Alexander (S)	50.9	34.2	67.3	18.1	13.8	23.3	16.2*	5.7	38.4	13.1*	7.8	21.2
Swan Hill (RC)	25.8	17.3	36.7	18.7	12.8	26.6	20.7	14.1	29.4	20.5	12.6	31.6
Loddon Mallee Region	36.8	32.2	41.6	16.5	13.5	20.1	21.5	17.0	26.9	20.5	15.5	26.5
Victoria	49.6	47.9	51.3	18.4	17.1	19.7	16.0	14.8	17.3	12.8	11.5	14.1

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}\,$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

## **Key findings**

**Time spent sitting** 





A significantly higher proportion of men spent eight hours or more sitting on an average weekday compared with the proportion of women





A significantly higher proportion of men and women who lived in the metropolitan regions spent eight hours or more sitting on an average weekday compared with their rural counterparts



### Time spent sitting on an average weekday

Respondents were asked about the time they spent sitting while at work, while at home, while doing study and during leisure time. This included time spent sitting at a desk, in the car, reading or sitting or lying down to watch television.

Table 5.27 shows the time spent sitting on an average weekday during the week preceding the survey, by duration, age group and sex. A significantly higher proportion of men spent eight hours or more sitting on an average weekday during the preceding week compared with the proportion of women. A significantly higher proportion of men 25–54 years of age spent eight hours or more sitting compared with all Victorian men. Table 5.27: Proportion (%) of adult population sitting on an average weekday, by duration, age group and sex, Victoria, 2014

					Time s	pent si	itting on	an avei	age we	ekday d	uring pr	sceding	week			
		< 2	hours/d	day	2 to <	4 hours	s/day	4 to <	6 hours	s/day	6 to <	8 hours	/day	8+ }	ours/d	ay
	Age	%	95%	Ū	%	95%	C	%	95%	C	%	92%	Ū	%	95%	Ū
	(years)		Η	Ъ		Н	Ъ		Н	Ъ		3	Ы		3	Ч
Males	18–24	5.3*	3.1	8.9	23.4	18.0	29.9	27.5	21.9	33.8	17.4	13.0	23.0	23.7	18.7	29.5
	25–34	З.8*	2.3	6.2	21.7	16.9	27.3	22.1	17.5	27.6	16.6	12.6	21.5	35.0	29.3	41.1
	35-44	5.3	4.0	7.0	22.5	19.7	25.6	18.9	16.2	22.0	16.6	14.1	19.5	35.6	32.2	39.2
	45-54	4.1	3.1	5.4	22.1	19.7	24.6	22.2	19.7	24.8	17.0	14.8	19.5	32.6	29.8	35.5
	55-64	5.0	4.0	6.2	26.3	24.2	28.5	25.6	23.5	27.8	15.3	13.5	17.1	24.7	22.6	27.0
	65–74	5.2	4.2	6.4	32.3	30.2	34.6	33.0	30.8	35.3	11.7	10.3	13.3	13.2	11.7	15.0
	75-84	5.2	4.0	6.7	37.1	34.1	40.2	30.1	27.4	33.1	10.7	8.9	12.7	10.5	8.7	12.7
	85+	4.0*	2.4	6.8	33.6	27.9	39.9	30.1	24.3	36.5	12.6	9.1	17.3	7.6	5.1	11.2
	Victoria	4.7	4.1	5.5	25.0	23.5	26.6	24.5	23.0	26.0	15.7	14.4	17.1	27.5	25.9	29.2
Females	18–24	3.1*	1.6	6.0	18.3	14.0	23.7	32.5	26.6	39.0	18.1	13.4	24.0	26.1	20.7	32.4
	25–34	8.4	6.2	11.3	30.1	25.6	35.0	19.7	16.3	23.6	12.6	9.3	16.9	24.6	20.6	29.1
	35-44	10.1	8.6	11.8	28.4	26.1	30.9	21.4	19.4	23.6	13.4	11.7	15.4	22.8	20.6	25.1
	45-54	7.6	6.5	8.9	28.1	26.1	30.3	23.2	21.3	25.3	13.6	12.1	15.3	23.4	21.4	25.6
	55-64	6.4	5.4	7.6	32.0	30.1	34.1	26.1	24.3	28.1	11.7	10.4	13.1	16.8	15.3	18.5
	65–74	6.9	5.9	8.1	36.7	34.7	38.8	30.1	28.2	32.1	9.6	8.4	10.8	8.4	7.3	9.7
	75–84	5.5	4.4	6.8	34.1	31.7	36.7	28.8	26.5	31.2	9.8	8.5	11.4	7.5	6.1	9.1
	85+	4.1	2.7	6.2	30.4	26.1	35.1	23.1	19.4	27.3	12.3	9.4	16.0	9.7	7.2	12.9
	Victoria	7.1	6.4	7.8	28.9	27.5	30.2	25.0	23.7	26.4	13.2	12.1	14.4	20.3	19.0	21.6

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* Estimate has a RSE 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 5.27: Proportion (%) of adult population sitting on an average weekday, by duration, age group and sex, Victoria, 2014 (continued)

l ime s	pent sitting oi	n an averag	je weeko	day during	preceding	g week			
· 2 to < 4	4 hours/day	4 to < 6	hours/de	ay 6 tc	s < 8 hours	s/day	8+ h	ours/do	Ŋ
%	95% CI	%	95% CI	%	95%	° CI	%	95%	Ū
Л	LL UL		ر ۲	Л	Н	Ы		Н	Ъ
3.4 20.9	17.3 25.1	29.9	5.8 3	4.4 17.8	14.4	21.7	24.9	21.1	29.1
7.9 25.9	22.5 29.6	20.9	8.0 2,	4.2 14.6	11.9	17.7	29.8	26.2	33.6
3.9 25.5	23.6 27.5	20.2	8.5 22	2.0 15.0	13.5	16.7	29.1	27.1	31.3
3.8 25.1	23.6 26.8	22.7	21.1 24	4.4 15.3	13.9	16.7	27.9	26.2	29.7
6 29.2	27.8 30.7	25.9 2	2.4.5	7.3 13.4	12.4	14.6	20.7	19.4	22.1
3.9 34.7	33.2 36.2	31.4 3	0.0	2.9 10.6	9.6	11.5	10.6	9.7	11.7
35.5 35.5	33.6 37.5	29.4	27.6 3	1.3 10.2	9.1	11.5	8.9	7.8	10.2
5.6 31.8	28.2 35.5	26.0	2.7 29	9.7 12.5	10.1	15.3	8.8	6.9	11.1
.5 27.0	26.0 28.0	24.7	3.7 2	5.7 14.4	13.6	15.3	23.8	22.7	24.9
	5.6     29.2       5.9     34.7       5.3     35.5       5.6     31.8       5.5     27.0	5.6     29.2     27.8     30.7       5.9     34.7     33.2     36.2       5.3     35.5     33.6     37.5       5.6     31.8     28.2     35.5       5.6     31.8     28.2     35.5       5.7     26.0     28.0     28.0	5.6     29.2     27.8     30.7     25.9     2       5.9     34.7     33.2     36.2     31.4     3       5.3     35.5     33.6     37.5     29.4     2       5.6     31.8     28.2     35.5     26.0     2       5.5     27.0     26.0     28.0     24.7     2	6.6     29.2     27.8     30.7     25.9     24.5     2       5.9     34.7     33.2     36.2     31.4     30.0     3       5.9     34.7     33.2     36.2     31.4     30.0     3       5.3     35.5     33.6     37.5     29.4     27.6     3       5.6     31.8     28.2     35.5     26.0     22.7     2       5.     27.0     26.0     28.0     24.7     23.7     2	5.6     29.2     27.8     30.7     25.9     24.5     27.3     13.4       5.9     34.7     33.2     36.2     31.4     30.0     32.9     10.6       5.3     35.5     33.6     37.5     29.4     27.6     31.3     10.2       5.6     31.8     28.2     29.4     27.6     31.3     10.2       5.6     31.8     28.2     25.5     26.0     22.7     29.7     12.5       5. <b>27.0 26.0 28.0 24.7 23.7 25.7 14.4</b>	6.6         29.2         27.8         30.7         25.9         24.5         27.3         13.4         12.4           6.9         34.7         33.2         36.2         31.4         30.0         32.9         10.6         9.6           6.3         35.5         33.6         37.5         29.4         27.6         31.3         10.2         9.6           5.3         35.5         33.6         37.5         29.4         27.6         31.3         10.2         9.1           5.6         31.8         27.6         27.7         29.7         10.2         9.1           5.6         28.0         28.0         24.7         28.7         10.2         10.1           5.7         26.0         28.0         24.7         28.7         14.4         13.6	6.6         29.2         27.8         30.7         25.9         24.5         27.3         13.4         12.4         14.6           6.9         34.7         33.2         36.2         31.4         30.0         32.9         10.6         9.6         11.5           6.3         35.5         33.6         37.5         29.4         27.6         31.3         10.2         9.1         11.5           5.6         31.8         27.5         29.4         27.6         31.3         10.2         9.1         11.5           5.6         31.8         28.5         26.0         22.7         29.7         12.5         10.1         15.3           5.7 <b>27.0 28.0 24.7 23.7 25.7</b> 14.4         13.6         15.3	6.6         29.2         27.8         30.7         25.9         24.5         27.3         13.4         12.4         14.6         20.7           6.9         34.7         33.2         36.2         31.4         30.0         32.9         10.6         9.6         11.5         10.6           6.3         35.5         33.6         37.5         29.4         27.6         31.3         10.2         9.1         11.5         10.6           6.6         31.8         27.6         31.3         10.2         9.1         11.5         8.9           5.6         31.8         27.6         27.7         29.7         10.2         9.1         15.3         8.9           5.7         26.0         22.7         29.7         14.4         15.3         8.9           5.7         26.0         28.7         28.7         14.4         15.6         13.8         8.9	6.6         29.2         27.8         30.7         25.9         24.5         27.3         13.4         12.4         14.6         20.7         19.4           6.9         34.7         33.2         36.2         31.4         30.0         32.9         10.6         9.6         11.5         10.6         9.7         19.4           6.3         35.5         33.6         37.5         29.4         27.6         31.3         10.2         9.1         11.5         8.9         7.8           5.6         31.5         29.4         27.6         31.3         10.2         9.1         11.5         8.9         7.8           5.6         31.8         28.5         26.0         22.7         29.7         10.2         11.5         8.9         6.9           5.7         28.0         28.0         28.7         28.7         14.4         15.6         15.3         23.8         5.7

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

Estimate has a RSE 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 5.28 shows the time spent sitting on an average weekday during the preceding week, by duration, departmental region and sex. A significantly higher proportion of men and women who lived in the metropolitan regions spent eight hours or more sitting on an average weekday during the preceding week compared with their rural counterparts. A significantly lower proportion of men who lived in Hume Region spent eight hours or more sitting on an average weekday during the preceding week compared with all Victorian men. A significantly lower proportion of women who lived in Barwon-South Western Region, Gippsland Region and Loddon Mallee Region spent eight hours or more sitting on an average weekday during the preceding week compared with all Victorian women.

Table 5.28: Proportion (%) of adult population sitting on an average weekday, by duration, Department of Health and Human Services region and sex, Victoria, 2014

Time spent sitting on an average weekday during preceding week

	< 2 h	ours/o	day	2 to <	4 hours	s/day	4 to <	6 hour:	s/day	6 to <	8 hours	s/day	8+ 1	ours/d	ay
	%	95%	CI	%	95%	CI	%	95%	C	%	95%	Ū	%	95%	Ū
Region		Н	٦L		Η	Ы		Н	Ъ		Η	Ъ		Н	Ч
Males (18+ years)															
Eastern Metropolitan	3.6*	2.2	5.9	19.6	16.6	22.9	26.6	22.8	30.7	16.6	13.5	20.3	31.9	28.0	36.1
North & West Metropolitan	4.7	3.7	5.9	24.0	21.4	26.8	24.5	22.0	27.2	16.6	14.4	19.0	27.6	25.1	30.4
Southern Metropolitan	3.7	2.6	5.3	26.9	23.5	30.7	21.3	18.3	24.6	14.1	11.6	16.9	31.4	27.6	35.4
All metropolitan regions	4.1	3.4	4.9	24.0	22.2	25.9	24.0	22.2	25.8	15.8	14.3	17.4	29.8	27.9	31.8
Barwon-South Western	4.6	3.3	6.5	27.8	22.0	34.5	25.7	19.7	32.8	19.7	13.5	27.7	19.9	14.7	26.2
Gippsland	9.1	5.5	14.6	25.8	21.4	30.6	27.0	21.5	33.3	11.4	8.3	15.4	21.1	15.3	28.4
Grampians	6.1	3.7	9.7	32.7	26.9	39.0	23.2	18.9	28.2	12.3	8.6	17.4	23.2	18.0	29.4
Hume	10.2*	6.1	16.3	27.1	23.0	31.6	27.7	22.7	33.3	14.4	11.1	18.5	17.6	14.2	21.5
Loddon Mallee	6.7	4.9	9.1	28.7	22.8	35.4	24.7	20.4	29.6	16.8	12.0	22.9	19.9	14.6	26.6
All rural regions	7.0	5.7	8.6	28.3	25.7	31.1	25.7	23.2	28.5	15.5	13.1	18.3	20.2	17.7	22.9
Victoria	4.7	4.1	5.5	25.0	23.5	26.6	24.5	23.0	26.0	15.7	14.4	17.1	27.5	25.9	29.2
Females (18+ years)															
Eastern Metropolitan	6.8	5.1	0.6	25.1	22.1	28.3	25.1	21.5	29.0	13.1	10.8	15.9	24.4	20.9	28.3
North & West Metropolitan	7.4	6.2	8.7	28.1	25.9	30.4	24.2	22.0	26.5	13.8	12.0	15.9	20.2	18.1	22.6
Southern Metropolitan	7.6	6.2	9.2	28.2	25.4	31.2	24.8	22.2	27.6	12.9	10.2	16.2	22.1	19.3	25.2
All metropolitan regions	7.2	6.4	8.1	27.5	25.9	29.0	24.7	23.1	26.3	13.3	12.0	14.8	21.9	20.3	23.5
Barwon-South Western	5.3	3.7	7.5	38.2	30.8	46.3	25.1	20.4	30.6	12.2	8.3	17.6	14.4	10.9	18.7
Gippsland	8.7	6.5	11.6	31.3	26.6	36.3	27.0	22.1	32.4	11.8	9.1	15.1	14.4	10.9	18.8
Grampians	6.1	4.7	7.8	33.2	29.3	37.3	25.4	20.8	30.6	14.6	10.0	20.7	15.9	11.3	21.8
Hume	7.3	5.6	9.3	32.0	28.3	35.9	26.6	23.1	30.4	13.0	10.5	16.0	15.8	13.0	19.0
Loddon Mallee	6.1	4.8	7.6	34.4	29.2	40.0	25.6	21.7	29.8	12.5	9.5	16.3	13.4	10.6	16.7
All rural regions	6.6	5.8	7.6	34.0	31.1	36.9	26.0	23.8	28.2	12.8	11.0	14.9	14.7	13.0	16.5
Victoria	7,1	6.4	7.8	28.9	27.5	30.2	25.0	23.7	26.4	13.2	12.1	14.4	20.3	19.0	21.6

Table 5.28: Proportion (%) of adult population sitting on an average weekday, by duration, Department of Health and Human Services region and sex, Victoria, 2014 (continued)

				lime sp	ent sitt	ing on (	an aver	age we	ekday c	luring p	recedi	ng week			
	< 2	ours/c	łay	2 to <	4 hour	s/day	4 to <	6 hour	s/day	6 to <	8 hour	s/day	8+ 1	ours/d	ay
	%	95%	Ū	%	95%	CI	%	95%	C	%	95%	C	%	95%	Ū
Region		Н	Ы		3	Ъ		Н	Ы		3	Ч		Н	٦L
People (18+ years)															
Eastern Metropolitan	5.2	4.0	6.7	22.4	20.2	24.7	25.9	23.2	28.7	14.8	12.8	17,1	28.1	25.4	30.9
North & West Metropolitan	6.1	5.3	7.0	26.0	24.3	27.8	24.3	22.6	26.1	15.2	13.7	16.7	23.8	22.2	25.6
Southern Metropolitan	5.7	4.7	6.8	27.6	25.3	30.0	23.0	21.0	25.1	13.5	11.6	15.6	26.6	24.2	29.2
All metropolitan regions	5.7	5.1	6.3	25.8	24.6	27.0	24.3	23.1	25.5	14.5	13.5	15.6	25.7	24.5	27.0
Barwon-South Western	4.9	3.9	6.3	33.0	27.9	38.5	25.4	21.5	29.8	15.9	12.0	20.8	17.1	13.9	20.9
Gippsland	9.2	6.9	12.2	28.3	25.1	31.7	26.9	23.1	31.0	11.4	9.4	13.7	17.8	14.1	22.2
Grampians	6.0	4.6	7.9	33.0	29.4	36.9	24.3	21.1	27.8	13.4	10.3	17.3	19.4	15.9	23.5
Hume	8. 8	6.3	12.0	29.5	26.6	32.6	27.2	23.9	30.7	13.7	11.5	16.2	16.6	14.3	19.1
Loddon Mallee	6.3	5.2	7.7	31.5	27.4	35.9	25.3	22.3	28.4	14.8	11.7	18.5	16.7	13.4	20.5
All rural regions	6.9	6.0	7.8	31.1	29.2	33.2	25.8	24.1	27.6	14.1	12.6	15.8	17.4	15.9	19.1
Victoria	5.9	5.5	6.5	27.0	26.0	28.0	24.7	23.7	25.7	14.4	13.6	15.3	23.8	22.7	24.9

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

# Time spent sitting on an average weekday by departmental region and local government area

IMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARF ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDAF BANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMI1 A FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI **BIN EAST GIPPS** DARE GREATER DANDLEONG REATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON I**ORSHAM HUME INDIGO K**INGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MAN MARIBYRNONG MAROOLIDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE EY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NII IK NORTHERN GRAMPIANS CORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT LUM SLAND STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOG INGTON WEST WILMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGE IAMBIACK ALPINE ARARAT BALLARAT BANY WASS COAST BAW BAW BAYSIDE BENALLA BOROONI SEY CENTRA RIMBANK BULOKE CAMPASPE CARDIN BIN EAST GIPPSLAND FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI GREATER DANDENONG GREATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON IORSHAM HUME INDIGO KINGSTON KNOX LALROBE LODDON MACEDON RANGES MANNINGHAM MAN MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MORA MONASH MOONE DAR EY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEX INDER MOUNE IK NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN O NDER MONNE MURRINDINDI NI LUM **RAMPIANS SOUT** SLAND STONMINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WAR INGTON WEST WIMMERA WHITEHOUSE WHITLESEA WODONGA WANDHAM YARRA YARRA MABIACK ALPINE ARARAT BALLARATBAN WE BASS COAST BAW BAW BAYSIDE BENALLA E BRIMBANK BULCKE CAMPASPE CARDINA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY COR BRIMBANK BULOKE CAMPASPE CARDINA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANG BIN EAST GIPPSLAND FRANKSTON GANNAWARKA GLENERA GLENELG GOLDEN PLAINS GREAT GREATER DANDENONG GREATER GELOMOLGREATER SHEPPADTON. UPDNIC GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON ROBE LODDON MACEDON F ORSHAM HUME INDIGO KINGSTON ANGES MANNINGHAM MAN RIBYRNONG MAROONDAH MEL TON MILDURA MITC ELL MOIRA MONASH MORELAND MORN **JULA MOUNT ALE** NDER MOYNE MURRINDINDI NI VALLEY N **NRA** LUMBIK NORTHERN GR MPIANS POI **LEES QUEENSC** OGIE SURF COAS WONG WANGARATTA WARRNAMBOO GIPPSLAND STONNINGTON CONGA WYNDHAM YARRA YARRA RANGE WELLINGTON WEST WIMMERA HITEHORSE BAW BAW BAYSIDE BENALLA BOROONI

Metropolitan Region. The proportion of adults who spent eight hours or more sitting on an average weekday during the preceding Table 5.29 shows the time spent sitting on an average weekday during the preceding week, by duration and LGA, in Eastern week was significantly higher among those who lived in the LGA of Whitehorse (C) compared with all Victorian adults. Table 5.29: Proportion (%) of adult population sitting on an average weekday, by duration and LGA, Eastern Metropolitan Region, Victoria, 2014

				Time sp	ent sit	ting on o	an avera	age we	ekday di	uring pr	ecedin	g week			
	< 2 h	ours/c	lay	2 to <	4 hours	s/day	4 to <	6 hour	s/day	6 to <	8 hours	s/day	8+	ours/d	ay
	%	95%	G	%	95%	G	%	95%	C	%	95%	C	%	95%	Ū
LGA		Н	Ч		Н	Ч		Н	Ы		Н	Ы		Н	Ъ
Boroondara (C)	2.6*	1.5	4.4	23.5	18.2	29.9	26.8	20.6	34.1	14.0	9.7	19.8	30.2	23.6	37.6
Knox (C)	6.4*	3.6	11.0	25.9	20.1	32.8	23.9	17.0	32.6	13.9	9.3	20.3	25.7	19.2	33.5
Manningham (C)	5.3*	3.2	8.6	21.0	16.0	26.9	27.8	20.9	35.9	14.1	9.2	21.0	25.9	20.0	32.9
Maroondah (C)	*			19.7	15.9	24.1	24.7	18.6	32.1	16.9	10.5	26.1	27.8	20.2	37.1
Monash (C)	7.0*	4.1	11.6	19.2	15.3	23.8	24.7	19.4	30.8	16.7	12.2	22.5	29.6	23.9	36.0
Whitehorse (C)	3.9*	2.1	6.9	22.5	17.3	28.6	23.3	18.0	29.7	12.8	9.2	17.6	35.2	27.9	43.3
Yarra Ranges (S)	4.6*	2.6	8.1	25.6	18.3	34.7	30.9	22.7	40.5	15.7	10.4	23.0	19.3	14.8	24.8
Eastern Metropolitan Region	5.2	4.0	6.7	22.4	20.2	24.7	25.9	23.2	28.7	14.8	12.8	17.1	28.1	25.4	30.9
Victoria	5.9	5.5	6.5	27.0	26.0	28.0	24.7	23.7	25.7	14.4	13.6	15.3	23.8	22.7	24.9

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Metropolitan Region. The proportion of adults who spent eight hours or more sitting on an average weekday during the preceding Table 5.30 shows the time spent sitting on an average weekday during the preceding week, by duration and LGA, in North & West week was significantly higher among those who lived in the LGA of Melbourne (C) compared with all Victorian adults. Table 5.30: Proportion (%) of adult population sitting on an average weekday, by duration and LGA, North & West Metropolitan Region, Victoria, 2014

				Time sp	ent sit	ting on o	an avera	ade We	ekdav du	urina pr	ecedin	a week			
	C >	hours/c	>0	2 to <	4 hours		4 to <		vdav	6 to 1	R hours		4 *	p/silio	Ş
	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū
LGA		Ξ	Ч		Η	Ч		Н	٦C		Н	Ч		Н	Ъ
Banyule (C)	3.9*	2.1	7.3	28.4	21.4	36.5	25.3	19.2	32.5	17.1	11.8	24.2	21.8	16.2	28.6
Brimbank (C)	6.1	4.2	8.8	31.0	25.6	37.0	19.9	15.3	25.6	11.8	8.4	16.3	25.8	20.5	31.9
Darebin (C)	4.2	2.6	6.6	28.2	21.8	35.6	27.0	20.3	34.9	18.8	13.1	26.3	18.5	13.8	24.5
Hobsons Bay (C)	8.6*	4.2	17.0	23.5	17.5	30.6	22.9	16.4	31.1	14.9	10.4	20.9	25.8	18.4	34.9
Hume (C)	6.8	4.3	10.7	29.4	24.6	34.7	24.1	19.0	30.1	12.4	8.5	17.6	23.0	17.6	29.3
Maribyrnong (C)	10.5	6.4	16.7	22.0	16.8	28.2	24.4	18.5	31.3	12.5	8.0	19.1	24.3	18.9	30.6
Melbourne (C)	1.3*	0.7	2.4	22.3	16.5	29.4	23.2	17.8	29.7	17.4	12.7	23.4	32.4	26.2	39.2
Melton (S)	9.4*	5.4	15.8	22.9	18.1	28.5	27.6	21.9	34.1	15.1	9.7	22.9	19.0	15.0	23.8
Moonee Valley (C)	3.6*	2.2	5.9	19.2	15.1	24.0	30.3	24.1	37.3	14.8	10.7	20.0	28.3	22.1	35.5
Moreland (C)	7.0*	4.1	11.5	19.2	15.0	24.1	26.1	20.1	33.3	18.0	13.0	24.2	24.3	18.1	31.9
Nillumbik (S)	4.1*	2.4	6.8	29.6	23.5	36.4	26.8	21.0	33.4	13.0	8.5	19.3	22.9	17.0	30.1
Whittlesea (C)	7.9	5.2	11.7	28.4	23.4	34.0	21.2	17.1	26.0	17.6	13.3	23.0	20.2	15.9	25.3
Wyndham (C)	7.6	5.1	11.1	26.6	21.6	32.3	25.2	20.0	31.1	10.8	7.6	14.9	24.2	19.3	29.9
Yarra (C)	5.3* 0	2.7	10.3	26.5	16.9	39.0	22.0	15.3	30.6	18.3	11.5	27.7	24.9	19.5	31.3
North & West Metropolitan Region	6.1	5.3	7.0	26.0	24.3	27.8	24.3	22.6	26.1	15.2	13.7	16.7	23.8	22.2	25.6
Victoria	5.9	5.5	6.5	27.0	26.0	28.0	24.7	23.7	25.7	14.4	13.6	15.3	23.8	22.7	24.9

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Metropolitan Region. The proportion of adults who spent eight hours or more sitting on an average weekday during the preceding Table 5.31 shows the time spent sitting on an average weekday during the preceding week, by duration and LGA, in Southern week was similar across all LGAs in Southern Metropolitan Region compared with all Victorian adults. Table 5.31: Proportion (%) of adult population sitting on an average weekday, by duration and LGA, Southern Metropolitan Region, Victoria, 2014

				Time sp	vent sit	ting on q	an aver	age we	ekday d	uring pr	recedin	ng week			
	< 2	nours/d	ay	2 to <	4 hours	s/day	4 to <	6 hour	s/day	6 to <	8 hour	s/day	8+ }	ours/d	ay
	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū
LGA		Н	Ъ		Ч	Ъ		Н	Ч		Ч	Ъ			Ы
Bayside (C)	2.8*	1.3	6.2	20.4	15.5	26.3	26.3	19.2	34.9	14.1	9.1	21.3	32.5	24.3	41.8
Cardinia (S)	6.6*	3.9	10.8	29.3	23.8	35.3	28.9	23.1	35.4	11.6	8.1	16.3	19.3	14.3	25.4
Casey (C)	6.6	4.4	9.7	26.7	21.4	32.9	26.6	21.2	32.8	10.6	7.7	14.4	26.5	20.6	33.3
Frankston (C)	6.8	4.1	11.0	29.7	24.0	36.0	23.3	18.1	29.4	10.6	7.4	14.9	24.4	18.9	31.0
Glen Eira (C)	3.5*	1.9	6.6	26.9	21.1	33.6	19.3	14.8	24.8	17.4	11.2	26.0	30.4	23.5	38.4
Greater Dandenong (C)	8.3	5.3	12.7	30.3	23.9	37.5	21.8	16.8	28.0	9.6	6.3	14.3	26.7	20.5	33.9
Kingston (C)	5.5*	2.5	11.8	28.6	22.3	35.8	20.2	13.9	28.4	17.6	11.6	25.7	22.6	16.3	30.6
Mornington Peninsula (S)	8.7*	5.0	14.7	29.9	22.9	38.0	23.6	17.4	31.2	9.7*	5.9	15.7	24.7	17.0	34.5
Port Phillip (C)	3.9	2.5	6.0	24.7	16.8	34.7	18.7	13.9	24.6	20.2	13.2	29.6	30.6	23.4	39.0
Stonnington (C)	4.5*	2.4	8.2	23.5	16.7	31.9	22.1	16.8	28.6	16.3	11.1	23.3	30.8	23.7	39.0
Southern Metropolitan Region	5.7	4.7	<u>6</u> .8	27.6	25.3	30.0	23.0	21.0	25.1	13.5	11.6	15.6	26.6	24.2	29.2
Victoria	5.9	5.5	6.5	27.0	26.0	28.0	24.7	23.7	25.7	14.4	13.6	15.3	23.8	22.7	24.9

Data were age-standardised to the 2011 Victorian population. LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

 $^{st}$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

was significantly lower among those who lived in the LGAs of Corangamite (S), Southern Grampians (S) and Surf Coast (S) compared Western Region. The proportion of adults who spent eight hours or more sitting on an average weekday during the preceding week Table 5.32 shows the time spent sitting on an average weekday during the preceding week, by duration and LGA, in Barwon-South with all Victorian adults.

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				Time sp	pent sit	ting on d	an aver	age we	ekday d	uring pr	ecedin	g week			
	< 2	hours/d	day	2 to <	4 hours	s/day	4 to <	6 hour	s/day	6 to <	8 hour	s/day	8+ }	ours/d	ay
	%	95%	°CI	%	95%	Ū	%	95%	C	%	95%	Ū	%	95%	Ū
LGA		Ξ	Ъ		Н	Ы		Н	Ы		Н	Ч		Н	Ъ
Colac-Otway (S)	12.5*	6.4	23.0	24.5	19.0	31.0	25.4	18.4	34.0	6.9*	3.6	12.7	27.4	18.2	39.0
Corangamite (S)	8.5*	4.0	17.2	36.1	27.5	45.7	27.8	21.3	35.4	10.4*	5.8	18.0	10.2	6.7	15.2
Glenelg (S)	5.0*	2.8	8.7	29.7	23.3	37.0	25.7	19.6	32.8	16.4	11.2	23.2	16.8	11.1	24.7
Greater Geelong (C)	2.7*	1.6	4.5	34.9	27.1	43.5	26.2	20.2	33.3	15.9	10.2	23.8	17.4	12.6	23.4
Moyne (S)	5.9	3.7	9.2	36.4	28.0	45.8	20.4	15.7	26.1	14.2	8.6	22.4	19.5	13.0	28.0
Queenscliffe (B)	4.5*	2.5	8.0	33.3	22.3	46.6	31.3	22.3	41.9	5.6*	3.1	9.7	23.2*	13.5	36.9
Southern Grampians (S)	8.9*	4.1	18.3	28.1	22.7	34.2	21.3	16.0	27.9	20.9	12.5	32.8	14.5	9.3	21.8
Surf Coast (S)	12.4*	7.2	20.4	28.7	22.1	36.3	24.0	18.0	31.3	19.3	12.1	29.4	13.1	8.5	19.5
Warrnambool (C)	5.1	3.1	8.2	33.1	25.8	41.3	19.5	15.5	24.1	16.7	10.2	26.1	19.5	13.7	26.9
Barwon-South Western Region	4.9	3.9	6.3	33.0	27.9	38.5	25.4	21.5	29.8	15.9	12.0	20.8	17.1	13.9	20.9
Victoria	5.9	5.5	6.5	27.0	26.0	28.0	24.7	23.7	25.7	14.4	13.6	15.3	23.8	22.7	24.9

Data were age-standardised to the 2011 Victorian population. LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 5.33 shows the time spent sitting on an average weekday during the preceding week, by duration and LGA, in Gippsland Region. The proportion of adults who spent eight hours or more sitting on an average weekday during the preceding week was significantly lower among those who lived in the LGAs of Baw Baw (S) and South Gippsland (S) compared with all Victorian adults.

Table 5.33: Proportion (%) of adult population sitting on an average weekday, by duration and LGA, Gippsland Region, Victoria, 2014

				Time sp	ent sit	ting on d	un averc	ige we	ekday dı	uring pr	ecedin	g week			
	< 2 h	ours/d	day	2 to <	4 hours	s/day	4 to <	6 hours	s/day	6 to <	8 hours	s/day	8+ h	ours/d	ay
	%	95%	°CI	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū
LGA		Н	Ъ		Н	Ы		Н	Ы		Н	Ъ		Н	Ч
Bass Coast (S)	12.1*	5.2	26.0	29.0	22.7	36.1	27.0	18.7	37.3	9.9	6.1	15.5	18.7*	10.5	31.1
Baw Baw (S)	7.1*	3.8	13.2	24.7	18.2	32.5	26.7	21.2	33.0	12.9	8.4	19.2	15.4	10.3	22.4
East Gippsland (S)	7.8*	3.7	15.6	33.2	24.8	42.8	28.7	20.0	39.5	7.4	5.1	10.5	18.4*	10.6	30.1
Latrobe (C)	11.2	7.0	17.4	24.7	18.8	31.8	26.0	18.2	35.6	10.6	6.8	16.0	20.2	12.6	30.9
South Gippsland (S)	8.2	5.0	13.2	36.5	28.6	45.2	22.9	16.9	30.3	15.5	9.7	23.7	14.1	9.3	20.8
Wellington (S)	7.2	4.7	11.0	29.3	23.8	35.5	30.9	24.2	38.6	13.1	9.1	18.5	16.0	10.2	24.1
Gippsland Region	9.2	6.9	12.2	28.3	25.1	31.7	26.9	23.1	31.0	11.4	9.4	13.7	17.8	14.1	22.2
Victoria	5.9	5.5	6.5	27.0	26.0	28.0	24.7	23.7	25.7	14.4	13.6	15.3	23.8	22.7	24.9

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.
significantly lower among those who lived in the LGAs of Hepburn (S) and Northern Grmpians (S) compared with all Victorian Adults. Table 5.34 shows the time spent sitting on an average weekday during the preceding week, by duration and LGA, in Grampians Region. The proportion of adults who spent eight hours or more sitting on an average weekday during the preceding week was

Table 5.34: Proportion (%) of adult population sitting on an average weekday, by duration and LGA, Grampians Region, Victoria, 2014

				Time sp	ent sit	ting on q	an averg	age we	ekday di	uring pr	ecedin	g week			
	< 2	nours/o	ay	2 to <	4 hours	s/day	4 to <	6 hours	s/day	6 to <	8 hours	s/day	8+ 1	ours/d	ay
	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū
LGA		Н	Ы		Н	Ы		Η	Ы		Н	Ы		Н	Ы
Ararat (RC)	*			31.0	23.8	39.3	24.2	17.5	32.5	12.1	8.5	16.9	23.9	16.3	33.4
Ballarat (C)	4.0	2.5	6.3	33.3	26.8	40.5	22.2	16.8	28.8	15.6	10.5	22.6	21.7	15.6	29.4
Golden Plains (S)	7.3*	4.2	12.3	32.2	25.4	39.7	30.0	23.0	38.2	10.3	6.3	16.5	17.7	12.4	24.6
Hepburn (S)	4.0*	2.4	6.7	33.6	24.9	43.5	27.8	21.3	35.4	17.7*	9.1	31.7	10.6	6.9	15.9
Hindmarsh (S)	5.6*	3.4	9.4	34.5	26.6	43.4	23.4	17.1	31.0	11.9	7.5	18.4	21.0	13.7	30.8
Horsham (RC)	14.4*	5.7	31.9	30.4	25.3	36.1	25.0	16.9	35.3	12.2*	6.5	22.0	15.7	9.6	24.7
Moorabool (S)	8.6*	5.0	14.5	33.3	26.7	40.5	23.1	17.7	29.5	7.6	5.1	11.1	20.8	15.0	28.1
Northern Grampians (S)	12.4*	7.2	20.6	34.0	26.1	43.0	30.5	22.2	40.2	9.2	5.7	14.4	10.8*	5.8	19.3
Pyrenees (S)	6.7*	3.7	11.8	31.0	23.7	39.4	20.3	13.3	29.6	20.6	12.9	31.0	16.7*	10.0	26.6
West Wimmera (S)	4.5	2.9	ĽŹ	27.7	21.7	34.6	31.2	23.5	40.1	11.4	7.8	16.3	21.4	12.8	33.5
Yarriambiack (S)	6.1*	3.6	10.1	31.4	24.4	39.3	30.8	22.3	40.9	7.4	5.1	10.4	19.3*	11.0	31.5
Grampians Region	6.0	4.6	7.9	33.0	29.4	36.9	24.3	21.1	27.8	13.4	10.3	17.3	19.4	15.9	23.5
Victoria	5.9	5.5	6.5	27.0	26.0	28.0	24.7	23.7	25.7	14.4	13.6	15.3	23.8	22.7	24.9

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 5.35 shows the time spent sitting on an average weekday during the preceding week, by duration and LGA, in Hume Region. The among those who lived in the LGAs of Alpine (S), Mansfield (S), Mitchell (S), Moira (S), Strathbogie (S), Towong (S), Wangaratta (RC) and proportion of adults who spent eight hours or more sitting on an average weekday during the preceding week was significantly lower Wodonga (RC) compared with all Victorian adults.

				Time sp	ent sitt	ting on o	in avero	age wee	ekday du	uring pr	ecedin	g week			
	< 2 h	ours/o	ay	2 to < 4	4 hours	s/day	4 to <	6 hours	s/day	6 to <	8 hours	s/day	8+ h	ours/d	ay
	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū
LGA		Н	Ы		Ę	Ч		Н	Ч		Ę	Ъ		1	Ч
Alpine (S)	3.9*	2.3	6.5	45.7	37.3	54.3	15.0	11.0	20.1	17.2*	9.3	29.5	14.8	9.8	21.6
Benalla (RC)	9.8*	5.1	18.0	22.1	16.0	29.7	32.3	24.6	40.9	9.6*	5.6	16.0	21.5	14.1	31.5
Greater Shepparton (C)	11.1*	5.4	21.3	26.1	20.0	33.3	22.1	17.1	28.1	15.4	10.2	22.7	19.8	13.9	27.5
Indigo (S)	7.8	4.9	12.3	35.4	26.3	45.8	24.9	16.8	35.2	12.6	8.1	19.2	17.4	10.9	26.7
Mansfield (S)	5.4*	2.6	11.1	32.4	22.9	43.8	22.1	15.2	30.9	26.4	16.7	39.2	10.5	6.8	15.8
Mitchell (S)	9.2*	4.6	17.6	22.7	17.7	28.5	37.0	27.4	47.6	11.7	7,1	18.6	15.3	10.9	21.2
Moira (S)	6.5*	3.5	11.8	43.1	34.2	52.5	19.6	13.4	27.6	10.5	7.4	14.8	15.9	11.1	22.2
Murrindindi (S)	4.7*	2.5	8.6	23.5	18.2	29.6	34.0	25.1	44.0	13.9	9.3	20.3	21.2	14.2	30.3
Strathbogie (S)	7.8*	3.6	15.9	25.0	18.2	33.3	45.6	36.6	54.9	7.7	5.5	10.7	11.5	7.5	17.4
Towong (S)	6.8*	3.6	12.3	41.3	32.0	51.4	25.3	17.5	34.9	15.8	10.8	22.4	7.0	4.4	10.9
Wangaratta (RC)	8.3*	3.6	18.3	25.3	18.9	32.9	32.7	23.5	43.5	14.2	9.1	21.4	13.2	9.3	18.4
Wodonga (RC)	9.3*	5.3	15.9	32.8	26.0	40.4	24.7	19.5	30.7	13.8	9.5	19.7	15.7	10.8	22.2
Hume Region	8.8	6.3	12.0	29.5	26.6	32.6	27.2	23.9	30.7	13.7	11.5	16.2	16.6	14.3	19.1

Table 5.35: Proportion (%) of adult population sitting on an average weekday, by duration and LGA, Hume Region, Victoria, 2014

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

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23.8

15.3

13.6

14.4

25.7

23.7

24.7

28.0

26.0

27.0

6.5

5.5 2

5.9

Victoria

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

significantly lower among those who lived in the LGAs of Campaspe (S), Central Goldfields (S), Gannawarra (S), Macedon Ranges (S) Table 5.36 shows the time spent sitting on an average weekday during the preceding week, by duration and LGA, in Loddon Mallee Region. The proportion of adults who spent eight hours or more sitting on an average weekday during the preceding week was and Mildura (RC) compared with all Victorian adults.

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				Time sp	pent sit	ting on 6	an aver	age we	ekday d	uring pr	ecedin	ig week			
	< 2	hours/d	day	2 to <	4 hours	s/day	4 to <	6 hour	s/day	6 to <	8 hour	s/day	8+ 1	ours/o	ay
	%	95%	°CI	%	95%	Ū	%	95%	Ū	%	95%	Ċ	%	95%	Ū
LGA		Н	Ы		Н	Ы		Н	Ч		Н	Ы		Н	Ч
Buloke (S)	9.6*	5.4	16.3	25.5	19.0	33.4	30.9	23.6	39.3	12.3*	6.4	22.2	17.2	11.2	25.7
Campaspe (S)	7.8*	4.3	13.8	33.5	25.2	42.8	24.3	18.3	31.4	14.4*	8.6	23.0	13.7	9.4	19.4
Central Goldfields (S)	9.8*	5.0	18.4	29.1	22.5	36.6	32.2	24.1	41.5	12.5*	7.3	20.6	13.1	8.9	18.9
Gannawarra (S)	10.6	6.4	16.9	27.9	21.9	34.7	29.3	18.5	42.9	11.0	7.5	15.8	12.0*	6.6	20.8
Greater Bendigo (C)	4.7	3.0	7.3	29.2	21.9	37.8	26.5	21.0	32.8	15.7	10.9	22.3	17.5	11.3	26.2
Loddon (S)	7.0*	3.8	12.7	28.1	22.0	35.0	25.6	16.3	37.8	12.6*	7.2	21.2	14.4*	8.1	24.5
Macedon Ranges (S)	5.4*	3.3	8.7	38.6	27.1	51.5	19.5	15.7	24.0	16.2*	7.3	32.3	14.7	10.8	19.7
Mildura (RC)	6.4	4.2	9.5	29.2	20.9	39.3	29.4	21.7	38.5	14.9*	8.8	24.2	15.6	10.6	22.4
Mount Alexander (S)	5.2	3.4	7.9	26.4	20.2	33.7	18.0	13.4	23.6	16.8*	9.2	28.9	30.4	20.0	43.2
Swan Hill (RC)	11.0*	5.9	19.8	35.7	26.9	45.6	22.3	16.1	30.0	11.2*	6.4	19.1	16.1*	9.4	26.4
Loddon Mallee Region	6.3	5.2	7.7	31.5	27.4	35.9	25.3	22.3	28.4	14.8	11.7	18.5	16.7	13.4	20.5
Victoria	5.9	5.5	6.5	27.0	26.0	28.0	24.7	23.7	25.7	14.4	13.6	15.3	23.8	22.7	24.9

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.
\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.



## Time spent sitting on a weekend day

Respondents were asked about the time they spent sitting while at work, while at home, while doing study and during leisure time. This included time spent sitting at a desk, in the car, reading or sitting or lying down to watch television.

Table 5.37 shows the time spent sitting on a weekend day during the preceding week, by duration, age group and sex. A significantly higher proportion of men spent eight hours or more sitting on a weekend day during the preceding week compared with the proportion of women. A significantly higher proportion of men and women 18–24 years of age spent eight hours or more sitting compared with all Victorian men and women, respectively. Table 5.37: Proportion (%) of adult population sitting on an average weekend day, by duration, age group and sex, Victoria, 2014

	'day	% CI	Ы	28.3	21.2	10.8	12.0	13.3	11.1	11.3	11.0	14.1	22.7	7.3	7.9	7.6	9.1	1:7	8.7	13.1	9.0
	hours/	95	Ц	16.8	12.2	6.9	8.4	9.9	8.3	7.5	4.9	11.5	12.7	3.4	5.3	5.3	6.7	5.1	5.8	7.3	71
	8+	%		22.0	16.2	8.6	10.0	11.5	9.6	9.2	7.4	12.8	17.2	5.0	6.5	6.3	7.8	6.0	7.1	9.8	8.0
ing weel	s/day	° CI	Ъ	23.1	18.5	12.4	13.5	12.2	11.8	11.7	18.6	13.5	18.5	15.1	8.6	10.4	11.3	10.7	10.5	16.5	11.1
oreced	8 hour	95%	Η	12.4	9.5	8.0	9.6	9.2	8.9	8.0	10.1	10.9	9.7	7.6	5.9	7.7	8.7	8.2	7.7	9.8	8.9
during	6 to <	%		17.1	13.4	10.0	11.4	10.6	10.2	9.7	13.8	12.1	13.5	10.8	7.1	8.0	9.9	9.4	9.0	12.8	10.0
cend day	s/day	% CI	Ъ	30.4	39.2	34.7	34.0	31.6	33.3	34.2	35.6	31.9	35.6	33.8	28.2	30.2	29.0	30.4	29.3	27.0	29.1
je week	6 hour	95%	Н	19.4	27.9	27.8	28.2	27.1	28.9	28.4	23.5	28.7	23.4	24.6	23.5	25.9	25.2	26.6	24.6	19.2	26.3
in averaç	4 to <	%		24.5	33.3	31.2	31.0	29.3	31.1	31.2	29.2	30.3	29.1	29.0	25.8	28.0	27.0	28.5	26.9	22.8	27.7
ing on c	s/day	C	Ы	31.7	36.6	40.8	39.6	40.2	38.5	39.1	38.4	35.6	36.2	45.8	45.1	44.1	41.7	39.4	36.3	31.8	39.9
ent sitt	4 hours	95%	Н	20.4	25.2	33.9	33.8	35.4	33.9	33.0	26.6	32.3	24.3	36.1	39.8	39.4	37.5	35.3	31.2	23.0	36.9
Time sp	2 to <	%		25.7	30.6	37.3	36.6	37.8	36.1	36.0	32.3	34.0	29.9	40.9	42.4	41.7	39.6	37.3	33.7	27.2	38.3
	day	° CI	Ъ	11.9	7.8	13.6	9.2	7.8	8.8	7.2	6.9	8.2	11.9	13.9	15.9	11.4	9.6	10.0	8.1	7.7	10.7
	hours/	95%	Н	4.8	2.9	9.0	6.1	5.5	6.2	4.5	2.3	6.4	4.5	8.3	12.2	8.6	7:1	7.5	5.5	3.7	8.9
	< 2	%		7.6	4.8*	11.1	7.5	6.5	7.4	5.7	4.0*	7.3	7.3*	10.8	13.9	9.9	8.3	8.7	6.7	5.4	9.7
		Age	(years)	18–24	25–34	35-44	45-54	55-64	65-74	75-84	85+	Victoria	18–24	25–34	35-44	45-54	55-64	65–74	75–84	85+	Victoria
				Males									Females								

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* Estimate has a RSE 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 5.37: Proportion (%) of adult population sitting on an average weekend day, by duration, age group and sex, Victoria, 2014 (continued)

				F	ime spe	ent sitti	ng on an	averag	e week	end day	during p	recedir	ng week			
		< 2 h	ours/d	ay	2 to < 4	4 hours	/day	4 to <	6 hours	/day	6 to <	3 hours	/day	8+ he	onrs/do	≿
	Age	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū
	(years)		Н	٥L		Н	Ы		Н	Ы		Н	٥L		Н	Ч
Persons	18–24	7.5	5.3	10.4	27.7	23.8	32.0	26.7	22.8	31.1	15.3	12.2	19.1	19.6	16.1	23.7
	25-34	7.8	6.2	9.8	35.7	32.1	39.6	31.2	27.6	34.9	12.1	9.5	15.3	10.6	8.4	13.4
	35-44	12.5	11.1	14.1	39.9	37.7	42.1	28.4	26.4	30.5	8.5	7.3	9.9	7.6	6.5	8.8
	45-54	8.7	7.7	9.8	39.2	37.4	41.1	29.5	27.7	31.3	10.1	0.6	11.4	8.1	7:1	9.3
	55-64	8.7	6.6	8.3	38.7	37.1	40.3	28.2	26.7	29.6	10.3	9.3	11.3	9.6	8.6	10.7
	65-74	8.7	7.3	9.0	36.8	35.3	38.3	29.7	28.2	31.1	9.8	8.9	10.8	7.6	6.8	8.5
	75–84	8.7	5.3	7.2	34.8	32.8	36.7	28.9	27.1	30.8	9.3	8.3	10.5	8.1	7.0	9.3
	85+	8.7	3.5	6.5	29.3	25.9	33.0	25.5	22.2	29.1	13.2	10.8	16.1	8.8	6.9	11.1
	Victoria	8.5	7.9	9.2	36.1	35.0	37.3	28.9	27.8	30.0	11.1	10.2	11.9	10.4	9.6	11.2

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

\* Estimate has a RSE 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 5.38 shows the time spent sitting on a weekend day during the preceding week, by duration, departmental region and sex. A significantly higher proportion of men who lived in the metropolitan regions spent eight hours or more sitting on an average weekend day during the preceding week compared with their rural counterparts. A significantly lower proportion of men who lived in Hume Region spent eight hours or more sitting on an average weekend day during the preceding week compared with all Victorian men. A significantly lower proportion of women who lived in Barwon-South Western Region spent eight hours or more sitting on an average weekend day during the preceding week compared with all Victorian women.

Table 5.38: Proportion (%) of adult population sitting on an average weekend day, by duration, Department of Health and Human Services region and sex, Victoria, 2014

			Tin	ne spen	t sittin	g on an	averag	e week	end day	/ during	prece	ding we	ъ К		
	< 2 h	ours/	day	2 to <	4 hour	s/day	4 to <	6 hour	s/day	6 to <	8 hour	s/day	8+ h	iours/d	ay
	%	959	° CI	%	95%	° CI	%	95%	CI	%	95%	C	%	95%	Ū
Region		Н	Ы		Н	Ы		Н	٦L		Н	٩L		Н	Ы
Males (18+ years)															
Eastern Metropolitan	5.8	3.8	8.7	33.3	29.7	37.1	31.2	27.3	35.5	12.1	9.5	15.1	14.3	11.1	18.3
North & West Metropolitan	6.7	5.5	8.1	32.8	30.1	35.6	29.4	26.9	32.0	12.9	10.8	15.4	14.2	11.9	16.8
Southern Metropolitan	6.7	5.1	8.7	34.4	30.6	38.4	30.4	26.8	34.3	12.6	9.9	15.9	12.3	9.9	15.1
All metropolitan regions	6.4	5.5	7.4	33.7	31.7	35.7	30.0	28.2	32.0	12.6	11.1	14.2	13.6	12.1	15.3
Barwon-South Western	10.3*	6.1	16.7	34.6	28.7	41.0	32.7	26.0	40.3	10.8	6.7	16.9	9.2*	5.5	15.0
Gippsland	11.2	7.3	16.6	30.7	24.6	37.6	29.9	24.2	36.3	13.8	8.6	21.5	9.9	7,1	13.6
Grampians	8.5	6.1	11.7	39.2	32.9	45.8	30.7	25.1	37.0	8.0	6.0	10.6	10.6	7.4	14.9
Hume	10.8	6.6	17.1	34.4	29.9	39.1	33.3	28.1	39.1	10.2	7.5	13.8	8.0	5.8	11.0
Loddon Mallee	10.1	7.8	12.9	34.7	28.9	41.1	29.5	23.6	36.1	10.4	7.5	14.4	11.6	7.3	18.0
All rural regions	10.2	8.4	12.4	34.6	31.8	37.4	31.4	28.5	34.5	10.6	8.7	12.9	9.9	8.1	12.1
Victoria	7.3	6.4	8.2	34.0	32.3	35.6	30.3	28.7	31.9	12.1	10.9	13.5	12.8	11.5	14.1
Females (18+ years)															
Eastern Metropolitan	9.3	ĽŹ	12.2	34.7	31.2	38.3	30.1	26.4	34.1	9.8	7.8	12.2	10.8	8.3	14.1
North & West Metropolitan	10.5	9.1	12.1	39.1	36.5	41.7	26.5	24.3	28.9	9.5	8.1	11.1	6.8	5.6	8.3
Southern Metropolitan	10.1	8.4	12.1	38.0	34.9	41.2	27.5	24.7	30.5	11.3	8.7	14.6	7.7	6.1	9.7
All metropolitan regions	10.0	9.0	11.1	37.8	36.0	39.6	27.7	26.0	29.4	10.2	9.0	11.6	8.1	7,1	9.2
Barwon-South Western	7.7	5.7	10.4	44.9	38.7	51.3	29.1	22.5	36.6	9.3	6.8	12.7	4.3	2.8	6.6
Gippsland	11.7	8.5	15.9	36.7	31.8	41.8	25.1	21.1	29.6	8.6	6.5	11.3	11.7	7.8	17.2
Grampians	6.1	4.9	7.4	45.4	39.7	51.2	25.8	21.9	30.0	7.0	5.5	8.9	9.4*	5.4	15.7
Hume	10.9	8.7	13.5	38.2	34.4	42.2	26.6	23.0	30.5	9.8	7.7	12.4	8.3	6.1	11.1
Loddon Mallee	8.4	6.6	10.5	36.7	32.1	41.7	29.8	24.8	35.3	8.8	6.1	12.4	9.1	6.0	13.5
All rural regions	8.9	7.8	10.1	40.6	38.0	43.2	27.6	24.9	30.4	8.8	7.7	10.1	8.1	6.6	9.8
Victoria	9.7	8.9	10.7	38.3	36.9	39.9	27.7	26.3	29.1	10.0	8.9	11.1	8.0	7.1	9.0

Table 5.38: Proportion (%) of adult population sitting on an average weekend day, by duration, Department of Health and Human Services region and sex, Victoria, 2014 (continued)

		Tin	ne spent	: sitting on an	averag	e weeke	end day	during	I preceding we	ъ К		
	< 2 h	ours/day	2 to < 4	t hours/day	4 to <	6 hours	/day	6 to <	8 hours/day	8+ }	ours/de	ау
	%	95% CI	%	95% CI	%	95%	Ū	%	95% CI	%	95%	Ū
Region		LL UL		LL UL		Н	٦L		LL UL		Η	Ы
People (18+ years)												

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Eastern Metropolitan	7.6	6.0	9.5	34.0	31.4	36.6	30.6	27.8	33.5	10.9	9.2	12.8	12.6	10.5	15.1
North & West Metropolitan	8.6	7.7	9.7	35.9	34.0	37.8	27.9	26.2	29.6	11.3	9.9	12.7	10.5	9.2	12.0
Southern Metropolitan	8.4	7.2	9.8	36.2	33.8	38.8	28.9	26.6	31.3	12.0	10.0	14.2	9.9	8.5	11.6
All metropolitan regions	8.2	7.5	9.0	35.7	34.4	37.1	28.8	27.5	30.1	11.4	10.4	12.5	10.8	9.9	11.8
Barwon-South Western	9.1	6.5	12.4	39.6	34.9	44.5	30.9	25.8	36.5	10.1	7.4	13.5	6.8	4.6	9.9
Gippsland	11.6	8.9	14.9	33.6	29.6	37.9	27.5	24.0	31.4	11.4	8.1	15.8	10.4	7.8	13.7
Grampians	7.2	5.9	8.8	42.3	38.1	46.7	28.2	24.6	32.1	7.6	6.3	9.1	9.8	7,1	13.4
Hume	10.9	8.3	14.1	36.2	33.2	39.4	30.0	26.6	33.7	10.0	8.2	12.1	8.2	6.5	10.2
Loddon Mallee	9.1	7.7	10.8	35.7	31.9	39.7	29.7	25.7	34.1	9.6	7.5	12.1	10.4	7.5	14.3
All rural regions	9.5	8.5	10.8	37.6	35.6	39.5	29.4	27.4	31.5	9.8	8.6	11.1	8.9	7.7	10.3
Victoria	8.5	7.9	9.2	36.1	35.0	37.3	28.9	27.8	30.0	11.1	10.2	11.9	10.4	9.6	11.2

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural. Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

# Time spent sitting on an average weekend by departmental region and local government area

IMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARF ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDAR BANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMIT A BIN EAST GIPPS C FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI GREATER DANDLONG REATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON IORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MAN FIELD MARIBYRNONG MAROOLIDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE VALLEY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI LUMBIK NORTHEEN GRAMPIANS CORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT SLAND STONNINGTON STRATHBOCIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOO INGTON WEST WIMMERA WHITEHNRSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGI IAMBIACK ALPINE ARARAT BALLARAT BANY SRIMBANK BULOKE CAMPASPE CARDINA CASEY CENTRAL CODDELEDS COLOC-OTWAY CORANGAMIT BIN EAST GIPPSLATID FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BET GREATER DANDENONG GREATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON IORSHAM HUME INDIGO KINGSTON KNOX LALROBE LODDON MACEDON RANGES MANNINGHAM MAN MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MORA MONASH MOONE Y MOORABOOL MORELAND MORNINGTO PENINSULA MOUNT ALEX NDER MONNE MURRINDINDI NI LUMBIK NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFT SOUTHERN O RAMPIANS SOUT SLAND STONMINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WAR INGTON WEST WIMMERA WHITEHOUSE WHITTLESEA WODONGA WANDHAM YARRA YARR MABIACK ALPINE ARARAT BALLARATBAN WE BASS COAST BAW BAW BAYSIDE BENALLA E BANYUSE BASS COAST BAW BAW BAYSIDE BENALLA BOR RIMBANK BULOKE CAMPASPE CARDIN BIN EAST GIPPSLAND FRANKSTON GANNAWARKA GLEN FIRA GLENELG GOLDEN PL GREATER DANDENONG GREATER GEELONG GREATER SHEPPARTON HEPBURG HIM BIN EAST GIPPSLAND FDA DARE GREATER SHEPPARTON HEPBU **HINDMARSH HOBSON** ROBE LODDON MACEDON ORSHAM HUME INDIGO KINGSTON **ANGES MANNINGHAM MAN** TON MILDURA MITC RIBYRNONG MAROONDAH MEL ELL MOIRA MONASH ULA MOUNT ALE MORELAND MORN NDER MOYNE MURRINDINDI NI **NEES QUEENSCL** MPIANS PO OGIE SURF COAS GIPPSLAND STONNINGTON WONG WANGARATTA WARRNAMBOO CONGA WYNDHAM WELLINGTON WEST WIMMERA IITEHORSE

Metropolitan Region. The proportion of adults who spent eight hours or more sitting on an average weekend day during the preceding Table 5.39 shows the time spent sitting on an average weekend day during the preceding week, by duration and LGA, in Eastern week was similar across all LGAs in Eastern Metropolitan Region compared with all Victorian adults.

Table 5.39: Proportion (%) of adult population sitting on an average weekend day, by duration and LGA, Eastern Metropolitan Region, Victoria, 2014

		Time	spent sit	ting on	an ave	erage we	sekend	day du	ring pre	ceding v	week				
	< 2 h	ours/o	ay	2 to <	4 hours	s/day	4 to <	6 hours	s/day	6 to <	8 hours	s/day	8+ }	ours/d	ay
	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū
LGA		Н	Ы		Η	Ы		Н	Ы		Η	Ъ		Н	Ч
Boroondara (C)	9.5	6.0	14.7	26.6	22.0	31.8	37.8	30.8	45.5	11.3	7.4	16.9	12.3	7.5	19.5
Knox (C)	6.0	3.8	9.3	40.8	33.2	48.9	30.7	23.2	39.4	9.2	5.9	14.0	11.3	1:7	17.4
Manningham (C)	5.8	3.8	8.0	34.3	27.7	41.7	29.0	22.5	36.6	10.5*	6.2	17.1	11.1	ĽŹ	17.1
Maroondah (C)	6.5	4.1	10.2	34.3	28.2	40.8	34.9	26.1	44.8	7.7	5.1	11.4	10.5*	5.6	18.8
Monash (C)	5.8*	3.2	10.3	37.1	31.3	43.3	27.1	22.0	32.9	12.0	8.2	17.2	14.1	10.0	19.5
Whitehorse (C)	9.6*	5.3	16.9	31.5	25.2	38.5	28.9	23.0	35.5	11.2	7.9	15.6	15.8	10.1	24.0
Yarra Ranges (S)	10.1*	4.7	20.2	32.8	26.3	40.0	25.9	20.4	32.3	14.4	0.6	22.3	11.0*	5.4	21.0
Eastern Metropolitan Region	7.6	6.0	9.5	34.0	31.4	36.6	30.6	27.8	33.5	10.9	9.2	12.8	12.6	10.5	15.1
Victoria	8.5	7.9	9.2	36.1	35.0	37.3	28.9	27.8	30.0	11.1	10.2	11.9	10.4	9.6	11.2

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Metropolitan Region. The proportion of adults who spent eight hours or more sitting on an average weekend day during the preceding Table 5.40 shows the time spent sitting on an average weekend day during the preceding week, by duration and LGA, in North & West week was significantly lower among those who lived in the LGA of Hobsons Bay (C) compared with all Victorian adults.

Table 5.40: Proportion (%) of adult population sitting on an average weekend day, by duration and LGA, North & West Metropolitan Region, Victoria, 2014

		Time	spent si	tting on	an ave	erage we	sekend	day du	ring pre	ceding v	week				
	< 2	hours/d	day	2 to <	4 hours	s/day	4 to <	6 hour:	s/day	6 to <	8 hour	s/day	8+ 1	ours/c	ay
	%	95%	°CI	%	95%	C	%	95%	Ū	%	95%	C	%	95%	C
LGA		Н	Ы		Н	٩L		Η	٦L		Н	Ы		Н	Ч
Banyule (C)	7.4	4.8	11.3	40.7	33.1	48.8	30.2	23.8	37.5	9.1	6.1	13.4	7.5*	4.3	12.8
Brimbank (C)	10.8	7.4	15.3	35.6	30.2	41.4	21.7	17.1	27.1	11.5	7.9	16.5	12.7	8.4	18.7
Darebin (C)	7,1	4.9	10.2	38.8	31.9	46.2	26.5	21.2	32.6	12.1*	6.9	20.5	11.5*	6.7	19.2
Hobsons Bay (C)	14.8*	8.9	23.7	35.5	27.4	44.6	30.0	23.3	37.8	8.2*	4.9	13.4	4.6	3.1	6.8
Hume (C)	8.3	6.0	11.4	36.9	31.0	43.2	28.0	22.6	34.2	9.3	5.8	14.6	10.2	6.9	15.0
Maribyrnong (C)	8.9	6.1	12.7	35.9	29.3	43.0	27.1	20.9	34.3	14.4	9.3	21.6	8.2	5.0	13.2
Melbourne (C)	3.6*	2.0	6.4	28.1	22.6	34.3	33.8	27.4	40.8	16.2	11.1	23.0	13.7	0.6	20.3
Melton (S)	10.1*	5.9	16.7	33.8	27.1	41.2	29.5	23.6	36.2	10.2	6.2	16.3	10.1	6.7	14.9
Moonee Valley (C)	7.6	5.0	11.3	33.9	27.9	40.5	32.0	25.7	39.1	13.6	9.2	19.6	8.7	5.6	13.4
Moreland (C)	7.9	5.1	11.9	42.7	35.9	49.7	23.0	18.5	28.3	10.7	7.3	15.6	8.5*	5.1	13.8
Nillumbik (S)	7.7	5.1	11.4	39.0	32.5	45.8	26.3	20.6	32.9	15.0	9.2	23.5	6.7	4.1	10.7
Whittlesea (C)	10.1	1:7	14.2	36.9	31.4	42.8	29.1	24.0	34.8	8.2	5.4	12.4	10.4	ĽŹ	15.1
Wyndham (C)	8.7	5.9	12.7	32.3	27.2	37.8	26.8	21.7	32.6	11.4	8.4	15.3	13.9	9.6	19.7
Yarra (C)	9.9*	5.5	17.3	37.1	26.7	48.9	25.1	18.3	33.4	10.9*	5.9	19.3	12.3	8.2	18.2
North & West Metropolitan Region	8.6	7.7	9.7	35.9	34.0	37.8	27.9	26.2	29.6	11.3	9.9	12.7	10.5	9.2	12.0
Victoria	8.5	7.9	9.2	36.1	35.0	37.3	28.9	27.8	30.0	11.1	10.2	11.9	10.4	9.6	11.2

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Metropolitan Region. The proportion of adults who spent eight hours or more sitting on an average weekend day during the preceding Table 5.41 shows the time spent sitting on an average weekend day during the preceding week, by duration and LGA, in Southern week was similar across all LGAs in Southern Metropolitan Region compared with all Victorian adults.

Table 5.41: Proportion (%) of adult population sitting on an average weekend day, by duration and LGA, Southern Metropolitan Region, Victoria, 2014

		Time	spent si	tting on	an ave	erage we	sekend	day du	ring pre	ceding v	veek				
	< 2 h	nours/d	ay	2 to <	4 hours	s/day	4 to <	6 hour:	s/day	6 to <	8 hours	s/day	8+ h	ours/d	ay
	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū
LGA		Н	Ы		Η	Ы		Н	Ы		Η	Ч		Н	Ч
Bayside (C)	8.4	5.3	13.1	37.3	29.5	45.8	27.2	19.3	36.8	7.7*	4.5	12.6	15.5*	0.6	25.3
Cardinia (S)	5.2	3.4	8.0	36.0	30.1	42.4	36.5	30.2	43.3	7.2	4.5	11.3	10.8	7.0	16.4
Casey (C)	8.8	5.9	12.8	33.5	27.8	39.8	30.3	24.5	36.8	13.5	9.2	19.3	9.9	6.9	14.0
Frankston (C)	8.5	5.5	13.1	37.3	31.0	44.0	27.1	21.6	33.4	10.2	6.9	14.8	9.5	6.0	14.6
Glen Eira (C)	10.7	6.9	16.2	31.7	26.1	38.0	29.0	23.2	35.6	13.6	8.2	21.7	11.9*	7.0	19.5
Greater Dandenong (C)	11.1	7.2	16.6	34.6	28.2	41.6	27.6	21.7	34.4	12.1	8.0	17.9	10.7	6.9	16.2
Kingston (C)	7.2	4.7	10.9	34.9	27.5	43.0	27.6	21.5	34.7	17.1	10.8	26.0	7.4*	4.4	12.2
Mornington Peninsula (S)	11.3	7:1	17.6	45.2	36.6	54.1	26.2	19.4	34.4	6.2*	3.6	10.7	5.9*	3.3	10.6
Port Phillip (C)	5.5	3.7	8.1	37.6	28.8	47.2	30.3	22.3	39.6	12.8*	6.6	23.3	11.6*	6.6	19.4
Stonnington (C)	6.0*	3.6	9.9	38.2	31.0	45.9	27.4	20.9	35.0	13.5*	7.9	22.0	10.8*	6.5	17.4
Southern Metropolitan Region	8.4	7.2	9.8	36.2	33.8	38.8	28.9	26.6	31.3	12.0	10.0	14.2	9.9	8.5	11.6
Victoria	8.5	7.9	9.2	36.1	35.0	37.3	28.9	27.8	30.0	11.1	10.2	11.9	10.4	9.6	11.2

Data were age-standardised to the 2011 Victorian population. LL/LU 95% CI = lower/upper limit of 95 per cent confidence interval.

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Estimates that are (statistically) significantly different from the corresponding estimate for Victoria are identified by colour as follows: above or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

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RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 5.42 shows the time spent sitting on an average weekend day during the preceding week, by duration and LGA, in Barwon-South week was significantly lower among those who lived in the LGAs of Moyne (S), Queenscliffe (B) and Warrnambool (C) compared with all Western Region. The proportion of adults who spent eight hours or more sitting on an average weekend day during the preceding Victorian adults.

Table 5.42: Proportion (%) of adult population sitting on an average weekend day, by duration and LGA, Barwon-South Western Region, Victoria, 2014

		Time	spent sit	tting on	an ave	erage w	eekend	day du	ring pre	ceding v	week				
	< 2	ours/c	lay	2 to <	4 hours	s/day	4 to <	6 hour	s/day	6 to <	8 hour	s/day	8+ 1	ours/c	ay
	%	95%	C	%	95%	C	%	95%	Ū	%	95%	C	%	95%	C
LGA		E	Ы		Н	Ы		Н	Ъ		Н	Ы		Н	Ч
Colac-Otway (S)	6.4*	3.5	11.5	34.7	27.0	43.4	29.4	20.5	40.1	13.2*	7.2	23.0	11.1*	5.6	20.8
Corangamite (S)	12.8*	7.4	21.3	40.2	31.5	49.6	30.6	23.2	39.2	3.6	2.2	5.7	7.3*	4.2	12.2
Glenelg (S)	6.4	3.9	10.2	33.2	26.7	40.3	29.9	23.3	37.4	13.7	8.6	21.2	9.9*	5.3	17.6
Greater Geelong (C)	8.9*	5.2	14.8	39.2	32.0	46.9	32.3	24.6	41.0	10.0	6.4	15.2	6.7*	3.7	11.8
Moyne (S)	9.6	6.2	14.4	43.1	35.4	51.2	29.8	22.3	38.5	9.7*	5.2	17.4	4.1*	2.0	8.2
Queenscliffe (B)	5.3*	3.1	8.7	48.3	37.2	59.7	37.2	26.8	48.9	3.4	2.1	5.4	3.9*	2.0	7.5
Southern Grampians (S)	8.5*	5.0	13.9	51.9	42.4	61.2	22.0	16.1	29.3	6.5*	3.5	12.0	5.3*	2.7	10.1
Surf Coast (S)	11.3	6.9	17.8	47.2	39.2	55.2	26.3	17.7	37.2	5.5*	3.2	9.3	6.9*	3.4	13.4
Warrnambool (C)	7.5*	3.9	13.7	38.7	31.0	47.0	29.2	22.6	36.9	15.2	9.3	23.9	3.7	2.5	5.6
Barwon-South Western Region	9.1	6.5	12.4	39.6	34.9	44.5	30.9	25.7	36.5	10.1	7.4	13.5	6.8	4.6	9.9
Victoria	8.5	7.9	9.2	36.1	35.0	37.3	28.9	27.8	30.0	11.1	10.2	11.9	10.4	9.6	11.2

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Region. The proportion of adults who spent eight hours or more sitting on an average weekend day during the preceding week was Table 5.43 shows the time spent sitting on an average weekend day during the preceding week, by duration and LGA, in Gippsland significantly lower among those who lived in the LGA of East Gippsland (S) compared with all Victorian adults.

Table 5.43: Proportion (%) of adult population sitting on an average weekend day, by duration and LGA, Gippsland Region, Victoria, 2014

		Time	spent si	tting on	an ave	erage we	ekend	day du	ring pre	ceding v	veek				
	< 2 h	ours/o	lay	2 to <	4 hours	s/day	4 to <	6 hours	s/day	6 to <	8 hours	s/day	8+ h	ours/d	ay
	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū
LGA		Н	Ы		Н	Ы		Н	Ы		H	Ы		H	Ч
Bass Coast (S)	15.1*	7.2	28.7	37.1	29.7	45.2	26.7	18.6	36.8	4.4	3.1	6.2	13.9*	6.7	26.8
Baw Baw (S)	7.8*	4.1	14.1	27.4	22.2	33.4	30.7	23.0	39.7	17.1*	9.1	29.7	9.9	6.0	15.8
East Gippsland (S)	15.6*	8.2	27.8	36.8	27.5	47.3	30.7	21.1	42.2	6.9	4.5	10.5	5.3*	3.2	8.6
Latrobe (C)	11.2	7.2	17.1	34.3	25.2	44.7	24.5	17.6	33.0	12.2*	6.4	21.9	11.1*	6.0	19.7
South Gippsland (S)	10.2*	5.7	17.6	32.6	25.8	40.1	26.4	20.0	34.0	13.8	8.3	22.0	12.3*	7.2	20.1
Wellington (S)	12.5*	7.4	20.2	35.6	29.1	42.6	27.9	20.7	36.5	10.1*	4.4	21.6	9.5*	5.3	16.3
Gippsland Region	11.6	8.9	14.9	33.6	29.6	37.9	27.5	24.0	31.4	11.4	8.1	15.8	10.4	7.8	13.7
Victoria	8.5	7.9	9.2	36.1	35.0	37.3	28.9	27.8	30.0	11.1	10.2	11.9	10.4	9.6	11.2

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 5.44 shows the time spent sitting on an average weekend day during the preceding week, by duration and LGA, in Grampians Region. The proportion of adults who spent eight hours or more sitting on an average weekend day during the preceding week was similar across all LGAs in Grampians Region compared with all Victorian adults.

Table 5.44: Proportion (%) of adult population sitting on an average weekend day, by duration and LGA, Grampians Region, Victoria, 2014

		Time	spent si	tting on	an ave	erage we	sekend	day du	ring pre	ceding v	week				
	< 2	hours/c	lay	2 to <	4 hours	s/day	4 to <	6 hour	s/day	6 to <	8 hours	s/day	8+ }	ours/d	ay
	%	95%	C	%	95%	Ū	%	95%	Ū	%	95%	C	%	95%	Ū
LGA		E	Ы		Н	Ы		Н	Ч		Н	Ъ		Н	Ч
Ararat (RC)	5.7*	3.3	9.6	37.0	28.5	46.4	29.6	22.9	37.3	8.7*	5.2	14.3	12.6*	7.6	20.4
Ballarat (C)	6.4	3.9	10.3	44.8	37.3	52.5	28.1	21.8	35.4	6.0	4.3	8.4	10.0*	5.7	16.9
Golden Plains (S)	9.6	6.5	14.0	38.9	31.4	46.9	30.9	24.3	38.4	13.4*	7.8	22.1	4.5	2.8	7.3
Hepburn (S)	5.5	3.5	8.6	38.6	29.2	49.0	25.2	19.4	32.0	18.0*	9.2	32.3	7.0*	3.6	13.3
Hindmarsh (S)	5.4	3.3	8.6	32.3	26.0	39.3	28.7	20.6	38.5	12.1*	7.2	19.8	16.6*	10.0	26.4
Horsham (RC)	7.4	5.2	10.4	51.1	41.1	61.0	24.8	19.5	30.9	10.8*	4.8	22.6	2.5	1.6	4.0
Moorabool (S)	8.8 8.0	5.6	13.6	35.2	28.7	42.2	28.2	22.6	34.7	4.4	2.9	6.6	16.1	10.5	23.8
Northern Grampians (S)	10.2	6.4	15.7	43.5	34.2	53.3	23.0	16.0	31.9	6.6*	3.6	11.8	11.9*	6.0	22.0
Pyrenees (S)	10.9	6.7	17.2	42.7	32.3	53.8	20.0	14.3	27.1	15.1*	8.5	25.2	6.4*	3.0	13.0
West Wimmera (S)	6.9	4.3	10.8	41.0	31.9	50.8	24.2	18.8	30.6	9.6*	5.7	15.7	12.9*	5.4	27.7
Yarriambiack (S)	8.8	5.5	13.8	32.1	25.0	40.1	34.5	25.3	45.2	7.9	5.2	11.9	11.9*	5.0	25.8
Grampians Region	7.2	5.9	8.8	42.3	38.0	46.7	28.2	24.6	32.1	7.6	6.3	9.1	9.8	7.1	13.4
Victoria	8.5	7.9	9.2	36.1	35.0	37.3	28.9	27.8	30.0	11.1	10.2	11.9	10.4	9.6	11.2

Data were age-standardised to the 2011 Victorian population. LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.
\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

significantly lower among those who lived in the LGAs of Alpine (S), Indigo (S) and Wangaratta (RC) compared with all Victorian adults. Region. The proportion of adults who spent eight hours or more sitting on an average weekend day during the preceding week was Table 5.45 shows the time spent sitting on an average weekend day during the preceding week, by duration and LGA, in Hume

Table 5.45: Proportion (%) of adult population sitting on an average weekend day, by duration and LGA, Hume Region, Victoria, 2014

		Time	spent sit	tting on	an ave	erage we	sekend	day du	ring pre	ceding v	veek				
	< 2 h	ours/o	ay	2 to <	4 hours	s/day	4 to <	6 hour:	s/day	6 to <	8 hours	s/day	8+ 1	iours/d	ay
	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū
LGA		Н	Ы		Н	Ч		Н	Ы		Н	Ы		Н	Ы
Alpine (S)	14.4*	6.3	29.7	35.7	24.9	48.0	32.6	22.7	44.3	8.8*	5.2	14.8	3.6	2.3	5.7
Benalla (RC)	10.3*	5.8	17.6	28.7	21.4	37.4	34.8	26.3	44.4	10.1	6.3	15.9	12.4*	6.4	22.6
Greater Shepparton (C)	15.0*	8.7	24.7	26.6	21.7	32.1	32.4	24.9	41.0	12.0	7.3	19.0	9.0	5.5	14.1
Indigo (S)	9.3	6.1	13.8	47.8	38.2	57.5	29.5	20.6	40.2	6.8	4.9	9.5	4.1*	2.1	7.8
Mansfield (S)	13.7*	8.2	22.1	34.2	26.0	43.6	22.6	15.1	32.3	18.5*	9.9	31.8	6.5*	3.7	11.4
Mitchell (S)	9.9	6.7	14.5	37.8	30.2	46.0	31.4	23.4	40.6	7.9*	4.8	12.8	8.4*	4,4	15.6
Moira (S)	6.0*	3.2	11.2	49.3	40.4	58.3	20.4	14.4	27.9	11.0	6.8	17.1	5.5*	3.0	9.7
Murrindindi (S)	7.1*	4.1	12.2	36.7	30.1	44.0	30.0	22.0	39.3	10.2	6.7	15.2	12.1*	6.6	21.3
Strathbogie (S)	8.9*	4.6	16.7	32.5	22.9	43.8	31.7	21.2	44.6	6.0	3.7	9.7	17.6*	8.3	33.6
Towong (S)	12.1	7.6	18.7	40.1	30.9	50.1	29.8	21.3	40.0	5.3*	2.9	9.4	7.6*	4.1	13.7
Wangaratta (RC)	6.8	4.3	10.5	34.9	27.2	43.4	38.1	30.4	46.5	9.8	6.6	14.3	4.6*	2.8	7.6
Wodonga (RC)	10.6	6.4	16.9	42.3	34.7	50.2	24.1	18.9	30.3	9.1	5.8	14.1	9.6*	5.6	16.0
Hume Region	10.9	8.3	14.1	36.2	33.2	39.4	30.0	26.6	33.7	10.0	8.2	12.1	8.2	6.5	10.2
Victoria	8.5	7.9	9.2	36.1	35.0	37.3	28.9	27.8	30.0	11.1	10.2	11.9	10.4	9.6	11.2

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Mallee Region. The proportion of adults who spent eight hours or more sitting on an average weekend day during the preceding week Table 5.46 shows the time spent sitting on an average weekend day during the preceding week, by duration and LGA, in Loddon was significantly higher among those who lived in the LGA of Swan Hill (RC) compared with all Victorian adults.

Table 5.46: Proportion (%) of adult population sitting on an average weekend day, by duration and LGA, Loddon Mallee Region, Victoria, 2014

		Time	spent si	tting or	an ave	erage we	eekend	day du	ring pre	ceding v	veek				
	< 2 h	ours/d	ay	2 to <	4 hours	s/day	4 to <	6 hours	s/day	6 to <	8 hours	s/day	8+ 1	iours/d	ay
	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū
LGA		Н	Ъ		Н	Ы		Н	Ы		Ę	Ы		Н	Ч
Buloke (S)	10.3*	5.8	17.5	34.4	27.2	42.4	29.1	20.7	39.2	9.7*	4.4	20.1	11.7*	6.8	19.4
Campaspe (S)	12.9*	7.2	22.2	30.8	24.5	38.0	28.7	20.5	38.6	13.9	8.4	22.1	6.5	4.4	9.4
Central Goldfields (S)	6.7*	3.3	13.1	38.2	29.0	48.3	28.8	21.1	37.9	7,1	4.8	10.3	14.1*	7.7	24.4
Gannawarra (S)	12.3	8.0	18.6	36.4	24.7	49.8	29.7	18.0	44.9	10.4	6.3	16.6	7.6*	3.2	16.7
Greater Bendigo (C)	8.9	6.4	12.2	36.7	29.2	44.9	28.4	21.5	36.4	7.5	4.7	11.8	12.9*	7.3	21.7
Loddon (S)	6.0	3.9	9.1	28.8	22.8	35.6	39.6	28.8	51.5	8.2*	4.0	16.0	8.5*	4.0	17.2
Macedon Ranges (S)	7.3	4.9	10.9	40.0	33.3	47.0	38.4	31.5	45.9	5.6	3.8	8.1	3.7*	2.3	6.0
Mildura (RC)	9.6	6.6	13.9	30.9	23.0	40.2	29.6	21.2	39.7	15.6*	0.6	25.7	8.9	5.8	13.4
Mount Alexander (S)	10.2	6.3	16.2	38.8	29.6	48.8	28.6	18.2	42.0	9.3*	5.0	16.7	8.2*	3.2	19.6
Swan Hill (RC)	7.9	5.3	11.6	37.6	29.0	47.0	21.8	14.7	31.1	8.2	5.7	11.8	18.6	11.3	29.3
Loddon Mallee Region	9.1	7.7	10.8	35.7	31.9	39.7	29.7	25.7	34.1	9.6	7.5	12.1	10.4	7.5	14.3
Victoria	8.5	7.9	9.2	36.1	35.0	37.3	28.9	27.8	30.0	11.1	10.2	11.9	10.4	9.6	11.2

Data were age-standardised to the 2011 Victorian population.

LL/LU 95% Cl = 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below: \* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

# Key findings

Cycling as transport

the preceding week





A significantly higher proportion of women did not use cycling for transport longer than 10 minutes during the preceding week compared with all Victorian men



#### **Cycling as transport**

Respondents were asked if they cycled as a means of transport to places like school, work, the shops and the train station for trips longer than 10 minutes. They were also asked about how many days they cycled in the week preceding the survey. This did not include cycling predominantly for recreation or exercise purposes.

Table 5.47 shows the proportion of adults who used cycling for transport longer than 10 minutes during the preceding week, by frequency, age group and sex. The majority of adults (92.9 per cent) reported not cycling for transport longer than 10 minutes during the preceding week. A significantly higher proportion of women did not use cycling for transport longer than 10 minutes during the preceding week compared with all Victorian men. A significantly higher proportion of men and women 65 years of age or older did not use cycling for transport longer than 10 minutes during the preceding week compared with all Victorian men and women, respectively. A significantly higher proportion of men 55-64 years of age did not use cycling for transport longer than 10 minutes during the preceding week compared with all Victorian men.

Table 5.48 shows the proportion of adults who used cycling for transport longer than 10 minutes during the preceding week, by frequency, departmental region and sex. A significantly higher proportion of women who lived in Eastern Metropolitan Region did not use cycling for transport longer than 10 minutes during the preceding week compared with all Victorian women.

		Days c	ycled fo	or transpo	ort, for	trips lor	nger thar	10 mir	nutes, in	precedir	ng week	¢
	1 (	day/we	ek	2-3	days/w	veek	4 or	more c week	lays/		None	
Age	%	95%	% CI	%	95%	% CI	%	959	% CI	%	95%	% CI
(years)		LL	UL		LL	UL		LL	UL		LL	UL
Males												
18–34	2.8*	1.7	4.6	3.7	2.5	5.5	4.2	2.8	6.3	88.6	85.7	91.0
35–44	4.6	3.3	6.2	3.9	2.8	5.5	3.8	2.6	5.5	87.5	85.0	89.6
45–54	1.8	1.2	2.7	3.3	2.5	4.3	3.8	2.9	5.1	90.8	89.1	92.3
55–64	1.7	1.2	2.4	2.9	2.2	3.8	2.1	1.5	2.9	92.9	91.6	94.0
65+	1.5	1.1	2.1	1.8	1.4	2.3	1.4	1.0	1.9	94.2	93.3	95.0
Victoria	2.6	2.0	3.2	3.2	2.7	3.8	3.3	2.7	4.0	90.4	89.3	91.4
Females												
18–34	1.7*	1.0	2.9	1.8*	1.0	3.3	2.3*	1.4	3.8	94.1	92.0	95.7
35–44	1.9	1.3	2.7	1.6	1.1	2.3	1.1	0.7	1.8	94.8	93.6	95.8
45–54	1.2	0.9	1.8	1.5	1.0	2.0	1.3	0.9	1.9	95.2	94.1	96.0
55–64	0.7	0.5	1.1	1.2	0.8	1.7	1.0	0.7	1.5	96.4	95.7	97.1
65+	0.4	0.3	0.7	0.5	0.3	0.7	0.4	0.2	0.6	97.5	97.0	97.9
Victoria	1.3	1.0	1.6	1.4	1.0	1.9	1.5	1.1	2.0	95.3	94.5	95.9
Persons												
18–34	2.2	1.5	3.3	2.8	2.0	3.8	3.3	2.4	4.5	91.3	89.6	92.8
35–44	3.2	2.5	4.1	2.8	2.1	3.6	2.4	1.8	3.3	91.2	89.8	92.4
45–54	1.5	1.2	2.0	2.3	1.9	2.9	2.6	2.0	3.2	93.0	92.0	93.9
55–64	1.2	0.9	1.6	2.0	1.6	2.5	1.5	1.2	2.0	94.7	94.0	95.3
65+	0.9	0.7	1.2	1.1	0.9	1.4	0.8	0.6	1.1	96.0	95.5	96.4
Victoria	1.9	1.6	2.3	2.3	2.0	2.7	2.3	2.0	2.8	92.9	92.2	93.5

Table 5.47: Proportion (%) of adult population cycling for transport during the proceeding week, by frequency, age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{st}\,$  Estimate has a RSE 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 5.48: Proportion (%) of adult population cycling for transport during the preceding week, by frequency, Department of Health and Human Services region and sex, Victoria, 2014

	Da	ys cycl	led for t	transpor	t, for t	rips lor	nger thar	n 10 mi	nutes, i	n preced	ding we	eek
	1 c	lay/we	ek	2-3 (	days/v	veek	4 or i	more o week	lays/		None	
	%	95%	6 CI	%	95%	% CI	%	95%	% CI	%	95%	% CI
Region		LL	UL		LL	UL		LL	UL		LL	UL
Males (18+ years)												
Eastern Metropolitan	2.8*	1.7	4.9	2.1*	1.1	3.8	2.1*	1.2	3.7	92.2	89.5	94.2
North & West Metropolitan	2.7	1.9	3.7	3.2	2.4	4.2	5.0	3.7	6.6	88.7	86.7	90.4
Southern Metropolitan	1.3	0.8	2.0	4.0	2.7	6.0	2.4	1.5	3.8	91.7	89.3	93.6
All metropolitan regions	2.3	1.8	2.9	3.2	2.5	3.9	3.5	2.8	4.4	90.5	89.2	91.6
Barwon-South Western	6.4*	2.9	13.6	3.5*	2.2	5.8	2.2*	1.1	4.4	87.5	81.2	91.9
Gippsland	4.7*	2.2	9.9	3.3*	1.9	5.7	**			89.0	83.2	92.9
Grampians	1.4	0.8	2.2	3.5*	1.7	6.8	1.4*	0.6	3.4	93.2	90.0	95.5
Hume	2.9	1.8	4.6	3.9	2.4	6.1	2.1	1.4	3.3	90.5	87.8	92.7
Loddon Mallee	1.5*	0.7	2.8	2.5	1.6	3.9	3.5*	1.7	6.8	92.1	88.8	94.4
All rural regions	3.6	2.2	5.7	3.3	2.6	4.2	2.4	1.7	3.4	90.3	88.1	92.1
Victoria	2.6	2.0	3.2	3.2	2.7	3.8	3.3	2.7	4.0	90.4	89.3	91.4
Females (18+ years)												
Eastern Metropolitan	0.7*	0.3	1.8	0.4*	0.2	0.9	**			97.7	96.0	98.6
North & West Metropolitan	1.6	1.1	2.6	1.9*	1.1	3.2	2.3	1.5	3.5	93.6	91.9	94.9
Southern Metropolitan	1.0*	0.6	1.6	1.5*	0.9	2.5	1.4*	0.8	2.5	95.3	93.9	96.4
All metropolitan regions	1.2	0.9	1.7	1.4	1.0	2.0	1.7	1.2	2.3	95.1	94.2	95.9
Barwon-South Western	1.0*	0.5	2.1	**			0.8*	0.4	1.9	96.6	94.5	97.9
Gippsland	1.4*	0.8	2.5	0.8*	0.4	1.3	0.5*	0.2	1.2	95.5	93.4	97.0
Grampians	0.9*	0.5	1.7	2.0*	1.0	3.7	0.4*	0.2	0.8	96.0	93.9	97.3
Hume	2.6*	1.0	6.7	1.5*	0.8	2.6	0.5*	0.3	0.8	94.5	91.1	96.7
Loddon Mallee	1.0*	0.5	2.1	1.0*	0.6	1.6	0.4*	0.2	0.8	96.8	95.6	97.7
All rural regions	1.4	0.9	2.1	1.3	0.9	1.8	0.6	0.4	0.8	95.9	95.0	96.7
Victoria	1.3	1.0	1.6	1.4	1.0	1.9	1.5	1.1	2.0	95.3	94.5	95.9

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 5.48: Proportion (%) of adult population cycling for transport during the preceding week, byfrequency, Department of Health and Human Services region and sex, Victoria, 2014 (continued)

	Da	ys cycl	led for t	ranspor	t, for t	rips lon	nger thar	ז 10 mi	nutes,	in prece	ding we	eek
	1 c	lay/we	ek	2-3	days/w	veek	4 or	more o week	days/		None	
	%	95%	% CI	%	95%	6 CI	%	95%	% CI	%	95%	6 CI
Region		LL	UL		LL	UL		LL	UL		LL	UL
People (18+ years)												
Eastern Metropolitan	1.8	1.1	2.8	1.3*	0.7	2.1	1.5*	0.9	2.5	95.0	93.5	96.2
North & West Metropolitan	2.2	1.7	2.8	2.5	2.0	3.3	3.6	2.8	4.6	91.2	89.9	92.3
Southern Metropolitan	1.1	0.8	1.6	2.7	2.0	3.8	1.9	1.3	2.7	93.5	92.2	94.7
All metropolitan regions	1.7	1.4	2.1	2.3	1.9	2.7	2.6	2.1	3.1	92.9	92.1	93.6
Barwon-South Western	3.7*	1.8	7.7	2.4	1.5	3.7	1.5*	0.9	2.6	92.0	88.5	94.6
Gippsland	2.9*	1.6	5.1	2.1	1.3	3.4	1.6*	0.6	4.1	92.3	89.3	94.5
Grampians	1.1	0.8	1.7	2.6	1.6	4.3	0.8*	0.4	1.7	94.7	93.0	96.1
Hume	2.7*	1.6	4.6	2.6	1.8	3.8	1.3	0.9	1.9	92.6	90.5	94.2
Loddon Mallee	1.2*	0.7	2.0	1.7	1.2	2.4	2.0*	1.0	3.8	94.4	92.6	95.8
All rural regions	2.5	1.7	3.6	2.3	1.9	2.8	1.5	1.1	2.0	93.1	91.9	94.1
Victoria	1.9	1.6	2.3	2.3	2.0	2.7	2.3	2.0	2.8	92.9	92.2	93.5

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

# Cycling for transport by departmental region and local government area

IMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARF ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDAR BANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMI A C FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI **BIN EAST GIPPS** GREATER DANDLIONG REATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON ORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MAN MARIBYRNONG MAROOLIDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE EY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI IK NORTHERN GRAMPIANS CORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT LUM SLAND STONNINGTON STRATHBOCIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOO INGTON WEST WIMMERA WHITEHNRSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGE IAMBIACK ALPINE ARARAT BALLARAT BANY SRIMBANK BULOKE CAMPASPE CARDINA, CASEY CENTRAL CODDELED & COLDC-OTWAY CORANGAMIT BIN EAST GIPPSLATID FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BET GREATER DANDENONG GREATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON IORSHAM HUME INDIGO KINGSTON KNOX LALROBE LODDON MACEDON RANGES MANNINGHAM MAN MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MORA MONASH MOONE Y MOORABOOL MORELAND MORNINGTO PENINSULA MOUNT ALEX NDER MONNE MURRINDINDI NI LUMBIK NORTHERN GRAMPIANS PORT PHILLUP PYRENEES QUEENSCLIFF SOUTHERN RAMPIANS SOUT SLAND STONMINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WAR INGTON WEST WIMMERA WHITEHOUSE WHITELESEA WODONGA WANDHAM YARRA YARR MABIACK ALPINE ARARAT BALLARATBAN WE BASS COAST BAW BAW BAYSIDE BENALLA E BANYLEE BASS COAST BAW BAW BAYSIDE BENALLA BOR A CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANG RIMBANK BULOKE CAMPASPE CARDIN BIN EAST GIPPSLAND FRANKSTON GANNAWARKA GLENEIRA GLENELG GOLDEN PLAINS GREATER DANDENONG GREATER GEELONG GREATER SHEPPARTON HEPBURK HINDMA DARE GREATER SHEPPARTON HEPBU **MINDMARSH HOBSON** ROBE LODDON MACEDON ORSHAM HUME INDIGO KINGSTON **ANGES MANNINGHAM MAN** RIBYRNONG MAROONDAH MEL TON MILDURA MITO ELL MOIRA MONASH MOONE ULA MOUNT ALE MORELAND MORN NDER MOYNE MURRINDINDI NI ND A **NEES QUEENSCL** MPIANS PO OGIE SURF COAS GIPPSLAND STONNINGTON WONG WANGARATTA WARRNAMBOO DNGA WYNDHAM YARRA YARRA RANGE WELLINGTON WEST WIMMERA HITEHORSE

Table 5.49 shows the proportion of adults who used cycling for transport longer than 10 minutes during the preceding week, by frequency and LGA, in Eastern Metropolitan Region. The proportion of adults who did not use cycling for transport longer than 10 minutes during the preceding week was significantly higher among those who lived in the LGAs of Knox (C), Maroondah (C) and Yarra Ranges (S) compared with all Victorian adults.

#### Table 5.49: Proportion (%) of adult population cycling for transport during the preceding week, by frequency and LGA, Eastern Metropolitan Region, Victoria, 2014

	D	ays cyo	cled for	transpo	rt, for t	rips lon	iger thar	n 10 mi	nutes, ir	n preced	ing we	ek
	1 c	lay/we	ek	2-3	days/w	veek	4 or	more o week	lays/		None	
	%	95%	% CI	%	95%	% CI	%	959	% CI	%	95%	6 CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Boroondara (C)	**			2.9*	1.1	7.7	3.8*	1.6	8.5	92.0	86.2	95.5
Knox (C)	**			0.0			**			99.0	97.4	99.6
Manningham (C)	**			**			**			96.1	93.1	97.8
Maroondah (C)	**			**			**			98.4	96.2	99.3
Monash (C)	**			1.8*	0.7	4.5	**			92.1	86.9	95.4
Whitehorse (C)	4.4*	2.2	8.8	**			1.3*	0.6	2.9	93.1	88.9	95.8
Yarra Ranges (S)	**			0.9*	0.3	2.2	**			97.6	95.2	98.8
Eastern Metropolitan Region	1.8	1.1	2.8	1.3*	0.7	2.1	1.5*	0.9	2.5	95.0	93.5	96.2
Victoria	1.9	1.6	2.3	2.3	2.0	2.7	2.3	2.0	2.8	92.9	92.2	93.5

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}\,$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 5.50 shows the proportion of adults who used cycling for transport longer than 10 minutes during the preceding week, by frequency and LGA, in North & West Metropolitan Region. The proportion of adults who did not use cycling for transport longer than 10 minutes during the preceding week was significantly higher among those who lived in the LGA of Brimbank (C) compared with all Victorian adults.

Table 5.50: Proportion (%) of adult population cycling for transport during the preceding week, by frequency and LGA, North & West Metropolitan Region, Victoria, 2014

	D	ays cya	cled for	transpo	rt, for t	rips lon	nger thar	10 mi	nutes, ir	n preced	ing wee	ek
							4 or	more c	lays/			
	1 c	day/we	ek	2-3	days/w	veek		week			None	
	%	95%	% CI	%	95%	% CI	%	959	% CI	%	95%	6 CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Banyule (C)	1.7*	0.7	4.1	0.8*	0.3	2.0	**			95.3	91.1	97.6
Brimbank (C)	**			**			**			97.2	94.3	98.7
Darebin (C)	3.5*	1.8	6.9	3.1*	1.8	5.2	9.4	5.8	14.9	83.3	77.5	87.9
Hobsons Bay (C)	3.3*	1.4	7.5	5.9*	2.6	12.7	5.6*	2.3	13.1	85.1	76.9	90.7
Hume (C)	1.6*	0.7	3.4	**			**			95.5	90.1	98.0
Maribyrnong (C)	2.9*	1.6	5.1	3.3*	1.9	5.6	5.7*	2.9	10.9	87.5	82.4	91.3
Melbourne (C)	4.2*	2.1	8.4	5.1*	2.6	9.6	5.5*	2.8	10.7	84.7	78.7	89.3
Melton (S)	**			4.2*	1.6	10.3	**			94.4	88.7	97.3
Moonee Valley (C)	2.1*	0.8	5.1	3.8*	1.6	8.9	2.7*	1.3	5.3	91.0	85.8	94.4
Moreland (C)	4.9*	2.1	11.0	4.7*	2.4	9.2	3.8*	1.8	7.9	86.3	79.7	91.1
Nillumbik (S)	2.0*	0.8	4.8	**			**			95.8	92.4	97.7
Whittlesea (C)	**			**			**			96.8	93.0	98.6
Wyndham (C)	2.6*	1.1	6.1	1.5*	0.7	3.2	**			92.0	87.0	95.1
Yarra (C)	1.8*	0.7	4.8	3.6*	2.1	6.2	12.5*	6.8	21.8	81.6	72.7	88.0
North & West Metropolitan Region	2.2	1.7	2.8	2.5	2.0	3.3	3.6	2.8	4.6	91.2	89.9	92.3
Victoria	1.9	1.6	2.3	2.3	2.0	2.7	2.3	2.0	2.8	92.9	92.2	93.5

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 5.51 shows the proportion of adults who used cycling for transport longer than 10 minutes during the preceding week, by frequency and LGA, in Southern Metropolitan Region. The proportion of adults who did not use cycling for transport longer than 10 minutes during the preceding week was significantly higher among those who lived in the LGAs of Casey (C) and Mornington Peninsula (S) compared with all Victorian adults.

#### Table 5.51: Proportion (%) of adult population cycling for transport during the preceding week, by frequency and LGA, Southern Metropolitan Region, Victoria, 2014

	D	ays cy	cled for	transpo	rt, for 1	rips lon	ger thar	n 10 mi	nutes, iı	n preced	ing we	ək
	1 c	lay/we	ek	2-3	days/v	veek	4 or	more o week	lays/		None	
	%	95%	% CI	%	959	% CI	%	959	% CI	%	95%	6 CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Bayside (C)	5.5*	2.7	11.0	**			1.1*	0.4	2.6	89.4	82.2	93.9
Cardinia (S)	**			**			**			95.8	92.0	97.9
Casey (C)	**			**			**			97.4	95.4	98.5
Frankston (C)	**			4.3*	1.7	10.6	**	0.4	3.4	93.3	87.5	96.5
Glen Eira (C)	1.1*	0.4	2.9	4.8*	2.1	10.4	2.6*	1.2	5.5	89.6	83.7	93.6
Greater Dandenong (C)	**			1.1*	0.4	2.5	**			97.1	91.6	99.0
Kingston (C)	1.7*	0.7	4.3	1.9*	0.7	4.8	2.1*	1.0	4.1	94.0	90.5	96.2
Mornington Peninsula (S)	0.9*	0.4	2.1	**			**			97.1	94.9	98.4
Port Phillip (C)	1.2*	0.5	2.7	6.2*	3.2	11.6	5.2*	2.4	10.9	86.9	80.2	91.6
Stonnington (C)	**			5.8*	2.8	11.7	3.6*	1.5	8.2	88.9	82.4	93.2
Southern Metropolitan Region	1.1	0.8	1.6	2.7	2.0	3.8	1.9	1.3	2.7	93.5	92.2	94.7
Victoria	1.9	1.6	2.3	2.3	2.0	2.7	2.3	2.0	2.8	92.9	92.2	93.5

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 5.52 shows the proportion of adults who used cycling for transport longer than 10 minutes during the preceding week, by frequency and LGA, in Barwon-South Western Region. The proportion of adults who did not use cycling for transport longer than 10 minutes during the preceding week was significantly lower among those who lived in the LGA of Queenscliffe (B) compared with all Victorian adults.

Table 5.52: Proportion (%) of adult population cycling for transport during the preceding week, by frequency and LGA, Barwon-South Western Region, Victoria, 2014

	Days cycled for transport, for trips longer than 10 minutes, in preceding week												
	1 day/week		ek	2-3 days/week			4 or more days/ week			None			
	%	95%	% CI	%	95%	6 CI	%	95%	6 CI	%	95%	% CI	
LGA		LL	UL		LL	UL		LL	UL		LL	UL	
Colac-Otway (S)	0.9*	0.3	2.4	**			1.0*	0.4	2.4	92.5	84.7	96.5	
Corangamite (S)	**			**			**			96.6	93.2	98.3	
Glenelg (S)	1.9*	0.8	4.4	**			**			93.1	88.0	96.2	
Greater Geelong (C)	4.4*	1.7	10.8	1.4*	0.6	3.4	1.4*	0.6	3.5	92.6	86.9	95.9	
Moyne (S)	2.2*	0.9	5.1	**			3.1*	1.6	5.9	87.4	77.8	93.2	
Queenscliffe (B)	7.8*	3.3	17.4	8.1*	3.5	17.7	**			81.9	70.7	89.5	
Southern Grampians (S)	**			**			**			94.0	88.9	96.8	
Surf Coast (S)	2.7*	1.5	5.0	4.7*	2.4	8.9	**			87.1	79.3	92.3	
Warrnambool (C)	2.2*	0.9	5.1	**			1.1*	0.4	2.5	92.5	85.1	96.4	
Barwon-South Western Region	3.7*	1.8	7.7	2.4	1.5	3.7	1.5*	0.9	2.6	92.0	88.5	94.6	
Victoria	1.9	1.6	2.3	2.3	2.0	2.7	2.3	2.0	2.8	92.9	92.2	93.5	

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 5.53 shows the proportion of adults who used cycling for transport longer than 10 minutes during the preceding week, by frequency and LGA, in Gippsland Region. The proportion of adults who did not use cycling for transport longer than 10 minutes during the preceding week was similar across all LGAs in Gippsland Region compared with all Victorian adults.

#### Table 5.53: Proportion (%) of adult population cycling for transport during the preceding week, by frequency and LGA, Gippsland Region, Victoria, 2014

	Days cycled for transport, for trips longer than 10 minutes, in preceding week													
	1 day/week			2-3 days/week			4 or	more c week	lays/	None				
	% 95% CI		% 95% CI		% CI	%	95% CI		%	95% CI				
LGA		LL	UL		LL	UL		LL	UL		LL	UL		
Bass Coast (S)	1.8*	0.8	4.0	3.2*	1.5	6.8	**			86.4	72.8	93.7		
Baw Baw (S)	**			**			**			94.9	90.7	97.3		
East Gippsland (S)	2.6*	1.0	6.4	**			**			90.8	82.3	95.4		
Latrobe (C)	**			**			0.0			94.6	88.5	97.6		
South Gippsland (S)	**			**			**			96.1	90.2	98.5		
Wellington (S)	**			3.9*	1.6	8.9	**			89.2	80.7	94.3		
Gippsland Region	2.9*	1.6	5.1	2.1	1.3	3.4	1.6*	0.6	4.1	92.3	89.3	94.5		
Victoria	1.9	1.6	2.3	2.3	2.0	2.7	2.3	2.0	2.8	92.9	92.2	93.5		

Data were age-standardised to the 2011 Victorian population.

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 5.54 shows the proportion of adults who used cycling for transport longer than 10 minutes during the preceding week, by frequency and LGA, in Grampians Region. The proportion of adults who did not use cycling for transport longer than 10 minutes during the preceding week was similar across all LGAs in Grampians Region compared with all Victorian adults.

#### Table 5.54: Proportion (%) of adult population cycling for transport during the preceding week, by frequency and LGA, Grampians Region, Victoria, 2014

	Days cycled for transport, for trips longer than 10 minutes, in preceding week												
	1 day/week		2-3 (	days/w	veek	4 or	4 or more days/ week			None			
	%	95%	6 CI	%	95%	% CI	%	95%	6 CI	%	95%	6 CI	
LGA		LL	UL		LL	UL		LL	UL		LL	UL	
Ararat (RC)	**			**			**			94.8	90.0	97.4	
Ballarat (C)	**			2.9*	1.3	6.3	**			96.2	92.9	98.0	
Golden Plains (S)	1.1*	0.5	2.5	**			**			94.0	86.5	97.4	
Hepburn (S)	**			**			**			94.6	89.5	97.3	
Hindmarsh (S)	**			**			1.8*	0.9	3.6	93.8	89.5	96.4	
Horsham (RC)	1.1*	0.5	2.4	**			**			87.7	76.3	94.1	
Moorabool (S)	**			2.0*	1.0	4.0	**			96.4	93.9	97.9	
Northern Grampians (S)	**			0.4*	0.1	0.9	**			95.7	89.5	98.3	
Pyrenees (S)	**			**			**			96.7	90.5	98.9	
West Wimmera (S)	**			1.8*	0.7	4.6	**			92.1	84.7	96.1	
Yarriambiack (S)	4.1*	1.8	9.1	9.9*	3.7	23.7	**			84.7	72.3	92.2	
Grampians Region	1.1	0.8	1.7	2.6	1.6	4.3	0.8*	0.4	1.7	94.7	93.0	96.1	
Victoria	1.9	1.6	2.3	2.3	2.0	2.7	2.3	2.0	2.8	92.9	92.2	93.5	

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 5.55 shows the proportion of adults who used cycling for transport longer than 10 minutes during the preceding week, by frequency and LGA, in Hume Region. The proportion of adults who did not use cycling for transport longer than 10 minutes during the preceding week was significantly higher among those who lived in the LGA of Mitchell (S) compared with all Victorian adults.

#### Table 5.55: Proportion (%) of adult population cycling for transport during the preceding week, by frequency and LGA, Hume Region, Victoria, 2014

	Days cycled for transport, for trips longer than 10 minutes, in preceding week												
	1 day/week			2-3	days/v	veek	4 or	4 or more days/ week			None		
	%	95%	% CI	%	959	% CI	%	95%	6 CI	%	95%	6 CI	
LGA		LL	UL		LL	UL		LL	UL		LL	UL	
Alpine (S)	3.2*	1.7	6.1	16.3*	7.9	30.6	1.3*	0.7	2.7	78.7	65.3	87.9	
Benalla (RC)	6.0*	2.2	15.0	**			1.6*	0.6	4.1	88.1	78.9	93.6	
Greater Shepparton (C)	1.4*	0.5	3.5	3.6*	1.6	7.6	0.8*	0.3	2.0	93.2	88.8	96.0	
Indigo (S)	**			**			1.4*	0.6	3.1	90.0	78.9	95.6	
Mansfield (S)	**			1.2*	0.5	2.8	0.8*	0.3	1.8	95.1	90.9	97.4	
Mitchell (S)	**			**			**			97.4	95.3	98.6	
Moira (S)	**			1.0*	0.5	2.1	**			88.4	75.3	95.0	
Murrindindi (S)	**			**			**			92.4	83.7	96.6	
Strathbogie (S)	3.1*	1.2	7.6	1.4*	0.6	3.2	**			93.7	89.0	96.5	
Towong (S)	**			**			**			96.2	93.3	97.9	
Wangaratta (RC)	2.4*	1.1	5.2	1.8*	0.9	3.8	3.1*	1.5	6.3	92.3	88.6	94.9	
Wodonga (RC)	3.6*	1.5	8.5	**			**			93.3	88.2	96.3	
Hume Region	2.7*	1.6	4.6	2.6	1.8	3.8	1.3	0.9	1.9	92.6	90.5	94.2	
Victoria	1.9	1.6	2.3	2.3	2.0	2.7	2.3	2.0	2.8	92.9	92.2	93.5	

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 5.56 shows the proportion of adults who used cycling for transport longer than 10 minutes during the preceding week, by frequency and LGA, in Loddon Mallee Region. The proportion of adults who did not use cycling for transport longer than 10 minutes during the preceding week was significantly higher among those who lived in the LGA of Mildura (RC) compared with all Victorian adults.

Table 5.56: Proportion (%) of adult population cycling for transport during the preceding week, by frequency and LGA, Loddon Mallee Region, Victoria, 2014

	Days cycled for transport, for trips longer than 10 minutes, in preceding weel												
	1 day/week			2-3 days/week			4 or	4 or more days/ week			None		
	%	95%	% CI	%	95%	% CI	%	959	% CI	%	95%	6 CI	
LGA		LL	UL		LL	UL		LL	UL		LL	UL	
Buloke (S)	**			**			**			93.9	87.5	97.1	
Campaspe (S)	**			2.0*	0.9	4.4	2.8*	1.2	6.4	94.3	90.6	96.6	
Central Goldfields (S)	**			**			8.9*	3.3	22.3	84.9	74.1	91.7	
Gannawarra (S)	**			2.0*	0.8	4.8	**			94.4	89.3	97.2	
Greater Bendigo (C)	**			1.1*	0.5	2.6	**			95.1	90.5	97.5	
Loddon (S)	1.6*	0.6	3.9	**			**			91.6	82.1	96.3	
Macedon Ranges (S)	**			1.6*	0.7	3.8	**			95.1	91.2	97.3	
Mildura (RC)	**			**			**			96.8	93.9	98.3	
Mount Alexander (S)	2.8*	1.4	5.8	6.4*	2.8	14.3	4.2*	2.2	7.9	86.4	79.3	91.3	
Swan Hill (RC)	**			**			0.9*	0.4	2.3	96.4	92.9	98.2	
Loddon Mallee Region	1.2*	0.7	2.0	1.7	1.2	2.4	2.0*	1.0	3.8	94.4	92.6	95.8	
Victoria	1.9	1.6	2.3	2.3	2.0	2.7	2.3	2.0	2.8	92.9	92.2	93.5	

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.



### Cycled either on weekdays or the weekend

Respondents who used cycling for transport longer than 10 minutes during the preceding week were asked if they were more likely to do this on a weekday, weekend or both.

Table 5.57 shows the proportion of adults who cycled either on weekdays or the weekend, among those who cycled during the preceding week, by age group and sex. The majority of adults (44.7 per cent) cycled predominantly both on a weekday and weekend during the preceding week. A significantly lower proportion of adults 65–74 years of age cycled on the weekend only compared with all Victorian adults. Table 5.58 shows the proportion of the adults who cycled either on weekdays or the weekend, among those who cycled during the preceding week, by departmental region and sex. A significantly higher proportion of men who lived in the metropolitan regions cycled on weekdays during the preceding week compared with their rural counterparts. A significantly lower proportion of men who lived in Gippsland Region cycled on weekdays during the preceding week compared with all Victorian men. A significantly lower proportion of women who lived in Hume Region cycled on weekdays during the preceding week compared with all Victorian women.

					Cycled p	oredomiı	nantly on:			
		٧	Veekday	s	٧	Veekend	s		Both	
		%	95%	6 CI	%	95%	% CI	%	95%	6 CI
	(years)		LL	UL		LL	UL		LL	UL
Males	18–24	27.2*	13.2	47.9	27.0*	14.2	45.4	45.7	29.0	63.5
	25–34	53.8	36.8	70.0	12.3*	5.4	25.6	33.9*	19.6	51.9
	35–44	37.6	28.7	47.5	26.0	18.3	35.4	36.3	27.3	46.4
	45–54	34.9	26.8	44.1	20.1	13.9	28.0	44.4	35.7	53.6
	55–64	35.0	26.8	44.2	16.9	11.7	23.9	47.8	39.0	56.7
	65–74	29.7	22.0	38.8	8.7*	4.6	15.9	56.0	46.1	65.4
	75–84	36.5	22.6	53.1	**			56.3	40.4	71.0
	85+	67.5*	21.7	94.0	0.0			**		
	Victoria	38.0	32.9	43.4	18.0	14.4	22.2	43.3	38.2	48.6
Females	18–24	38.9*	21.7	59.5	18.9*	7.3	41.1	42.2*	22.9	64.2
	25–34	29.0*	12.9	53.0	**			54.7	31.8	75.7
	35–44	37.9	27.6	49.4	28.2	18.8	40.2	33.8	24.3	44.9
	45–54	31.8	22.4	43.0	14.4*	8.6	23.0	53.4	42.8	63.7
	55–64	30.4	20.7	42.3	14.3*	8.5	23.1	52.9	41.5	64.1
	65–74	39.5	26.1	54.8	9.2*	3.4	22.6	50.2	35.8	64.6
	75–84	**			**			63.8	33.6	85.9
	85+	**			**			90.0	41.8	99.1
	Victoria	32.9	27.1	39.2	18.8	14.0	24.9	47.8	41.2	54.5
Persons	18–24	32.3	20.8	46.4	23.5*	13.9	37.0	44.2	31.2	58.0
	25–34	47.4	33.7	61.5	13.3*	6.8	24.5	39.3	26.4	53.8
	35–44	37.7	30.5	45.5	26.6	20.3	34.0	35.6	28.5	43.4
	45–54	34.0	27.5	41.1	18.3	13.5	24.3	47.3	40.4	54.2
	55–64	33.5	27.0	40.7	16.1	11.9	21.4	49.4	42.4	56.4
	65–74	32.5	25.5	40.3	8.9*	5.2	14.7	54.4	46.2	62.4
	75–84	33.1	20.9	48.0	7.4*	2.8	18.2	57.4	43.1	70.5
	85+	47.6*	13.0	84.7	**			50.0*	14.2	85.8
	Victoria	36.6	32.6	40.8	18.0	15.1	21.3	44.7	40.6	48.9

Table 5.57: Proportion (%) of the adult population who cycled either on weekdays or the weekend, among those who cycled during the preceding week, by age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{st}$  Estimate has a RSE 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 5.58: Proportion (%) of the adult population who cycled either on weekdays or the weekend, among those who cycled during the preceding week, by Department of Health and Human Services region and sex, Victoria, 2014

	Cycled predominantly on:										
	v	Veekday	/S	W	/eekend	ds		Both			
	%	95%	6 CI	%	95%	% CI	%	959	% CI		
		LL	UL		LL	UL		LL	UL		
Males (18+ years)											
Eastern Metropolitan	32.4	23.5	42.7	29.4	18.7	43.0	38.2	26.4	51.7		
North & West Metropolitan	46.6	38.2	55.1	13.6	9.3	19.3	39.2	31.2	47.8		
Southern Metropolitan	39.6	28.5	51.9	17.3	11.2	25.7	42.7	31.8	54.3		
All metropolitan regions	42.2	36.1	48.5	16.7	13.0	21.2	40.5	34.5	46.9		
Barwon-South Western	25.2*	13.6	41.9	21.6*	10.1	40.2	50.1	37.6	62.7		
Gippsland	18.2	11.4	27.8	31.1	19.8	45.2	50.7	38.1	63.2		
Grampians	33.9	21.2	49.4	20.9	12.6	32.6	43.5	31.0	57.0		
Hume	22.4	14.4	33.0	25.3	16.1	37.3	52.0	39.2	64.5		
Loddon Mallee	29.8	20.1	41.6	14.9*	8.0	26.1	55.3	44.6	65.6		
All rural regions	24.4	16.8	34.0	24.4	16.4	34.8	50.0	41.3	58.7		
Victoria	38.0	32.9	43.4	18.0	14.4	22.2	43.3	38.2	48.6		
Females (18+ years)											
Eastern Metropolitan	28.1*	14.4	47.5	36.0	22.8	51.6	36.0	21.0	54.3		
North & West Metropolitan	27.8	20.5	36.6	18.9	11.9	28.8	52.5	42.3	62.4		
Southern Metropolitan	45.7	34.6	57.3	16.8*	9.8	27.4	37.4	27.0	49.2		
All metropolitan regions	33.5	26.8	40.9	19.3	13.7	26.6	46.7	39.0	54.6		
Barwon-South Western	38.8	23.7	56.3	22.3	14.2	33.2	39.0	24.8	55.4		
Gippsland	21.8	14.2	31.9	13.8*	7.7	23.4	36.5	26.8	47.5		
Grampians	43.8	29.2	59.5	13.3*	6.7	24.6	42.7	29.8	56.6		
Hume	15.0	9.4	23.2	15.9*	9.1	26.1	62.9	53.1	71.9		
Loddon Mallee	27.3	17.9	39.4	13.3*	7.1	23.6	35.8	25.5	47.7		
All rural regions	31.1	21.6	42.6	15.2	11.3	20.1	53.3	42.9	63.4		
Victoria	32.9	27.1	39.2	18.8	14.0	24.9	47.8	41.2	54.5		

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 5.58: Proportion (%) of the adult population who cycled either on weekdays or the weekend, among those who cycled during the preceding week, by Department of Health and Human Services region and sex, Victoria, 2014 (continued)

	Cycled predominantly on:										
	٧	Veekday	/S	v	/eekenc	ds		Both			
	%	95%	6 CI	%	95% CI		%	95% CI			
		LL	UL		LL	UL		LL	UL		
People (18+ years)											
Eastern Metropolitan	35.0	25.7	45.6	28.1	18.4	40.3	36.9	25.9	49.5		
North & West Metropolitan	39.5	33.2	46.2	15.4	11.4	20.5	44.2	37.7	51.0		
Southern Metropolitan	42.0	33.5	51.1	17.1	12.3	23.3	40.6	32.7	49.1		
All metropolitan regions	39.6	34.8	44.5	17.5	14.3	21.3	42.4	37.6	47.3		
Barwon-South Western	27.7	16.7	42.1	24.0*	13.4	39.2	46.0	35.2	57.1		
Gippsland	19.1	13.1	27.1	30.2	19.1	44.1	50.7	39.2	62.1		
Grampians	37.8	27.5	49.3	16.4	10.6	24.4	44.8	34.8	55.3		
Hume	18.3	13.0	25.2	21.8	13.8	32.7	59.3	49.5	68.5		
Loddon Mallee	29.0	20.5	39.2	14.4	8.7	22.9	56.5	45.9	66.5		
All rural regions	26.4	19.8	34.3	22.3	15.6	30.8	50.4	42.9	57.8		
Victoria	36.6	32.6	40.8	18.0	15.1	21.3	44.7	40.6	48.9		

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.


#### Walking for transport

Respondents were asked about the number days they walked for transport for trips longer than 10 minutes during the preceding week.

Table 5.59 shows the proportion of the adults who walked for transport for trips longer than 10 minutes during the preceding week, by frequency, age group and sex. The majority of adults (57.4 per cent) did not walk for transport for trips longer than 10 minutes during the preceding week. A significantly higher proportion of men and women 45 years of age or older did not walk for transport compared with all Victorian adults. Table 5.60 shows the proportion of adults who walked for transport for trips longer than 10 minutes during the preceding week, by frequency, departmental region and sex. A significantly higher proportion of men and women who lived in Grampians Region, Hume Region and rural Victoria did not walk for transport for trips longer than 10 minutes during the preceding week compared with all Victorian men and women, respectively.

		1 c	day/wee	∍k	2-3	days/w	eek	4 or mo	ore day	s/week		None	
	Age	%	95%	6 CI	%	95%	6 CI	%	95%	6 CI	%	95%	6 CI
	(years)		LL	UL		LL	UL		LL	UL		LL	UL
Males	18–24	9.3	6.0	14.1	28.2	22.4	34.9	23.3	18.5	29.0	38.8	32.6	45.4
	25–34	10.0	6.7	14.7	16.4	12.3	21.4	19.9	15.5	25.2	53.4	47.3	59.5
	35–44	6.6	5.0	8.7	14.0	11.6	16.7	19.7	17.0	22.9	59.6	56.0	63.2
	45–54	5.4	4.2	6.9	13.4	11.6	15.6	18.5	16.3	21.0	62.3	59.4	65.2
	55–64	5.6	4.5	6.8	13.9	12.3	15.7	15.5	13.8	17.3	64.7	62.3	67.0
	65–74	6.4	5.3	7.7	16.0	14.3	17.9	15.0	13.4	16.8	62.0	59.6	64.3
	75–84	4.9	3.8	6.3	14.1	12.1	16.4	14.5	12.4	16.8	65.2	62.2	68.1
	85+	5.4*	3.2	8.8	8.7	5.5	13.7	10.7	7.4	15.2	73.9	67.8	79.1
	Victoria	7.2	6.2	8.3	16.5	15.1	18.0	18.6	17.2	20.0	57.4	55.6	59.2
Females	18–24	9.9	6.4	14.9	21.3	16.6	26.8	30.2	24.2	36.9	38.6	32.6	45.1
	25–34	6.8	5.0	9.3	19.3	15.4	23.8	21.9	17.8	26.7	51.6	46.5	56.5
	35–44	8.1	6.8	9.6	17.3	15.3	19.4	17.1	15.2	19.2	57.3	54.7	59.9
	45–54	6.6	5.5	7.9	14.8	13.2	16.6	14.1	12.6	15.8	64.3	62.0	66.5
	55–64	6.5	5.6	7.6	15.8	14.3	17.5	12.9	11.6	14.4	64.3	62.3	66.3
	65–74	7.5	6.4	8.7	15.0	13.6	16.6	12.2	10.9	13.6	64.1	62.1	66.1
	75–84	6.8	5.6	8.2	13.8	12.2	15.7	9.2	7.8	10.8	68.5	66.0	70.9
	85+	4.8	3.1	7.2	12.5	9.6	16.1	10.2	7.7	13.4	70.2	65.7	74.4
	Victoria	7.4	6.6	8.2	17.1	15.9	18.4	17.7	16.4	19.2	57.3	55.8	58.8
Persons	18–24	9.6	7.1	12.9	24.8	21.0	29.1	26.7	22.7	31.1	38.7	34.3	43.3
	25–34	8.4	6.4	11.0	17.8	14.9	21.1	20.9	17.8	24.4	52.5	48.5	56.4
	35–44	7.3	6.3	8.6	15.7	14.1	17.4	18.4	16.7	20.3	58.5	56.2	60.7
	45–54	6.0	5.2	7.0	14.1	12.9	15.5	16.3	14.9	17.8	63.3	61.5	65.2
	55–64	6.0	5.3	6.8	14.9	13.8	16.1	14.2	13.1	15.3	64.5	62.9	66.0
	65–74	7.0	6.2	7.8	15.5	14.3	16.7	13.5	12.5	14.6	63.1	61.6	64.7
	75–84	5.9	5.0	6.9	14.0	12.6	15.4	11.6	10.4	13.0	67.0	65.0	68.8
	85+	5.0	3.6	6.9	10.9	8.6	13.7	10.4	8.3	13.0	71.8	68.1	75.1
	Victoria	7.3	6.6	8.0	16.8	15.9	17.8	18.1	17.1	19.1	57.4	56.2	58.5

Table 5.59: Proportion (%) of adult population who walked for transport for trips longer than 10 minutes during the preceding week, by frequency, age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}~$  Estimate has a RSE 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 5.60: Proportion (%) of adult population who walked for transport for trips longer than 10 minutes during the preceding week, by frequency, Department of Health and Human Services region and sex, Victoria, 2014

	Days walked for transport, for trips longer than 10 minutes, in preceding week												
	1 c	day/we	ek	2-3	days/v	veek	4 or	more o week	days/		None		
	%	959	% CI	%	95%	% CI	%	959	% CI	%	959	% CI	
Region		LL	UL		LL	UL		LL	UL		LL	UL	
Males (18+ years)													
Eastern Metropolitan	7.3	5.1	10.4	18.0	14.8	21.8	18.4	15.1	22.1	56.2	51.8	60.5	
North & West Metropolitan	9.1	7.1	11.6	16.9	14.6	19.4	19.6	17.5	21.9	53.9	50.9	56.9	
Southern Metropolitan	5.6	4.2	7.3	15.7	12.8	19.2	22.0	18.7	25.8	56.2	52.1	60.3	
All metropolitan regions	7.6	6.4	9.1	16.7	15.1	18.5	19.9	18.3	21.7	55.3	53.2	57.5	
Barwon-South Western	4.6	3.1	7.0	18.1	12.6	25.2	13.1	9.2	18.3	63.6	56.4	70.3	
Gippsland	6.4*	3.9	10.6	18.3	12.7	25.6	16.4	11.3	23.3	58.7	51.8	65.3	
Grampians	3.5	2.4	5.2	17.1	12.4	23.2	10.9	8.2	14.5	67.8	61.6	73.5	
Hume	5.9	3.7	9.2	16.0	11.8	21.4	13.6	10.4	17.6	64.3	59.4	68.9	
Loddon Mallee	7.2	4.8	10.6	10.8	8.6	13.5	16.6	12.2	22.1	65.2	59.1	70.8	
All rural regions	5.5	4.5	6.7	15.9	13.6	18.6	14.1	12.1	16.4	64.1	61.0	67.1	
Victoria	7.2	6.2	8.3	16.5	15.1	18.0	18.6	17.2	20.0	57.4	55.6	59.2	
Females (18+ years)													
Eastern Metropolitan	7.8	6.1	9.9	16.1	13.3	19.3	20.0	16.6	24.0	55.8	51.9	59.7	
North & West Metropolitan	6.6	5.5	7.9	19.6	17.4	21.9	20.4	18.2	22.7	53.0	50.4	55.5	
Southern Metropolitan	8.9	7.0	11.4	17.3	14.8	20.2	16.6	13.8	19.9	56.6	53.4	59.7	
All metropolitan regions	7.6	6.7	8.7	18.1	16.6	19.6	19.1	17.5	20.8	54.8	53.0	56.5	
Barwon-South Western	6.3	4.3	9.1	12.9	9.8	16.7	12.7	9.3	17.1	67.9	61.7	73.4	
Gippsland	8.1	5.0	13.1	15.9	11.8	21.1	12.3	9.3	16.0	63.1	57.6	68.2	
Grampians	6.8	4.6	10.1	18.0	12.9	24.6	9.9	7.8	12.5	64.7	59.0	70.0	
Hume	6.2	4.5	8.6	13.4	10.7	16.7	13.2	10.7	16.2	66.9	62.9	70.7	
Loddon Mallee	6.7	4.7	9.5	13.1	9.3	18.1	15.5	11.5	20.6	64.4	59.0	69.4	
All rural regions	6.8	5.6	8.1	14.2	12.4	16.4	12.7	11.1	14.5	65.8	63.2	68.4	
Victoria	7.4	6.6	8.2	17.1	15.9	18.4	17.7	16.4	19.2	57.3	55.8	58.8	

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

### Table 5.60: Proportion (%) of adult population who walked for transport for trips longer than 10 minutes during the preceding week, by frequency, Department of Health and Human Services region and sex, Victoria, 2014 (continued)

	Da	ys wall	ed for	transpo	rt, for t	rips lor	nger tha	n 10 m	inutes,	in prece	ding w	eek
	1 c	day/we	ek	2-3	days/v	veek	4 or	more o week	lays/		None	
	%	95%	6 CI	%	95%	% CI	%	95%	% CI	%	95%	6 CI
Region		LL	UL		LL	UL		LL	UL		LL	UL
People (18+ years)												
Eastern Metropolitan	7.6	6.2	9.4	17.0	14.8	19.4	19.2	16.7	21.9	56.0	53.1	58.9
North & West Metropolitan	7.9	6.7	9.2	18.2	16.7	19.9	19.9	18.4	21.5	53.4	51.4	55.4
Southern Metropolitan	7.3	6.0	8.7	16.5	14.5	18.7	19.3	17.0	21.7	56.4	53.8	59.0
All metropolitan regions	7.7	6.9	8.5	17.4	16.3	18.5	19.5	18.3	20.7	55.1	53.7	56.4
Barwon-South Western	5.5	4.1	7.2	15.5	12.1	19.7	12.9	10.2	16.2	65.7	60.8	70.2
Gippsland	7.1	5.0	9.9	17.2	13.4	21.6	14.3	11.1	18.2	61.1	56.6	65.3
Grampians	5.2	3.9	6.9	17.5	13.9	21.9	10.3	8.5	12.3	66.4	62.1	70.4
Hume	6.0	4.5	7.9	14.7	11.9	17.9	13.3	11.2	15.8	65.7	62.4	68.9
Loddon Mallee	6.8	5.3	8.8	11.8	9.6	14.4	15.8	12.7	19.5	65.3	61.0	69.2
All rural regions	6.1	5.3	7.0	15.2	13.6	16.9	13.4	12.0	14.8	65.0	63.0	67.0
Victoria	7.3	6.6	8.0	16.8	15.9	17.8	18.1	17.1	19.1	57.4	56.2	58.5

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

### Walking for transport by departmental region and local government area

IMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARF ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDAF BANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMI1 A C FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI **BIN EAST GIPPS** GREATER DANDE REATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON ORSHAM HUME INDIGO KANGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MAN MARIBYRNONG MAROOLIDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE EY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI IK NORTHERN GRAMPIANS GORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT LUM SLAND STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOG INGTON WEST WILMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGE IAMBIACK ALPINE ARARAT BALLARAT BANY WASS COAST BAW BAW BAYSIDE BENALLA BOROONI SEY CENTRA RIMBANK BULOKE CAMPASPE CARDIN BIN EAST GIPPSLATID FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI GREATER DANDEN ONG GREATER GEELONG GREATER SHEPPARTON HEPBUR I HINDMARSH HOBSON IORSHAM HUME INDIGO KINGSTON KNOX LA ROBE LODDON MACEDON RANGES MANNINGHAM MAN MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MORA MONASH MOONE EY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEX INDER MOVIE IK NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN O NE MURRINDINDI NI LUM RAMPIANS SOUT SLAND STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WAR INGTON WEST WIMMERA WHITEHORSE WHITTLESEA WODONGA WANDHAM YARRA YARRA MABIACK ALPINE ARARAT BALLARATBAN WE BASS COAST BAW BAW BAYSIDE BENALLA E BRIMBANK BULCKE CAMPASPE CARDING CASEY CENTRAL GOLDFIELDS COLAC-OTWAY COR BRIMBANK BULOKE CAMPASPE CARDINA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANG BIN EAST GIPPSLAND FRANKSTON GANNAWARKA GLENERA GLENELG GOLDEN PLAINS GREAT GREATER DANDENONG GREATER GELOMOLGREATER SHEPPADTON. UPDNIC GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON ROBE LODDON MACEDON F ORSHAM HUME INDIGO KINGSTON **ANGES MANNINGHAM MAN** RIBYRNONG MAROONDAH MEL TON MILDURA MITC ELL MOIRA MONASH MORELAND MORN **JULA MOUNT ALE** VALLEY N **NRA** NDER MOYNE MURRINDINDI NI LUMBIK NORTHERN GR MPIANS POI **LEES QUEENSC** OGIE SURF COAS WONG WANGARATTA WARRNAMBOO GIPPSLAND STONNINGTON CONGA WYNDHAM YARRA YARRA RANGE WELLINGTON WEST WIMMERA HITEHORSE BAW BAW BAYSIDE BENALLA BOROONI

Table 5.61 shows the proportion of adults who walked for transport for trips longer than 10 minutes during the preceding week, by frequency and LGA, in Eastern Metropolitan Region. The proportion of adults who did not walk for transport for trips longer than 10 minutes during the preceding week was similar across all LGAs in Eastern Metropolitan Region compared with all Victorian adults.

#### Table 5.61: Proportion (%) of adult population who walked for transport for trips longer than 10 minutes during the preceding week, by frequency and LGA, Eastern Metropolitan Region, Victoria, 2014

	Do	ays wa	lked for	transpo	ort, for	trips lor	nger thai	n 10 mi	nutes, i	n preced	ling we	ek
	10	day/we	ek	2-3	days/w	veek	4 or	more o week	lays/		None	
	%	95%	% CI	%	95%	% CI	%	959	% CI	%	95%	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Boroondara (C)	8.3	5.2	13.0	20.1	15.1	26.3	22.4	16.7	29.2	49.1	41.8	56.4
Knox (C)	5.7*	2.7	11.7	15.7	10.3	23.0	15.1	9.3	23.5	63.5	56.4	70.1
Manningham (C)	8.1*	4.6	13.8	16.4	11.0	23.6	20.8	14.7	28.6	54.5	47.0	61.7
Maroondah (C)	7.1	4.5	11.0	10.4	7.0	15.3	18.2	11.7	27.2	63.8	54.5	72.1
Monash (C)	9.8	6.3	14.8	17.3	12.9	22.9	17.6	13.0	23.4	55.1	48.5	61.5
Whitehorse (C)	8.6*	5.0	14.2	20.1	15.0	26.4	21.8	15.9	29.0	49.4	41.6	57.2
Yarra Ranges (S)	3.9*	2.4	6.5	16.6	10.0	26.4	19.8	12.6	29.9	59.5	52.0	66.6
Eastern Metropolitan Region	7.6	6.2	9.4	17.0	14.8	19.4	19.2	16.7	21.9	56.0	53.1	58.9
Victoria	7.3	6.6	8.0	16.8	15.9	17.8	18.1	17.1	19.1	57.4	56.2	58.5

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 5.62 shows the proportion of adults who walked for transport for trips longer than 10 minutes during the preceding week, by frequency and LGA, in North & West Metropolitan Region. The proportion of adults who did not walk for transport for trips longer than 10 minutes during the preceding week was significantly higher among those who lived in the LGAs of Hume (C), Nillumbik (S) and Whittlesea (C) compared with all Victorian adults.

#### Table 5.62: Proportion (%) of adult population who walked for transport for trips longer than 10 minutes during the preceding week, by frequency and LGA, North & West Metropolitan Region, Victoria, 2014

	Days walked for transport, for trips longer than 10 minutes, in preceding week													
	1 c	lay/we	ek	2-3	days/w	veek	4 or	more c week	lays/		None			
	%	95%	% CI	%	95%	% CI	%	95%	6 CI	%	95%	6 CI		
LGA		LL	UL		LL	UL		LL	UL		LL	UL		
Banyule (C)	8.8*	5.3	14.5	24.8	18.3	32.8	20.3	15.1	26.7	45.7	39.2	52.3		
Brimbank (C)	6.9*	4.1	11.1	15.1	11.0	20.3	15.4	11.3	20.7	61.3	55.1	67.2		
Darebin (C)	12.8*	7.4	21.3	23.7	18.4	30.0	19.6	14.9	25.3	43.3	36.1	50.8		
Hobsons Bay (C)	6.0	3.9	9.3	21.4	14.9	29.7	16.7	12.1	22.6	55.1	46.4	63.4		
Hume (C)	8.0	5.3	11.8	14.8	10.4	20.8	11.6	8.1	16.2	65.6	59.0	71.6		
Maribyrnong (C)	10.7	6.8	16.3	18.0	13.2	24.1	25.7	19.9	32.6	43.1	36.2	50.1		
Melbourne (C)	8.9*	5.1	15.1	23.3	17.5	30.3	44.8	37.8	52.0	22.6	17.4	28.8		
Melton (S)	6.3*	3.3	11.6	15.8	10.0	23.9	14.5	10.0	20.6	63.2	56.0	69.8		
Moonee Valley (C)	7.0	4.4	10.9	18.9	14.2	24.8	25.4	19.5	32.4	48.3	41.5	55.2		
Moreland (C)	5.7*	3.3	9.6	17.2	12.9	22.5	22.0	16.6	28.6	54.6	47.5	61.5		
Nillumbik (S)	7.0	4.4	10.9	11.9	8.1	17.1	12.1	8.2	17.5	68.6	61.7	74.8		
Whittlesea (C)	7.4	4.5	11.8	15.2	11.3	20.2	11.5	8.1	16.1	65.8	59.8	71.3		
Wyndham (C)	4.7*	2.8	7.9	18.1	13.6	23.7	15.5	11.8	20.0	60.9	54.7	66.7		
Yarra (C)	8.9*	5.2	14.9	27.8	19.9	37.5	34.8	27.3	43.2	28.2	22.1	35.2		
North & West Metropolitan Region	7.9	6.7	9.2	18.2	16.7	19.9	19.9	18.4	21.5	53.4	51.4	55.4		
Victoria	7.3	6.6	8.0	16.8	15.9	17.8	18.1	17.1	19.1	57.4	56.2	58.5		

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}\,$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 5.63 shows the proportion of adults who walked for transport for trips longer than 10 minutes during the preceding week, by frequency and LGA, in Southern Metropolitan Region. The proportion of adults who did not walk for transport for trips longer than 10 minutes during the preceding week was significantly higher among those who lived in the LGAs of Cardinia (S), Casey (C), Frankston (C) and Mornington Peninsula (S) compared with all Victorian adults.

#### Table 5.63: Proportion (%) of adult population who walked for transport for trips longer than 10 minutes during the preceding week, by frequency and LGA, Southern Metropolitan Region, Victoria, 2014

	Do	ays wa	lked for	transpo	rt, for	trips lor	nger thai	n 10 mi	nutes, ir	n preced	ling we	ek
	1 c	day/we	ek	2-3	days/w	veek	4 or	more c week	lays/		None	
	%	959	% CI	%	95%	% CI	%	95%	% CI	%	95%	6 CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Bayside (C)	6.6	4.1	10.3	26.7	18.7	36.5	25.3	17.7	34.9	41.2	33.4	49.5
Cardinia (S)	4.8*	2.8	7.9	10.5	7.0	15.5	10.1	6.6	15.1	74.0	67.9	79.4
Casey (C)	7.6	4.8	11.9	15.1	10.5	21.3	8.6	6.0	12.3	67.9	61.2	74.0
Frankston (C)	3.9*	2.2	6.8	14.9	10.4	20.9	11.9	8.0	17.2	68.4	61.8	74.4
Glen Eira (C)	11.2*	6.0	19.9	16.8	12.1	23.0	23.7	17.4	31.3	48.1	41.5	54.9
Greater Dandenong (C)	5.2*	3.0	8.8	18.5	13.1	25.4	14.1	10.0	19.5	61.5	54.3	68.1
Kingston (C)	8.2	5.5	12.2	16.1	11.1	22.8	21.3	15.0	29.3	53.5	45.0	61.8
Mornington Peninsula (S)	4.0*	2.0	7.7	10.1*	6.1	16.3	16.8*	10.0	26.8	69.1	59.6	77.1
Port Phillip (C)	4.4	2.7	7.0	23.6	16.4	32.6	44.6	35.2	54.4	27.1	20.9	34.4
Stonnington (C)	14.4	9.8	20.7	17.4	12.3	24.0	27.2	21.0	34.5	40.9	33.1	49.2
Southern Metropolitan Region	7.3	6.0	8.7	16.5	14.5	18.7	19.3	17.0	21.7	56.4	53.8	59.0
Victoria	7.3	6.6	8.0	16.8	15.9	17.8	18.1	17.1	19.1	57.4	56.2	58.5

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 5.64 shows the proportion of adults who walked for transport for trips longer than 10 minutes during the preceding week, by frequency and LGA, in Barwon-South Western Region. The proportion of adults who did not walk for transport for trips longer than 10 minutes during the preceding week was significantly higher among those who lived in the LGAs of Glenelg (S), Greater Geelong (C), Southern Grampians (S) and Warrnambool (C) compared with all Victorian adults.

#### Table 5.64: Proportion (%) of adult population who walked for transport for trips longer than 10 minutes during the preceding week, by frequency and LGA, Barwon-South Western Region, Victoria, 2014

	Do	Days walked for transport, for trips longer than 10 minutes, in preceding week													
	1 c	lay/we	ek	2-3	days/w	veek	4 or i	more c week	lays/		None				
	%	95%	6 CI	%	95%	6 CI	%	95%	6 CI	%	95%	6 CI			
LGA		LL	UL		LL	UL		LL	UL		LL	UL			
Colac-Otway (S)	9.3*	4.3	18.8	17.2	10.7	26.6	8.4	5.2	13.2	63.7	53.2	73.1			
Corangamite (S)	8.7*	4.5	16.1	17.2	10.9	26.1	17.5	11.6	25.5	56.3	47.0	65.2			
Glenelg (S)	2.9*	1.6	5.1	12.2	7.7	18.7	15.1	9.9	22.3	69.5	61.6	76.4			
Greater Geelong (C)	4.0	2.4	6.4	15.4	10.6	21.9	12.2	8.4	17.3	68.1	61.0	74.5			
Moyne (S)	5.7*	3.0	10.7	11.9	8.0	17.4	18.1	12.2	26.1	64.1	55.5	71.8			
Queenscliffe (B)	10.2*	5.0	19.7	15.6*	9.3	25.1	20.7*	11.9	33.4	52.9	39.1	66.2			
Southern Grampians (S)	3.6*	2.0	6.5	12.8	8.0	19.9	12.0	8.3	16.9	71.2	63.2	78.1			
Surf Coast (S)	7.6*	4.3	12.9	23.5	16.1	33.1	13.2	9.0	19.0	54.8	47.8	61.7			
Warrnambool (C)	9.2*	5.1	16.1	11.3*	6.8	18.4	12.3	7.6	19.4	67.0	58.7	74.3			
Barwon-South Western Region	5.5	4.1	7.2	15.5	12.1	19.7	12.9	10.2	16.2	65.7	60.8	70.2			
Victoria	7.3	6.6	8.0	16.8	15.9	17.8	18.1	17.1	19.1	57.4	56.2	58.5			

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here. Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 5.65 shows the proportion of adults who walked for transport for trips longer than 10 minutes during the preceding week, by frequency and LGA, in Gippsland Region. The proportion of adults who did not walk for transport for trips longer than 10 minutes during the preceding week was similar across all LGAs in Gippsland Region compared with all Victorian adults.

#### Table 5.65: Proportion (%) of adult population who walked for transport for trips longer than 10 minutes during the preceding week, by frequency and LGA, Gippsland Region, Victoria, 2014

	Do	Days walked for transport, for trips longer than 10 minutes, in preceding week											
	1 c	lay/we	ek	2-3	days/w	/eek	4 or i	more o week	lays/		None		
	%	95%	% CI	%	95%	% CI	%	959	% CI	%	95%	6 CI	
LGA		LL	UL		LL	UL		LL	UL		LL	UL	
Bass Coast (S)	11.5*	6.6	19.4	10.9	6.9	16.8	14.1*	7.2	25.8	63.3	52.4	73.0	
Baw Baw (S)	6.2	3.8	10.0	11.8	7.6	17.8	18.0*	9.9	30.6	63.6	53.4	72.7	
East Gippsland (S)	5.1*	2.7	9.7	16.0*	9.3	26.3	10.6*	5.7	18.9	68.1	57.3	77.3	
Latrobe (C)	9.0*	4.3	17.8	20.6	13.3	30.4	14.5	9.9	20.8	55.5	46.4	64.3	
South Gippsland (S)	8.6*	4.6	15.4	16.5	10.7	24.7	17.3	11.1	26.0	57.2	48.9	65.1	
Wellington (S)	3.2*	1.6	6.3	21.9	13.5	33.4	11.7	7.4	18.0	62.8	53.2	71.5	
<b>Gippsland Region</b>	7.1	5.0	9.9	17.2	13.4	21.6	14.3	11.1	18.2	61.1	56.6	65.3	
Victoria	7.3	6.6	8.0	16.8	15.9	17.8	18.1	17.1	19.1	57.4	56.2	58.5	

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}\,$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 5.66 shows the proportion of adults who walked for transport for trips longer than 10 minutes during the preceding week, by frequency and LGA, in Grampians Region. The proportion of adults who did not walk for transport for trips longer than 10 minutes during the preceding week was significantly higher among those who lived in the LGAs of Ballarat (C), Golden Plains (S) and Hepburn (S), compared with all Victorian adults.

#### Table 5.66: Proportion (%) of adult population who walked for transport for trips longer than 10 minutes during the preceding week, by frequency and LGA, Grampians Region, Victoria, 2014

	Do	ays wa	lked for	transpo	rt, for	trips loi	nger thar	n 10 mi	nutes, i	n preced	ling we	ek
	1 c	day/we	ek	2-3	days/w	veek	4 or i	more o week	days/		None	
	%	95%	% CI	%	95%	% CI	%	95%	% CI	%	95%	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Ararat (RC)	8.5*	4.1	16.8	15.3	10.1	22.5	20.1	13.1	29.7	55.6	48.2	62.7
Ballarat (C)	5.1*	3.0	8.4	19.3	13.3	27.2	7.8	5.1	11.7	67.4	59.6	74.4
Golden Plains (S)	5.1	3.2	8.0	10.7	6.5	17.1	9.2	6.3	13.3	74.8	67.9	80.7
Hepburn (S)	1.3*	0.7	2.6	15.5	9.8	23.5	11.2*	6.6	18.4	71.7	62.1	79.6
Hindmarsh (S)	6.2	3.8	9.9	17.0	11.2	24.9	9.8	6.7	13.9	66.3	58.1	73.7
Horsham (RC)	3.9*	2.2	6.7	13.5*	7.1	24.1	15.8*	8.6	27.3	66.6	53.7	77.4
Moorabool (S)	7.0*	3.7	12.9	17.0	11.9	23.7	10.8	6.9	16.4	63.2	56.1	69.7
Northern Grampians (S)	2.0*	1.1	3.9	16.7	12.1	22.7	14.3	8.6	22.7	66.7	57.7	74.6
Pyrenees (S)	11.1*	4.8	23.6	24.7	16.5	35.4	10.8	6.7	17.0	52.6	43.8	61.2
West Wimmera (S)	5.3*	2.4	11.0	10.8	7.2	16.0	18.8	11.4	29.4	64.5	54.7	73.2
Yarriambiack (S)	6.7*	3.2	13.3	22.1	14.0	32.9	13.5	8.9	20.0	56.9	47.2	66.0
Grampians Region	5.2	3.9	6.9	17.5	13.9	21.9	10.3	8.5	12.3	66.4	62.1	70.4
Victoria	7.3	6.6	8.0	16.8	15.9	17.8	18.1	17.1	19.1	57.4	56.2	58.5

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 5.67 shows the proportion of adults who walked for transport for trips longer than 10 minutes during the preceding week, by frequency and LGA, in Hume Region. The proportion of adults who did not walk for transport for trips longer than 10 minutes during the preceding week was significantly higher among those who lived in the LGAs of Mitchell (S), Murrindindi (S), Wangaratta (RC) and Wodonga (RC) compared with all Victorian adults.

Table 5.67: Proportion (%) of adult population who walked for transport for trips longer than 10 minutes during the preceding week, by frequency and LGA, Hume Region, Victoria, 2014

	Do	ays wa	lked for	transpo	rt, for	trips lor	nger thar	n 10 mi	nutes, i	n preced	ling we	ek
	1 c	day/we	ek	2-3	days/w	veek	4 or	more c week	lays/		None	
	%	95%	% CI	%	95%	% CI	%	95%	% CI	%	95%	6 CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Alpine (S)	**			13.2	9.1	18.6	22.8*	12.9	37.1	57.7	44.7	69.7
Benalla (RC)	9.6*	5.4	16.5	15.4	9.8	23.4	15.2*	9.0	24.4	59.9	50.2	68.8
Greater Shepparton (C)	6.8*	3.6	12.5	13.8*	7.6	23.6	14.1	9.1	21.1	65.2	56.9	72.6
Indigo (S)	4.9*	2.5	9.4	14.8	9.3	22.9	16.6*	9.8	26.7	63.5	53.4	72.6
Mansfield (S)	**			12.7*	6.7	22.6	11.4	7.4	17.2	67.4	52.4	79.5
Mitchell (S)	1.8*	1.0	3.2	17.9	12.0	26.0	11.9	7.2	18.9	68.0	61.3	74.0
Moira (S)	4.7*	2.2	10.1	21.1	12.6	33.2	12.5	8.3	18.4	61.3	51.6	70.2
Murrindindi (S)	4.7*	2.3	9.3	10.5	6.9	15.6	12.8*	7.6	20.7	71.5	62.8	78.9
Strathbogie (S)	3.0*	1.6	5.7	19.3*	9.6	35.1	13.2*	7.7	21.6	64.2	49.7	76.5
Towong (S)	6.6	4.1	10.5	24.8	16.8	35.1	17.8	11.7	26.2	50.1	42.5	57.6
Wangaratta (RC)	8.8*	4.0	18.2	10.9	7.5	15.7	7.1	4.8	10.4	73.0	64.4	80.1
Wodonga (RC)	7.0*	3.9	12.2	11.2	7.2	17.1	13.6	8.7	20.7	67.7	59.9	74.7
Hume Region	6.0	4.5	7.9	14.7	11.9	17.9	13.3	11.2	15.8	65.7	62.4	68.9
Victoria	7.3	6.6	8.0	16.8	15.9	17.8	18.1	17.1	19.1	57.4	56.2	58.5

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 5.68 shows the proportion of adults who walked for transport for trips longer than 10 minutes during the preceding week, by frequency and LGA, in Loddon Mallee Region. The proportion of adults who did not walk for transport for trips longer than 10 minutes during the preceding week was significantly higher among those who lived in the LGAs of Gannawarra (S), Greater Bendigo (C) and Swan Hill (RC) compared with all Victorian adults.

Table 5.68: Proportion (%) of adult population who walked for transport for trips longer than 10 minutes during the preceding week, by frequency and LGA, Loddon Mallee Region, Victoria, 2014

	Do	ays wa	lked for	transpo	rt, for	trips lor	nger thai	n 10 mi	nutes, i	n precec	ling we	ek
	1 c	lay/we	ek	2-3	days/w	veek	4 or	more o week	lays/		None	
	%	95%	% CI	%	95%	% CI	%	959	% CI	%	95%	% CI
LGA		LL	UL		LL	UL		LL	UL		LL	UL
Buloke (S)	3.2*	1.6	6.2	21.5	14.3	31.0	21.4	14.1	31.3	53.7	45.2	61.9
Campaspe (S)	16.5	9.9	26.1	8.5	5.9	12.2	15.0*	8.8	24.3	59.7	51.3	67.5
Central Goldfields (S)	10.1*	4.5	21.1	16.7	10.3	25.9	13.8*	7.1	25.2	58.5	49.7	66.8
Gannawarra (S)	5.2*	2.1	11.9	11.4*	6.1	20.1	9.5	6.2	14.4	73.3	64.3	80.7
Greater Bendigo (C)	5.4	3.6	8.0	10.6	7.9	14.2	15.0	10.3	21.3	68.7	62.0	74.7
Loddon (S)	7.0*	3.7	12.7	18.7*	10.2	31.7	10.8*	6.3	17.9	63.1	50.9	73.9
Macedon Ranges (S)	4.1	2.6	6.4	16.8*	8.1	31.8	19.5*	10.0	34.6	59.5	51.1	67.4
Mildura (RC)	9.2*	5.0	16.3	10.1	6.5	15.6	14.5*	8.5	23.5	65.6	55.9	74.3
Mount Alexander (S)	4.9*	2.8	8.5	17.9*	10.4	29.0	25.6	15.9	38.5	51.5	41.3	61.6
Swan Hill (RC)	4.2*	1.8	9.6	8.5	6.0	12.0	15.1*	9.1	24.0	72.1	62.8	79.9
Loddon Mallee Region	6.8	5.3	8.8	11.8	9.6	14.4	15.8	12.7	19.5	65.3	61.0	69.2
Victoria	7.3	6.6	8.0	16.8	15.9	17.8	18.1	17.1	19.1	57.4	56.2	58.5

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.



### Walked for transport either on weekdays or the weekend

Respondents who walked for transport for trips longer than 10 minutes during the preceding week were asked if they were more likely to do this on a weekday, weekend or both.

Table 5.69 shows the proportion of the adults who walked for transport either on weekdays or the weekend, among those who walked for transport for trips longer than 10 minutes, by age group and sex. The majority of adults (46.9 per cent) walked for transport predominantly both on weekdays and the weekend during the preceding week. A significantly lower proportion of 65 years of age or older men and women walked for transport on the weekend compared with all Victorian adults. A significantly lower proportion of 75–84-year-old men walked for transport on weekdays compared with all Victorian adults. Table 5.70 shows the proportion of the adults who walked for transport either on weekdays or the weekend, among those who walked for transport for trips longer than 10 minutes, by departmental region and sex. A significantly higher proportion of men who lived in the metropolitan regions walked for transport on weekdays during the preceding week compared with their rural counterparts. A significantly lower proportion of men who lived in Barwon-South Western Region and Gippsland Region walked for transport on weekdays during the preceding week compared with all Victorian men. A significantly lower proportion of men who lived in Grampians Region walked for transport on the weekend during the preceding week compared with all Victorian women.

		Walked predominantly on:												
		v	Veekday	'S	٧	Veekend	ls		Both					
		%	95%	6 CI	%	95%	% CI	%	95	% CI				
	(years)		LL	UL		LL	UL		LL	UL				
Males	18–24	48.3	39.8	56.8	17.3	11.3	25.7	34.4	27.1	42.5				
	25–34	37.2	28.9	46.4	16.7	11.1	24.5	44.5	35.7	53.6				
	35–44	37.8	32.3	43.5	17.6	13.6	22.6	44.4	38.7	50.2				
	45–54	41.9	37.1	46.8	14.8	11.6	18.7	42.8	38.2	47.6				
	55–64	33.8	30.1	37.8	12.7	10.2	15.7	52.5	48.4	56.6				
	65–74	32.9	29.2	36.8	5.7	4.0	7.9	60.6	56.6	64.5				
	75–84	30.8	26.2	36.0	5.3*	3.1	8.9	61.6	56.3	66.7				
	85+	47.9	35.1	60.9	3.1*	1.2	7.5	47.8	35.2	60.7				
	Victoria	38.7	36.1	41.4	14.0	12.1	16.2	46.5	43.9	49.1				
Females	18–24	45.6	37.1	54.4	14.1	9.1	21.3	39.3	31.3	47.8				
	25–34	36.3	29.7	43.5	9.4	6.3	13.8	53.8	46.3	61.1				
	35–44	41.5	37.5	45.6	14.9	12.1	18.0	43.3	39.3	47.4				
	45–54	38.8	35.1	42.7	14.1	11.6	17.0	46.2	42.4	50.1				
	55–64	35.2	31.9	38.7	10.3	8.4	12.6	53.5	50.0	57.0				
	65–74	40.0	36.5	43.6	7.2	5.4	9.6	51.2	47.5	54.8				
	75–84	46.7	42.1	51.4	5.1	3.4	7.5	46.4	41.7	51.1				
	85+	50.5	41.5	59.5	**			41.8	33.1	51.1				
Persons	Victoria	40.2	38.0	42.5	11.4	10.1	12.9	47.4	45.1	49.7				
	18–24	47.0	40.9	53.1	15.8	11.6	21.1	36.8	31.3	42.7				
	25–34	36.8	31.4	42.5	13.0	9.6	17.3	49.2	43.3	55.1				
	35–44	39.7	36.3	43.2	16.2	13.7	19.0	43.8	40.4	47.3				
	45–54	40.4	37.3	43.5	14.5	12.4	16.8	44.5	41.4	47.6				
	55–64	34.5	32.0	37.1	11.5	9.8	13.3	53.0	50.3	55.7				
	65–74	36.6	34.0	39.2	6.5	5.2	8.1	55.7	53.0	58.4				
	75–84	38.9	35.6	42.4	5.2	3.7	7.2	53.9	50.4	57.4				
	85+	49.5	42.0	57.0	2.7*	1.2	6.3	44.2	36.9	51.8				
	Victoria	39.5	37.8	41.2	12.7	11.5	14.0	46.9	45.2	48.7				

### Table 5.69: The proportion (%) of the adult population who walked either on weekdays or the weekend, among those who walked, by age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{st}\,$  Estimate has a RSE 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 5.70: The proportion (%) of the adult population who walked either on weekdays or the weekend, among those who walked, by Department of Health and Human Services region and sex, Victoria, 2014

				Walked pr	redomir	nantly oi	n:		
	V	Veekday	/S	W	/eekend	ds		Both	
	%	95%	6 CI	%	95%	% CI	%	959	% CI
		LL	UL		LL	UL		LL	UL
Males (18+ years)									
Eastern Metropolitan	48.5	42.3	54.7	14.0	9.9	19.4	36.4	31.0	42.1
North & West Metropolitan	40.9	36.6	45.4	14.1	11.1	17.8	44.6	40.6	48.7
Southern Metropolitan	35.7	30.5	41.4	13.9	10.2	18.7	49.7	43.9	55.6
All metropolitan regions	41.0	37.9	44.1	14.0	11.9	16.5	44.4	41.4	47.4
Barwon-South Western	22.9	15.6	32.2	19.4*	10.3	33.3	55.8	45.9	65.3
Gippsland	26.0	18.5	35.1	14.6*	7.9	25.6	59.0	48.3	68.9
Grampians	38.9	29.9	48.6	7.9	5.2	11.8	52.9	43.6	61.9
Hume	31.6	25.3	38.5	17.2	12.2	23.8	50.6	43.2	58.0
Loddon Mallee	40.5	33.0	48.6	8.7	5.9	12.8	49.5	42.0	57.1
All rural regions	30.5	26.3	35.1	13.8	10.4	18.2	54.7	49.9	59.4
Victoria	38.7	36.1	41.4	14.0	12.1	16.2	46.5	43.9	49.1
Females (18+ years)									
Eastern Metropolitan	41.9	36.5	47.6	14.0	10.3	18.8	43.1	37.9	48.5
North & West Metropolitan	41.5	37.9	45.1	9.8	7.8	12.3	47.7	44.0	51.4
Southern Metropolitan	38.1	33.5	42.9	12.1	9.6	15.2	49.0	44.1	54.0
All metropolitan regions	40.5	38.0	43.1	11.3	9.8	13.1	47.2	44.5	49.8
Barwon-South Western	35.0	27.6	43.3	14.5	9.3	22.0	49.6	40.9	58.3
Gippsland	39.4	31.8	47.6	8.9	5.5	14.1	51.0	42.8	59.1
Grampians	38.7	30.3	47.8	10.9*	6.5	17.7	49.0	40.1	57.9
Hume	35.0	30.3	40.1	16.8	11.3	24.3	47.7	41.4	54.1
Loddon Mallee	44.2	36.3	52.4	11.8	7.4	18.3	42.9	35.7	50.5
All rural regions	38.9	35.2	42.8	12.5	10.1	15.4	47.6	43.8	51.5
Victoria	40.2	38.0	42.5	11.4	10.1	12.9	47.4	45.1	49.7

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below: \* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

Table 5.70: The proportion (%) of the adult population who walked either on weekdays or the weekend, among those who walked, by Department of Health and Human Services region and sex, Victoria, 2014 (continued)

				Walked p	redomir	nantly or	n:		
	۷	Veekday	/S	۷	Veekend	ds		Both	
	%	95%	6 CI	%	95%	% CI	%	95%	% CI
		LL	UL		LL	UL		LL	UL
People (18+ years)									
Eastern Metropolitan	45.1	41.0	49.3	14.0	11.1	17.5	39.8	36.0	43.7
North & West Metropolitan	41.2	38.4	44.0	11.8	10.0	13.9	46.3	43.6	49.1
Southern Metropolitan	36.9	33.4	40.6	13.0	10.7	15.8	49.4	45.5	53.3
All metropolitan regions	40.8	38.8	42.8	12.6	11.3	14.1	45.8	43.8	47.8
Barwon-South Western	27.8	22.6	33.7	16.7	11.0	24.6	54.1	46.8	61.3
Gippsland	32.2	26.6	38.5	12.1	7.5	19.1	55.1	48.1	61.8
Grampians	38.8	32.3	45.7	9.5	6.6	13.5	50.8	44.1	57.5
Hume	34.5	29.5	39.8	16.4	12.6	21.1	48.6	43.7	53.6
Loddon Mallee	42.0	36.2	48.1	10.3	7.4	14.2	46.5	41.0	52.2
All rural regions	34.7	31.8	37.6	13.2	11.0	15.8	51.2	48.1	54.3
Victoria	39.5	37.8	41.2	12.7	11.5	14.0	46.9	45.2	48.7

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.



# 6. Alcohol consumption

-

### **Key findings**

#### Lifetime risk of alcohol-related harm





#### **59.2%**

were at increased lifetime risk of alcohol-related harm based on National Health and Medical Research Council (2009) guidelines





There was a significantly higher proportion of men at increased lifetime risk of alcohol-related harm compared with Victorian women





There was a significantly higher proportion of women and people at 'increased lifetime risk' of alcohol-related harm who lived in the rural regions compared with Victorian women and people who lived in the metropolitan regions



The prevalence of lifetime risk of alcohol-related harm significantly increased with increasing total annual household income among both men and women

#### Introduction

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

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

• goes beyond looking at the immediate risk of injury and the cumulative risk of chronic disease, to estimating the overall risk of alcohol-related harm over a lifetime

- provides advice on lowering the risk of alcoholrelated harm, using the level of one death for every 100 people as a guide to acceptable risk in the context of present-day Australian society
- provides universal guidance applicable to healthy adults 18 years of age or older (guidelines 1 and 2) and guidance specific to children and young people (guideline 3) and to pregnant and breastfeeding women (guideline 4).

The guidelines focus on reducing health risks from drinking. Only guidelines 1 and 2, listed below (Table 6.1), apply to respondents of the Victorian Population Health Survey, as the survey is administered to adults aged 18 years and over. Guideline 1 refers to lifetime or long-term harm, as lifetime risk of harm from drinking alcohol increases with the amount consumed. Guideline 2 refers to immediate harm, or harm in the shortterm, as on a single occasion of drinking the risk of alcohol-related injury increases with the amount consumed.

#### Australian alcohol guidelines

#### Table 6.1: National Health and Medical Research Council (NHMRC) guidelines to reduce health risks from drinking alcohol

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

### Lifetime risk of alcohol-related harm

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

Table 6.2 and Figure 6.1 and show prevalence of alcohol-related harm in the lifetime based on the NHMRC (2009) guidelines, by age group and sex.

There was a significantly higher proportion of men and women 35–44 years of age at 'increased lifetime risk' of alcohol-related harm compared with all Victorian men and women, respectively. There was also a significantly higher proportion of women and adults 18–24 years of age at 'increased risk' of alcohol-related harm in the lifetime compared with all Victorian women and adults, respectively. The proportion at 'increased risk' of alcohol-related harm was significantly higher among men compared with women in every age group except 18–24 years age group. Table 6.2: Proportion (%) of the adult population with lifetime risk of alcohol-related harm,<sup>a</sup> by risk category, age group and sex, Victoria, 2014

										Fre	squency	of exce	seding 2	standar	d drink	s per day			
		Abs Ion	stainer ger dri	/ no nks	Q		<u>د</u>		V Acov		2						Total	increa:	sed
	Age	%	95%	Ū	%	95%	ξ Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	<u>វ</u> ប
	group (years)		F	Ч		F	Ы		F	٦		F	Ы		F	L L		E	٦
Males	18–24	17.1	12.5	23.0	0.6	6.2	12.9	27.5	22.1	33.7	21.7	16.7	27.7	24.2	18.9	30.5	73.4	67.2	78.8
	25–34	19.1	14.4	24.7	7.4	4.9	10.9	26.4	21.5	31.9	20.0	15.5	25.4	26.3	21.3	32.0	72.6	66.7	77.9
	35-44	12.1	9.9	14.7	10.2	8.2	12.7	28.6	25.5	32.0	19.1	16.4	22.1	28.1	24.9	31.5	75.8	72.5	78.8
	45-54	11.8	9.8	14.0	14.7	12.6	17.2	31.3	28.6	34.1	16.6	14.5	18.9	24.0	21.5	26.7	71.8	68.9	74.6
	55-64	13.6	12.0	15.4	15.9	14.1	17.9	30.4	28.3	32.7	13.6	12.0	15.4	23.0	20.9	25.2	67.0	64.6	69.4
	65-74	15.1	13.5	16.9	18.9	17.1	20.9	25.9	23.9	28.0	15.8	14.1	17.7	21.3	19.4	23.3	63.0	60.7	65.3
	75-84	22.0	19.5	24.7	27.1	24.3	30.0	14.1	12.2	16.2	12.5	10.6	14.6	22.4	19.9	25.2	49.0	45.9	52.1
	85+	26.5	20.9	32.9	30.6	25.3	36.5	10.4	7.4	14.6	6.9	4.4	10.6	21.4	16.5	27.2	38.7	32.8	45.1
	Victoria	15.6	14.2	17.1	13.3	12.3	14.4	27.2	25.6	28.8	17.5	16.1	19.0	24.7	23.1	26.3	69.3	67.6	70.9
Females	18–24	21.2	15.9	27.5	10.6	7.2	15.2	14.6	10.9	19.3	28.2	22.5	34.7	23.8	18.8	29.6	66.6	60.0	72.6
	25–34	26.0	21.9	30.5	18.2	14.8	22.1	11.9	9.1	15.4	15.5	11.9	19.8	27.4	23.1	32.2	54.8	49.8	59.6
	35-44	22.1	19.9	24.4	23.0	20.8	25.3	12.6	11.0	14.4	14.0	12.3	15.9	27.4	25.2	29.8	54.0	51.3	56.6
	45-54	21.3	19.3	23.4	23.9	21.9	26.0	14.3	12.8	16.0	11.2	9.9	12.7	27.6	25.6	29.8	53.1	50.8	55.5
	55-64	24.3	22.5	26.3	29.2	27.3	31.2	10.6	9.4	11.9	11.3	10.0	12.7	22.6	20.9	24.4	44.5	42.4	46.6
	65–74	31.6	29.7	33.7	33.1	31.1	35.1	7.3	6.3	8.4	8.3	7.2	9.6	17.5	16.1	19.1	33.2	31.3	35.2
	75–84	42.5	39.9	45.1	33.9	31.4	36.4	2.9	2.2	3.9	4.9	3.8	6.3	13.7	12.0	15.6	21.6	19.5	23.8
	85+	53.5	48.7	58.2	32.0	27.8	36.5	*			3.9*	2.4	6.3	6.5	4.7	8.8	11.8	0.6	15.1
	Victoria	25.7	24.4	27.1	23.1	22.0	24.2	11.4	10.5	12.5	14.3	13.0	15.6	24.0	22.7	25.3	49.7	48.1	51.2

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Esumates may not add to per centrate to a proportion to addit randow or retained to say resp. Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

\* Estimate has a RSE 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 6.2: Proportion (%) of the adult population with lifetime risk of alcohol-related harm,<sup>a</sup> by risk category, age group and sex, Victoria, 2014 (continued)

										Fre	quency	of exce	eding 2 s	standar	d drink	s per day			
		Abs	tainer / Jer drin Ilcohol	/ no hks	Reo	luced ri	×.	>	Veekly		2	lonthly			(early		Total lifet	increa: ime ris	sed Sed
	Age	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	ΰ
	(years)		Н	Ы		Η	Ч		Н	٦		Н	Ы		Н	Ъ		Η	٦L
Persons	18–24	19.1	15.5	23.3	9.8	7.5	12.6	21.2	17.8	25.1	24.9	21.0	29.2	24.0	20.3	28.2	70:1	65.6	74.2
	25-34	22.5	19.3	26.0	12.8	10.6	15.3	19.1	16.2	22.4	17.7	14.8	21.1	26.9	23.5	30.5	63.7	59.9	67.4
	35-44	17.1	15.5	18.9	16.7	15.1	18.3	20.5	18.7	22.4	16.5	14.9	18.3	27.8	25.8	29.8	64.8	62.6	66.8
	45-54	16.6	15.2	18.1	19.4	17.9	21.0	22.6	21.1	24.3	13.8	12.6	15.2	25.8	24.2	27.5	62.3	60.4	64.2
	55-64	19.1	17.8	20.4	22.7	21.3	24.1	20.3	19.0	21.6	12.4	11.4	13.6	22.8	21.5	24.2	55.5	53.9	57.2
	65-74	24.1	22.7	25.5	26.6	25.2	28.0	15.9	14.8	17.0	11.8	10.8	12.9	19.3	18.1	20.5	46.9	45.3	48.5
	75–84	33.0	31.1	34.9	30.7	28.9	32.6	8.1	Ľ	9.2	8.4	7.4	9.7	17.7	16.2	19.4	34.3	32.4	36.2
	85+	42.1	38.3	46.0	31.4	28.0	34.9	5.3	3.7	7.3	5.1	3.7	7.1	12.8	10.4	15.7	23.2	20.0	26.6
	Victoria	20.8	19.9	21.8	18.3	17.6	19.1	19.1	18.2	20.1	15.8	14.8	16.8	24.3	23.2	25.3	59.2	58.0	60.3

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* Estimate has a RSE 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.

NHMRC (2009) guidelines



Figure 6.1: Proportion (%) of the adult population with increased lifetime risk of alcohol-related harm,<sup>a</sup> by age group and sex, Victoria, 2014

Data are age-adjusted to the 2011 population of Victoria.

95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

<sup>a</sup> NHMRC (2009) guidelines.

The trend over time of lifetime risk of alcoholrelated harm was investigated (Table 6.3 and Figure 6.2). The proportions of men and women with increased lifetime risk of alcohol-related harm remained unchanged from 2012 to 2014.

#### Table 6.3: Proportion (%) of the adult population with lifetime risk of alcohol-related harm,<sup>a</sup> by year and sex, Victoria, 2012-14

				F	requency	ofexc	eeding	2 standar	d drinl	ks per d	daya		
			Weekly		1	Monthly	y		Yearly		Tota life	l incre time ri	ased sk <sup>a</sup>
		%	95%	6 CI	%	95%	% CI	%	95%	6 CI	%	95%	6 CI
			LL	UL		LL	UL		LL	UL		LL	UL
2012	Males	33.0	30.3	35.8	15.9	13.7	18.3	23.0	20.7	25.5	71.9	69.2	74.3
	Females	12.4	10.8	14.2	13.7	12.0	15.7	23.1	21.0	25.3	49.2	46.7	51.8
	People	22.5	20.8	24.2	14.8	13.3	16.3	23.0	21.4	24.7	60.2	58.4	62.1
2014	Males	27.2	25.6	28.8	17.5	16.1	19.0	24.7	23.1	26.3	69.3	67.6	70.9
	Females	11.4	10.5	12.5	14.3	13.0	15.6	24.0	22.7	25.3	49.7	48.1	51.2
	People	19.1	18.2	20.1	15.8	14.8	16.8	24.3	23.2	25.3	59.2	58.0	60.3

Data were age-standardised to the 2011 Victorian population.

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

<sup>a</sup> NHMRC (2009) guidelines.

#### Figure 6.2: Proportion (%) of the adult population with increased lifetime risk of alcohol-related harm,<sup>a</sup> by year and sex, Victoria, 2014



Data were age-standardised to the 2011 Victorian population. LL/LU 95% CI = lower/upper limit of 95 per cent confidence interval. <sup>a</sup> NHMRC (2009) guidelines. Table 6.4 shows the prevalence of lifetime risk of alcohol-related harm, by departmental region and sex. There was a significantly higher proportion of men and adults at 'increased lifetime risk' of alcohol-related harm who lived in Grampians Region and Hume Region compared with all Victorian men and adults, respectively. There was a significantly higher proportion of women and adults at 'increased lifetime risk' of alcoholrelated harm who lived in the rural regions compared with Victorian women and adults who lived in the metropolitan regions. Table 6.4: Proportion (%) of the adult population with lifetime risk of alcohol-related harm,<sup>a</sup> by risk category, Department of Health and Human Services region and sex, Victoria, 2014

									Ľ	eduend	sy of ex	ceeding	g 2 star	ndard c	drinks p€	er day <sup>a</sup>		
	Abs long	tainer , ger drin Ilcohol	/ no nks	Red	uced ri	-×		/eekly		Σ	onthly			Yearly		Total lifet	increa ime ris	kª d
	%	95%	Ū	%	95%	ប	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	บ
Region		Н	Ы		F	Ъ		Н	Ч		F	L L		E	Ы		F	Ч
Males (18+ years)																		
Eastern Metropolitan	13.6	10.9	16.7	13.7	11.4	16.2	27.7	23.9	31.8	18.1	14.6	22.2	25.2	21.5	29.3	71.0	67.3	74.4
North & West Metropolitan	19.1	16.6	21.9	14.7	13.0	16.6	22.6	20.2	25.2	17.0	14.8	19.3	24.9	22.3	27.6	64.5	61.5	67.3
Southern Metropolitan	12.3	9.9	15.1	14.1	11.7	16.8	29.1	25.6	32.9	16.7	13.6	20.3	26.1	22.6	30.0	71.9	68.4	75.1
All metropolitan regions	15.7	14.1	17.4	14.3	13.0	15.6	25.9	24.1	27.7	17.1	15.5	18.9	25.3	23.5	27.3	68.3	66.3	70.2
Barwon-South Western	17.6	11.7	25.5	7.5	5.8	9.7	31.7	25.4	38.6	19.1	14.1	25.2	21.6	16.2	28.3	72.3	64.8	78.8
Gippsland	12.5	8.8	17.4	14.2	10.7	18.6	28.1	22.5	34.5	24.3	17.9	32.1	19.5	15.5	24.3	71.9	66.0	77.2
Grampians	8.7	7,1	10.6	9.9	8.0	12.0	32.3	26.6	38.6	21.1	16.1	27.1	25.5	20.0	31.9	78.9	75.4	81.9
Hume	11.5	8.8	14.9	9.9	8.0	12.2	33.6	28.3	39.4	18.7	14.2	24.2	24.6	20.4	29.3	76.9	73.0	80.3
Loddon Mallee	21.5	16.0	28.4	12.5	9.7	15.8	30.9	25.6	36.9	13.6	10.7	17.0	19.6	16.1	23.7	64.1	57.8	70.0
All rural regions	15.0	12.4	18.0	10.5	9.4	11.8	31.4	28.6	34.3	19.1	16.6	21.7	22.0	19.7	24.5	72.5	69.4	75.3
Victoria	15.6	14.2	17:1	13.3	12.3	14.4	27.2	25.6	28.8	17.5	16.1	19.0	24.7	23.1	26.3	69.3	67.6	70.9
		y	H															

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Table 6.4: Proportion (%) of the adult population with lifetime risk of alcohol-related harm,<sup>a</sup> by risk category, Department of Health and Human Services region and sex, Victoria, 2014 (continued)

									Fredu	uency d	of exce	eding 2	standa	rd drin	ks per o	da y <sup>a</sup>		
	Abs Ion	stainer ger drii alcohol	/ no nks	Red	luced r	isk	S	Veekly		<u> </u>	lonthly			Yearly		Tota life	l incred time ris	ised ised
	%	95%	C	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū
Region		Е	Ы		Н	Ч		Е	Ы		Н	Ч	1	Н	Ъ		F	Ч
Females (18+ years)																		
Eastern Metropolitan	23.2	20.0	26.8	25.5	22.4	28.9	9.0	7.2	11.3	15.3	12.1	19.2	26.2	22.9	29.7	50.5	46.5	54.5
North & West Metropolitan	31.4	29.0	34.0	23.5	21.6	25.5	9.3	7.9	11.1	12.5	10.7	14.5	21.5	19.5	23.6	43.3	40.7	45.9
Southern Metropolitan	23.2	20.9	25.7	21.9	19.8	24.2	14.5	12.3	16.9	15.5	12.7	18.7	23.8	20.8	27.0	53.7	50.7	56.6
All metropolitan regions	26.7	25.1	28.3	23.5	22.2	24.9	11.0	0.0	12.2	14.1	12.7	15.7	23.3	21.8	24.9	48.4	46.7	50.2
Barwon-South Western	22.9	16.2	31.3	21.6	17.9	25.7	13.0	8.7	19.1	14.5	10.7	19.3	25.1	19.3	31.9	52.6	45.2	59.8
Gippsland	17.6	15.1	20.4	24.7	20.8	29.0	14.4	10.5	19.5	16.5	12.3	21.7	24.0	19.6	29.0	54.8	50.1	59.5
Grampians	21.5	17.6	26.0	22.1	19.6	24.9	10.5	7.9	13.8	12.3	9.0	16.6	32.0	26.5	38.1	54.8	50.0	59.6

49.7 54.8 53.5 55.2 53.9 29.0 28.9 25.3 31.4 38.1 26.5 23.9 22.6 22.7 21.2 24.0 25.6 26.0 26.3 32.0 20.4 16.6 15.6 18.4 16.7 13.0 12.8 11.6 9.0 11.1 14.6 14.3 12.3 14.7 15.2 14.9 18.8 12.5 13.8 16.2 10.3 10.5 10.7 11.1 7.9 14.0 10.5 13.2 12.9 11.4 24.2 24.3 20.9 23.2 24.9 20.0 22.0 19.6 16.4 17.7 23.1 20.8 18.6 21.5 22.1 26.0 28.8 27.9 25.2 27.1 19.9 24.4 21.2 20.7 17.6 25.7 24.4 24.5 22.4 21.5 Loddon Mallee All rural regions Grampians Victoria Hume

59.6

57.5

49.5 50.7 56.6

51.2

51.1 **48.1** 

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Table 6.4: Proportion (%) of the adult population with lifetime risk of alcohol-related harm,<sup>a</sup> by risk category, Department of Health and Human Services region and sex, Victoria, 2014 (continued)

									Fred	nency o	of exce	eding 2	standa	rd drin	ks per d	aya		
	Abs lon	tainer ger dri	/ no nks	ć												Total	increa	sed
		alcono		0 Y O	ncear	SK	>	veekiy		2	lontniy			Yeariy		IITet	ime ris	, Y
	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	C	%	95%	CI	%	95%	Ū
Region		Η	Ы		Ч	Ы		Ч	Ы		Ξ	Ы		Ξ	Ы		Ч	Ч
People (18+ years)																		
Eastern Metropolitan	18.5	16.4	20.9	19.7	17.8	21.9	18.1	15.9	20.6	16.7	14.2	19.4	25.6	23.1	28.3	60.4	57.6	63.1
North & West Metropolitan	25.5	23.7	27.4	19.2	17.9	20.6	15.9	14.4	17.4	14.5	13.1	16.0	23.1	21.5	24.9	53.6	51.6	55.5
Southern Metropolitan	18.0	16.3	19.8	18.1	16.5	19.8	21.6	19.5	23.8	16.0	13.9	18.4	24.9	22.6	27.4	62.5	60.2	64.7
All metropolitan regions	21.4	20.3	22.6	19.0	18.1	20.0	18.2	17.2	19.4	15.5	14.4	16.7	24.3	23.1	25.5	58.0	56.7	59.3
Barwon-South Western	20.3	15.6	26.1	14.7	12.6	17.0	22.3	18.1	27.2	16.7	13.5	20.5	23.2	19.1	27.9	62.2	56.8	67.4
Gippsland	15.4	12.8	18.3	19.5	16.8	22.5	21.2	17.6	25.2	20.3	16.2	25.1	21.6	18.6	24.9	63.0	59.2	66.7
Grampians	15.3	13.1	17.8	16.1	14.4	17.8	21.2	17.9	25.0	16.7	13.5	20.5	28.7	24.6	33.1	66.6	63.6	69.5
Hume	18.0	15.8	20.4	15.4	13.5	17.5	23.4	20.2	26.9	16.8	13.8	20.3	25.0	22.4	27.9	65.2	62.2	68.0
Loddon Mallee	23.5	19.5	28.1	15.7	13.9	17.8	22.2	18.8	26.0	14.0	11.4	17.0	22.8	19.7	26.1	58.9	54.5	63.2
All rural regions	18.9	17.0	20.8	16.1	15.1	17.2	22.1	20.3	23.9	16.7	15.2	18.4	24.1	22.4	25.9	62.9	60.9	64.9
Victoria	20.8	19.9	21.8	18.3	17.6	19.1	19.1	18.2	20.1	15.8	14.8	16.8	24.3	23.2	25.3	59.2	58.0	60.3

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

NHMRC (2009) guidelines.

## Lifetime risk of alcohol-related harm by departmental region and local government area

HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MANSFIELD MARIB' RNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONEE VALLEY MOOR/ BOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NILLUMBIK NORTH TON WEST WIMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARRIAME ACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDARA BRIN EAST GIPPSLAND FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BENDIG HORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MANSFIEL MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONEE VALLE MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NILLUMB NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUTH GIPPS STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOOL WE MMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARF ACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDAF BANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMI1 DAREBIN EAST GIPPS FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI GREATER DANDE LONG REATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON IORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MAN MARIBYRNONG MAROOLIDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE VALLEY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI LUMBIK NORTHERN GRAMPIANS GORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT SLAND STONNINGTON STRATHBOGIE INGTON WEST WIMMERA WHITEHOU IAMBIACK ALPINE ARARAT BALLARAT E SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOC WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGE COAST BAW BAW BAYSIDE BENALLA BOROONI ARA BRIMBANK BULOKE CAMPASPE CARDINA. COSEY CENTRAL COSEFIELDS CODEC-OTWAY CORANGAMIN DARE BIN EAST GIPPSLATID FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI DIGC GREATER DANDENONG GREATER GEELONG OREATER SHEPPARTON HEPBURN HINDMARSH HOBSON BAY HORSHAM HUME INDIGO KINGSTON KNOX LATPOBE LODDON MACEDON RANGES MANNINGHAM MANS FIELD MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MORA MONASH MOONE VALLEY MOORABOOL MORELAND MORNINGTOT PENINSULA MOUNT ALEX MOER MOUNE MURRINDINDI NII LUMI IK NORTHERN GRAMPIANS PORT PHILLU PYRENEES QUEENSCLIEFE SOUTHERN COMPIANS SOUT GIPP SLAND STONNINGTON STRATHBOGIE SUBF COAST SWAN HILD TOWONG WANGARATTA WARNAMBOC WELLINGTON WEST WIMMERA WHITEHOUSE THITTLESEA WODONGA WANDHAM YARRA YARRA RANGE YARF MABBIACK ALPINE ARARAT BALLARATEBANY LEE BASS COAST BAW BAW BAYSIDE BENALLA BORCONI ARA BRIMBANK BULOKE CAMPASPE CARDINA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANG NII DARE BIN EAST GIPPSLAND FOM KSTON GANNAWARKA GLENERA GLENERA GLENELG GOLDEN PLAINS GREATER CELON ARA BRIMBANK BULOKE CAMPASPE CARDINA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANG NII DARE BIN EAST GIPPSLAND FOM KSTON GANNAWARKA GLENERA GLENERA GLENELG BOLDEN PLAINS GREATER BED DIGC GREATER DANDENONG GREATER CELON FOR STATER SHEPPARTON HEPBUEN HINDMARSH HOBSON BAY FOR HUME INDIGO KINGSTON JAPATIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANG NII DARE BIN EAST GIPPSLAND FOM KSTON GANNAWARKA GLENERA GLENERA GLENELG BOLDEN PLAINS GREATER RESO DIGC GREATER DANDENONG GREATER CELON FOR SHEPPARTON HEPBUEN HINDMARSH HOBSON BAY FOR HUME INDIGO KINGSTON JAPATIA CASEY CENTRAL SHEPPARTON HEPBUEN HINDMARSH HOBSON BAY FOR HUME INDIGO KINGSTON JAPATIA CASEY CENTRAL SHEPPARTON HEPBUEN HINDMARSH HOBSON BAY FOR HUME INDIGO KINGSTON JAPATIA CASEY CENTRAL SHEPPARTON HEPBUEN HINDMARSH HOBSON BAY FOR HUME INDIGO KINGSTON JAPATIA CASEY CENTRAL SHEPPARTON HEPBUEN HINDMARSH HOBSON BAY FOR HUME INDIGO KINGSTON JAPATIA CASE DIDDON MACEDON PLAINSE MANNINGHAM MANS FIELD MARIBARDONG MAROONDAH MELBOU'NE MENTAN MILDURA MITCHELL MORA M SEY CENTR BRIMBANK BULOKE CAMPASPE CARDIN COL **JULA MOUNT ALEX** MORELAND MORNIN VALLEY NOORA ANDER MOYNE MURRINDINDI NI MPIANS POR **IEES QUEENSCL** LUMBIK NORTHERN GE AN **GIPPSLAND STONNINGTON** TRATHE GIE SURF WELLINGTON WEST WIMMERA WYNDHAM YARRA YARRA RANGE YARRIAMBIACK ALPINE ARARAT BALLARAT **BAW BAYSIDE BENALLA BOROONI** BAY HORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MAN! FIELD MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE VALLEY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI LUMBIK NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT GIPPSLAND STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOC WELLINGTON WEST WIMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGE YARRIAMBIACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONI ARA BRIMBANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMIT

Table 6.5 shows the prevalence of lifetime risk of alcohol-related harm by LGA in Eastern Metropolitan Region. The proportion of adults who were at 'increased lifetime risk' of alcohol-related harm was significantly higher among those who lived in the LGAs of Boroondara (C) and Maroondah (C) compared with all Victorian adults

#### Table 6.5: Proportion (%) of the adult population with lifetime risk of alcohol-related harm,<sup>a</sup> by risk category and LGA, Eastern Metropolitan Region, Victoria, 2014

	Abst Ion	ainer o ger dri alcoho	or no nks I	Redu	ced life risk	etime	Incre	ased lif risk	etime
	%	95%	6 CI	%	95%	6 CI	%	95%	6 CI
LGA		LL	UL		LL	UL		LL	UL
Boroondara (C)	12.5	8.5	17.9	18.5	14.3	23.6	68.4	62.1	74.0
Knox (C)	21.6	16.5	27.9	20.4	14.5	27.8	56.8	48.8	64.5
Manningham (C)	19.1	14.0	25.6	20.2	15.6	25.8	59.0	51.9	65.7
Maroondah (C)	14.5	10.3	20.0	16.9	13.1	21.7	67.0	60.8	72.7
Monash (C)	23.6	18.3	30.0	26.4	21.2	32.4	48.1	41.6	54.7
Whitehorse (C)	17.7	13.0	23.7	17.1	13.3	21.6	64.5	58.0	70.6
Yarra Ranges (S)	20.9	13.9	30.2	15.3	12.1	19.0	62.3	53.3	70.5
Eastern Metropolitan Region	18.5	16.4	20.9	19.7	17.8	21.9	60.4	57.6	63.1
Victoria	20.8	19.9	21.8	18.3	17.6	19.1	59.2	58.0	60.3

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Table 6.6 shows the prevalence of lifetime risk of alcohol-related harm by LGA in North & West Metropolitan Region. The proportion of adults who were at 'increased lifetime risk' of alcohol-related harm was significantly higher among those who lived in the LGAs of Melbourne (C) and Nillumbik (C) compared with all Victorian adults.

#### Table 6.6: Proportion (%) of the adult population with lifetime risk of alcohol-related harm,<sup>a</sup> by risk category and LGA, North & West Metropolitan Region, Victoria, 2014

	Abst Ion	tainer o ger dri alcoho	or no nks I	Redu	ced life risk	etime	In	cre	ased lif risk	etime
	%	95%	% CI	%	95%	% CI	-	%	95%	6 CI
LGA		LL	UL		LL	UL			LL	UL
Banyule (C)	15.1	10.4	21.5	23.7	17.1	31.9	5	7.9	49.9	65.5
Brimbank (C)	33.0	27.6	38.9	20.7	16.2	26.0	4	3.2	37.2	49.5
Darebin (C)	28.1	20.7	36.9	18.1	14.1	22.8	53	3.0	45.2	60.6
Hobsons Bay (C)	17.7	13.0	23.7	20.2	13.9	28.4	6	0.1	51.9	67.8
Hume (C)	31.2	25.5	37.7	19.6	15.8	24.0	4	7.0	40.7	53.4
Maribyrnong (C)	21.3	16.9	26.4	15.6	11.5	20.8	60	D.9	54.4	67.0
Melbourne (C)	19.5	14.3	26.1	10.3	7.4	14.3	6	9.1	62.3	75.2
Melton (S)	35.2	28.4	42.8	24.3	20.1	29.2	38	8.6	31.7	45.9
Moonee Valley (C)	19.6	14.8	25.5	21.0	15.8	27.4	5	7.9	50.9	64.6
Moreland (C)	29.2	22.7	36.6	13.2	10.5	16.6	5	7.3	50.0	64.3
Nillumbik (S)	10.9	7.3	15.8	16.3	12.6	20.7	7	1.2	65.5	76.2
Whittlesea (C)	26.5	21.7	31.9	23.9	19.3	29.2	48	8.0	42.1	54.0
Wyndham (C)	25.0	20.3	30.4	22.2	18.2	26.7	5	1.7	46.3	57.2
Yarra (C)	18.3	12.0	26.7	13.5	10.0	17.8	64	4.9	56.3	72.7
North & West Metropolitan Region	25.5	23.7	27.4	19.2	17.9	20.6	53	3.6	51.6	55.5
Victoria	20.8	19.9	21.8	18.3	17.6	19.1	5	9.2	58.0	60.3

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Table 6.7 shows the prevalence of lifetime risk of alcohol-related harm by LGA in Southern Metropolitan Region. The proportion of adults who were at 'increased lifetime risk' of alcoholrelated harm was significantly higher among those who lived in the LGAs of Bayside (C), Mornington Peninsula (S) and Stonnington (C) compared with all Victorian adults.

#### Table 6.7: Proportion (%) of the adult population with lifetime risk of alcohol-related harm,<sup>a</sup> by risk category and LGA, Southern Metropolitan Region, Victoria, 2014

	Abst Ion	ainer o ger dri alcohol	or no nks I	Redu	ced life risk	etime	Incred	ased lif risk	etime
	%	95%	6 CI	%	95%	6 CI	%	95%	6 CI
LGA		LL	UL		LL	UL		LL	UL
Bayside (C)	7.9*	4.5	13.6	18.7	12.6	27.0	72.7	63.8	80.1
Cardinia (S)	18.1	13.4	23.9	17.5	13.2	22.7	62.0	55.4	68.1
Casey (C)	25.6	21.1	30.6	20.2	15.8	25.4	52.6	46.4	58.7
Frankston (C)	21.1	16.6	26.4	16.1	12.4	20.7	60.1	54.0	65.9
Glen Eira (C)	12.5	9.1	16.9	21.6	17.2	26.8	65.6	59.5	71.2
Greater Dandenong (C)	32.6	26.6	39.3	22.8	17.6	29.1	42.9	35.9	50.2
Kingston (C)	17.7	12.3	24.8	19.6	15.2	25.0	61.7	54.2	68.8
Mornington Peninsula (S)	12.3	8.1	18.2	10.1	7.2	13.9	76.3	69.8	81.8
Port Phillip (C)	12.3	7.7	19.1	16.8	11.2	24.5	68.8	59.7	76.7
Stonnington (C)	7.9	5.4	11.5	14.2	10.6	18.7	76.7	71.4	81.3
Southern Metropolitan Region	18.0	16.3	19.8	18.1	16.5	19.8	62.5	60.2	64.7
Victoria	20.8	19.9	21.8	18.3	17.6	19.1	59.2	58.0	60.3

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

Table 6.8 shows the prevalence of lifetime risk of alcohol-related harm by LGA in Barwon-South Western Region. The proportion of adults who were at 'increased lifetime risk' of alcohol-related harm was significantly higher among those who lived in the LGAs of Colac-Otway (S), Moyne (S), Queenscliffe (B), Surf Coast (S) and Warrnambool (C) compared with all Victorian adults.

#### Table 6.8: Proportion (%) of the adult population with lifetime risk of alcohol-related harm,<sup>a</sup> by risk category and LGA, Barwon-South Western Region, Victoria, 2014

	Abst Ion	ostainer or no onger drinks alcohol			Redu	ced life risk	etime	Increased lifetime risk		
	%	95% CI			%	95%	6 CI	%	95% CI	
LGA		LL	UL			LL	UL		LL	UL
Colac-Otway (S)	18.5	12.6	26.3		12.4	9.5	16.0	68.1	60.3	74.9
Corangamite (S)	20.1	15.0	26.4		12.9	9.4	17.4	64.5	57.5	71.0
Glenelg (S)	25.2	19.4	32.0		19.3	14.2	25.6	50.9	43.2	58.5
Greater Geelong (C)	23.2	16.1	32.1		15.2	12.0	19.1	58.2	49.8	66.1
Moyne (S)	12.9	9.0	18.2		17.4	12.5	23.8	68.5	61.2	75.0
Queenscliffe (B)	4.2	2.8	6.1		14.9*	9.0	23.8	80.1	71.6	86.6
Southern Grampians (S)	16.7	12.2	22.5		14.6	11.1	19.0	65.0	57.2	72.1
Surf Coast (S)	7.4	5.0	10.9		11.9	9.5	14.9	79.7	75.6	83.3
Warrnambool (C)	15.3	11.9	19.4		12.2	9.7	15.1	71.8	67.2	75.9
Barwon-South Western Region	20.3	15.6	26.1		14.7	12.6	17.0	62.2	56.8	67.4
Victoria	20.8	19.9	21.8		18.3	17.6	19.1	59.2	58.0	60.3

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

Table 6.9 shows the prevalence of lifetime risk of alcohol-related harm by LGA in Gippsland Region. The proportion of adults who were at 'increased lifetime risk' of alcohol-related harm was significantly higher among those who lived in the LGA of Wellington (S) compared with all Victorian adults.

#### Table 6.9: Proportion (%) of the adult population with lifetime risk of alcohol-related harm,<sup>a</sup> by risk category and LGA, Gippsland Region, Victoria, 2014

	Abst Ion	Abstainer or no longer drinks alcohol			Redu	ced life risk	etime	Increased lifetime risk			
	%	95% CI			%	95% CI		%	95	95% CI	
LGA		LL	UL			LL	UL		LL	UL	
Bass Coast (S)	17.6*	9.6	30.2		17.1	12.5	22.8	62.9	51.2	73.3	
Baw Baw (S)	17.7	13.4	23.0		23.5	16.7	32.1	57.0	48.4	65.2	
East Gippsland (S)	10.7	7.6	14.9		26.6	17.6	38.1	61.4	50.5	71.3	
Latrobe (C)	16.8	11.6	23.7		18.4	13.6	24.3	61.0	52.8	68.7	
South Gippsland (S)	22.0	15.6	30.2		17.5	13.5	22.4	57.6	49.4	65.3	
Wellington (S)	9.3	7.5	11.6		14.3	11.3	18.1	76.0	) 72.1	79.5	
Gippsland Region	15.4	12.8	18.3		19.5	16.8	22.5	63.0	) 59.2	66.7	
Victoria	20.8	19.9	21.8		18.3	17.6	19.1	59.2	58.0	60.3	

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported..
Table 6.10 shows the prevalence of lifetime risk of alcohol-related harm by LGA in Grampians Region. The proportion of adults who were at 'increased lifetime risk' of alcohol-related harm was significantly higher among those who lived in the LGAs of Ballarat (C) and Moorabool (S) compared with all Victorian adults.

# Table 6.10: Proportion (%) of the adult population with lifetime risk of alcohol-related harm,<sup>a</sup> by risk category and LGA, Grampians Region, Victoria, 2014

	Abst Ion	ainer o ger dri alcoho	or no nks I	Redu	ced life risk	etime	Incre	ased lif risk	etime
	%	95%	6 CI	%	95%	6 CI	%	95%	6 CI
LGA		LL	UL		LL	UL		LL	UL
Ararat (RC)	19.7	13.2	28.3	16.3	11.7	22.4	61.2	52.7	69.1
Ballarat (C)	14.4	10.7	19.1	14.0	11.2	17.4	69.5	64.0	74.5
Golden Plains (S)	17.8	12.6	24.5	16.4	12.4	21.5	64.7	57.2	71.5
Hepburn (S)	14.5	10.1	20.3	22.2	15.6	30.4	61.4	52.4	69.7
Hindmarsh (S)	22.6	17.2	29.1	14.8	10.1	21.2	62.0	55.1	68.5
Horsham (RC)	11.7	9.3	14.7	22.0	16.1	29.3	62.3	52.3	71.4
Moorabool (S)	13.1	9.6	17.6	17.2	12.7	23.0	68.6	62.2	74.4
Northern Grampians (S)	20.1	14.8	26.6	20.5	14.3	28.5	57.9	49.2	66.1
Pyrenees (S)	22.3	15.5	31.0	17.6	11.2	26.6	58.6	48.5	68.0
West Wimmera (S)	18.0	13.8	23.2	13.9	10.4	18.2	63.1	55.7	69.9
Yarriambiack (S)	18.1	13.3	24.1	13.2	9.6	17.8	64.6	57.9	70.8
Grampians Region	15.3	13.1	17.8	16.1	14.4	17.8	66.6	63.6	69.5
Victoria	20.8	19.9	21.8	18.3	17.6	19.1	59.2	58.0	60.3

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Table 6.11 shows the prevalence of lifetime risk of alcohol-related harm by LGA in Hume Region. The proportion of adults who were at 'increased lifetime risk' of alcohol-related harm was significantly higher among those who lived in the LGAs of Alpine (S), Indigo (S), Mansfield (S), Murrindindi (S) Towong (S) and Wodonga (RC) compared with all Victorian adults.

# Table 6.11: Proportion (%) of the adult population with lifetime risk of alcohol-related harm,<sup>a</sup> by risk category and LGA, Hume Region, Victoria, 2014

	Abst Ion	ainer o ger dri alcoho	or no nks I	Redu	ced life risk	etime	Incre	ased lif risk	etime
	%	95%	6 CI	%	95%	% CI	%	95%	% CI
LGA		LL	UL		LL	UL		LL	UL
Alpine (S)	12.4	8.7	17.3	15.0	10.7	20.5	71.5	64.7	77.5
Benalla (RC)	23.3	16.8	31.4	 15.2	10.7	21.2	55.5	46.1	64.4
Greater Shepparton (C)	23.1	17.4	30.0	 13.0	10.1	16.5	62.5	55.4	69.2
Indigo (S)	8.7	6.8	11.1	13.7	9.6	19.2	74.3	67.5	80.1
Mansfield (S)	12.5*	7.1	21.2	 14.6	9.8	21.3	69.8	60.9	77.4
Mitchell (S)	19.5	13.0	28.2	18.2	13.9	23.5	61.4	52.5	69.5
Moira (S)	17.8	13.1	23.8	13.0	8.0	20.3	68.1	59.8	75.3
Murrindindi (S)	15.0	10.7	20.8	11.1	8.4	14.4	73.4	67.4	78.7
Strathbogie (S)	29.7	18.4	44.1	 13.6	10.0	18.3	55.7	42.6	68.1
Towong (S)	16.2	11.3	22.8	14.1	10.8	18.2	68.5	62.0	74.4
Wangaratta (RC)	13.7	9.7	19.1	23.7	14.5	36.2	61.2	49.8	71.6
Wodonga (RC)	12.1	8.8	16.3	16.3	12.0	21.7	71.0	65.0	76.4
Hume Region	18.0	15.8	20.4	15.4	13.5	17.5	65.2	62.2	68.0
Victoria	20.8	19.9	21.8	18.3	17.6	19.1	59.2	58.0	60.3

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

 $^{\ast\ast}$  RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

Table 6.12 shows the prevalence of lifetime risk of alcohol-related harm by LGA in Loddon Mallee Region. The proportion of adults who were at 'increased lifetime risk' of alcohol-related harm was not significantly different among those who lived in the LGAs of Loddon Mallee Region compared with all Victorian adults.

# Table 6.12: Proportion (%) of the adult population with lifetime risk of alcohol-related harm,<sup>a</sup> by risk category and LGA, Loddon Mallee Region, Victoria, 2014

	Abst Ion	tainer o ger dri alcoho	or no nks I	Redu	ced life risk	etime	Incre	ased lit risk	fetime
	%	95%	% CI	%	95%	6 CI	%	95	% CI
LGA		LL	UL		LL	UL		LL	UL
Buloke (S)	23.1	15.2	33.6	16.1	10.2	24.6	59.7	49.5	69.1
Campaspe (S)	22.5	16.5	29.9	11.0	7.3	16.1	65.6	57.6	72.8
Central Goldfields (S)	19.4	15.7	23.7	15.6	10.8	22.0	59.4	51.0	67.3
Gannawarra (S)	25.5	15.3	39.4	17.1	12.7	22.7	56.3	43.4	68.5
Greater Bendigo (C)	26.4	19.5	34.6	14.8	11.9	18.4	56.6	48.4	64.4
Loddon (S)	22.1	16.2	29.4	17.0*	10.1	27.1	60.6	50.0	70.4
Macedon Ranges (S)	22.7*	12.8	37.0	16.2	12.6	20.7	59.3	46.6	70.8
Mildura (RC)	17.5	13.7	22.1	21.2	14.8	29.4	59.3	50.9	67.2
Mount Alexander (S)	25.4	17.5	35.4	18.4	12.9	25.5	55.3	45.2	65.0
Swan Hill (RC)	23.0	15.6	32.6	12.5	9.1	17.0	61.9	52.2	70.7
Loddon Mallee Region	23.5	19.5	28.1	15.7	13.9	17.8	58.9	54.5	63.2
Victoria	20.8	19.9	21.8	18.3	17.6	19.1	59.2	58.0	60.3

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}\,$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

Table 6.13 shows the prevalence of lifetime risk of alcohol-related harm in men, by selected socioeconomic determinants. When compared with all Victorian men, a significantly higher proportion of men were at 'increased lifetime risk' of alcohol-related harm with the following characteristics:

- born in Australia
- speaks English language at home
- total annual household income of \$100,000 or more.

Table 6.14 shows the prevalence of lifetime risk of alcohol-related harm in women, by selected socioeconomic determinants. When compared with all Victorian women, a significantly higher proportion of women were at 'increased lifetime risk' of alcohol-related harm with the following characteristics:

- born in Australia
- speaks English language at home
- employed
- total annual household income of \$100,000 or more.

Table 6.13: Proportion (%) of the adult male population with lifetime risk of alcohol-related harm,<sup>a</sup> by risk category and selected socioeconomic determinants, Victoria, 2014

	Abstair drii	ier or no nks alcof	longer Iol	Reduce	ed lifetin	ne risk	Increas	ed lifetir	ne risk
	%	95%	Ū	%	95%	CI	%	95%	Ū
		ΓΓ	UL		ΓΓ	UL		ΓΓ	NΓ
All males	15.6	14.2	17.1	13.3	12.3	14.4	69.3	67.6	70.9
Country of birth									
Australia	13.4	11.9	15.1	11.0	10.0	12.0	73.8	72.0	75.6
Overseas	21.2	17.9	24.9	18.5	16.1	21.2	58.4	54.6	62.2
Language spoken at home									
English	11.6	10.4	13.0	11.2	10.2	12.3	75.4	73.8	77.0
Language other than English	26.6	23.1	30.4	20.7	18.2	23.4	50.7	46.9	54.5
Education level									
Did not complete high school	21.9	16.8	28.1	11.5	9.4	14.0	62.3	56.1	68.0
Completed high school, or TAFE, or trade certificate, or diploma	14.8	12.9	17.0	12.6	11.4	13.9	70.6	68.3	72.9
University, or some other tertiary institute degree, including postgraduate diploma or degree	13.1	11.1	15.5	14.8	12.7	17.2	70.7	67.8	73.5
Employment status									
Employed	13.2	11.5	15.1	12.3	10.9	13.9	72.9	70.7	75.0
Unemployed	21.6	13.7	32.4	16.9	12.1	23.1	56.6	48.0	64.8
Not in labour force	26.5	21.9	31.6	13.5	11.6	15.6	58.5	53.4	63.5
Total annual household income									
< \$40,000	30.6	25.7	36.0	13.6	11.5	16.0	53.1	47.8	58.3
\$40,000 to < \$100,000	16.3	13.8	19.2	13.8	12.0	15.9	68.3	65.2	71.2
≥ \$100,000	8.3	6.5	10.7	10.2	8.4	12.2	80.2	77.3	82.7

Data were age-standardised to the 2011 Victorian population.

LL/LU 95% CI = lower/upper limit of 95 per cent confidence interval. New that estimates may not add to 100 per cent due to a proportion of 'don't

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

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

NHMRC (2009) guidelines.

Table 6.14: Proportion (%) of the adult female population with lifetime risk of alcohol-related harm,<sup>a</sup> by risk category and selected socioeconomic determinants, Victoria, 2014

	Abstair drii	nks alcol	longer Jol	Reduc	ed lifetir	ne risk	Increas	sed lifetir	ne risk
	%	95%	cl	%	95%	6 CI	%	95%	Ū
		LL	UL		ΓΓ	UL		LL	٥L
All females	25.7	24.4	27:1	23.1	22.0	24.2	49.7	48.1	51.2
Country of birth									
Australia	20.0	18.6	21.4	22.0	20.8	23.3	56.2	54.5	57.8
Overseas	40.1	36.8	43.6	25.7	23.1	28.4	33.2	29.9	36.7
Language spoken at home									
English	19.7	18.4	21.2	21.6	20.4	22.9	57.0	55.3	58.7
Language other than English	43.8	40.7	47.0	27.4	25.0	30.0	27.6	24.6	30.8
Education level									
Did not complete high school	33.2	28.5	38.2	23.9	20.0	28.2	41.0	35.8	46.4
Completed high school, or TAFE, or trade certificate, or diploma	24.9	23.0	26.9	22.0	20.5	23.5	51.3	49.2	53.4
University, or some other tertiary institute degree, including postgraduate diploma or degree	20.9	18.7	23.3	24.3	22.3	26.4	53.4	50.7	56.0
Employment status									
Employed	19.9	17.6	22.3	23.1	21.0	25.4	55.0	52.8	57.1
Unemployed	41.6	34.5	49.2	18.4	14.1	23.6	39.6	32.8	46.7
Not in labour force	33.5	31.0	36.1	24.3	22.3	26.3	40.9	38.3	43.6
Total annual household income									
< \$40,000	39.8	35.4	44.4	22.3	19.8	25.1	36.3	31.8	41.0
\$40,000 to < \$100,000	23.1	20.8	25.6	24.8	22.8	26.9	50.9	48.3	53.6
≥ \$100,000	13.8	11.1	17.1	20.8	18.0	23.9	64.2	60.4	67.9

Data were age-standardised to the 2011 Victorian population.

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

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

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

NHMRC (2009) guidelines.

The relationship was investigated between SES and the age-adjusted prevalence of alcoholrelated harm in the lifetime, using total annual household income as a measure of SES (Figure 6.3). The prevalence of alcohol-related harm in the lifetime significantly increased with increasing total annual household income among both men and women.





Data are age-adjusted to the 2011 population of Victoria. 95% Cl = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

<sup>a</sup> NHMRC (2009) guidelines.

Table 6.15 shows the prevalence of lifetime risk of alcohol-related harm in men, by selected modifiable risk factors contributing to chronic disease. When compared with all Victorian men, a significantly lower proportion of men were at 'increased lifetime risk' of alcohol-related harm with the following characteristics:

- high or very high levels of psychological distress
- sedentary behaviour
- non-smoker
- underweight
- diagnosed with diabetes by a doctor.

Table 6.16 shows the prevalence of lifetime risk of alcohol-related harm in women, by selected modifiable risk factors contributing to chronic disease. When compared with all Victorian women, a significantly higher proportion of women were at 'increased lifetime risk' of alcoholrelated harm with the following characteristics:

- engaged in sufficient physical activity
- excellent or very good self-reported health status.

Table 6.15: Proportion (%) of the adult male population with lifetime risk of alcohol-related harm,<sup>a</sup> by risk category and selected modifiable risk factors, Victoria, 2014

	Abstair drii	ter or no 1ks alcol	longer 1ol	Reduc	ed lifetiı	me risk	Increas	ed lifetir	ne risk
	%	95%	ū	%	959	% CI	%	95%	Ū
		LL	UL		LL	٥L		LL	٩L
All males	15.6	14.2	17.1	13.3	12.3	14.4	69.3	67.6	70.9
Psychological distress <sup>b</sup>									
Low (K10 score < 16)	14.4	12.8	16.2	13.2	12.0	14.6	70.7	68.7	72.7
Moderate (K10 score 16–21)	14.3	11.8	17.1	12.4	10.5	14.6	71.4	68.1	74.4
High / very high (K10 score 22+)	23.5	18.7	29.2	15.1	12.3	18.3	60.7	55.0	66.0
Physical activity <sup>c</sup>									
Sedentary	31.5	25.8	37.8	15.6*	9.1	25.3	50.9	41.6	60.1
Insufficient time (< 150 min) and/or sessions (< 2)	16.1	14.2	18.2	13.8	12.5	15.3	68.7	66.4	70.9
Sufficient time (≥ 150 min) and sessions (≥ 2)	14.0	12.0	16.3	12.9	11.3	14.7	71.3	68.7	73.8
Met fruit / vegetable guidelines <sup>d</sup>									
Both guidelines	13.6*	7.8	22.7	11.8*	6.0	21.8	71.9	60.8	80.9
Vegetable guidelines <sup>e</sup>	11.9*	7.0	19.5	14.5*	8.2	24.4	71.3	60.7	80.0
Fruit guidelines <sup>e</sup>	15.3	13.4	17.3	13.7	12.3	15.2	69.4	67.1	71.7
Neither	15.8	13.9	18.0	13.0	11.6	14.5	69.5	67.2	71.8
Smoking status									
Current smoker	13.3	10.8	16.4	10.2	8.3	12.5	73.5	70.0	76.7
Ex-smoker	12.3	8.9	16.8	10.8	9.1	12.8	75.1	70.7	79.1
Non-smoker	18.1	16.4	20.1	15.3	13.9	16.8	64.9	62.8	67.0
Data wasa ada etandaralisad ta tha 2011 Victorian bana ata				יפט טצ מטק צט מפּג	2 20 0 0 0 0	+ actimata (%) chailed I	an interneted with	citi citi	

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

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

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

<sup>a</sup> NHMRC (2009) guidelines.

Based on the Kessler 10 scale for psychological distress. ۵

DoH (2017) guidelines. o

NHMRC (2013) guidelines. σ Φ

Includes those meeting both guidelines.

Body mass index (BMI) = Weight (kg) / Height ( $m^2$ ). 4

Table 6.15: Proportion (%) of the adult male population with lifetime risk of alcohol-related harm,<sup>a</sup> by risk category and selected modifiable risk factors, Victoria, 2014 (continued)

	Abstain drir	ier or no 1ks alcol	longer 101	Reduc	ed lifetir	me risk	Increas	sed lifeti	ne risk
	%	95%	CI	%	959	% CI	%	959	C
		F	Ъ		F	٦L		H	Ч
Self-reported health									
Excellent/very good	14.0	12.0	16.3	12.9	11.5	14.5	71.1	68.6	73.5
Good	13.5	11.7	15.5	13.9	12.3	15.8	70.6	68.1	73.0
Fair/poor	21.9	18.3	26.0	12.9	10.7	15.3	63.9	59.6	67.9
Body weight status based on BMI $^{ m f}$									
Underweight (BMI < 18.5 kg/m²)	25.1	17.3	35.1	20.8*	11.8	34.0	54.0	44.4	63.4
Normal range (18.5 ≥ BMI < 25 kg/m²)	14.9	12.9	17.1	14.4	12.7	16.2	69.0	66.4	71.4
Pre-obese (25 $\ge$ BMI < 30 kg/m <sup>2</sup> )	14.6	12.3	17.2	11.4	10.2	12.8	72.2	69.4	74.8
Obese (BMI ≥ 30 kg/m²)	17.8	14.0	22.2	14.9	11.8	18.7	65.7	61.0	70.1
Blood pressure status (excluding pregnancy induced hyp	ertension)								
Doctor diagnosed hypertension	18.7	14.6	23.7	12.3	9.9	15.1	66.6	61.3	71.4
Normal range	14.9	13.5	16.5	14.0	12.9	15.3	69.4	67.6	71.1
Blood glucose status (excluding gestational diabetes)									
Doctor diagnosed diabetes	30.1	18.2	45.5	20.8*	10.7	36.5	48.1	37.1	59.3
Normal range	14.7	13.3	16.2	13.0	12.1	14.1	70.4	68.7	72.0

Data were age-standardised to the 2011 Victorian population.

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

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

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say'

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below: responses, not reported here.

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.
 \*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

NHMRC (2009) guidelines.

Based on the Kessler 10 scale for psychological distress. م

DoH (2017) guidelines.

<sup>d</sup> NHMRC (2013) guidelines.

Includes those meeting both guidelines. Φ

Body mass index (BMI) = Weight (kg) / Height  $(m^2)$ . 4

Table 6.16: Proportion (%) of the adult female population with lifetime risk of alcohol-related harm,<sup>a</sup> by risk category and selected modifiable risk factors, Victoria, 2014

	Abstair drii	ier or na iks alco	) longer hol	Reduc	ed lifetiı	ne risk	Increas	ed lifetir	ne risk
	%	95%	° CI	%	953	% CI	%	95%	Ū
		Ц	Π		Ц	Ч		Ц	Ъ
All females	25.7	24.4	27.1	23.1	22.0	24.2	49.7	48.1	51.2
Psychological distress <sup>b</sup>									
Low (K10 score < 16)	24.3	22.4	26.3	23.6	22.1	25.1	50.8	48.7	52.9
Moderate (K10 score 16–21)	23.9	21.6	26.4	23.0	20.8	25.3	51.0	48.0	53.9
High / very high (K10 score 22+)	34.6	31.0	38.3	21.1	18.7	23.8	43.4	39.9	47.1
Physical activity <sup>c</sup>									
Sedentary	41.7	32.9	51.1	27.4	19.8	36.6	30.5	22.4	40.2
Insufficient time (<150 min) and/or sessions (<2)	27.8	25.9	29.9	23.4	21.9	25.0	47.3	45.2	49.5
Sufficient time (≥ 150 min) and sessions (≥ 2)	18.8	17.0	20.8	23.1	21.3	25.0	56.7	54.3	59.1
Met fruit / vegetable guidelines <sup>d</sup>									
Both guidelines	26.8	21.3	33.2	20.3	17.6	23.4	51.1	44.8	57.3
Vegetable guidelines <sup>e</sup>	24.4	20.1	29.4	19.6	16.9	22.5	54.3	49.3	59.2
Fruit guidelines <sup>e</sup>	25.3	23.4	27.3	24.4	22.8	26.0	49.1	46.9	51.3
Neither	25.8	23.9	27.9	22.2	20.6	23.9	50.2	47.9	52.4
Smoking status									
Current smoker	20.1	17.4	23.2	17.8	15.4	20.5	60.2	56.8	63.5
Ex-smoker	16.5	13.8	19.5	22.0	18.6	25.9	59.9	55.5	64.2
Non-smoker	29.9	28.2	31.6	25.2	23.8	26.6	43.6	41.8	45.5

Data were age-standardised to the 2011 Victorian population.

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

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

Estimates that are (statistically) significantly different from the corresponding estimate for Victoria

are identified by colour as follows: above or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

NHMRC (2009) guidelines.

Based on the Kessler 10 scale for psychological distress. ٩

DoH (2017) guidelines. o

NHMRC (2013) guidelines. σ

Includes those meeting both guidelines. Body mass index (BMI) = Weight (kg) / Height (m<sup>2</sup>). Φ 4

Table 6.16: Proportion (%) of the adult female population with lifetime risk of alcohol-related harm,<sup>a</sup> by risk category and selected modifiable risk factors, Victoria, 2014 (continued)

	Abstair drir	ier or no iks alcol	longer 1ol	Reduc	ed lifetir	ne risk	Increas	sed lifeti	me risk
	%	95%	ū	%	95%	% CI	%	95%	°CI
		H	Ъ		H	٦L		3	Ч
Self-reported health									
Excellent/very good	19.3	17.4	21.4	22.4	20.8	24.1	56.6	54.2	58.9
Good	26.2	24.0	28.4	23.8	22.0	25.6	48.5	46.0	50.9
Fair/poor	37.1	33.9	40.3	23.2	20.5	26.2	38.5	35.2	42.0
Body weight status based on BMI <sup>f</sup>									
Underweight (BMI < 18.5 kg/m²)	25.6	19.2	33.1	24.6	18.8	31.5	48.3	40.8	55.9
Normal range (18.5 ≥ BMI < 25 kg/m²)	24.1	22.1	26.3	23.2	21.5	24.9	51.3	49.0	53.6
Pre-obese (25 $\ge$ BMI < 30 kg/m <sup>2</sup> )	23.3	20.9	25.9	23.8	21.6	26.1	51.2	48.1	54.4
Obese (BMI ≥ 30 kg/m²)	26.5	23.6	29.6	22.5	19.7	25.6	48.9	45.0	52.8
Blood pressure status (excluding pregnancy induced hyp	ertension)								
Doctor diagnosed hypertension	32.0	23.4	42.0	19.9	16.8	23.5	46.9	38.3	55.8
Normal range	24.5	23.1	25.9	23.2	21.9	24.5	50.7	49.1	52.4
Blood glucose status (excluding gestational diabetes)									
Doctor diagnosed diabetes	32.9	27.2	39.1	33.2	21.6	47.4	33.5	22.4	46.7
Normal range	24.7	23.4	26.1	23.1	22.0	24.2	50.6	49.0	52.1

Data were age-standardised to the 2011 Victorian population.

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

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

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

ia <sup>e</sup> Includes those meeting both guidelines. <sup>f</sup> Body mass index (BMI) = Weight (kg) / Height (m<sup>2</sup>).

<sup>d</sup> NHMRC (2013) guidelines.

DoH (2017) guidelines.

Based on the Kessler 10 scale for psychological distress.

NHMRC (2009) guidelines.

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The relationship was investigated between smoking status and the age-adjusted prevalence of alcohol-related harm in the lifetime (Figure 6.4 and Figure 6.5). The proportion of the adult Victorian population at 'increased risk' of alcoholrelated harm in the lifetime was least among non-smoker men and women. However, the proportion was not significantly different between current and ex-smokers.

# Figure 6.4: Proportion (%) of the adult male population with increased lifetime risk of alcohol-related harm,<sup>a</sup> by smoking status, Victoria, 2014



Data are age-adjusted to the 2011 population of Victoria.

95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.



#### Figure 6.5: Proportion (%) of the adult female population with increased lifetime risk of alcohol-related harm,<sup>a</sup> by smoking status, Victoria, 2014

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

# Key findings

### Risk of alcohol-related injury on a single occasion





**42.5%** were at increased risk of alcohol-related injury on a single occasion





The proportion at increased risk of alcohol-related injury on a single occasion was significantly higher among men compared with women





There was a significantly higher proportion of men and women who lived in the rural regions at increased risk of alcohol-related injury on a single occasion compared with Victorian men and women who lived in the metropolitan regions



The prevalence of increased risk of alcohol-related injury on a single occasion significantly increased with increasing total annual household income among both men and women



# Risk of alcohol-related injury on a single occasion

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

Table 6.17 and Figure 6.6 show the proportion of the adult Victorian population at risk of alcoholrelated injury on a single occasion based on the NHMRC (2009) guidelines, by risk category, age group and sex. There were significantly lower proportions of men and women 55 years of age or older at increased risk of alcohol-related injury on a single occasion, either weekly, monthly or yearly, compared with the proportion among all Victorian men and women, respectively. There were significantly higher proportions of adults 18–44 years of age at increased risk of alcohol-related injury on a single occasion, either weekly, monthly or yearly, compared with all Victorian adults. The proportion at increased risk of alcohol-related injury on a single occasion, either weekly, monthly or yearly, was significantly higher among men compared with women in every age group.

		Abstaiı dri	ner or no nks alco	longer hol		Reduce	ed risk	Incre year	ased ris ly or mo weekly	k: either nthly or 1
	Ago group	%	95%	% CI	%		95% CI	%	95	5% CI
	(years)		LL	UL		LL	_ UL		LL	UL
Males	18–24	17.1	12.5	23.0	14.	4 10.	8 19.0	68.1	61.7	73.8
	25–34	19.1	14.4	24.7	19.	7 15.4	4 24.9	60.8	54.6	66.6
	35–44	12.1	9.9	14.7	24.	5 21.4	4 27.8	62.3	58.7	65.8
	45–54	11.8	9.8	14.0	30.	6 27.	8 33.5	56.5	53.4	59.5
	55–64	13.6	12.0	15.4	34.	<mark>8</mark> 32.	5 37.3	50.3	47.8	52.8
	65–74	15.1	13.5	16.9	42.	0 39.	6 44.4	40.8	38.5	43.2
	75–84	22.0	19.5	24.7	53.	<mark>8</mark> 50.	6 56.9	22.7	20.2	25.3
	85+	26.5	20.9	32.9	54	.1 47.	7 60.4	17.6	13.4	22.8
	Victoria	15.6	14.2	17.1	28.	6 27.	2 30.1	54.7	53.0	56.5
Females	18–24	21.2	15.9	27.5	22.	<mark>3</mark> 17.	1 28.4	55.2	48.5	61.7
	25-34	26.0	21.9	30.5	32.	7 28.	4 37.2	41.1	36.1	46.2
	35–44	22.1	19.9	24.4	44.	3 41.	7 46.9	33.2	30.8	35.7
	45–54	21.3	19.3	23.4	48.	7 46.	.4 51.1	29.4	27.3	31.5
	55–64	24.3	22.5	26.3	55.	<mark>6</mark> 53.	4 57.7	19.1	17.5	20.8
	65–74	31.6	29.7	33.7	56.	<mark>6</mark> 54.	5 58.7	11.3	10.0	12.6
	75–84	42.5	39.9	45.1	52.	7 50	.1 55.3	3.6	2.8	4.6
	85+	53.5	48.7	58.2	43.	0 38.	4 47.8	1.7*	0.7	4.1
	Victoria	25.7	24.4	27.1	42.	7 41.	3 44.1	30.9	29.4	32.4
Persons	18–24	19.1	15.5	23.3	18.	2 15.0	0 22.0	61.8	57.1	66.3
	25–34	22.5	19.3	26.0	26.	2 23	.1 29.6	50.9	47.0	54.9
	35–44	17.1	15.5	18.9	34.	5 32.	4 36.6	47.6	45.4	49.8
	45–54	16.6	15.2	18.1	39.	8 37.	9 41.7	42.7	40.8	44.6
	55–64	19.1	17.8	20.4	45.	<b>4</b> 43.	.8 47.1	34.4	32.8	36.0
	65–74	24.1	22.7	25.5	49.	9 48.	3 51.5	24.8	23.5	26.2
	75–84	33.0	31.1	34.9	53.	2 51.	2 55.2	12.4	11.2	13.8
	85+	42.1	38.3	46.0	47.	7 43.	9 51.6	8.4	6.5	11.0
	Victoria	20.8	19.9	21.8	35.	8 34.	.8 36.8	42.5	41.3	43.7

Table 6.17: Proportion (%) of the adult population at risk of alcohol-related injury on a single occasion,<sup>a</sup> by risk category, age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{st}\,$  Estimate has a RSE 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.



Figure 6.6: Proportion (%) of the adult population at risk of alcohol-related injury on a single occasion,<sup>a</sup> by age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. 95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap. <sup>a</sup> NHMRC (2009) guidelines.

Table 6.18 shows the proportion of the adult Victorian population at increased risk of alcoholrelated injury on a single occasion, by frequency, age group and sex. A significantly higher proportion of men and women 35-44 years of age was at increased risk of alcohol-related injury on a single occasion on a yearly basis compared with all Victorian men and women, respectively. The prevalence of increased risk of alcohol-related injury on a single occasion, on a monthly basis, was significantly higher in men and women 18-24 years of age compared with all Victorian men and women, respectively. In all age groups except 85 years of age or older, the prevalence of increased risk of alcohol-related injury on a single occasion on a weekly basis was a significantly higher among men compared with women.

		Increa	sed risk:	yearly	Increas	ed risk: ı	monthly	Increas	ed risk:	weekly
	Age group	%	95%	6 CI	%	95%	% CI	%	959	% CI
	(years)		LL	UL		LL	UL		LL	UL
Males	18–24	28.7	23.0	35.3	21.5	16.6	27.5	17.8	13.4	23.3
	25–34	30.9	25.6	36.8	17.5	13.4	22.5	12.4	9.0	16.9
	35–44	31.5	28.2	34.9	16.0	13.5	18.8	14.9	12.5	17.6
	45–54	26.8	24.2	29.6	14.4	12.4	16.6	15.3	13.4	17.4
	55–64	23.2	21.2	25.4	11.6	10.1	13.3	15.5	13.8	17.3
	65–74	20.6	18.8	22.6	9.3	8.0	10.8	10.8	9.5	12.4
	75–84	12.1	10.3	14.2	5.7	4.4	7.2	4.9	3.7	6.5
	85+	11.2	7.8	15.8	3.3*	1.7	6.2	3.1*	1.6	6.0
	Victoria	26.4	24.8	28.1	14.7	13.4	16.1	13.7	12.5	15.0
Females	18–24	26.6	21.3	32.5	19.6	15.1	25.0	9.1	6.0	13.5
	25–34	25.5	21.3	30.3	11.5	8.2	15.9	4.0	2.6	6.1
	35–44	21.9	19.8	24.1	7.7	6.5	9.2	3.6	2.8	4.5
	45–54	18.8	17.0	20.7	7.2	6.2	8.4	3.4	2.7	4.3
	55–64	12.9	11.6	14.4	4.1	3.3	5.0	2.2	1.7	2.8
	65–74	7.0	6.1	8.1	2.9	2.3	3.7	1.3	0.9	1.8
	75–84	2.2	1.7	2.8	1.2*	0.8	2.0	0.2*	0.1	0.5
	85+	**			**			**		
	Victoria	18.4	17.1	19.7	8.7	7.7	9.9	3.8	3.1	4.5
Persons	18–24	27.7	23.7	32.1	20.6	17.1	24.5	13.5	10.7	17.0
	25–34	28.2	24.8	32.0	14.5	11.8	17.7	8.2	6.3	10.7
	35–44	26.6	24.7	28.6	11.8	10.4	13.4	9.2	7.9	10.6
	45–54	22.7	21.2	24.4	10.7	9.6	12.0	9.2	8.2	10.4
	55–64	18.0	16.7	19.3	7.7	6.9	8.7	8.7	7.8	9.6
	65–74	13.3	12.3	14.4	5.9	5.2	6.6	5.7	5.0	6.4
	75–84	6.8	5.8	7.8	3.3	2.6	4.1	2.4	1.8	3.1
	85+	5.6	4.0	7.9	1.5*	0.8	2.7	1.3*	0.7	2.6
	Victoria	22.3	21.2	23.3	11.6	10.8	12.5	8.6	7.9	9.4

# Table 6.18: Proportion (%) of the adult population at increased risk of alcohol-related injury on a single occasion,<sup>a</sup> by frequency, age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. LL/LU 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 or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* Estimate has a RSE 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 6.19 shows the proportion of adults at risk of alcohol-related injury on a single occasion, by risk category, departmental region and sex. There was a significantly higher prevalence of increased risk of alcohol-related injury on a single occasion among adults who lived in rural Victoria compared with their metropolitan counterparts. There was a significantly higher proportion of men at increased risk of alcohol-related injury on a single occasion who lived in Grampians Region and Hume Region compared with all Victorian men. There was a significantly higher proportion of women at increased risk of alcohol-related injury on a single occasion who lived in Loddon Mallee Region compared with all Victorian women. By contrast there was a significantly lower proportion of men at increased risk of alcoholrelated injury on a single occasion who lived in North & West Metropolitan Region compared with all Victorian men.

Table 6.19: Proportion (%) of the adult population at risk of alcohol-related injury on a single occasion,<sup>a</sup> by risk category, Department of Health and Human Services region and sex, Victoria, 2014

	Abs longer	tainer o drinks (	r no alcohol	R	educed	risk	Incr eith mont	reased er year hly or v	risk: ly or veekly
	%	95%	6 CI	%	95	% CI	%	959	% CI
		LL	UL		LL	UL		LL	UL
Males (18+ years)									
Eastern Metropolitan	13.6	10.9	16.7	28.5	25.2	32.0	56.7	52.6	60.6
North & West Metropolitan	19.1	16.6	21.9	30.4	28.1	32.8	49.5	46.6	52.5
Southern Metropolitan	12.3	9.9	15.1	32.1	28.7	35.7	54.6	50.7	58.4
All metropolitan regions	15.7	14.1	17.4	30.5	28.8	32.3	52.7	50.7	54.8
Barwon-South Western	17.6	11.7	25.5	17.9	15.0	21.1	63.3	55.9	70.1
Gippsland	12.5	8.8	17.4	27.4	22.6	32.8	59.5	53.2	65.5
Grampians	8.7	7.1	10.6	22.4	19.1	26.0	68.3	64.6	71.9
Hume	11.5	8.8	14.9	22.8	20.1	25.8	64.4	60.2	68.3
Loddon Mallee	21.5	16.0	28.4	24.3	20.5	28.5	53.1	47.2	58.8
All rural regions	15.0	12.4	18.0	22.6	21.0	24.3	61.4	58.4	64.3
Victoria	15.6	14.2	17.1	28.6	27.2	30.1	54.7	53.0	56.5
Females (18+ years)									
Eastern Metropolitan	23.2	20.0	26.8	48.1	44.1	52.1	28.2	24.5	32.2
North & West Metropolitan	31.4	29.0	34.0	40.7	38.5	43.0	27.0	24.7	29.5
Southern Metropolitan	23.2	20.9	25.7	41.6	38.8	44.5	34.5	31.5	37.7
All metropolitan regions	26.7	25.1	28.3	42.9	41.3	44.6	29.7	28.0	31.5
Barwon-South Western	22.9	16.2	31.3	43.7	38.4	49.1	33.0	26.4	40.4
Gippsland	17.6	15.1	20.4	49.2	43.6	54.7	31.6	26.6	37.1
Grampians	21.5	17.6	26.0	42.6	37.1	48.2	35.3	29.8	41.3
Hume	24.4	21.2	27.9	39.4	35.7	43.2	35.5	31.6	39.6
Loddon Mallee	24.5	20.7	28.8	34.9	32.0	37.8	39.4	34.9	44.1
All rural regions	22.4	19.9	25.2	41.9	39.7	44.2	34.8	32.1	37.6
Victoria	25.7	24.4	27.1	42.7	41.3	44.1	30.9	29.4	32.4

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Table 6.19: Proportion (%) of the adult population at risk of alcohol-related injury on a single occasion,<sup>a</sup> by risk category, Department of Health and Human Services region and sex, Victoria, 2014 (continued)

	Abs longer	Abstainer or no onger drinks alcohol		Re	duced r	isk	Increased risk: either yearly or monthly or weekly				
	%	95%	% CI	%	95%	6 CI	%	95% CI			
		LL	UL		LL	UL		LL	UL		
People (18+ years)											
Eastern Metropolitan	18.5	16.4	20.9	38.5	35.8	41.3	42.0	39.1	45.0		
North & West Metropolitan	25.5	23.7	27.4	35.6	34.0	37.3	38.0	36.1	40.0		
Southern Metropolitan	18.0	16.3	19.8	37.0	34.8	39.3	44.2	41.7	46.7		
All metropolitan regions	21.4	20.3	22.6	36.8	35.6	38.0	40.9	39.5	42.3		
Barwon-South Western	20.3	15.6	26.1	30.9	27.8	34.1	47.9	42.6	53.2		
Gippsland	15.4	12.8	18.3	38.5	34.6	42.6	45.1	40.8	49.5		
Grampians	15.3	13.1	17.8	32.4	29.1	35.9	51.6	47.9	55.4		
Hume	18.0	15.8	20.4	31.0	28.6	33.6	50.0	46.8	53.2		
Loddon Mallee	23.5	19.5	28.1	30.0	27.5	32.7	45.3	41.0	49.6		
All rural regions	18.9	17.0	20.8	32.4	30.9	33.8	47.8	45.8	49.9		
Victoria	20.8	19.9	21.8	35.8	34.8	36.8	42.5	41.3	43.7		

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

<sup>a</sup> NHMRC (2009) guidelines.

Table 6.20 shows the proportion of the adult Victorian population at increased risk of alcohol-related injury on a single occasion, by frequency, departmental region and sex. There was a significantly higher proportion of men who lived in Grampians Region at increased risk of alcohol-related injury on a single occasion on a monthly basis compared with all Victorian men. A significantly higher proportion of men who lived in Hume Region were at increased risk of alcoholrelated injury on a single occasion on a weekly basis compared with all Victorian men. Table 6.20: Proportion (%) of the adult population at increased risk of alcohol-related injury on a single occasion,<sup>a</sup> by frequency, Department of Health and Human Services region and sex, Victoria, 2014

	Increased risk: yearly			Inc	reased monthly	risk: /	Increased risk: weekly			
	%	95%	6 CI	%	959	% CI	%	95	% CI	
		LL	UL		LL	UL		LL	UL	
Males (18+ years)										
Eastern Metropolitan	26.9	23.1	31.1	16.7	13.3	20.8	13.0	10.2	16.4	
North & West Metropolitan	26.0	23.3	28.8	12.7	10.9	14.9	10.8	9.0	12.8	
Southern Metropolitan	26.5	22.9	30.5	12.9	10.4	16.0	15.1	12.4	18.4	
All metropolitan regions	26.4	24.5	28.4	13.7	12.2	15.3	12.7	11.3	14.2	
Barwon-South Western	28.9	22.6	36.2	20.4	14.8	27.4	13.9	10.5	18.2	
Gippsland	24.2	19.2	30.1	18.9	12.9	26.9	16.4	12.2	21.6	
Grampians	29.4	23.6	35.9	21.4	16.1	27.8	17.6	13.0	23.4	
Hume	26.5	21.8	31.7	16.6	12.2	22.1	21.3	16.9	26.5	
Loddon Mallee	22.7	18.1	28.2	13.9	11.1	17.4	16.4	12.7	20.8	
All rural regions	26.4	23.8	29.2	18.3	15.7	21.2	16.7	14.7	18.9	
Victoria	26.4	24.8	28.1	14.7	13.4	16.1	13.7	12.5	15.0	
Females (18+ years)										
Eastern Metropolitan	18.4	15.4	21.8	7.1	5.0	10.0	2.7*	1.4	5.0	
North & West Metropolitan	15.6	13.7	17.7	8.4	6.8	10.3	3.1	2.2	4.3	
Southern Metropolitan	20.1	17.2	23.4	10.1	7.6	13.1	4.3	3.1	6.1	
All metropolitan regions	17.7	16.2	19.3	8.7	7.4	10.1	3.4	2.7	4.2	
Barwon-South Western	22.2	16.5	29.2	8.1	5.3	12.1	2.7*	1.4	5.3	
Gippsland	16.4	13.2	20.2	9.1	6.2	13.2	6.2*	3.2	11.5	
Grampians	21.9	16.9	27.9	10.6	7.1	15.5	2.8	1.9	4.2	
Hume	20.0	16.9	23.4	9.1	6.5	12.5	6.5	4.3	9.5	
Loddon Mallee	23.0	18.3	28.4	8.5	5.8	12.3	8.0*	4.3	14.3	
All rural regions	20.8	18.5	23.3	8.9	7.5	10.6	5.1	3.8	6.7	
Victoria	18.4	17.1	19.7	8.7	7.7	9.9	3.8	3.1	4.5	

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

Table 6.20: Proportion (%) of the adult population at increased risk of alcohol-related injury on a single occasion,<sup>a</sup> by frequency, Department of Health and Human Services region and sex, Victoria, 2014 (continued)

	Increased risk: yearly		Inc	reased i monthly	risk: Y	Incr	risk: ′		
	%	95%	% CI	%	95%	% CI	%	95% CI	
		LL	UL		LL	UL		LL	UL
People (18+ years)									
Eastern Metropolitan	22.5	20.0	25.1	11.9	9.8	14.4	7.7	6.1	9.7
North & West Metropolitan	20.7	19.0	22.4	10.5	9.2	11.9	6.9	5.9	8.1
Southern Metropolitan	23.2	20.8	25.8	11.4	9.6	13.5	9.6	8.1	11.5
All metropolitan regions	21.9	20.7	23.2	11.1	10.1	12.1	7.9	7.1	8.8
Barwon-South Western	25.4	21.1	30.4	14.3	10.8	18.6	8.2	6.3	10.6
Gippsland	20.1	17.0	23.5	13.8	10.1	18.5	11.2	8.5	14.7
Grampians	25.6	21.7	29.9	15.9	12.6	19.9	10.1	7.6	13.3
Hume	23.2	20.3	26.4	12.9	10.1	16.4	13.8	11.2	17.0
Loddon Mallee	22.7	19.3	26.5	10.9	8.9	13.2	11.7	8.9	15.2
All rural regions	23.5	21.7	25.4	13.5	12.0	15.3	10.8	9.6	12.1
Victoria	22.3	21.2	23.3	11.6	10.8	12.5	8.6	7.9	9.4

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

 $^{*}$  RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

### Risk of alcohol-related injury on a single occasion by departmental region and local government area

HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MANSFIELD MARIB' RNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONEE VALLEY MOOR/ BOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NILLUMBIK NORTI STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOOL WELLING TON WEST WIMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARRIAME ACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDARA BRIN MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONEE VALLE MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NILLUMB NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUTH GIPPS MMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARF CK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDAF BANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMIT BIN EAST GIPPS FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI DARE GREATER DANDELIONG REATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON IORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MAN FIELD MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE VALLEY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI LUMBIK NORTHERN CRAMPIANS CORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT SLAND STONNINGTON STRATHBO IE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOO INGTON WEST WIMMERA WHITEHN IAMBIACK ALPINE ARARAT BALLARAT WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGE **BAW BAW BAYSIDE BENALLA BOROONI** ARA BRIMBANK BULOKE CAMPASPE CARDINN, CASEY CENTRAL COUDEFIELDS COLIC-OTWAY CORANGAMIN DARE BIN EAST GIPPSLAND FRANKSTON GANNAWA PRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEN DIGC GREATER DANDENONG GREATER GEELONG DREATER SHEPPARTON HEPBURN HINDMARSH HOBSON BAY HORSHAM HUME INDIGO KINGSTON KNOX LALPOBE LODDON MACEDON RANGES MANNINGHAM MAN FIELD MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MORA MONASH MOONE VALLEY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEX (NDER MAYNE MURRINDINDI NI LUMINK NORTHERN GRAMPIANS PORT PHILLUP PYRENEES QUEENSCLIEFT SOUTHERN CLAMPIANS SOUT GIPP SLAND STONNINGTON STRATHBOGIE SUBF COAST SWAN HILL TOWONG WANGARATTA WARRA MAN YARE MANDATING WIMMERA WHITEHOUSE TWHITTLESEA WODONGGA WANDHAM YARRA YARRA RANGE YARE MANBIAK BULOKE CAMPASPE CARDINA CASEY CEMTRAL GOLDFIELDS COLAC-OTWAY CORANG NI ARA BRIMBANK BULOKE CAMPASPE CARDINA CASEY CEMTRAL GOLDFIELDS COLAC-OTWAY CORANG NI ARA BRIMBANK BULOKE CAMPASPE CARDINA CASEY CEMTRAL GOLDFIELDS COLAC-OTWAY CORANG NI ARA BRIMBANK BULOKE CAMPASPE CARDINA CASEY CEMTRAL GOLDFIELDS COLAC-OTWAY CORANG NI ARA BRIMBANK BULOKE CAMPASPE CARDINA CASEY CEMTRAL GOLDFIELDS COLAC-OTWAY CORANG NI ARA BRIMBANK BULOKE CAMPASPE CARDINA CASEY CEMTRAL GOLDFIELDS COLAC-OTWAY CORANG NI ARA BRIMBANK BULOKE CAMPASPE CARDINA CASEY CEMTRAL GOLDFIELDS COLAC-OTWAY CORANG NI ARA BRIMBANK BULOKE CAMPASPE CARDINA CASEY CEMTRAL GOLDFIELDS COLAC-OTWAY CORANG NI ARA BRIMBANK BULOKE CAMPASPE CARDINA CASEY CEMTRAL GOLDFIELDS COLAC-OTWAY CORANG NI ARA BRIMBANK BULOKE CAMPASPE CARDINA CASEY CEMTRAL GOLDFIELDS COLAC-OTWAY CORANG NI ARA BRIMBANK BULOKE CAMPASPE CARDINA CASEY CEMTRAL GOLDFIELDS COLAC-OTWAY CORANG NI ARA BRIMBANK BULOKE CAMPASPE CARDINA CASEY CEMTRAL GOLDFIELDS COLAC-OTWAY CORANG NI ARA BRIMBANK BULOKE CAMPASPE CARDINA CASEY CEMTRAL GOLDFIELDS COLAC-OTWAY CORANG NI ARA BRIMANA BULOKE CAMPASPE CARDINA CASEY CEMTRAL GOLDFIELD A REBULA HINDMARSH HOBSON BAY YORSHAM HUME INDIGO KINGSTON SINCTLAR CON CEMTRAL GOLDFIELD A MORE MURRINDINGHAM MAN FIELD MARIBYRNONG MAR BRIMBANK BULOKE CAMPASPE CARDIN SEY CENTR **JULA MOUNT ALEX** MORELAND MORNIN VALLEY N ANDER MOYNE MURRINDINDI NI MPIANS POP **NEES QUEENSCL** LUMBIK NORTHERN G **OGIE SURF** GIPPSLAND STONNINGTON TRATH WELLINGTON WEST WIMMERA YARRIAMBIACK ALPINE ARARAT BALLAR FIELD MARIBYRNONG MAROONDAH MELBOURNE **MELTON MILDURA MITCHELL** MOIRA MONASH MOONE VALLEY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI LUMBIK NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT GIPPSLAND STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOC WELLINGTON WEST WIMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGE YARRIAMBIACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONI ARA BRIMBANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMI

Table 6.21 shows the proportion of adults at risk of alcohol-related injury on a single occasion, by risk category and LGA, in Eastern Metropolitan Region. The proportion of adults who were at increased risk of alcohol-related injury on a single occasion (either yearly, monthly or weekly) was not significantly different among those who lived in Eastern Metropolitan Region compared with all Victorian adults.

## Table 6.21: Proportion (%) of the adult population at risk of alcohol-related injury on a single occasion,<sup>a</sup> by risk category and LGA, Eastern Metropolitan Region, Victoria, 2014

	Abst Ion	Abstainer or no longer drinks alcohol			Rec	luced r	isk	Inci eith mont	reased er year hly or v	sed risk: yearly or or weekly	
	%	95%	% CI		%	95%	6 CI	%	95%	6 CI	
LGA		LL	UL			LL	UL		LL	UL	
Boroondara (C)	12.5	8.5	17.9	3	38.6	32.5	45.1	48.8	42.0	55.6	
Knox (C)	21.6	16.5	27.9	3	39.7	32.1	47.9	37.4	29.8	45.7	
Manningham (C)	19.1	14.0	25.6	2	43.8	36.7	51.2	36.1	29.5	43.3	
Maroondah (C)	14.5	10.3	20.0	:	34.1	27.7	41.2	48.7	40.8	56.7	
Monash (C)	23.6	18.3	30.0	3	38.4	32.5	44.7	36.7	30.5	43.4	
Whitehorse (C)	17.7	13.0	23.7	3	38.7	32.3	45.4	43.5	36.2	51.1	
Yarra Ranges (S)	20.9	13.9	30.2	3	33.6	28.6	39.0	44.8	36.0	53.9	
Eastern Metropolitan Region	18.5	16.4	20.9	3	38.5	35.8	41.3	42.0	39.1	45.0	
Victoria	20.8	19.9	21.8	:	35.8	34.8	36.8	42.5	41.3	43.7	

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Table 6.22 shows the proportion of adults at risk of alcohol-related injury on a single occasion, by risk category and LGA, in North & West Metropolitan Region. The proportion of adults who were at increased risk of alcohol-related injury on a single occasion (either yearly, monthly or weekly) was significantly higher among those who lived in the LGAs of Nillumbik (S) and Yarra (C) compared with all Victorian adults.

# Table 6.22: Proportion (%) of the adult population at risk of alcohol-related injury on a single occasion,<sup>a</sup> by risk category and LGA, North & West Metropolitan Region, Victoria, 2014

	Abstainer or no longer drinks alcohol			Red	duced r	risk		Increased risk: either yearly or monthly or week		
	%	95%	6 CI	%	95%	<u>د CI ۶</u>		%	95%	6 CI
LGA		LL	UL		LL	UL			LL	UL
Banyule (C)	15.1	10.4	21.5	 44.0	36.4	51.9		40.7	33.5	48.4
Brimbank (C)	33.0	27.6	38.9	 32.0	26.8	37.8		33.8	28.0	40.1
Darebin (C)	28.1	20.7	36.9	33.4	28.2	39.2		37.1	30.0	44.9
Hobsons Bay (C)	17.7	13.0	23.7	 35.0	27.5	43.3		46.2	38.8	53.9
Hume (C)	31.2	25.5	37.7	40.0	34.1	46.2		27.6	22.3	33.7
Maribyrnong (C)	21.3	16.9	26.4	34.5	28.4	41.1		42.5	35.7	49.7
Melbourne (C)	19.5	14.3	26.1	32.2	27.0	37.9		47.7	40.7	54.8
Melton (S)	35.2	28.4	42.8	35.8	31.0	41.0		27.5	21.1	34.9
Moonee Valley (C)	19.6	14.8	25.5	38.8	32.3	45.7		40.4	33.6	47.5
Moreland (C)	29.2	22.7	36.6	26.8	23.1	30.8		43.8	36.7	51.2
Nillumbik (S)	10.9	7.3	15.8	 32.9	28.1	38.1		55.5	49.7	61.2
Whittlesea (C)	26.5	21.7	31.9	43.0	37.4	48.7		30.5	25.2	36.3
Wyndham (C)	25.0	20.3	30.4	39.3	33.7	45.1		34.7	29.1	40.7
Yarra (C)	18.3	12.0	26.7	 25.6	20.9	31.0		55.1	47.1	62.9
North & West Metropolitan Region	25.5	23.7	27.4	35.6	34.0	37.3		38.0	36.1	40.0
Victoria	20.8	19.9	21.8	35.8	34.8	36.8		42.5	41.3	43.7

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Table 6.23 shows the proportion of adults at risk of alcohol-related injury on a single occasion, by risk category and LGA, in Southern Metropolitan Region. The proportion of adults who were at increased risk of alcohol-related injury on a single occasion (either yearly, monthly or weekly) was significantly higher among those who lived in the LGAs of Mornington Peninsula (S), Stonnington (C) and Port Phillip (C) compared with all Victorian adults.

Table 6.23: Proportion (%) of the adult population at risk of alcohol-related injury on a single occasion,<sup>a</sup> by risk category and LGA, Southern Metropolitan Region, Victoria, 2014

	Abstainer or n longer drinks alcohol			Red	duced r	risk		Increased risk: either yearly or monthly or week				
	%	95%	% CI	%	95%	6 CI	_	%		% CI		
LGA		LL	UL		LL	UL			LL	UL		
Bayside (C)	7.9*	4.5	13.6	40.2	31.9	49.1		50.5	41.7	59.3		
Cardinia (S)	18.1	13.4	23.9	37.8	32.0	43.9		42.7	36.2	49.3		
Casey (C)	25.6	21.1	30.6	36.7	30.8	42.9		36.9	30.9	43.4		
Frankston (C)	21.1	16.6	26.4	33.1	27.4	39.3		44.6	38.2	51.1		
Glen Eira (C)	12.5	9.1	16.9	41.8	34.9	49.1		45.7	38.4	53.1		
Greater Dandenong (C)	32.6	26.6	39.3	40.4	33.8	47.3		26.0	19.8	33.4		
Kingston (C)	17.7	12.3	24.8	36.5	30.6	42.8		45.1	37.5	53.0		
Mornington Peninsula (S)	12.3	8.1	18.2	 34.1	27.1	41.9		52.9	44.5	61.2		
Port Phillip (C)	12.3	7.7	19.1	31.6	24.9	39.2		55.3	46.3	63.9		
Stonnington (C)	7.9	5.4	11.5	37.7	31.6	44.2		54.0	47.5	60.4		
Southern Metropolitan Region	18.0	16.3	19.8	37.0	34.8	39.3		44.2	41.7	46.7		
Victoria	20.8	19.9	21.8	35.8	34.8	36.8		42.5	41.3	43.7		

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Table 6.24 shows the proportion of adults at risk of alcohol-related injury on a single occasion, by risk category and LGA, in Barwon-South Western Region. The proportion of adults who were at increased risk of alcohol-related injury on a single occasion (either yearly, monthly or weekly) was significantly higher among those who lived in the LGAs of Colac-Otway (S), Moyne (S), Queenscliffe (B), Surf Coast (S) and Warrnambool (C) compared with all Victorian adults.

Table 6.24: Proportion (%) of the adult population at risk of alcohol-related injury on a single occasion,<sup>a</sup> by risk category and LGA, Barwon-South Western Region, Victoria, 2014

	Abst Ion	tainer o ger dri alcoho	or no nks l	Re	educed	risk	Incr eith mont	eased risk: er yearly or hly or weekly		
	%	95%	% CI	%	95%	% CI	%	95%	% CI	
LGA		LL	UL		LL	UL		LL	UL	
Colac-Otway (S)	18.5	12.6	26.3	25.1	19.8	31.4	56.0	47.3	64.3	
Corangamite (S)	20.1	15.0	26.4	35.4	27.5	44.2	44.0	35.3	53.2	
Glenelg (S)	25.2	19.4	32.0	33.2	27.3	39.7	36.1	28.8	44.1	
Greater Geelong (C)	23.2	16.1	32.1	31.3	26.6	36.4	44.9	36.9	53.2	
Moyne (S)	12.9	9.0	18.2	31.5	25.4	38.2	55.2	47.8	62.5	
Queenscliffe (B)	4.2	2.8	6.1	35.4	25.1	47.3	59.9	48.3	70.5	
Southern Grampians (S)	16.7	12.2	22.5	31.2	23.1	40.5	49.3	40.7	58.0	
Surf Coast (S)	7.4	5.0	10.9	32.3	26.4	38.7	59.7	52.9	66.2	
Warrnambool (C)	15.3	11.9	19.4	26.5	22.4	31.0	57.1	51.9	62.2	
Barwon-South Western Region	20.3	15.6	26.1	30.9	27.8	34.1	47.9	42.6	53.2	
Victoria	20.8	19.9	21.8	35.8	34.8	36.8	42.5	41.3	43.7	

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Table 6.25 shows the proportion of adults at risk of alcohol-related injury on a single occasion, by risk category and LGA, in Gippsland Region. The proportion of adults who were at increased risk of alcohol-related injury on a single occasion (either yearly, monthly or weekly) was not significantly different among those who lived in Gippsland Region compared with all Victorian adults.

# Table 6.25: Proportion (%) of the adult population at risk of alcohol-related injury on a single occasion,<sup>a</sup> by risk category and LGA, Gippsland Region, Victoria, 2014

	Abst Ion	Abstainer or no longer drinks alcohol			Rec	duced r	risk	Inc eith mont	ncreased risk: ither yearly or onthly or weekly		
	%	95%	% CI		%	95% CI		%	95%	% CI	
LGA		LL	UL			LL	UL		LL	UL	
Bass Coast (S)	17.6*	9.6	30.2		36.5	30.0	43.5	45.2	34.4	56.5	
Baw Baw (S)	17.7	13.4	23.0		38.5	30.8	46.9	42.9	34.7	51.5	
East Gippsland (S)	10.7	7.6	14.9		45.0	34.4	56.0	44.0	33.5	55.1	
Latrobe (C)	16.8	11.6	23.7		37.7	29.5	46.7	43.3	34.0	53.1	
South Gippsland (S)	22.0	15.6	30.2		35.1	28.9	41.9	41.9	33.9	50.4	
Wellington (S)	9.3	7.5	11.6		38.0	29.3	47.6	52.5	43.2	61.6	
Gippsland Region	15.4	12.8	18.3		38.5	34.6	42.6	45.1	40.8	49.5	
Victoria	20.8	19.9	21.8		35.8	34.8	36.8	42.5	41.3	43.7	

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported..

Table 6.26 shows the proportion of adults at risk of alcohol-related injury on a single occasion, by risk category and LGA, in Grampians Region. The proportion of adults who were at increased risk of alcohol-related injury on a single occasion (either yearly, monthly or weekly) was significantly higher among those who lived in Ballarat (C), Hindmarsh (S), Moorabool (S) and West Wimmera (S) compared with all Victorian adults.

# Table 6.26: Proportion (%) of the adult population at risk of alcohol-related injury on a single occasion,<sup>a</sup> by risk category and LGA, Grampians Region, Victoria, 2014

	Abst Ion	ainer o ger dri alcoho	or no nks I	Rec	duced	risk	m	Increased risk: either yearly or monthly or weekly			
	%	95%	% CI	%	95%	6 CI		%	95%	6 CI	
LGA		LL	UL		LL	UL			LL	UL	
Ararat (RC)	19.7	13.2	28.3	 30.8	24.8	37.5	4	8.2	39.8	56.8	
Ballarat (C)	14.4	10.7	19.1	31.5	25.6	38.1	5	3.7	46.8	60.5	
Golden Plains (S)	17.8	12.6	24.5	 33.1	27.7	39.0	4	8.4	41.1	55.8	
Hepburn (S)	14.5	10.1	20.3	 37.5	29.5	46.3	4	7.6	38.2	57.1	
Hindmarsh (S)	22.6	17.2	29.1	 25.6	19.8	32.3	5	1.4	44.4	58.4	
Horsham (RC)	11.7	9.3	14.7	 38.0	31.0	45.4	4	9.8	42.5	57.1	
Moorabool (S)	13.1	9.6	17.6	 32.9	27.5	38.7	5	3.7	47.3	59.9	
Northern Grampians (S)	20.1	14.8	26.6	 33.1	25.5	41.6	4	5.7	36.8	54.9	
Pyrenees (S)	22.3	15.5	31.0	31.7	23.8	40.7	4	5.8	35.8	56.2	
West Wimmera (S)	18.0	13.8	23.2	 25.0	20.6	29.9	5	3.5	46.4	60.4	
Yarriambiack (S)	18.1	13.3	24.1	 32.3	23.7	42.2	4	6.9	37.1	56.9	
Grampians Region	15.3	13.1	17.8	 32.4	29.1	35.9	5	1.6	47.9	55.4	
Victoria	20.8	19.9	21.8	35.8	34.8	36.8	4	2.5	41.3	43.7	

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Table 6.27 shows the proportion of adults at risk of alcohol-related injury on a single occasion, by risk category and LGA, in Hume Region. The proportion of adults who were at increased risk of alcohol-related injury on a single occasion (either yearly, monthly or weekly) was significantly higher among those who lived in the LGAs of Alpine (S), Indigo (S), Moira (S), Murrindindi (S), Towong (S) and Wodonga (RC) compared with all Victorian adults.

Table 6.27: Proportion (%) of the adult population at risk of alcohol-related injury on a single occasion,<sup>a</sup> by risk category and LGA, Hume Region, Victoria, 2014

	Abstainer or no longer drinks alcohol			Red	duced ı	risk	Ind eit mor	Increased risk: either yearly or monthly or weekly		
	%	95%	% CI	%	95%	6 CI	%	959	% CI	
LGA		LL	UL		LL	UL		LL	UL	
Alpine (S)	12.4	8.7	17.3	30.9	24.5	38.2	56.1	48.1	63.7	
Benalla (RC)	23.3	16.8	31.4	32.8	26.2	40.1	40.2	31.6	49.5	
Greater Shepparton (C)	23.1	17.4	30.0	26.3	22.1	31.0	49.7	42.4	57.0	
Indigo (S)	8.7	6.8	11.1	30.6	24.4	37.7	58.3	50.5	65.8	
Mansfield (S)	12.5*	7.1	21.2	38.8	27.4	51.6	46.3	34.4	58.7	
Mitchell (S)	19.5	13.0	28.2	33.1	27.3	39.4	46.4	37.3	55.8	
Moira (S)	17.8	13.1	23.8	27.4	20.4	35.7	53.9	45.2	62.4	
Murrindindi (S)	15.0	10.7	20.8	25.6	21.2	30.4	58.7	52.3	64.9	
Strathbogie (S)	29.7	18.4	44.1	26.5	21.4	32.3	43.C	30.8	56.2	
Towong (S)	16.2	11.3	22.8	27.3	22.3	33.0	55.4	48.1	62.3	
Wangaratta (RC)	13.7	9.7	19.1	42.5	31.7	54.1	43.5	32.8	54.7	
Wodonga (RC)	12.1	8.8	16.3	34.6	28.4	41.4	53.1	46.2	59.9	
Hume Region	18.0	15.8	20.4	31.0	28.6	33.6	50.C	46.8	53.2	
Victoria	20.8	19.9	21.8	35.8	34.8	36.8	42.5	41.3	43.7	

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

Table 6.28 shows the proportion of adults at risk of alcohol-related injury on a single occasion, by risk category and LGA, in Loddon Mallee Region. The proportion of adults who were at increased risk of alcohol-related injury on a single occasion (either yearly, monthly or weekly) was significantly lower among those who lived in the LGA of Gannawarra (S) compared with all Victorian adults.

Table 6.28: Proportion (%) of the adult population at risk of alcohol-related injury on a single occasion,<sup>a</sup> by risk category and LGA, Loddon Mallee Region, Victoria, 2014

	Abstainer or no longer drinks alcohol			Rec	duced r	risk	Increased risk: either yearly or monthly or weekly					
	%	95%	6 CI	%	95%	6 CI	%	95%	% CI			
LGA		LL	UL		LL	UL	_	LL	UL			
Buloke (S)	23.1	15.2	33.6	31.0	22.9	40.3	45.6	35.7	55.9			
Campaspe (S)	22.5	16.5	29.9	27.4	21.3	34.6	49.3	41.0	57.7			
Central Goldfields (S)	19.4	15.7	23.7	33.4	25.5	42.3	45.3	36.6	54.3			
Gannawarra (S)	25.5	15.3	39.4	44.2	31.1	58.1	29.3	22.1	37.7			
Greater Bendigo (C)	26.4	19.5	34.6	28.1	23.5	33.3	44.1	36.6	51.9			
Loddon (S)	22.1	16.2	29.4	36.7	27.6	46.8	41.0	31.2	51.6			
Macedon Ranges (S)	22.7*	12.8	37.0	32.1	27.4	37.3	44.3	32.5	56.9			
Mildura (RC)	17.5	13.7	22.1	34.7	27.3	42.8	46.5	38.3	54.9			
Mount Alexander (S)	25.4	17.5	35.4	31.2	24.9	38.2	43.2	33.5	53.5			
Swan Hill (RC)	23.0	15.6	32.6	22.6	18.2	27.7	52.5	42.9	61.9			
Loddon Mallee Region	23.5	19.5	28.1	 30.0	27.5	32.7	45.3	41.0	49.6			
Victoria	20.8	19.9	21.8	35.8	34.8	36.8	42.5	41.3	43.7			

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

### What does Map 6.1 tell us?

In Map 6.1 the 79 LGAs have been ranked according to the proportion of adults who were at risk of alcohol-related injury on a single occasion in each LGA. The LGAs were then divided into 4 groups of 16 LGAs (labelled poorest, fair, good and very good results) with decreasing proportions of adults who were at risk of alcohol-related injury on a single occasion and a final group of 15 LGAs with the best results (i.e. the smallest proportions of adults who were at risk of alcohol-related injury on a single occasion). Map 6.1: Proportion of population at risk of alcohol-related injury on a single occasion according to the NHMRC 2009 guidelines, by LGA, Victoria, 2014



Note: The local government area (LGA) ID is based on the alphabetical order of the LGA names (see Table iii, page 17).

The relationship was investigated between SES and the age-adjusted prevalence of increased risk of alcohol-related injury on a single occasion, using total annual household income as a measure of SES (Figure 6.7). The prevalence of increased risk of alcohol-related injury on a single occasion (either yearly, monthly or weekly) significantly increased with increasing total annual household income among both men and women.





Data are age-adjusted to the 2011 population of Victoria.

95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

<sup>a</sup> Either yearly or monthly or weekly.

Table 6.29 shows the proportion of men at risk of alcohol-related injury on a single occasion (either yearly, monthly or weekly), by risk category and selected socioeconomic determinants. When compared with all Victorian men, a significantly higher proportion of men was at increased risk of alcohol-related injury on a single occasion with the following characteristics:

- born in Australia
- speaks English language at home
- total annual household income of \$100,000 or more.

Table 6.30 shows the proportion of women at risk of alcohol-related injury on a single occasion (either yearly, monthly or weekly), by risk category and selected socioeconomic determinants. When compared with all Victorian women, a significantly higher proportion of women was at increased risk of alcohol-related injury on a single occasion with the following characteristics:

- born in Australia
- speaks English language at home
- employed
- total annual household income of \$100,000 or more.
Table 6.29: Proportion (%) of the adult male population at risk of alcohol-related injury on a single occasion,<sup>a</sup> by risk category and selected socioeconomic determinants, Victoria, 2014

	Abstain drir	ier or no ıks alcol	longer ool	Re	duced ri	Å	Increa: yearly	sed risk: or mont weekly	either hly or
	%	95%	C	%	95%	° CI	%	95%	Ū
	1	LL	UL		LL	UL		LL	UL
All males	15.6	14.2	17.1	28.6	27.2	30.1	54.7	53.0	56.5
Country of birth									
Australia	13.4	11.9	15.1	25.6	24.1	27.3	60.0	58.0	61.9
Overseas	21.2	17.9	24.9	35.0	32.0	38.1	42.6	38.8	46.5
Language spoken at home									
English	11.6	10.4	13.0	26.2	24.6	27.8	61.2	59.3	63.0
Language other than English	26.6	23.1	30.4	36.6	33.6	39.7	35.5	32.0	39.2
Education level									
Did not complete high school	21.9	16.8	28.1	23.9	20.5	27.7	52.6	46.6	58.5
Completed high school, or TAFE, or trade certificate, or diploma	14.8	12.9	17.0	26.8	24.9	28.8	57.2	54.7	59.7
University, or some other tertiary institute degree, including postgraduate diploma or degree	13.1	11.1	15.5	32.9	30.2	35.7	53.2	50.2	56.3
Employment status									
Employed	13.2	11.5	15.1	28.5	26.6	30.5	57.4	55.2	59.5
Unemployed	21.6	13.7	32.4	34.6	27.7	42.2	41.7	34.0	49.7
Not in labour force	26.5	21.9	31.6	29.6	25.2	34.4	42.9	38.0	47.9
Total annual household income									
< \$40,000	30.6	25.7	36.0	27.6	24.1	31.3	40.8	35.6	46.1
\$40,000 to < \$100,000	16.3	13.8	19.2	29.2	26.8	31.8	53.5	50.4	56.7
≥ \$100,000	8.3	6.5	10.7	26.5	23.9	29.3	64.4	61.3	67.4
Data were age-standardised to the 2011 Victorian population.			Estimates that are	(statistically) sig	gnificantly o	different from the co	orresponding e	stimate for	Victoria

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

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

are identified by colour as follows: above or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say'

responses, not reported here. <sup>a</sup> NHMRC (2009) guidelines.

Table 6.30: Proportion (%) of the adult female population at risk of alcohol-related injury on a single occasion,<sup>a</sup> by risk category and selected socioeconomic determinants, Victoria, 2014

	Abstair drii	ier or no Aks alcol	longer ool	Re	duced ri	×°	Increa yearly	sed risk: or mont weekly	either hly or
	%	95%	Ū	%	95%	CI	%	95%	Ū
		F	٦		E	٦L		<b>=</b>	٦L
All females	25.7	24.4	27:1	42.7	41.3	44.1	30.9	29.4	32.4
Country of birth									
Australia	20.0	18.6	21.4	43.3	41.8	44.8	35.9	34.2	37.6
Overseas	40.1	36.8	43.6	42.0	38.6	45.4	17.5	14.8	20.6
Language spoken at home									
English	19.7	18.4	21.2	42.8	41.3	44.4	36.6	34.9	38.3
Language other than English	43.8	40.7	47.0	41.3	38.3	44.4	14.5	11.9	17.5
Education level									
Did not complete high school	33.2	28.5	38.2	39.8	35.1	44.6	25.4	20.5	31.1
Completed high school, or TAFE, or trade certificate, or diploma	24.9	23.0	26.9	42.2	40.2	44.2	32.3	30.2	34.4
University, or some other tertiary institute degree, including postgraduate diploma or degree	20.9	18.7	23.3	45.9	43.7	48.2	32.5	30.0	35.1
Employment status									
Employed	19.9	17.6	22.3	43.3	40.9	45.8	36.1	34.0	38.2
Unemployed	41.6	34.5	49.2	34.1	28.3	40.5	23.8	18.3	30.3
Not in labour force	33.5	31.0	36.1	42.5	39.9	45.1	23.2	20.9	25.8
Total annual household income									
< \$40,000	39.8	35.4	44.4	36.5	33.5	39.6	22.9	18.7	27.7
\$40,000 to < \$100,000	23.1	20.8	25.6	47.1	44.4	49.7	29.5	27.0	32.2
≥ \$100,000	13.8	11.1	17.1	46.6	43.5	49.7	39.1	35.8	42.5
			:	-	ŝ		:		-

Data were age-standardised to the 2011 Victorian population.

LL/LU 95% CI = lower/upper limit of 95 per cent confidence interval. Note that estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

<sup>a</sup> NHMRC (2009) guidelines.

Table 6.31 shows the proportion of men at risk of alcohol-related injury on a single occasion (either yearly, monthly or weekly), by risk category and selected modifiable risk factors and chronic conditions. When compared with all Victorian men, there was a significantly lower proportion of men at increased risk of alcohol-related injury on a single occasion with the following characteristics:

• current or ex-smoker.

Table 6.32 shows the proportion of women at risk of alcohol-related injury on a single occasion (either yearly, monthly or weekly), by risk category and selected modifiable risk factors and chronic conditions. When compared with all Victorian women, there was a significantly lower proportion of women at increased risk of alcohol-related injury on a single occasion with the following characteristic:

• engaged in sufficient physical activity.

Table 6.31: Proportion (%) of the adult male population at risk of alcohol-related injury on a single occasion,<sup>a</sup> by risk category and selected modifiable risk factors, Victoria, 2014

	Abstair drii	ter or no Aks alco	longer hol	a R	iduced r	isk	Increa: yearly	sed risk: or mon weekly	either thly or
	%	95%	° CI	%	956	% CI	%	95%	°C
		LL	UL		LL	UL		LL	UL
All males	15.6	14.2	17.1	28.6	27.2	30.1	54.7	53.0	56.5
Psychological distress <sup>b</sup>									
Low (K10 score < 16)	14.4	12.8	16.2	29.0	27.2	30.8	55.6	53.4	57.8
Moderate (K10 score 16–21)	14.3	11.8	17.1	26.4	23.7	29.2	58.7	55.2	62.1
High / very high (K10 score 22+)	23.5	18.7	29.2	28.2	24.3	32.4	47.3	41.9	52.7
Physical activity <sup>c</sup>									
Sedentary	31.5	25.8	37.8	27.9	20.0	37.4	39.8	31.0	49.4
Insufficient time (<150 min) and/or sessions (< 2)	16.1	14.2	18.2	29.7	27.8	31.7	53.4	51.0	55.8
Sufficient time ( $\ge$ 150 min) and sessions ( $\ge$ 2)	14.0	12.0	16.3	28.0	25.9	30.3	56.9	54.2	59.6
Met fruit / vegetable guidelines <sup>d</sup>									
Both guidelines	13.6*	7.8	22.7	30.3	21.2	41.2	55.2	43.8	66.0
Vegetable guidelines <sup>e</sup>	11.9*	7.0	19.5	29.4	21.2	39.2	57.9	47.2	67.9
Fruit guidelines <sup>e</sup>	15.3	13.4	17.3	29.1	27.1	31.1	54.8	52.3	57.2
Neither	15.8	13.9	18.0	28.2	26.3	30.2	55.1	52.7	57.5
Smoking status									
Current smoker	13.3	10.8	16.4	19.6	17.0	22.5	65.1	61.4	68.6
Ex-smoker	12.3	8.9	16.8	24.8	22.0	27.8	61.6	57.0	66.0
Non-smoker	18.2	16.4	20.1	32.7	30.8	34.7	48.4	46.1	50.6

Data were age-standardised to the 2011 Victorian population.

LL/LU 95% Cl = lower/upper limit of 95 per cent confidence interval.

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

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.
\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

Not greater that, or equal to 30 per cent, point estimate 7%, NHMRC (2009) guidelines.

<sup>b</sup> Based on the Kessler 10 scale for psychological distress.

DoH (2017) guidelines.

d NHMRC (2013) guidelines.

Includes those meeting both guidelines.

<sup>f</sup> Body mass index (BMI) = Weight (kg) / Height (m<sup>2</sup>).

Table 6.31: Proportion (%) of the adult male population at risk of alcohol-related injury on a single occasion,<sup>a</sup> by risk category and selected modifiable risk factors, Victoria, 2014 (continued)

	Abstain drir	er or no ıks alcoh	longer Jol	Ğ	duced ri	sk	Increas yearly	ed risk: ( or month weekly	either Ny or
	%	95%	ū	%	95%	CI	%	95%	Ū
		E	٦L		F	٦		Н	Ъ
Self-reported health									
Excellent/very good	14.0	12.0	16.3	27.2	25.3	29.2	57.6	54.9	60.2
Good	13.5	11.7	15.5	31.1	28.7	33.5	54.5	51.8	57.2
Fair/poor	21.9	18.3	26.0	27.3	24.1	30.7	49.9	45.7	54.1
Body weight status based on BMl <sup>f</sup>									
Underweight (BMI < 18.5 kg/m²)	25.1	17.3	35.1	36.1	23.6	50.8	38.8	27.0	52.0
Normal range (18.5 ≥ BMI < 25 kg/m²)	14.9	12.9	17.1	31.9	29.6	34.3	52.2	49.4	54.8
Pre-obese (25 $\ge$ BMI < 30 kg/m <sup>2</sup> )	14.6	12.3	17.2	25.5	23.6	27.4	58.9	56.0	61.7
Obese (BMI ≥ 30 kg/m²)	17.8	14.0	22.2	29.4	25.3	33.8	52.1	47.4	56.7
Blood pressure status (excluding pregnancy induced hyper	tension)								
Doctor diagnosed hypertension	18.7	14.6	23.7	27.0	23.4	30.8	52.4	47.1	57.7
Normal range	14.9	13.5	16.5	29.5	27.9	31.2	54.8	52.8	56.7
Blood glucose status (excluding gestational diabetes)									
Doctor diagnosed diabetes	30.1	18.2	45.5	38.0	24.5	53.7	31.2	22.5	41.4
Normal range	14.7	13.3	16.2	28.5	27.1	29.9	55.7	53.9	57.5

Data were age-standardised to the 2011 Victorian population.

Note that estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to LL/LU 95% CI = lower/upper limit of 95 per cent confidence interval.

say' responses, not reported here.

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported. \* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

NHMRC (2009) guidelines.

Based on the Kessler 10 scale for psychological distress. ٩

DoH (2017) guidelines.

NHMRC (2013) guidelines. σ

Includes those meeting both guidelines. Ð 4

Body mass index (BMI) = Weight (kg) / Height ( $m^2$ ).

Table 6.32: Proportion (%) of the adult female population at risk of alcohol-related injury on a single occasion,<sup>a</sup> by risk category and selected modifiable risk factors, Victoria, 2014

	Abstair drir	ier or no ıks alco	longer hol	Re	duced r	isk	Increa: yearly	sed risk: or mont weekly	either hly or
	%	95%	° CI	%	959	6 CI	%	95%	CI
		LL	ΛL		LL	UL		LL	UL
All females	25.7	24.4	27.1	42.7	41.3	44.1	30.9	29.4	32.4
Psychological distress <sup>b</sup>									
Low (K10 score < 16)	24.3	22.4	26.3	46.0	44.0	48.1	29.3	27.3	31.4
Moderate (K10 score 16–21)	23.9	21.6	26.4	41.2	38.5	44.0	34.3	31.4	37.3
High / very high (K10 score 22+)	34.6	31.0	38.3	34.4	31.5	37.5	29.7	26.4	33.3
Physical activity <sup>c</sup>									
Sedentary	41.7	32.9	51.1	41.7	32.4	51.6	16.4	10.3	25.1
Insufficient time (<150 min) and/or sessions (<2)	27.8	25.9	29.9	42.7	40.8	44.5	28.8	26.8	30.9
Sufficient time (≥ 150 min) and sessions (≥ 2)	18.8	17.0	20.8	45.1	42.7	47.4	35.8	33.4	38.3
Met fruit / vegetable guidelines <sup>d</sup>									
Both guidelines	26.8	21.3	33.2	42.0	37.1	47.1	30.8	25.0	37.3
Vegetable guidelines <sup>e</sup>	24.4	20.1	29.4	41.2	37.1	45.5	33.9	29.0	39.1
Fruit guidelines <sup>e</sup>	25.3	23.4	27.3	45.1	43.0	47.1	29.1	27.0	31.3
Neither	25.8	23.9	27.9	40.8	38.8	42.8	32.6	30.4	34.9
Smoking status									
Current smoker	20.1	17.4	23.2	33.9	30.8	37.2	44.0	40.4	47.7
Ex-smoker	16.5	13.8	19.5	41.8	37.8	45.9	41.1	36.6	45.8
Non-smoker	29.9	28.2	31.6	45.2	43.5	46.9	24.6	22.8	26.3

Data were age-standardised to the 2011 Victorian population.

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

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

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

NHMRC (2009) guidelines. σ

Based on the Kessler 10 scale for psychological distress. م

DoH (2017) guidelines.

NHMRC (2013) guidelines. σ

Includes those meeting both guidelines. Φ

Body mass index (BMI) = Weight (kg) / Height  $(m^2)$ . 4

Table 6.32: Proportion (%) of the adult female population at risk of alcohol-related injury on a single occasion,<sup>a</sup> by risk category and selected modifiable risk factors, Victoria, 2014 (continued)

	Abstain drir	er or no iks alcoł	longer Ior	Ř	duced ri	×	Increas yearly	ed risk: ( or montl weekly	either Ny or
	%	92%	ū	%	95%	ū	%	95%	Ū
		Η	UL		Ц	١L		Ц	٥L
Self-reported health									
Excellent/very good	19.3	17.4	21.4	46.1	43.8	48.4	33.9	31.5	36.3
Good	26.2	24.0	28.4	42.3	40.2	44.4	30.8	28.4	33.2
Fair/poor	37.1	33.9	40.3	37.5	34.4	40.8	25.0	21.9	28.3
Body weight status based on BMI <sup>f</sup>									
Underweight (BMI < 18.5 kg/m²)	25.6	19.2	33.1	44.0	36.4	51.9	29.9	23.3	37.5
Normal range (18.5 ≥ BMI < 25 kg/m²)	24.1	22.1	26.3	44.6	42.6	46.7	30.7	28.5	33.0
Pre-obese (25 ≥ BMI < 30 kg/m²)	23.3	20.9	25.9	42.9	39.6	46.2	33.4	30.0	36.9
Obese (BMI ≥ 30 kg/m²)	26.5	23.6	29.6	41.5	37.8	45.4	31.6	27.8	35.6
Blood pressure status (excluding pregnancy induced hype	rtension)								
Doctor diagnosed hypertension	32.0	23.4	42.0	41.4	34.6	48.7	26.1	19.8	33.4
Normal range	24.5	23.1	25.9	43.4	41.8	44.9	31.5	29.9	33.1
Blood glucose status (excluding gestational diabetes)									
Doctor diagnosed diabetes	32.9	27.2	39.1	52.5	43.9	61.0	14.3*	8.5	22.9
Normal range	24.7	23.4	26.1	43.2	41.8	44.6	31.3	29.8	32.9

Data were age-standardised to the 2011 Victorian population.

Note that estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to LL/LU 95% CI = lower/upper limit of 95 per cent confidence interval.

say' responses, not reported here.

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported. \* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

NHMRC (2009) guidelines.

Based on the Kessler 10 scale for psychological distress. ٩

DoH (2017) guidelines.

NHMRC (2013) guidelines. σ Ð

Body mass index (BMI) = Weight (kg) / Height ( $m^2$ ). Includes those meeting both guidelines. 4

The relationship was investigated between smoking status and the age-adjusted prevalence of increased risk of alcohol-related injury on a single occasion (Figure 6.8 and Figure 6.9). The proportion of the adult Victorian population at increased risk of alcohol-related injury on a single occasion was least among non-smoking men and women. However, the proportion was not significantly different between current and exsmokers.

### Figure 6.8: Proportion (%) of the adult male population at increased risk of alcohol-related injury on a single occasion,<sup>a</sup> by smoking status, Victoria, 2014



Data are age-adjusted to the 2011 population of Victoria.

95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

<sup>a</sup> NHMRC (2009) guidelines.



Figure 6.9: Proportion (%) of the adult female population at increased risk of alcohol-related injury on a single occasion,<sup>a</sup> by smoking status, Victoria, 2014

95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

<sup>a</sup> NHMRC (2009) guidelines.



## 7. Psychological distress



### **Key findings**

**Psychological distress** 





The proportion of Victorian adults with high or very high levels of psychological distress was significantly higher in women than men



the Kessler 10 scale



The proportions of men and women with high or very high levels of psychological distress remained unchanged from 2003 to 2014



### Introduction

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

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

The K10 covers the dimensions of nervousness, hopelessness, restlessness, sadness and worthlessness. It consists of 10 questions that have the same response categories: all of the time, most of the time, some of the time, a little of the time and none of the time (that are scored 5 through to 1). 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).

### Prevalence of psychological distress (K10 scale)

Table 7.1 and Figure 7.1 show psychological distress levels by age group and sex. The proportion of Victorian adults with low levels of psychological distress was 61.3 per cent, significantly higher in men (65.5 per cent) than women (57.3 per cent).

When the categories of 'high' and 'very high' levels of psychological distress were combined, the proportion of Victorian adults with high or very high levels of psychological distress was significantly higher in women than men. There was a significantly higher proportion of 18–24-year-old women with high or very high levels of psychological distress compared with all Victorian women. Table 71: Proportion (%) of adult population with psychological distress,<sup>a</sup> by level, age group and sex, Victoria, 2014

		Low	/ (K10: <	16)	Σξ	loderate 10: 16–2	0 <del>2</del>	High	(K10: 22	-29)	Very	high († 30+)	<10:	High (K	/very h (10: 22+	igh (
	Age	%	95%	° CI	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	ū
	(years)		4	UL		Ц	Ы		Η	Ъ		Ч	Ъ		Н	Ы
Males	18–24	57.4	50.7	63.8	25.2	20.0	31.2	9.9	6.8	14.3	5.0*	2.4	9.9	14.9	10.7	20.4
	25-34	63.1	56.9	68.8	22.2	17.6	27.6	8.3	5.1	13.3	3.1*	1.5	6.0	11.4	7.7	16.6
	35-44	64.4	60.8	67.8	21.9	19.1	25.1	9.1	7,1	11.6	2.4	1.7	3.5	11.5	9.4	14.1
	45-54	67.0	64.1	69.8	20.2	17.8	22.8	6.3	4.9	7.9	3.0	2.2	4.2	9.3	7.7	11.2
	55-64	70.2	67.9	72.4	17.2	15.5	19.1	6.4	5.3	7.8	2.7	2.0	3.6	9.1	7.7	10.6
	65-74	73.0	70.7	75.1	16.1	14.4	18.0	4.3	3.5	5.4	1.3	0.8	1.9	5.6	4.6	6.8
	75–84	68.2	65.2	71.1	17.2	15.0	19.7	4.6	3.5	5.9	1.5*	0.8	2.9	6.1	4.8	7.8
	85+	66.8	60.7	72.3	19.5	15.1	24.7	5.6*	3.3	9.3	* *			6.9	4.3	10.9
	Victoria	65.5	63.7	67.2	20.6	19.2	22.2	7.4	6.4	8.5	2.9	2.2	3.6	10.3	9.1	11.6
Females	18–24	40.4	34.1	47.1	28.8	23.2	35.1	18.8	14.4	24.1	9.1	6.1	13.4	27.9	22.6	33.9
	25–34	50.8	45.8	55.8	30.3	25.9	35.1	10.6	7.5	14.9	5.8*	3.5	9.4	16.4	12.5	21.3
	35-44	61.9	59.3	64.4	23.0	20.9	25.3	8.7	7.3	10.4	4.1	3.1	5.3	12.8	11.1	14.7
	45-54	62.6	60.2	64.9	21.1	19.3	23.1	8.8	7.5	10.3	4.2	3.3	5.3	13.0	11.4	14.7
	55-64	63.7	61.6	65.7	21.3	19.6	23.1	7.7	6.7	0.6	3.7	3.0	4.6	11.4	10.1	12.9
	65–74	65.1	63.0	67.1	19.4	17.7	21.1	۲Ż	6.1	8.2	3.2	2.5	4.1	10.3	9.1	11.7
	75–84	63.4	60.8	62.9	19.6	17.6	21.8	6.4	5.3	7.9	2.2	1.5	3.2	8.7	7.3	10.3
	85+	58.7	53.8	63.4	19.5	16.0	23.5	8.4	5.8	12.0	1.7*	0.7	3.7	10.1	7.2	13.8
	Victoria	57.3	55.7	58.8	24.0	22.6	25.4	10.2	9.2	11.4	4.9	4.1	5.8	15.1	13.8	16.4

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population.

Estimates that are (statistically) significantly different from the corresponding estimate for Victoria are identified by colour as follows: above or below. LL/LU 95% CI = lower/upper limit of 95 per cent confidence interval.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

\* Estimate has a RSE between 25 and 50 per cent and should be interpreted with caution. Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

\*\* Estimate has a RSE greater than 50 per cent and is not reported as it is unreliable for general use.

Table 71: Proportion (%) of adult population with psychological distress,<sup>a</sup> by level, age group and sex, Victoria, 2014 (continued)

		Low	, (K10: <	16)	ΣĘ	loderat 10: 16–2	<del>-</del>	High	(K10: 22	-29)	Very hi	gh (K10	: 30+)	High (K	/very h 10: 22+)	igh
	Age	%	95%	C	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū
	(years)		Ц	٩L		Ц	СГ		Η	Ъ		Н	Ы		Η	٩L
Persons	18–24	49.1	44.4	53.8	26.9	23.0	31.3	14.2	11.5	17.6	7.0	4.9	10.0	21.2	17.8	25.2
	25-34	56.9	52.9	60.8	26.3	23.0	29.8	9.5	7,1	12.6	4.4	3.0	6.6	13.9	11.1	17.3
	35-44	63.1	60.9	65.2	22.5	20.7	24.4	8.9	7.7	10.4	3.3	2.6	4.0	12.2	10.8	13.7
	45-54	64.8	62.9	66.6	20.6	19.1	22.2	7.6	6.6	8.6	3.6	3.0	4.4	11.2	10.0	12.4
	55-64	6.99	65.3	68.4	19.3	18.1	20.6	7.1	6.3	8.0	3.2	2.7	3.8	10.3	9.3	11.3
	65–74	68.7	67.2	70.2	17.9	16.6	19.1	5.8	5.1	6.6	2.3	1.9	2.9	8.2	7.3	9.1
	75–84	65.7	63.7	67.6	18.5	17.0	20.1	5.6	4.8	6.5	1.9	1.4	2.6	7.5	6.5	8.6
	85+	62.1	58.3	65.8	19.5	16.7	22.6	7.2	5.3	9.7	1.5*	0.8	2.9	8.7	6.7	11.4
	Victoria	61.3	60.2	62.5	22.4	21.3	23.4	8.8	8.0	9.6	3.9	3.3	4.4	12.6	11.8	13.6

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

Estimate has a RSE 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.



### Figure 7.1: Proportion (%) of adult population with high or very high levels of psychological distress,<sup>a</sup> by age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. 95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

 $^{\alpha}~$  Based on the Kessler 10 scale for psychological distress.

The trend over time of psychological distress was investigated (Table 7.2 and Figure 7.2). The proportions of men and women with high or very high levels of psychological distress remained unchanged from 2003 to 2014.

### Table 7.2: Proportion (%) of the adult population with psychological distress,<sup>a</sup> by level, survey year and sex, Victoria, 2003–2014

				Level of psy	/chologi	cal distre	ess:		
	(1/10	Low	16)	(K1C	Moderat	:e 6 21)	Hig	h/very	high
									- 22)
Survey	7o	95% 		- 70	95		70	95 	% CI
year		LL	UL		LL	UL		LL	UL
Males	70.4	070	70.0	10.0	47.4				
2003	70.1	67.9	72.2	19.2	17.4	21.2	9.1	7.9	10.5
2004	68.8	66.5	/1.0	19.8	17.9	21.7	9.0	/./	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	/1.5	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	/0.0	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
2014#	65.5	63.7	67.2	20.6	19.2	22.2	10.3	9.1	11.6
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
2014#	57.3	55.7	58.8	24.0	22.6	25.4	15.1	13.8	16.4

Data are age-standardised to the 2011 Victorian population.

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

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

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

Survey sample size: # ~34,000; \* ~3,600; remaining surveys ~7,500.

 $^{\alpha}~$  Based on the Kessler 10 scale for psychological distress.

### Table 7.2: Proportion (%) of the adult population with psychological distress,<sup>a</sup> by level, survey year andsex, Victoria, 2003–2014 (continued)

				Level of psy	/chologi	cal distre	ess:		
	(K10	Low ) score <	: 16)	ו (K10	Moderat ) score 1	:e 6–21)	Hi (K	gh/very 10 score	high ≥ 22)
Survey	%	95%	6 CI	%	959	% CI	%	95	% CI
year		LL	UL		LL	UL		LL	UL
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
2014#	61.3	60.2	62.5	22.4	21.3	23.4	12.6	11.8	13.6

Data are age-standardised to the 2011 Victorian population.

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

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

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

Survey sample size: # ~34,000; \* ~3,600; remaining surveys ~7,500.



### Figure 7.2: Proportion (%) of the adult population with high or very high levels of psychological distress,<sup>a</sup> by survey year and sex, Victoria, 2003–2014

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

Survey sample size: # ~34,000; <sup>+</sup> ~3,600; remaining surveys ~7,500.

<sup>a</sup> Based on the Kessler 10 scale for psychological distress.

Table 7.3 shows psychological distress by departmental region and sex. There were no significant regional differences in the proportions of men or women with low, moderate, high or very high levels of psychological distress. Table 7.3: Proportion (%) of adult population with psychological distress,<sup>a</sup> by level, Department of Health and Human Services region and sex, Victoria, 2014

	Low	, (K10: -	< 16)	ΣŸ	oderat 0:16–2	te 21)	High	(K10: 2:	2-29)	ž	ery hig 10: 30+	<u>ج</u> ج	High, (K	/very h 10: 22+)	igh
	%	95%	C %	%	95%	CI %	%	95%	C S	%	95%	Ū	%	95%	Ū
Region		Н	Ч		Н	Ч		Н	٦C		Н	٦	I	E	٦L
Males (18+ years)															
Eastern Metropolitan	67.1	62.7	71.3	18.9	15.6	22.8	8.9	6.3	12.4	2.2*	1.2	3.9	11.1	8.3	14.6
North & West Metropolitan	64.0	60.9	66.9	20.8	18.5	23.3	7.6	5.9	9.7	3.3	2.1	5.0	10.9	8.8	13.3
Southern Metropolitan	64.2	60.1	68.1	22.5	19.1	26.3	6.4	4.7	8.7	2.8*	1.7	4.6	9.2	7.1	11.9
All metropolitan regions	65.0	62.9	67.1	20.8	19.1	22.6	7.4	6.2	8.8	2.8	2.1	3.8	10.3	8.9	11.9
Barwon-South Western	68.3	61.1	74.7	21.3	15.7	28.2	5.0	3.2	7.8	*			8.3*	4.9	13.7
Gippsland	66.7	59.6	73.1	18.2	12.8	25.3	9.1*	5.5	14.7	3.1	1.9	4.9	12.2	8.2	17.7
Grampians	66.0	60.0	71.6	20.2	15.9	25.3	9.2	5.7	14.7	2.3	1.4	3.7	11.6	7.8	16.9
Hume	64.2	58.4	69.7	22.9	18.0	28.6	8.9	5.8	13.3	2.2*	1.2	4.1	11.1	7.7	15.6
Loddon Mallee	69.0	62.7	74.7	17.4	14.4	21.0	5.6	3.5	8.8	2.9	1.9	4.5	8.5	6.0	11.9
All rural regions	67.0	64.0	69.9	20.0	17.6	22.7	7.3	5.9	9.1	2.8	1.9	4.2	10.1	8.4	12.2
Victoria	65.5	63.7	67.2	20.6	19.2	22.2	7.4	6.4	8.5	2.9	2.2	3.6	10.3	9.1	11.6
Females (18+ years)															
Eastern Metropolitan	62.9	58.9	66.8	21.9	18.6	25.6	8.6	6.3	11.7	3.5	2.1	5.6	12.1	9.4	15.4
North & West Metropolitan	53.1	50.5	55.7	27.1	24.8	29.6	10.5	9.0	12.3	5.1	4.1	6.4	15.7	13.8	17.8
Southern Metropolitan	57.9	54.6	61.2	22.5	19.5	25.7	10.8	8.4	13.9	5.4	3.9	7.3	16.2	13.4	19.3
All metropolitan regions	57.1	55.2	58.9	24.4	22.8	26.1	10.1	8.8	11.4	4.8	4.0	5.7	14.9	13.5	16.4
Barwon-South Western	56.9	50.6	63.0	19.8	15.0	25.8	11.2	7:1	17.1	8.4*	3.6	18.5	19.5	13.7	27.0
Gippsland	57.1	51.6	62.4	23.7	19.1	28.9	11.5	8.0	16.2	4.7	3.1	6.9	16.2	12.3	21.0
Grampians	59.1	53.3	64.8	22.8	19.4	26.6	8.3	5.1	13.2	3.7*	1.7	7.6	11.9	8.1	17.3
Hume	57.9	54.0	61.7	25.2	21.6	29.2	11.1	8.2	14.9	3.5	2.4	5.3	14.6	11.5	18.5
Loddon Mallee	56.5	51.4	61.4	23.2	19.2	27.8	13.0	8.7	18.9	3.2	2.1	4.9	16.2	11.7	21.9
All rural regions	57.3	54.8	59.9	22.8	20.7	25.0	11.0	9.1	13.3	5.1	3.1	8.3	16.2	13.6	19.1
Victoria	57.3	55.7	58.8	24.0	22.6	25.4	10.2	9.2	11.4	4.9	4.1	5.8	15.1	13.8	16.4

Table 7.3: Proportion (%) of adult population with psychological distress,<sup>a</sup> by level, Department of Health and Human Services region and sex, Victoria, 2014 (continued)

	Low	/ (K10: <	16)	Σy	oderat 0: 16–2	1) e	High	K10: 23	2–29)	×₹	ery high 10: 30+		High (X	/very h 10: 22+)	igh (
	%	95%	Ū	%	95%	Ū	%	95%	° CI	%	95%	ਹ	%	95%	Ū
Region		Н	Ч		Н	Ы		Н	٦L		Η	Ч		Н	٩L
People (18+ years)															
Eastern Metropolitan	64.9	62.0	67.8	20.5	18.1	23.1	8.8	7.0	11.0	2.8	1.9	4.1	11.6	9.6	14.0
North & West Metropolitan	58.5	56.5	60.5	24.0	22.4	25.8	9.0	7.8	10.3	4.2	3.4	5.3	13.2	11.8	14.7
Southern Metropolitan	61.0	58.4	63.6	22.5	20.2	24.9	8.6	7.1	10.5	4.1	3.1	5.3	12.7	10.9	14.8
All metropolitan regions	61.0	59.6	62.4	22.6	21.4	23.9	8.7	7.9	9.7	3.8	3.3	4.5	12.6	11.6	13.7
Barwon-South Western	62.6	57.6	67.5	20.6	16.7	25.1	8.1	5.7	11.3	5.8*	2.8	11.6	13.9	10.0	19.0
Gippsland	61.7	57.2	66.0	21.1	17.3	25.4	10.5	7.7	14.0	3.8	2.8	5.1	14.3	11.3	17.9
Grampians	62.7	58.4	66.8	21.6	18.8	24.6	8.7	6.2	12.1	3.0	1.8	4.8	11.7	8.9	15.2
Hume	61.0	57.5	64.5	24.0	20.9	27.5	10.0	7.7	12.9	2.8	2.0	4.0	12.9	10.4	15.8
Loddon Mallee	63.0	58.7	67.2	20.3	17.7	23.1	8.9	6.4	12.4	3.0	2.2	4.1	12.0	9.2	15.4
All rural regions	62.2	60.2	64.2	21.4	19.8	23.1	9.1	7.9	10.5	3.9	2.8	5.5	13.1	11.4	14.9
Victoria	61.3	60.2	62.5	22.4	21.3	23.4	8.8	8.0	9.6	3.9	3.3	4.4	12.6	11.8	13.6

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

### Level of psychological distress by departmental region and local government area

HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MANSFIELD MARIB' RNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONEE VALLEY MOOR/ BOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NILLUMBIK NORTI STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOOL WELLING TON WEST WIMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARRIAME ACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDARA BRIN HORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MANSFIEL MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONEE VALLE MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NILLUMB NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUTH GIPPS IMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARF ACK ALPINE A RARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDAF BANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMIT BIN EAST GIPPS FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI GREATER DANDELIONG CREATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON IORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MAN MARIBYRNONG MAROOLIDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE EY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI IK NORTHERN GRAMPIANS CORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT LUM SLAND STONNINGTON STRATHBOGIE INGTON WEST WIMMERA WHITEHO IAMBIACK ALPINE ARARAT BALLARAT GIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOO RSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGE IAMBIACK ALPINE ARARAT BALLARAT BANY CEDASS COAST BAW BAW BAYSIDE BENALLA BOROONI BRIMBANK BULOKE CAMPASPE CARDININ, CISEY CENTRAL COLDENEL DO COLC-OTWAY CORANGAMIT BIN EAST GIPPSLAID FRANKSTON GANNAWARA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI GREATER DANDENONG GREATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON HORSHAM HUME INDIGO KINGSTON KNOX LALPOBE LODDON MACEDON RANGES MANNINGHAM MAN D MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MORA MONASH MOONE EY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEX MOER MANNE MURRINDINDI NI HIK NORTHERN GRAMPIANS PORT PHILLUP PYRENEES QUEENSCLIEFE SOUTHERN CHAMPIANS SOUT SLAND STONNINGTON STRATHBOGIE SURF COAST SWAN HILD TOWONG WANGARATTA WARNAMBOO LINGTON WEST WIMMERA WHITCHORSE WHITTLESEA WODONGA WANDHAM YARRA YARRA RANGE MARIBIACK ALPINE ARARAT BALLARATEBANY HE BASS COAST BAW BAW BAYSIDE BENALLA BORONI BRIMBANK BULOKE CAMPASPE CARDINA CASEY CEMTRAT GOLDFIELDS COLAC-OTWAY CORANG HIM BIACK ALPINE ARARAT BALLARATEBANY HE BASS COAST BAW BAW BAYSIDE BENALLA BORONI BRIMBANK BULOKE CAMPASPE CARDINA CASEY CEMTRAT GOLDFIELDS COLAC-OTWAY CORANG HIM BIACK ALPINE ARARAT BALLARATEBANY HE BASS COAST BAW BAW BAYSIDE BENALLA BORONI BRIMBANK BULOKE CAMPASPE CARDINA CASEY CEMTRAT GOLDFIELDS COLAC-OTWAY CORANG HIM BIACK ALPINE ARARAT BALLARATEBANY HE BASS COAST BAW BAW BAYSIDE BENALLA BORONI BIN EAST GIPPSLAND FEATER CEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSON HORSHAM HUME INDIGO KINGSTON HANGA LA ROBE LODDON MACEDON PANGES MANNINGHAM MAN D MARIBYRNONG MAROONDAH MELBOU HIM MARTIN MILDURA MITCHELL MORA MONASH MOONE HORSHAM HUME INDIGO KINGSTON HANGA LA ROBE LODDON MACEDON PANGES MANNINGHAM MAN D MARIBYRNONG MAROONDAH MELBOU HIM MANDA MARCH A GLENELG MORA MONASH MOONE HARIBYRNONG MAROONDAH MELBOU HIM MARTIN MILDURA MITCHELL MORA MONASH MOONE HARIBYRNONG MAROONDAH MELBOU HIM MARTIN MILDURA MITCHELL MORA MONASH MOONE HARIBYRNONG MAROONDAH MELBOU HIM MARTIN MILDURA MITCHELL MORA MONASH MOONE S COAST BAW BAW BAYSIDE BENALLA BOROONI ARA LUM DARE **JULA MOUNT ALEX** MORELAND MORNU VALLEY N ANDER MOYNE MURRINDINDI NI MPIANS POP **NEES QUEENSCL** LUMBIK NORTHERN GI PHILLI OGIE SURF COAS **GIPPSLAND STONNINGTON** TRATH AN WELLINGTON WEST WIMMERA ITEHORSE WHITTLESE YARRIAMBIACK ALPINE ARARAT BALLARAT BANYULE BASS BAY HORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MAN FIELD MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE VALLEY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI LUMBIK NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT GIPPSLAND STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOC WELLINGTON WEST WIMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGE YARRIAMBIACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONI ARA BRIMBANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMI

Table 7.4 shows level of psychological distress by LGA in Eastern Metropolitan Region. There was a significantly lower proportion of people with high or very high levels of psychological distress who lived in the LGA of Knox (C) compared with all Victorian adults.

## Table 7.4: Proportion (%) of adult population with psychological distress,<sup>a</sup> by level and LGA, Eastern Metropolitan Region, Victoria, 2014

	Low	(K10: <	16)	ΣЗ	o: 16–2	a 🗧	High (	K10: 22	-29)	≥ £	ery higl 10: 30+	<b>c ^</b>	High (K	/very h 10: 22+)	igh
	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū
LGA		Н	Ч		Ч	Ч		Н	Ч		Н	٦		Н	Ы
Boroondara (C)	70.3	62.9	76.7	17.4	12.5	23.6	8.9*	5.1	15.1	* *			10.5*	6.3	17.0
Knox (C)	65.9	58.0	73.0	24.7	18.1	32.7	4.7	3.1	7.3	2.4*	1.2	5.1	7.2	4.9	10.4
Manningham (C)	64.9	56.8	72.2	23.2	17.2	30.4	5.0*	2.4	10.1	3.7*	1.5	8.6	8.7*	5.0	14.6
Maroondah (C)	59.1	49.8	67.8	22.3	15.1	31.6	9.6*	5.1	17.2	5.5*	2.3	12.4	15.0	9.2	23.6
Monash (C)	63.6	57.1	69.7	18.3	13.6	24.1	10.2	6.4	15.8	* *			12.6	8.5	18.2
Whitehorse (C)	66.5	58.5	73.6	22.0	15.6	30.0	6.6*	3.9	11.0	* *			8.5	5.3	13.3
Yarra Ranges (S)	61.5	52.2	70.1	17.2	12.7	22.9	16.0*	9.1	26.5	* *			20.0	12.7	30.1
Eastern Metropolitan Region	64.9	62.0	67.8	20.5	18.1	23.1	8.8	7.0	11.0	2.8	1.9	4.1	11.6	9.6	14.0
Victoria	61.3	60.2	62.5	22.4	21.3	23.4	8.8	8.0	9.6	3.9	3.3	4.4	12.6	11.8	13.6
			:												

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.
 \*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

Table 7.5 shows level of psychological distress by LGA in North & West Metropolitan Region. There was a significantly higher proportion of people with high levels of psychological distress who lived in the LGA of Darebin (C) compared with all Victorian adults. There was a significantly higher proportion of people with very high levels of psychological distress who lived in the LGA of Hume (C) compared with all Victorian adults.

Table 7.5: Proportion (%) of adult population with psychological distress,<sup>a</sup> by level and LGA, North & West Metropolitan Region, Victoria, 2014

	Lov	v (K10: <	16)	ΣΆ	oderat 10: 16–2	e 1)	High	(K10: 22	i–29)	ž	ery higl 10: 30+	<u>ج</u> ج	High (k	/very h (10: 22+	igh (
	%	95%	C	%	95%	Ū	%	95%	Ū	%	95%	C	%	95%	Ū
LGA		З	Ч		Н	Ъ		Н	Ч		Н	Ъ		3	٦
Banyule (C)	60.0	53.1	66.5	24.5	18.1	32.3	7.5*	4.1	13.4	2.0*	0.8	4.8	9.6*	5.7	15.5
Brimbank (C)	52.6	46.3	58.7	27.8	22.6	33.7	9.1	6.5	12.7	4.5*	2.6	7.5	13.6	10.2	17.8
Darebin (C)	55.7	48.4	62.8	19.8	15.5	24.8	16.4	10.3	25.1	4.0*	2.3	6.9	20.4	14.0	28.7
Hobsons Bay (C)	62.1	53.6	69.9	25.4	18.5	33.8	7.4	4.6	11.6	1.5*	0.7	3.2	8.9	5.9	13.2
Hume (C)	56.6	50.3	62.6	24.1	19.4	29.6	7.3	4.8	10.9	7.5	4.6	12.0	14.8	10.8	19.9
Maribyrnong (C)	61.6	54.5	68.3	24.7	19.0	31.6	8.6	5.3	13.6	* *	0.4	3.3	9.7	6.2	14.8
Melbourne (C)	61.9	54.7	68.7	22.7	16.8	29.9	5.3	3.2	8.6	5.8*	2.6	12.3	11.1	7.0	17.2
Melton (S)	56.3	48.8	63.5	25.1	18.7	32.7	11.3	7.6	16.6	3.7*	2.1	6.6	15.0	10.8	20.5
Moonee Valley (C)	59.4	52.7	65.8	23.4	17.8	30.1	9.8*	5.8	16.1	4.5*	2.2	9.2	14.3	9.4	21.1
Moreland (C)	64.6	57.2	71.4	18.0	13.2	24.2	10.8	6.7	16.8	4.5*	1.9	10.3	15.3	10.2	22.2
Nillumbik (S)	66.0	58.2	73.0	27.3	20.6	35.2	2.7	1.7	4.2	1.6*	0.6	4.1	4.3	2.7	6.7
Whittlesea (C)	54.0	48.1	59.7	29.0	23.7	34.8	7.9	5.4	11.3	5.1	3.4	7.8	13.0	9.8	17.0
Wyndham (C)	63.0	57.1	68.6	21.6	17.2	26.7	8.6	5.7	12.9	3.3*	1.8	6.1	11.9	8.5	16.5
Yarra (C)	59.5	50.3	68.1	25.2	18.0	34.1	8.6*	4.8	15.0	* *			11.1	6.8	17.6
North & West Metropoliton Begion	58.5	56.5	60.5	24.0	22.4	25.8	0.0	7.8	10.3	4.2	3.4	5.3	13.2	11.8	14.7
Victoria	61.3	60.2	62.5	22.4	21.3	23.4	8.8	8.0	9.6	3.9	3.3	4.4	12.6	11.8	13.6

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

Based on the Kessler 10 scale for psychological distress.

Table 7.6 shows level of psychological distress by LGA in Southern Metropolitan Region. There was a significantly higher proportion of people with high or very high levels of psychological distress who lived in the LGA of Casey (C) compared with all Victorian adults.

## Table 7.6: Proportion (%) of adult population with psychological distress,<sup>a</sup> by level and LGA, Southern Metropolitan Region, Victoria, 2014

	Low	(K10: <	16)	Σ¥	oderat 0: 16–2	9 <del>(</del>	High (	(K10: 22	:-29)	ž €	∍ry higl 10: 30+	<u>د ج</u>	High (k	/very h (10: 22+	igh )
	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	C
LGA		Ц	Ъ		Η	Ъ		Н	Ъ		Η	Ы		Н	٦
Bayside (C)	75.7	66.7	82.8	16.8	11.2	24.5	1.2*	0.6	2.4	* *			3.6*	1.3	9.1
Cardinia (S)	60.0	53.1	66.4	21.9	16.6	28.3	10.6	6.9	16.0	4.4*	2.0	9.3	15.0	10.5	21.1
Casey (C)	56.3	49.6	62.7	21.7	16.6	27.8	12.3	8.4	17.6	6.3*	3.7	10.4	18.6	13.8	24.6
Frankston (C)	59.1	52.5	65.5	20.6	15.4	26.9	10.2	6.9	14.8	5.4*	3.2	8.8	15.5	11.5	20.7
Glen Eira (C)	63.0	54.9	70.4	24.0	17.6	31.9	7.4*	4.3	12.4	1.5*	0.7	3.4	8.9	5.6	13.9
Greater Dandenong (C)	55.4	48.3	62.2	25.3	19.3	32.5	8.5	5.7	12.4	4.3*	2.4	7.4	12.7	9.3	17.2
Kingston (C)	58.3	50.1	66.1	24.9	17.8	33.5	7.0*	4.0	11.7	6.0*	2.3	14.8	12.9*	7.8	20.7
Mornington Peninsula (S)	65.0	56.4	72.8	23.5	16.6	32.1	2.9	1.9	4.4	5.3*	2.4	11.1	8.1*	4.8	13.5
Port Phillip (C)	64.1	52.8	74.0	21.1	12.7	32.8	11.0*	5.2	22.1	1.6*	6.0	2.8	12.6*	6.4	23.2
Stonnington (C)	65.4	57.4	72.7	24.1	17.6	32.0	6.6*	3.4	12.6	* *			8.4*	4.7	14.5
Southern Metropolitan Region	61.0	58.4	63.6	22.5	20.2	24.9	8.6	1 <u>,</u>	10.5	4.1	3.1	5.3	12.7	10.9	14.8
Victoria	61.3	60.2	62.5	22.4	21.3	23.4	8.8	8.0	9.6	3.9	3.3	4.4	12.6	11.8	13.6

Data were age-standardised to the 2011 Victorian population. LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported. <sup>a</sup> Based on the Kessler 10 scale for psychological distress.

of people with high levels of psychological distress who lived in the LGAs of Colac-Otway (S) and Queenscliffe (B) compared with all Victorian adults. There was a significantly lower proportion of people with very high levels of psychological distress who lived in the Table 7.7 shows level of psychological distress by LGA in Barwon-South Western Region. There was a significantly lower proportion LGA of Moyne (S) compared with all Victorian adults.

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	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	ū
LGA		5	Ч		Н	Ч		Н	Ч		Н	Ч		Н	Ч
Colac-Otway (S)	64.7	54.0	74.2	26.3	17.6	37.4	5.2	3.4	7.9	1.7*	0.8	3.5	6.9	4.8	9.9
Corangamite (S)	64.0	55.2	72.0	22.6	16.1	30.7	6.3*	3.5	11.0	3.2*	1.4	7.0	9.5	6.0	14.8
Glenelg (S)	63.5	55.7	70.8	25.2	19.0	32.5	5.1* 5.1	3.1	8.3	5.4*	2.4	11.5	10.5	6.5	16.4
Greater Geelong (C)	62.1	54.3	69.4	18.4	12.9	25.6	8.9	5.5	14.1	6.9*	2.9	15.5	15.8	10.3	23.4
Moyne (S)	68.7	59.7	76.6	23.5	16.1	32.9	4.9*	2.7	9.0	1.0*	0.4	2.3	5.9*	3.5	9.9
Queenscliffe (B)	78.3	66.2	86.9	17.5*	9.5	30.1	1,4*	0.6	2.9	* *			2.7*	1:1	6.6
Southern Grampians (S)	73.1	64.0	80.7	17.4	11.1	26.3	4.8*	2.3	9.5	<u>а.</u> 5*	1.5	7.8	8.3*	4.8	13.9
Surf Coast (S)	62.3	52.4	71.3	25.9	17.5	36.4	7.4*	3.8	14.0	2.7*	1.2	5.7	10.1*	5.9	16.7
Warrnambool (C)	59.6	52.2	66.6	23.3	16.9	31.2	10.8*	6.0	18.7	3.9*	1.5	9.7	14.7	9.2	22.6
Barwon-South Western Region	62.6	57.6	67.5	20.6	16.7	25.1	8.1	5.7	11.3	5.8*	2.8	11.6	13.9	10.0	19.0
Victoria	61.3	60.2	62.5	22.4	21.3	23.4	8.8	8.0	9.6	3.9	3.3	4.4	12.6	11.8	13.6

Data were age-standardised to the 2011 Victorian population.

LL/LU 95% CI = lower/upper limit of 95 per cent confidence interval. Estimatos that and (statistically) significantly different from the common directory for Vistory

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported. Based on the Kessler 10 scale for psychological distress. Table 7.8 shows level of psychological distress by LGA in Gippsland Region. There was a significantly higher proportion of people with high or very high levels of psychological distress who lived in the LGA of South Gippsland (S) compared with all Victorian adults

	Low	, (K10: <	16)	ΣŊ	oderati 0: 16–2	a 🗧	High (	K10: 22	-29)	≥ X	iry high 10: 30+	د <b>م</b>	High (K	/very h 10: 22+)	igh
	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū
LGA		Н	Ы		Н	Ч		Н	Ч		Н	Ч		H	Ы
Bass Coast (S)	65.4	53.7	75.5	17.3	12.0	24.3	11.3*	4.9	24.1	* *			15.4*	8.1	27.3
Baw Baw (S)	65.2	56.9	72.7	21.3	15.9	27.9	7.4*	4.0	13.3	3.1*	1.6	5.9	10.5	6.5	16.5
East Gippsland (S)	77.2	72.3	81.5	12.4	9.3	16.5	5.8	3.7	9.2	ю. Э.З*	1.8	5.9	9.1	6.4	12.9
Latrobe (C)	51.5	42.5	60.4	26.7	17.9	37.8	12.9*	6.9	22.8	4.1*	2.4	6.9	17.0	10.4	26.5
South Gippsland (S)	57.7	49.5	65.6	19.1	13.5	26.1	13.7*	8.2	22.1	6.8*	3.5	12.9	20.5	14.1	28.9
Wellington (S)	64.9	56.2	72.8	21.4	14.8	29.8	9.5	5.9	14.9	2.2*	1.1	4.3	11.7	7.9	17.1
<b>Gippsland Region</b>	61.7	57.2	66.1	21.1	17.3	25.4	10.5	7.7	14.0	3.8	2.8	5.1	14.3	11.3	17.9
Victoria	61.3	60.2	62.5	22.4	21.3	23.4	8.8	8.0	9.6	3.9	3.3	4.4	12.6	11.8	13.6

Table 7.8: Proportion (%) of adult population with psychological distress,<sup>a</sup> by level and LGA, Gippsland Region, Victoria, 2014

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.
<sup>a</sup> Based on the Kessler 10 scale for psychological distress.

with high or very high levels of psychological distress who lived in the LGAs of Hindmarsh (S) and Horsham (RC) compared with all Table 7.9 shows level of psychological distress by LGA in Grampians Region. There was a significantly lower proportion of people Victorian adults.

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	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū
LGA		Ч	Ъ		Ч	Ъ		Н	Ъ		Ч	Ч		۲	٩L
Ararat (RC)	63.2	53.7	71.7	23.5	16.0	33.3	7.5*	3.6	14.6	* *			10.1*	5.6	17.7
Ballarat (C)	62.0	54.3	69.1	22.0	17.4	27.5	9.8*	5.7	16.4	* *			11.9	7.3	18.7
Golden Plains (S)	63.5	55.3	70.9	23.4	16.9	31.3	6.0*	3.2	11.0	* *			9.1*	5.3	15.3
Hepburn (S)	60.6	53.0	67.7	21.9	14.2	32.3	9.3*	5.6	15.2	5.7*	2.6	12.3	15.0	9.7	22.6
Hindmarsh (S)	66.4	56.2	75.2	25.7	17.3	36.3	3.2*	1.9	5.2	2.3*	0.9	5.6	5.5	3.4	8.7
Horsham (RC)	66.9	56.2	76.1	20.4	13.1	30.4	4.6*	2.1	9.6	* *			6.5*	3.5	11.7
Moorabool (S)	63.8	56.1	70.8	23.8	17.6	31.3	5.6	3.9	8.1	3.5*	1.4	8.3	9.1	6.0	13.5
Northern Grampians (S)	61.0	51.3	69.9	17.5	12.0	24.8	13.8*	7.3	24.4	5.2*	2.0	12.8	19.0	11.7	29.4
Pyrenees (S)	62.0	52.7	70.5	16.6	11.9	22.8	13.2*	7.2	23.0	4.6*	1.8	10.9	17.8	11.0	27.3
West Wimmera (S)	70.8	63.1	77.4	17.3	11.6	25.0	6.2	4.1	9.3	3.2*	1.8	5.8	9.4	6.7	13.0
Yarriambiack (S)	59.7	49.4	69.2	25.0	16.5	36.0	9.0	5.8	13.5	4.0*	1.9	8.1	13.0	0.6	18.4
Grampians Region	62.7	58.4	66.8	21.6	18.8	24.6	8.7	6.2	12.1	3.0	1.8	4.8	11.7	8.9	15.2
Victoria	61.3	60.2	62.5	22.4	21.3	23.4	8.8	8.0	9.6	3.9	3.3	4.4	12.6	11.8	13.6

Data were age-standardised to the 2011 Victorian population.

LLL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.
\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

high levels of psychological distress who lived in the LGAs of Greater Shepparton (C), Strathbogie (S) and Wangaratta (RC) compared Table 7.10 shows level of psychological distress by LGA in Hume Region. There was a significantly lower proportion of people with very with all Victorian adults..

	Low	/ (K10: <	16)	ΣΆ	oderat 10: 16–2	Э (Г	High	(K10: 23	2–29)	≥₹	ery hig 10: 30+	<b>د</b> ۍ	High (k	/very h 10: 22+	iigh )
	%	95%	Ū	%	95%	Ū	%	95%	C	%	95%	C	%	95%	Ū
LGA		H	Ч		Н	Ч		Н	Ч		Н	Ы		5	Ы
Alpine (S)	64.9	52.8	75.4	25.7	16.4	37.8	5.7*	3.4	9.6	* *			8.2	5.0	13.1
Benalla (RC)	58.2	48.5	67.3	25.7	18.1	35.0	11.0*	5.4	21.0	2.7*	1.3	5.7	13.7*	7.7	23.4
Greater Shepparton (C)	59.3	51.0	67.2	26.6	19.9	34.7	11.4*	6.6	19.1	1.1*	0.4	2.6	12.5*	7.5	20.1
Indigo (S)	67.2	58.6	74.8	22.3	17.0	28.7	3.4*	1.5	7.7	* *			9.4*	4.5	18.6
Mansfield (S)	71.6	61.3	80.1	16.4	11.5	22.9	8.8*	3.9	18.5	2.3*	0.9	5.4	11.1*	5.7	20.5
Mitchell (S)	63.9	55.4	71.6	18.3	13.3	24.7	7.7	4.9	11.8	7.1*	3.3	14.8	14.8	9.7	22.0
Moira (S)	57.8	47.5	67.5	27.6	19.0	38.3	8.8*	5.1	14.8	3.0*	1.3	6.6	11.8	7.7	17.8
Murrindindi (S)	57.5	48.5	66.0	23.8	16.3	33.4	13.5*	7.7	22.7	2.9*	1.2	7.2	16.4	10.2	25.5
Strathbogie (S)	66.0	57.3	73.8	22.6	15.8	31.3	8.8*	5.0	15.0	0.8*	0.3	2.1	9.6*	5.7	15.7
Towong (S)	57.2	48.8	65.1	29.1	21.6	37.8	4.3*	2.6	7.2	6.4*	2.7	14.5	10.8*	6.2	18.0
Wangaratta (RC)	61.6	53.0	69.5	21.2	13.3	32.1	14.2*	6.5	28.1	1.0*	0.5	2.3	15.2*	7.4	28.9
Wodonga (RC)	59.5	51.7	66.9	23.7	17.3	31.5	12.0*	1.7	19.5	* *			14.1	8.9	21.6
Hume Region	61.0	57.5	64.5	24.0	20.9	27.5	10.0	7.7	12.9	2.8	2.0	4.0	12.9	10.4	15.8
Victoria	61.3	60.2	62.5	22.4	21.3	23.4	8.8	8.0	9.6	3.9	3.3	4.4	12.6	11.8	13.6

Table 7.10: Proportion (%) of adult population with psychological distress,<sup>a</sup> by level and LGA, Hume Region, Victoria, 2014

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

Table 7.11 shows level of psychological distress by LGA in Loddon Mallee Region. There was a significantly lower proportion of people with very high levels of psychological distress who lived in the LGA of Gannawarra (S) compared with all Victorian adults.

	Low	/ (K10: <	16)	ΣЗ	o: 16–2	e ()	High (	K10: 22	-29)	≥ ₹	ary high 10: 30+		High (K	/very hi 10: 22+)	gh
	%	95%	Ū	%	95%	<del>ט</del>	%	95%	Ū	%	95%	Ū	%	95%	ច
LGA		Н	Ч		Н	Ч		Н	Ы		Н	٦C		Н	Ч
Buloke (S)	63.8	54.1	72.5	22.8	15.4	32.4	8.4*	4.0	16.9	*			11.6*	6.4	19.9
Campaspe (S)	53.6	44.1	62.8	26.3	18.9	35.2	13.3*	7.5	22.5	5.0*	2.3	10.4	18.3	11.7	27.5
Central Goldfields (S)	53.9	45.7	61.8	20.3	13.3	29.7	11.1*	5.2	21.9	9.3*	4.4	18.6	20.3	12.4	31.4
Gannawarra (S)	70.0	56.4	80.8	16.9	11.8	23.8	* *			1.1*	0.5	2.3	11.5*	4.3	27.4
Greater Bendigo (C)	64.2	55.7	71.8	19.2	14.5	25.0	6.4*	3.3	12.1	2.3*	1.2	4.3	8.7*	5.2	14.2
Loddon (S)	59.9	49.9	69.2	27.1	18.4	38.0	3.8	2.4	5.8	*			7.9*	4.1	14.8
Macedon Ranges (S)	64.8	51.8	75.9	19.3	14.8	24.8	12.7*	4.9	29.1	* *			13.5*	5.5	29.5
Mildura (RC)	65.2	56.0	73.4	17.9	13.3	23.7	9.9*	4.5	20.2	4.1*	2.2	7.8	14.0*	7.9	23.6
Mount Alexander (S)	55.3	44.7	65.5	25.8	16.8	37.4	14.3*	5.8	31.2	2.8*	1.3	5.9	17.2*	8.0	33.2
Swan Hill (RC)	67.9	57.5	76.8	21.8	14.1	32.2	4.1*	2.3	7.2	* *			8.2*	4.0	15.9
Loddon Mallee Region	63.0	58.7	67.2	20.3	17.7	23.1	8.9	6.4	12.4	3.0	2.2	4.1	12.0	9.2	15.4
Victoria	61.3	60.2	62.5	22.4	21.3	23.4	8.8	8.0	9.6	3.9	3.3	4.4	12.6	11.8	13.6

# Table 7.11: Proportion (%) of adult population with psychological distress,<sup>a</sup> by level and LGA, Loddon Mallee Region, Victoria, 2014

Data were age-standardised to the 2011 Victorian population. LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

### What does Map 7.1 tell us?

In Map 7.1 the 79 LGAs have been ranked according to the proportion of adults who have high or very high levels of psychological distress in each LGA. The LGAs were then divided into 4 groups of 16 LGAs (labelled poorest, fair, good and very good results) with decreasing proportions of adults who have high or very high levels of psychological and a final group of 15 LGAs with the best results (i.e. the smallest proportions of adults who have high or very high levels of psychological distress). Map 7.1: Proportion of adults with a high or very high level of psychological distress, by LGA, Victoria, 2014



Note: The local government area (LGA) ID is based on the alphabetical order of the LGA names (see Table iii, page 17).

Table 7.12 shows the proportion of adult males with psychological distress, by level of distress and selected socioeconomic determinants. When compared with all Victorian men, there was a significantly higher proportion of men with very high levels of psychological distress who had the following characteristics:

- did not complete high school
- unemployed
- not in the labour force
- total annual household income less than \$40,000.

Table 7.13 shows the proportion of adult females with psychological distress, by level of distress and selected socioeconomic determinants. When compared with all Victorian women, there was a significantly higher proportion of women with very high levels of psychological distress who had the following characteristics:

- did not complete high school
- unemployed
- not in the labour force
- total annual household income less than \$40,000.

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	Lov	v (K10: <	:16)	2 3	10derat (10:16–2	e 1)	High	(K10: 22	i–29)	Very hi	gh (K10	(+08:
	%	95%	۶ CI	%	95%	6 CI	%	95%	CI	%	95%	Ū
		Н	٦L		3	Ц		Н	Ъ		Н	Ч
All males	65.5	63.7	67.2	20.6	19.2	22.2	7.4	6.4	8.5	2.9	2.2	3.6
Country of birth												
Australia	67.0	64.9	69.0	20.3	18.7	22.1	7.5	6.2	9.0	2.9	2.2	3.9
Overseas	62.4	58.6	66.1	21.5	18.4	24.9	7.3	5.6	9.6	2.2	1.5	3.2
Language spoken at home												
English	67.9	62.9	69.8	20.3	18.6	22.0	6.7	5.6	7.9	2.6	2.0	3.5
Language other than English	58.0	54.2	61.6	21.9	18.9	25.2	9.4	7.3	12.1	3.4	2.3	5.0
Education level												
Did not complete high school	58.8	52.6	64.7	17.9	14.0	22.7	12.0	7.4	19.0	6.4*	3.7	11.0
Completed high school, or TAFE, or trade certificate, or diploma	62.9	60.3	65.4	22.4	20.3	24.6	8.7	17	10.6	3.1	2.3	4.3
University, or some other tertiary institute degree, including postgraduate diploma or degree	71.0	67.9	73.8	19.0	16.6	21.6	5.0	3.7	6.5	1.6*	0.8	3.3
Employment status												
Employed	70.0	67.8	72.2	20.7	18.8	22.8	5.4	4.5	6.6	1.3	0.9	1.8
Unemployed	48.3	41.1	55.5	20.2	15.0	26.7	17.7	11.1	27.0	6.3	3.8	10.3
Not in labour force	54.1	48.8	59.3	16.2	13.4	19.4	13.6	10.5	17.4	11.2	7.8	15.8
Total annual household income												
< \$40,000	50.2	45.0	55.4	22.9	18.7	27.8	13.5	10.3	17.5	6.4	4.7	8.5
\$40,000 to < \$100,000	64.6	61.4	67.6	24.7	22.0	27.6	6.3	5.1	7.9	2.4*	1.3	4.4
≥ \$100,000	75.2	71.9	78.2	16.2	13.7	19.0	6.2	4.4	8.6	*8 <sup>.</sup> 0	0.5	1.4

Data were age-standardised to the 2011 Victorian population.

LL/LU 95% CI = lower/upper limit of 95 per cent confidence interval. Not-that actimates may not add to 100 per cent due to a proportion of (don'

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

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

Table 7.13: Proportion (%) of adult females with psychological distress,<sup>a</sup> by level and selected socioeconomic determinants, Victoria, 2014

	Low	/ (K10: <	16)	<u>د</u> خ	100era1 (10: 16–2	e 21)	High	(K10: 22	-29)	Very h	igh (K10	: 30+)
	%	95%	° CI	%	95%	% CI	%	95%	cI	%	95%	Ū
		3	Ъ		3	٦		3	Ы		Ξ	Ъ
All females	57.3	55.7	58.8	24.0	22.6	25.4	10.2	9.2	11.4	4.9	4.1	5.8
Country of birth												
Australia	58.7	57.0	60.4	23.7	22.2	25.3	9.9	8.7	11.3	4.7	3.7	5.8
Overseas	54.9	51.4	58.3	25.1	22.0	28.5	10.4	8.5	12.7	4.8	3.8	6.0
Language spoken at home												
English	59.8	58.0	61.5	23.1	21.6	24.7	9.5	8.4	10.8	4.7	3.7	5.9
Language other than English	48.6	45.4	51.9	26.5	23.6	29.6	12.7	10.3	15.5	6.0	4.8	7.6
Education level												
Did not complete high school	51.7	46.2	57.2	21.9	18.4	26.0	12.4	9.4	16.3	9.4	6.6	13.3
Completed high school, or TAFE, or trade certificate, or diploma	55.4	53.2	57.6	25.7	23.7	27.8	10.5	9.2	12.0	5.2	4.2	6.4
University, or some other tertiary institute degree, including postgraduate diploma or degree	62.9	60.2	65.5	21.8	19.6	24.2	8.5	6.7	10.9	3.3	2.0	5.4
Employment status												
Employed	60.9	58.3	63.5	22.5	20.6	24.5	10.0	8.0	12.3	3.6	2.5	5.1
Unemployed	38.3	31.6	45.5	27.4	21.5	34.2	18.5	13.4	24.9	12.4	8.2	18.4
Not in labour force	52.8	50.1	55.6	24.7	22.3	27.2	10.7	9.1	12.6	7.0	5.8	8.4
Total annual household income												
< \$40,000	44.7	40.3	49.2	24.7	20.5	29.4	16.4	13.1	20.4	9.7	7.7	12.1
\$40,000 to < \$100,000	59.0	56.3	61.7	24.0	21.6	26.6	11.5	9.5	13.8	3.1	2.3	4.1
≥ \$100,000	67.6	64.0	70.9	21.0	18.3	24.1	6.8	4.5	10.2	Э.Э*	1.6	6.6
Data were age-standardised to the 2011 Victorian population. LL/LU 95% CI = lower/upper limit of 95 per cent confidence interval.			ШС	istimates m esponses, r	iay not ad iot reporte	d to 100 per ce ed here.	ent due to a	proportio	n of 'don't kna	ow' or 'refus	ed to say'	

Note that estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to כם ווורפו אחוי IOMEL/ADDEL III III OI say' responses, not reported here.

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

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported. \* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

<sup>a</sup> Based on the Kessler 10 scale for psychological distress.

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The relationship was investigated between SES and very high levels of psychological distress, using total annual household income as a measure of SES (Figure 7.3). The proportion of men and women with very high levels of psychological distress significantly decreased with increasing income.

### Figure 7.3: Proportion (%) of adult population with a very high level of psychological distress,<sup>a</sup> by total annual household income and sex, Victoria, 2014



Data are age-adjusted to the 2011 population of Victoria.

95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

 $^{\alpha}~$  Based on the Kessler 10 scale for psychological distress.
Table 7.14 shows the proportion of adult males with psychological distress, by level of distress and selected modifiable risk factors contributing to chronic disease. When compared with all Victorian men, there was a significantly higher proportion of men with very high levels of psychological distress who had the following characteristics:

- sedentary behaviour
- current smoker
- abstainer or no longer drinks alcohol
- fair or poor self-reported health status.

Table 7.15 shows the proportion of adult females with psychological distress, by level of distress and selected modifiable risk factors contributing to chronic disease. When compared with all Victorian women, there was a significantly higher proportion of women with very high levels of psychological distress who had the following characteristics:

- sedentary behaviour
- current smoker
- abstainer or no longer drinks alcohol
- fair or poor self-reported health status
- doctor-diagnosed hypertension.

	Lov	v (K10: <	16)	≥ ¥	loderate 10: 16–2		High	(K10: 22	-29)	Very h	igh (K10	: 30+)
	%	95%	° CI	%	95%	CI	%	95%	C	%	95%	U
		Ц	٩L		Н	٦L		Н	٩L		Н	Ъ
All males	65.5	63.8	67.3	20.7	19.2	22.3	7.2	6.3	8.3	2.8	2.2	3.6
Physical activity <sup>b</sup>												
Sedentary	54.8	45.4	63.9	16.5	11.8	22.5	9.5*	4.1	20.4	14.8	12.1	18.1
Insufficient time (< 150 min) and/or sessions (< 2)	62.8	60.2	65.3	21.7	19.5	24.0	8.9	7.4	10.6	3.1	2.2	4.2
Sufficient time (> 150 min) and sessions (> 2)	70.5	67.9	73.0	19.9	17.7	22.3	4.8	3.8	6.1	1.8	1.1	2.7
Met fruit / vegetable guidelines $^{ m c}$												
Both guidelines	67.5	56.8	76.7	15.5*	7.3	29.9	11.4*	4.5	26.2	2.4*	1.0	5.5
Vegetable guidelines <sup>d</sup>	65.2	55.1	74.1	16.0*	7.8	29.8	13.2*	6.1	26.2	3.1*	1.4	6.7
Fruit guidelines <sup>d</sup>	68.2	65.5	70.7	19.9	17.7	22.2	5.3	4.3	6.4	3.0	2.0	4.6
Neither	63.8	61.4	66.2	21.6	19.6	23.7	8.7	7.1	10.5	2.7	2.0	3.5
Smoking status												
Current smoker	54.4	50.1	58.6	22.2	18.8	26.0	11.5	9.1	14.3	5.8	4.2	8.1
Ex-smoker	62.4	57.4	67.2	23.0	18.7	27.9	8.6	6.0	12.2	2.6	1.2	5.5
Non-smoker	68.9	66.7	71.0	19.9	18.1	21.8	5.8	4.8	6.9	2.1	1.4	3.2
Lifetime risk of alcohol-related harm $^{ m e}$												
Abstainer / no longer drinks alcohol	59.4	54.4	64.2	18.7	15.4	22.6	10.1	6.9	14.5	5.7	3.9	8.4
Reduced risk	65.2	59.9	70.2	19.5	15.5	24.2	8.1	5.6	11.4	2.6*	1.5	4.4
Increased risk	6.99	64.9	68.9	21.3	19.6	23.1	6.8	5.8	8.0	2.3	1.6	3.3
Data were age-standardised to the 2011 Victorian population. LL/LU 95% CI = lower/upper limit of 95 per cent confidence interval.				* * * * * *	between 2 greater th	5 and 50 per an, or equal t	: cent; point e: to 50 per cent	stimate (% ; point esti	) should be int mate (%) is ur	terpreted wit rreliable, her	ch caution. Ice not rep	orted.

Table 7.14: Proportion (%) of adult males with psychological distress,<sup>a</sup> by level and selected modifiable risk factors, Victoria, 2014

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

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

Based on the Kessler 10 scale for psychological distress. DoH (2014) guidelines. σ

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NHMRC (2009) guidelines. Body mass index (BMI) = Weight (kg) / Height (m<sup>2</sup>). Φ 4

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Table 7.14: Proportion (%) of adult males with psychological distress, <sup>a</sup> by

Moderate

	Lov	v (K10: <	[6)	¥	10: 16–21		High	(K10: 22-	-29)	Very h	igh (K10:	30+)
	%	95%	C	%	95%	CI	%	95%	C	%	95%	ū
		Н	٩L		Н	٩L		Η	٩L		Ц	٦L
Self-reported health												
Excellent/very good	76.3	73.7	78.7	16.6	14.6	18.9	3.7	2.6	5.2	1.1*	0.5	2.6
Good	64.6	61.7	67.4	23.0	20.5	25.6	6.5	5.2	8.2	2.1	1.3	3.4
Fair/poor	47.9	43.8	52.2	23.7	20.4	27.3	15.8	12.6	19.6	7.5	5.6	9.9
Body weight status based on BMI $^{ m f}$												
Underweight (BMI < 18.5 kg/m²)	60.8	45.4	74.3	22.8*	12.1	38.9	6.5*	2.7	14.5	*		
Normal range (18.5 ≥ BMI < 25 kg/m²)	69.2	66.5	71.7	19.8	17.7	22.2	5.7	4.6	7,1	2.0	1.2	3.1
Pre-obese (25 ≥ BMI < 30 kg/m²)	64.7	61.6	67.7	22.5	19.7	25.5	6.7	5.4	8.2	2.8	1.8	4.5
Obese (BMI ≥ 30 kg/m²)	60.5	55.8	65.0	19.3	16.4	22.6	11.7	8.5	16.1	3.9	2.6	5.6
Blood pressure status (excluding pregnancy induc	ed hypert	ension)										
Doctor diagnosed hypertension	56.4	51.1	61.5	20.8	16.5	25.9	12.5	8.6	17.8	4.4	2.9	6.6
Normal range	67.1	65.1	68.9	20.6	19.0	22.3	6.4	5.4	7.5	2.4	1.8	3.3
Blood glucose status (excluding gestational diabet	tes)											
Doctor diagnosed diabetes	67.5	58.5	75.5	16.6	11.3	23.7	5.1	3.5	7.3	7.5*	3.2	16.8
Normal range	66.1	64.3	67.9	20.4	19.0	22.0	7.3	6.3	8.5	2.6	2.0	3.4
Data were age-standardised to the 2011 Victorian population.				HSR *	between 2	5 and 50 per c	ent: point es	stimate (%)	should be int	erpreted wit	th caution.	

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

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

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say'

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below: responses, not reported here.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

<sup>a</sup> Based on the Kessler 10 scale for psychological distress.

<sup>b</sup> DoH (2014) guidelines.

NHMRC (2013) guidelines.

<sup>d</sup> Includes those meeting both guidelines.
 <sup>e</sup> NHMRC (2009) guidelines.
 <sup>f</sup> Body mass index (BMI) = Weight (kg) / Height (m<sup>2</sup>).

	L ov	/ (K10: <	16)	~ ~	10derat (10: 16-2	e (1	High	(K10: 2	2–29)	Very h	iigh (K10	: 30+)
	%	95%	cl	%	95%	c	%	953	% CI	%	95%	CI
		Η	Ч		Н	٦L		3	٦L		Η	Ы
All females	57.3	55.7	58.8	24.0	22.6	25.4	10.2	9.2	11.4	4.9	4.1	5.8
Physical activity <sup>b</sup>												
Sedentary	51.9	41.8	61.8	20.1	15.4	25.9	11.9*	5.6	23.6	10.3*	6.2	16.7
Insufficient time (< 150 min) and/or sessions (< 2)	56.5	54.3	58.6	24.2	22.4	26.1	11.1	9.5	12.8	5.2	4.0	6.7
Sufflicient time (> 150 min) and sessions (> 2)	61.6	59.1	64.0	24.0	21.7	26.4	8.2	6.9	9.9	3.2	2.3	4.3
Met fruit / vegetable guidelines <sup>c</sup>												
Both guidelines	66.8	60.5	72.6	18.8	15.6	22.5	7.7*	4.6	12.4	*		
Vegetable guidelines <sup>d</sup>	65.1	59.9	69.9	20.5	17.1	24.4	7.9	5.4	11.5	4.1*	1.8	8.8
Fruit guidelines <sup>d</sup>	60.5	58.3	62.7	22.9	21.1	24.9	8.7	7.5	10.0	4.1	3.0	5.5
Neither	54.1	51.9	56.4	25.3	23.2	27.5	12.0	10.1	14.1	5.3	4.3	6.4
Smoking status												
Current smoker	41.2	37.9	44.6	26.5	23.1	30.2	15.4	12.3	19.0	12.7	9.9	16.1
Ex-smoker	60.0	55.0	64.7	21.7	18.7	25.0	12.0	7.7	18.3	3.7	2.3	5.9
Non-smoker	59.5	57.6	61.4	23.7	22.1	25.5	9.1	8.0	10.3	3.8	3.0	4.9
Lifetime risk of alcohol-related harm $^{ m e}$												
Abstainer / no longer drinks alcohol	53.2	49.7	56.6	21.6	19.0	24.4	11.6	9.5	14.1	8.3	6.0	11.4
Reduced risk	58.4	54.7	62.1	24.3	21.0	28.1	8.9	6.9	11.5	3.1	2.2	4.2
Increased risk	59.9	57.9	61.9	24.6	22.8	26.6	9.7	8.3	11.3	3.8	3.0	4.8
Data were age-standardised to the 2011 Victorian population. LLL/LU 95% CI = lower/upper limit of 95 per cent confidence interval. Note that estimates may not add to 100 per cent due to a proportior say' responses, not reported here. Estimates that are (statistically) significantly different from the corre	n of 'don't k ssponding e	now' or 're sstimate fc	fused to or Victoria	* RSE Bas Dor NHN	between 2 greater th ed on the k I (2014) gui 1RC (2013)	5 and 50 per ( an, or equal to essler 10 scal delines. guidelines.	cent; point es 5 50 per cent, e for psychol	stimate (% ; point esti ogical dist	) should be int mate (%) is ur ress.	erpreted witl reliable, hen	r caution. ce not repo	irted.

Table 7.15: Proportion (%) of adult females with psychological distress.<sup>a</sup> by level and selected modifiable risk factors. Victoria, 2014

are identified by colour as follows: above or below. Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here. Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

<sup>d</sup> Includes those meeting both guidelines.
 NHMRC (2009) guidelines.
 <sup>f</sup> Body mass index (BMI) = Weight (kg) / Height (m<sup>2</sup>).

Table 7.15: Proportion (%) of adult females with psychological distress,<sup>a</sup> by level and selected modifiable risk factors, Victoria, 2014 (continued)

	Low	, (K10: <	16)	2 3	10derat( 10:16-2	e ()	High	(K10: 22	2-29)	Very h	igh (K10:	30+)
	%	95%	CI	%	95%	C	%	95%	° CI	%	92%	Ū
		님	٥L		۲	٩L		Н	٥L		H	٦
Self-reported health												
Excellent/very good	69.7	67.3	72.0	20.6	18.6	22.8	6.0	4.7	7.5	1.3	0.8	2.0
Good	56.2	53.8	58.6	25.4	23.1	27.7	11.0	9.2	13.1	4.2	3.0	6.0
Fair/poor	34.2	31.2	37.3	27.9	24.9	31.1	17.6	15.1	20.3	13.7	11.2	16.7
Body weight status based on BMI <sup>f</sup>												
Underweight (BMI < 18.5 kg/m²)	53.8	46.1	61.2	25.7	19.9	32.5	10.1*	5.7	17.4	6.5*	3.5	11.9
Normal range (18.5 ≥ BMI < 25 kg/m²)	61.3	59.0	63.5	23.4	21.4	25.5	8.4	6.9	10.1	3.4	2.4	4.8
Pre-obese (25 ≥ BMI < 30 kg/m²)	57.0	53.5	60.4	24.7	21.5	28.2	10.6	8.3	13.5	3.9	2.8	5.4
Obese (BMI ≥ 30 kg/m²)	48.4	44.3	52.4	26.1	22.7	29.9	15.6	12.5	19.3	6.5	4.7	9.0
Blood pressure status (excluding pregnancy induce	ed hyperte	(noisus										
Doctor diagnosed hypertension	46.5	40.3	52.8	22.0	17.7	26.9	12.3	8.0	18.4	15.9*	8.6	27.5
Normal range	59.3	57.6	61.0	23.4	21.9	25.0	9.8	8.6	11.0	3.8	3.2	4.5
Blood glucose status (excluding gestational diabet	es)											
Doctor diagnosed diabetes	40.6	32.6	49.0	26.2	16.7	38.7	19.2*	9.3	35.6	8.9*	4.8	16.0
Normal range	58.0	56.4	59.5	23.9	22.6	25.4	10.0	8.9	11.2	4.6	3.8	5.5
Data were age-standardised to the 2011 Victorian population.				* RSE	between 2	5 and 50 per c	cent; point es	timate (%)	should be int	erpreted with	caution.	

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

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

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported. <sup>a</sup> Based on the Kessler 10 scale for psychological distress.

<sup>b</sup> DoH (2014) guidelines.

NHMRC (2013) guidelines.

<sup>d</sup> Includes those meeting both guidelines.

NHMRC (2009) guidelines.
 <sup>f</sup> Body mass index (BMI) = Weight (kg) / Height (m<sup>2</sup>).

The relationship was investigated between very high levels of psychological distress and the prevalence of self-reported health status (Figure 7.4 and Figure 7.5). The proportion of the adult Victorian population with very high levels of psychological distress was highest among men and women with fair or poor health status.

#### Figure 7.4: Proportion (%) of adult males with very high levels of psychological distress,<sup>a</sup> by self-reported health status, Victoria, 2014



Data are age-adjusted to the 2011 population of Victoria.

95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

 $^{\alpha}~$  Based on the Kessler 10 scale for psychological distress.



## Figure 7.5: Proportion (%) of adult females with very high levels of psychological distress,<sup>a</sup> by self-reported health status, Victoria, 2014

Data are age-adjusted to the 2011 population of Victoria. 95% Cl = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

<sup>a</sup> Based on the Kessler 10 scale for psychological distress.



## 8. Hypertension



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# Key findings

Prevalence of hypertension





The prevalence of hypertension was significantly higher in men compared with women



There was a significantly higher proportion of women with high blood pressure who lived in the rural regions compared with their counterparts in metropolitan regions



The proportion of women diagnosed with high blood pressure decreased with increasing income



The proportion of men diagnosed with high blood pressure did not change with income



The proportion of men diagnosed with high blood pressure increased between 2003 and 2014

However, in women it remained unchanged



#### Introduction

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

Hypertension is an important risk factor for cardiovascular disease, and the risk of disease increases with increasing blood pressure levels. Adults are advised to have their blood pressure checked regularly. There are several modifiable causes of high blood pressure including poor nutrition (especially a diet high in salt), low levels of physical activity, obesity and high levels of alcohol consumption.

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

There are two types of hypertension.

#### Primary (essential) hypertension

For most adults, there is no identifiable cause of high blood pressure. This type of high blood pressure, called primary (essential) hypertension, tends to develop gradually over many years. In industrialised countries, the risk of becoming hypertensive (blood pressure > 140/90 mm Hg) during a lifetime exceeds 90 per cent. Essential hypertension usually clusters with other cardiovascular risk factors such as ageing, being overweight, insulin resistance, diabetes and hyperlipidaemia (Messerli, Williams & Ritz 2007).

#### Secondary hypertension

Secondary hypertension is a type of high blood pressure with an underlying, potentially

correctable, cause. Approximately 5–10 per cent of adults with hypertension have a secondary cause (Viera & Neutze 2010). Secondary causes of hypertension include renal parenchymal disease, renovascular diseases, coarctation of the aorta, Cushing's syndrome, primary hyperaldosteronism, pheochromocytoma, hyperthyroidism and hyperparathyroidism. Occasionally included in this category are alcohol-induced and oral contraceptive-induced hypertension and hypothyroidism (Akpunonu, Mulrow & Hoffman 1996).

The Victorian Population Health Survey makes no distinction between primary and secondary hypertension when reporting the prevalence of hypertension.

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

#### Prevalence of hypertension

Survey respondents were asked 'Have you ever been told by a doctor that you have high blood pressure?' Table 8.1 and Figure 8.1 show the proportion of the adult population diagnosed with high blood pressure, by age group and sex. Overall, the prevalence of hypertension was 25.9 per cent and was significantly higher in men (28.5 per cent) compared with women (23.3 per cent).

The proportion of the adult population diagnosed with high blood pressure was age-related, increasing with age to 58.2 per cent of people 85 years of age or older compared with 4.0 per cent of 18–24-year-old people. A significantly higher proportion of men and women 55 years of age or older were diagnosed with high blood pressure compared with all Victorian men and women, respectively.

#### Table 8.1: Proportion (%) of adult population diagnosed with high blood pressure, by age group and sex, Victoria, 2014

				High b	blood pr	essure			
	/	Males			Females	a		People	
Age group	%	95%	6 CI	%	95%	% CI	%	959	% CI
(years)		LL	UL		LL	UL		LL	UL
18–24	4.8*	2.7	8.3	3.1*	1.5	6.2	4.0	2.6	6.1
25–34	15.6	11.3	21.2	7.2	4.7	10.8	11.4	8.8	14.6
35–44	20.2	17.5	23.3	10.5	9.0	12.3	15.3	13.7	17.0
45–54	29.3	26.6	32.1	20.6	18.7	22.6	24.9	23.3	26.6
55–64	44.3	41.8	46.8	38.9	36.8	41.0	41.5	39.9	43.2
65–74	57.2	54.9	59.6	54.8	52.7	56.9	55.9	54.3	57.5
75–84	58.5	55.4	61.6	67.0	64.4	69.4	63.0	61.1	65.0
85+	52.8	46.4	59.1	62.2	57.4	66.9	58.2	54.3	62.1
Victoria	28.5	27.2	29.8	23.3	22.4	24.2	25.9	25.1	26.7

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.



## Figure 8.1: Proportion (%) of adult population diagnosed with high blood pressure,<sup>a</sup> by age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population. 95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

<sup>a</sup> Excludes pregnancy induced hypertension.

Table 8.2 and Figure 8.2 show the proportion of the adult population diagnosed with high blood pressure from 2003 to 2014, by sex. The proportion of the adult population diagnosed with high blood pressure increased in men and all people from 2003 to 2014. However, in women it remained unchanged.

#### Table 8.2: Proportion (%) of adult population diagnosed with high blood pressure, by survey year and sex, Victoria, 2003–2014

		Males			Females	a		People	
	%	95%	6 CI	%	95%	% CI	%	955	% CI
Survey year		LL	UL		LL	UL		LL	UL
2003	22.8	21.0	24.7	26.0	24.5	27.6	24.7	23.5	25.9
2004	24.4	22.5	26.3	26.4	25.0	28.0	25.7	24.6	27.0
2005	22.8	21.2	24.5	27.9	26.5	29.4	25.6	24.5	26.7
2006	22.8	21.1	24.6	26.5	25.0	28.0	24.8	23.7	26.0
2007	24.7	22.9	26.6	27.0	25.6	28.5	25.9	24.8	27.1
2008#	25.3	24.3	26.3	27.4	26.6	28.1	26.4	25.8	27.1
2009	25.3	23.6	27.0	27.3	26.0	28.7	26.3	25.3	27.5
2010	25.5	23.7	27.4	26.8	25.4	28.3	26.2	25.1	27.4
2011-12#	25.5	24.5	26.6	29.4	28.6	30.4	27.6	26.9	28.3
2012	26.1	24.3	28.0	29.8	27.9	31.7	28.0	26.7	29.3
2013 <sup>tb</sup>									
2014#	28.5	27.2	29.8	26.9	25.8	27.9	27.7	26.9	28.5

Data are age-standardised to the 2011 Victorian population.

LL/UL 95% CI = lower/upper limit of 95% 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

Survey sample size:  $^{\#}$  ~34,000;  $^{+}$  ~3,600; remaining surveys ~7,500.

<sup>a</sup> Includes pregnancy induced hypertension.

<sup>b</sup> Data not collected in 2013.





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. Survey sample size: # ~34,000; <sup>+</sup> ~3,600; remaining surveys ~7,500.

Table 8.3 shows the proportion of the adult population diagnosed with high blood pressure, by departmental region and sex. A significantly lower proportion of women who lived in Southern Metropolitan Region were diagnosed with high blood pressure compared with all Victorian women. There was a significantly higher proportion of women with high blood pressure who lived in the rural regions compared with their counterparts in metropolitan regions.

#### Table 8.3: Proportion (%) of adult population diagnosed with high blood pressure, by Department of Health and Human Services region and sex, Victoria, 2014

				High b	lood pr	essure			
		Males		F	emales	a		People	
	%	95%	% CI	%	95%	6 CI	%	95%	6 CI
Region		LL	UL		LL	UL		LL	UL
Eastern Metropolitan	26.8	23.9	30.0	22.7	20.7	24.8	24.7	22.9	26.6
North & West Metropolitan	28.8	26.5	31.1	23.4	22.1	24.7	26.1	24.8	27.4
Southern Metropolitan	28.8	25.9	31.9	20.6	19.1	22.3	24.7	23.0	26.4
All metropolitan regions	28.3	26.8	29.9	22.3	21.4	23.2	25.3	24.4	26.2
Barwon-South Western	26.6	22.0	31.8	27.7	20.6	36.2	27.2	22.5	32.4
Gippsland	32.7	26.8	39.2	26.0	24.1	28.0	29.7	26.0	33.6
Grampians	28.5	24.8	32.6	28.8	23.5	34.8	28.7	25.4	32.2
Hume	27.8	24.6	31.4	23.9	21.7	26.2	26.0	24.0	28.1
Loddon Mallee	31.5	27.3	36.0	26.1	22.9	29.6	28.7	26.0	31.5
All rural regions	29.3	27.1	31.5	26.7	24.0	29.6	28.0	26.2	29.7
Victoria	28.5	27.2	29.8	23.3	22.4	24.2	25.9	25.1	26.7

Metropolitan and rural regions are identified by colour as follows: metropolitan/rural.

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

# Prevalence of hypertension by departmental region and local government area

ALPINE RARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDAF ANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMI GREATER DANDULONG ORSHAM HUME INDIGO K NGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MAN IDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONE MARIBYRNONG MAROO MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NI CORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUT Y MOORABOOL MORELAN **IK NORTHERN GRAMPIANS** LAN **STONNINGTON STRATHBO** ON WEST WIMMERA WHITEH AMBIACK ALPINE ARARAT BALLARA **RIMBANK BULOK CAMPASPE CARDIN** SEY CENTR BIN EAST GIPPSLATID FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BEI GREATER DANDEN ONG GREATER GEELONG GREATER SHEPPARTON HEPBUR I HINDMARSH HOBSON GREATER DANDENONG GREATER GEELONG GREATER SHEPPARTON HEPBUR IORSHAM HUME INDISO RINGSTON KNOX LA POBE LODDON MACEDON RANGE MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL EY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEX (1992) IK NORTHERN GRAMPIANS PORT PHILLUP PYRENEES QUEENSCLIFF' SOUTH LUM IK PYRENEES QUEENSCLIEF SOUTHERN SLAND STONMINGTON STRATHBOGI F COAST SWAN HILD TOWONG WANGARATTA HITTLESEA WODC NDHAM YARRA YARR E ARARAT BALLARAT **BIACK ALPIN** BAW BAW BAYSIDE BENALLA BOR KE CAMPASPE CARDIN **RIMBANK BUL OLDFIELDS COLAC-OTWAY CORAN BIN EAST GIPPSLAND** RA GLENELG GOLDEN PL SHEPPARTON HEPB GREATER DANDENONG GR RSHAM HUME INDIGO KINGSTON ODDON MACEDON VRNONG MAROONDAH **MILDURA MITO IORELAND MORI** A MOUNT ALE VALLEY N **OGIE SURF COA** WELLINGTON WEST WIMMERA 8

Table 8.4 shows the proportion of the adult population diagnosed with high blood pressure, by LGA, in Eastern Metropolitan Region. The proportion of adults diagnosed with high blood pressure was similar across all LGAs in Eastern Metropolitan Region compared with all Victorian adults

#### Table 8.4: Proportion (%) of adult population diagnosed with high blood pressure, by LGA, Eastern Metropolitan Region, Victoria, 2014

	High k	blood pre	ssure <sup>a</sup>
	%	95%	% CI
LGA		LL	UL
Boroondara (C)	20.4	16.2	25.3
Knox (C)	26.4	22.7	30.4
Manningham (C)	22.0	18.9	25.4
Maroondah (C)	28.9	22.4	36.5
Monash (C)	27.1	22.7	32.0
Whitehorse (C)	25.5	20.5	31.2
Yarra Ranges (S)	23.6	20.2	27.3
Eastern Metropolitan Region	24.7	22.9	26.6
Victoria	25.9	25.1	26.7

Data were age-standardised to the 2011 Victorian population.

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

 $^{\alpha}~$  Excludes pregnancy induced hypertension.

Table 8.5 shows the proportion of the adult population diagnosed with high blood pressure, by LGA, in North & West Metropolitan Region. The proportion of adults diagnosed with high blood pressure was significantly lower among those who lived in the LGAs of Melbourne (C) and Nillumbik (S) compared with all Victorian adults.

#### Table 8.5: Proportion (%) of adult population diagnosed with high blood pressure, by LGA, North & West Metropolitan Region, Victoria, 2014

	High I	olood pre	ssure <sup>a</sup>
	%	95%	% CI
LGA		LL	UL
Banyule (C)	24.3	20.2	28.9
Brimbank (C)	27.0	22.6	31.7
Darebin (C)	26.4	20.4	33.5
Hobsons Bay (C)	26.5	22.6	30.9
Hume (C)	30.8	25.8	36.3
Maribyrnong (C)	28.6	24.7	32.8
Melbourne (C)	18.4	15.4	21.8
Melton (S)	30.0	25.4	35.1
Moonee Valley (C)	22.5	18.9	26.6
Moreland (C)	23.4	19.8	27.5
Nillumbik (S)	20.1	16.4	24.4
Whittlesea (C)	28.7	25.1	32.5
Wyndham (C)	29.6	25.8	33.7
Yarra (C)	22.5	18.4	27.2
North & West Metropolitan Region	26.1	24.8	27.4
Victoria	25.9	25.1	26.7

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Table 8.6 shows the proportion of the adult population diagnosed with high blood pressure, by LGA, in Southern Metropolitan Region. The proportion of adults diagnosed with high blood pressure was significantly lower among those who lived in the LGA of Port Phillip (C) compared with all Victorian adults.

#### Table 8.6: Proportion (%) of adult population diagnosed with high blood pressure, by LGA, Southern Metropolitan Region, Victoria, 2014

	High l	blood pres	ssure <sup>a</sup>
	%	95%	6 CI
LGA		LL	UL
Bayside (C)	20.6	15.1	27.5
Cardinia (S)	23.4	19.8	27.5
Casey (C)	27.0	23.3	31.1
Frankston (C)	28.6	24.3	33.4
Glen Eira (C)	22.9	19.0	27.3
Greater Dandenong (C)	28.4	23.7	33.7
Kingston (C)	22.8	18.3	28.1
Mornington Peninsula (S)	28.7	21.2	37.5
Port Phillip (C)	15.5	12.9	18.5
Stonnington (C)	23.3	16.6	31.6
Southern Metropolitan Region	24.7	23.0	26.4
Victoria	25.9	25.1	26.7

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Table 8.7 shows the proportion of the adult population diagnosed with high blood pressure, by LGA, in Barwon-South Western Region. The proportion of adults diagnosed with high blood pressure was significantly lower among those who lived in the LGAs of Southern Grampians (S) and Surf Coast (S) compared with all Victorian adults.

#### Table 8.7: Proportion (%) of adult population diagnosed with high blood pressure, by LGA, Barwon-South Western Region, Victoria, 2014

	High	blood pre	ssure <sup>a</sup>
	%	95%	6 CI
LGA		LL	UL
Colac-Otway (S)	27.7	21.2	35.4
Corangamite (S)	28.8	23.8	34.4
Glenelg (S)	28.8	24.7	33.3
Greater Geelong (C)	28.7	21.7	37.0
Moyne (S)	23.7	20.0	27.9
Queenscliffe (B)	20.2	14.9	26.8
Southern Grampians (S)	21.6	18.5	25.0
Surf Coast (S)	19.9	17.0	23.1
Warrnambool (C)	24.3	20.9	28.1
Barwon-South Western Region	27.2	22.5	32.4
Victoria	25.9	25.1	26.7

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Table 8.8 shows the proportion of the adult population diagnosed with high blood pressure, by LGA, in Gippsland Region. The proportion of adults diagnosed with high blood pressure was significantly higher among those who lived in the LGA of Latrobe (C) compared with all Victorian adults.

#### Table 8.8: Proportion (%) of adult population diagnosed with high blood pressure, by LGA, Gippsland Region, Victoria, 2014

	High	olood pres	ssure <sup>a</sup>			
	%	95%	6 CI			
LGA		LL	UL			
Bass Coast (S)	25.9	21.4	31.0			
Baw Baw (S)	28.4	24.3	32.9			
East Gippsland (S)	23.8	20.0	28.0			
Latrobe (C)	<b>37.1</b> 28.5 46.6					
South Gippsland (S)	24.0	20.1	28.4			
Wellington (S)	29.1	25.6	32.8			
Gippsland Region	29.7	26.0	33.6			
Victoria	25.9	25.1	26.7			

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Table 8.9 shows the proportion of the adult population diagnosed with high blood pressure, by LGA, in Grampians Region. The proportion of adults diagnosed with high blood pressure was significantly lower among those who lived in the LGA of Pyrenees (S) compared with all Victorian adults.

#### Table 8.9: Proportion (%) of adult population diagnosed with high blood pressure, by LGA, Grampians Region, Victoria, 2014

	High	blood pres	ssure <sup>a</sup>			
	%	95%	6 CI			
LGA		LL	UL			
Ararat (RC)	25.9	22.2	29.9			
Ballarat (C)	31.9	25.9	38.5			
Golden Plains (S)	23.6	20.5	27.1			
Hepburn (S)	27.3	20.4	35.5			
Hindmarsh (S)	22.9	18.6	27.8			
Horsham (RC)	28.2	23.2	33.8			
Moorabool (S)	23.6	20.0	27.6			
Northern Grampians (S)	29.7 22.6 37.9					
Pyrenees (S)	19.9	16.6	23.7			
West Wimmera (S)	30.0	25.5	35.0			
Yarriambiack (S)	28.3	23.4	33.8			
Grampians Region	28.7	25.4	32.2			
Victoria	25.9	25.1	26.7			

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Table 8.10 shows the proportion of the adult population diagnosed with high blood pressure, by LGA, in Hume Region. The proportion of adults diagnosed with high blood pressure was significantly lower among those who lived in the LGAs of Indigo (S) and Wangaratta (RC) compared with all Victorian adults.

#### Table 8.10: Proportion (%) of adult population diagnosed with high blood pressure, by LGA, Hume Region, Victoria, 2014

	High	blood pres	ssure <sup>a</sup>
	%	95%	6 CI
LGA		LL	UL
Alpine (S)	21.8	17.2	27.3
Benalla (RC)	29.1	23.5	35.6
Greater Shepparton (C)	25.4	20.9	30.5
Indigo (S)	21.2	18.0	24.8
Mansfield (S)	21.6	17.8	26.1
Mitchell (S)	27.4	22.2	33.3
Moira (S)	29.9	23.6	37.1
Murrindindi (S)	29.5	24.1	35.4
Strathbogie (S)	26.1	21.1	31.7
Towong (S)	24.1	19.5	29.3
Wangaratta (RC)	19.2	15.5	23.7
Wodonga (RC)	28.1	22.9	34.0
Hume Region	26.0	24.0	28.1
Victoria	25.9	25.1	26.7

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Table 8.11 shows the proportion of the adult population diagnosed with high blood pressure, by LGA, in Loddon Mallee Region. The proportion of adults diagnosed with high blood pressure was significantly higher among those who lived in the LGAs of Campaspe (S) and Central Goldfields (S) compared with all Victorian adults.

#### Table 8.11: Proportion (%) of adult population diagnosed with high blood pressure, by LGA, Loddon Mallee Region, Victoria, 2014

	High	blood pres	ssure <sup>a</sup>
	%	95%	6 CI
LGA		LL	UL
Buloke (S)	32.1	25.4	39.6
Campaspe (S)	36.8	29.0	45.4
Central Goldfields (S)	34.4	28.4	40.8
Gannawarra (S)	28.4	23.1	34.4
Greater Bendigo (C)	27.1	22.0	32.8
Loddon (S)	32.9	25.0	42.0
Macedon Ranges (S)	25.2	20.4	30.8
Mildura (RC)	28.1	22.2	34.8
Mount Alexander (S)	24.9	19.6	31.2
Swan Hill (RC)	27.2	20.1	35.7
Loddon Mallee Region	28.7	26.0	31.5
Victoria	25.9	25.1	26.7

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Table 8.12 shows the proportion of the adult population diagnosed with high blood pressure, by selected socioeconomic determinants and sex. When compared with all Victorian men, a significantly higher proportion of men with high blood pressure were not in the labour force. When compared with all Victorian women, a significantly higher proportion of women with high blood pressure had a total household income of less than \$40,000.

#### Table 8.12: Proportion (%) of adult population diagnosed with high blood pressure, by selected socioeconomic determinants and sex, Victoria, 2014

		Males		1	-emales	s <sup>a</sup>
	%	95%	6 CI	%	959	% CI
		LL	UL	-	LL	UL
All males	28.5	27.2	29.8	23.3	22.4	24.2
Country of birth						
Australia	28.8	27.2	30.4	23.8	22.7	24.9
Overseas	28.2	25.8	30.8	22.0	20.6	23.4
Language spoken at home						
English	28.3	26.9	29.8	23.5	22.4	24.6
Language other than English	29.1	26.2	32.1	22.7	21.0	24.4
Education level						
Did not complete high school	31.7	27.7	36.0	26.0	24.0	28.2
Completed high school, or TAFE, or trade certificate, or diploma	29.7	27.7	31.8	24.0	22.7	25.2
University, or some other tertiary institute degree, including postgraduate diploma or degree	26.4	24.3	28.6	20.8	19.1	22.7
Employment status						
Employed	26.1	24.3	27.9	21.3	19.3	23.5
Unemployed	35.5	26.8	45.2	25.3	21.1	30.0
Not in labour force	34.1	29.9	38.5	25.6	24.1	27.2
Total annual household income						
< \$40,000	31.2	27.5	35.2	27.6	25.3	30.1
\$40,000 to < \$100,000	28.0	26.0	30.1	22.4	21.2	23.8
≥ \$100,000	28.5	25.9	31.2	20.1	17.2	23.3

Data were age-standardised to the 2011 Victorian population.

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

Note that estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here. Estimates that are (statistically) significantly different from the corresponding estimate for Victoria are identified by colour as follows: above or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

The relationship was investigated between SES and age-adjusted prevalence of hypertension, using total annual household income as a measure of SES (Figure 8.3). The proportion of women diagnosed with high blood pressure decreased with increasing income, while the proportion of men diagnosed with high blood pressure did not change with income.





Total annual household income (\$)

Data are age-adjusted to the 2011 population of Victoria.

95% CI = 95 per cent confidence interval.

Estimates are (statistically) significantly different if their 95% CI do NOT overlap.

Table 8.13 shows the proportion of the adult population diagnosed with high blood pressure, by selected modifiable risk factors contributing to chronic disease and sex. When compared with all Victorian men, a significantly higher proportion of men with high blood pressure were observed with the following characteristics:

- high or very high levels of psychological distress
- fair or poor self-reported health
- obese
- diagnosed with diabetes by a doctor.

When compared with all Victorian women, a significantly higher proportion of women with high blood pressure were observed with the following characteristics:

- high or very high levels of psychological distress
- good, fair or poor self-reported health
- obese
- diagnosed with diabetes by a doctor.

## Table 8.13: Proportion (%) of adult population diagnosed with high blood pressure, by selected modifiable risk factors and sex, Victoria, 2014

		Males		F	emales	a.
	%	95%	6 CI	%	95%	% CI
		LL	UL		LL	UL
All males	28.5	27.2	29.8	23.3	22.4	24.2
Psychological distress <sup>a</sup>						
Low (K10 score < 16)	26.6	25.2	28.0	21.1	20.2	22.1
Moderate (K10 score 16–21)	28.8	26.0	31.7	24.7	23.2	26.2
High / very high (K10 score 22+)	38.5	33.5	43.7	30.4	27.3	33.7
Physical activity <sup>b</sup>						
Sedentary	31.4	23.4	40.6	23.5	20.2	27.1
Insufficient time (< 150 min) and/or sessions (< 2)	31.0	29.0	33.0	24.5	23.0	25.9
Sufficient time (≥ 150 min) and sessions (≥ 2)	26.7	24.9	28.5	21.2	20.1	22.3
Met fruit / vegetable guidelines <sup>c</sup>						
Both guidelines	31.2	20.3	44.7	19.3	17.6	21.0
Vegetable guidelines <sup>d</sup>	30.5	20.0	43.5	20.4	18.9	22.0
Fruit guidelines <sup>d</sup>	27.0	25.2	28.8	22.7	21.3	24.1
Neither	29.4	27.6	31.3	23.8	22.7	25.0
Smoking status						
Current smoker	26.4	23.2	29.8	23.9	21.0	27.0
Ex-smoker	31.3	28.2	34.6	23.4	22.0	24.8
Non-smoker	26.7	25.1	28.4	22.7	21.6	23.8
Lifetime risk of alcohol-related harm <sup>e</sup>						
Abstainer/no longer drinks alcohol	32.0	28.1	36.2	26.7	24.1	29.5
Reduced risk	25.2	22.2	28.5	22.2	20.7	23.6
Increased risk	28.3	26.9	29.8	22.3	21.2	23.5

Data were age-standardised to the 2011 Victorian population.

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

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

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

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

- \*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.
- <sup>a</sup> Based on the Kessler 10 scale for psychological distress.
- <sup>b</sup> DoH (2017) guidelines.
- ° NHMRC (2013) guidelines.
- <sup>d</sup> Includes those meeting both guidelines.
- <sup>e</sup> NHMRC (2009) guidelines.
- <sup>f</sup> Body mass index (BMI) = Weight (kg) / Height (m<sup>2</sup>).
- <sup>g</sup> Excludes pregnancy induced hypertension.

## Table 8.13: Proportion (%) of adult population diagnosed with high blood pressure, by selected modifiable risk factors and sex, Victoria, 2014 (continued)

		Males		F	emales	3a
	%	95%	% CI	%	95%	% CI
		LL	UL		LL	UL
Self-reported health						
Excellent/very good	20.5	18.9	22.2	16.3	15.4	17.1
Good	28.6	26.7	30.5	25.9	24.2	27.7
Fair/poor	42.3	38.7	46.1	33.3	31.0	35.6
Body weight status based on BMI <sup>f</sup>						
Underweight (BMI < 18.5 kg/m²)	25.9*	14.5	41.9	14.0	10.6	18.2
Normal range (18.5 ≥ BMI < 25 kg/m²)	17.9	16.5	19.4	16.5	15.2	17.9
Pre-obese (25 ≥ BMI < 30 kg/m²)	29.1	26.9	31.4	22.9	21.6	24.3
Obese (BMI ≥ 30 kg/m²)	42.8	39.0	46.6	36.8	33.7	40.1
Blood glucose status (excluding gestational diab	oetes)					
Doctor diagnosed diabetes	47.4	39.0	56.0	51.1	39.6	62.4
Normal range	26.8	25.5	28.2	21.9	21.0	22.9

Data were age-standardised to the 2011 Victorian population.

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

Note that estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here. Estimates that are (statistically) significantly different from the corresponding estimate for Victoria are identified by colour as follows:

above or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported.

<sup>a</sup> Based on the Kessler 10 scale for psychological distress.

<sup>b</sup> DoH (2017) guidelines.

° NHMRC (2013) guidelines.

<sup>d</sup> Includes those meeting both guidelines.

<sup>e</sup> NHMRC (2009) guidelines.

<sup>f</sup> Body mass index (BMI) = Weight (kg) / Height (m<sup>2</sup>).

# Key findings Management of high blood pressure





46.5%

reported that they exercised to control

their blood pressure

A significantly lower proportion of adults who lived in the rural regions reported that they exercised to control their blood pressure compared with their metropolitan counterparts



2014

46.1%

reported that their hypertension

was being treated with medication

reported that they had tried to reduce stress in their lives to assist in controlling their blood pressure



41.9%

reported that they had modified their diet to help control their blood pressure



**39.5%** reported that they were attempting to reduce their weight to control their blood pressure



## Management of high blood pressure

Survey respondents who indicated that they had been diagnosed with hypertension by a doctor at some point in their lifetime (with the exception of women who had experienced pregnancy induced hypertension) were asked to select what treatment modality(ies) they had pursued. Table 8.14 shows the proportion of the adult population with high blood pressure, by method of management, age group and sex.

Overall, 46.1 per cent of people responded that their hypertension was being treated with medication, and this was not significantly different between men and women. This increased with age, with 89.3 per cent of people 85 years of age or older taking medication to reduce their blood pressure. A significantly higher proportion of men and women 45 years of age or older were taking medication to reduce their blood pressure compared with all Victorian men and women, respectively.

The next most common adjustment to lifestyle to control hypertension was exercise, with 46.5 per cent of people reporting that they exercised to control their blood pressure. A significantly higher proportion of men and women 55–74 years old reported that they exercised to control their blood pressure compared with all Victorian men and women respectively.

The next most common lifestyle adjustment was stress management, with 40.2 per cent of people reporting that they had tried to reduce stress in their lives to assist in controlling their blood pressure. A higher proportion of women 45–74 years old reported trying stress management to control their blood pressure compared with all Victorian women. A significantly lower proportion of 25–34-year-old women reported using stress management to control their blood pressure compared with all Victorian women.

The next most common lifestyle adjustment was changes to dietary intake, with 41.9 per cent of people reporting that they had modified their diet to help control their blood pressure. A significantly lower proportion of women reported modifying their diet to help control their blood pressure compared with men. A significantly lower proportion of men and women 85 years of age or older reported that they had modified their diet compared with all Victorian men and women, respectively.

Weight reduction was the least common adjustment to lifestyle, with 39.5 per cent of people reporting that they were attempting to reduce their weight to control their blood pressure. A significantly lower proportion of men and women 75 years of age or older reported that they were attempting to reduce their weight compared with all Victorian men and women, respectively.

		Diet		>	Veight		Û	xercise		Σ	ledicine			Stress			Other	
%		95%	°CI	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	ច
		Ŀ	Ч		Н	٦		H	Ч		5	Ч		۲	Ъ		Η	Ч
51.7*		25.6	76.9	23.6*	8.5	50.8	33.9*	14.4	61.1	*			29.2*	11.6	56.4	0.0		
47.3		30.9	64.4	46.5	30.1	63.7	46.3	30.0	63.5	22.4*	10.2	42.5	47.2	30.7	64.3	*		
54.5		46.6	62.2	49.8	42.0	57.7	57.4	49.5	65.0	35.0	27.8	42.8	49.8	42.0	57.7	*		
51.6		46.1	57.0	51.8	46.3	57.2	58.3	52.8	63.6	58.3	52.9	63.5	49.3	43.9	54.8	*		
51.9		48.1	55.7	51.4	47.6	55.1	61.5	57.8	65.1	78.9	75.8	81.8	51.8	48.0	55.6	0.8*	0.4	1.7
43.7		40.6	46.9	40.9	37.8	44.0	61.4	58.2	64.4	87.7	85.4	89.6	45.2	42.0	48.4	1.4*	0.8	2.4
33.4		29.7	37.3	24.9	21.6	28.4	50.6	46.6	54.6	88.6	85.8	90.9	36.7	33.0	40.6	2.1*	1.0	4.2
20.1		14.3	27.4	10.8	6.9	16.5	49.9	41.6	58.3	88.9	82.0	93.4	28.4	21.5	36.4	*		
48.	m	42.9	53.7	43.9	38.0	48.6	50.8	46.2	55.4	48.7	44.8	52.6	44.5	39.4	49.7	0.8	0.5	1.4
24.9	*	9.3	51.8	36.5*	15.1	65.1	44.0*	20.0	71.2	*			42.1*	17.9	70.7	0.0		
24.0	*	12.0	42.1	21.0*	9.6	40.1	28.4*	15.7	45.9	5.0*	2.0	11.8	13.5*	7.3	23.8	0.0		
31.(	6	25.9	38.0	33.9	27.9	40.4	30.9	25.3	37.2	29.5	23.6	36.1	32.4	26.6	38.9	*		
43.	4	38.7	48.2	43.2	38.6	48.0	51.0	46.2	55.8	55.4	50.6	60.2	49.0	44.2	53.8	1.6*	0.7	3.8
44.	7	41.3	48.0	48.5	45.2	51.9	53.0	49.6	56.3	72.3	69.1	75.3	50.2	46.8	53.5	1.9*	1.1	3.1
39.9	0	37.2	42.7	39.4	36.6	42.1	54.4	51.6	57.3	87.8	85.9	89.5	44.9	42.1	47.8	.09*	0.5	1.6
31.1		28.2	34.2	22.5	19.9	25.3	43.5	40.4	46.7	88.5	86.4	90.4	38.1	35.1	41.3	1.0*	0.6	1.7
22.7		18.3	27.9	13.1	9.7	17.4	34.5	29.2	40.3	89.5	85.8	92.4	37.3	31.7	43.2	*		
34.6		28.4	41.4	35.3	29.1	41.9	42.0	35.8	48.4	43.2	39.6	46.8	35.2	30.6	40.0	0.9	0.6	1.3

Table 8.14: Proportion (%) of adult population with high blood pressure,<sup>a</sup> by method of management,<sup>b</sup> age group and sex, Victoria, 2014

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\* Estimate has a RSE 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.

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Excludes pregnancy induced hypertension.
 <sup>b</sup> Respondents responded either 'Yes' or 'No'

Respondents responded either 'Yes' or 'No' to each possible method, responses were mutually exclusive.

			Diet			Veight		ш	xercise		Σ	edicine			Stress			Other	
	Age	%	95%	Ū	%	95%	ਹ	%	95%	Ū	%	95%	Ū	%	95%	Ū	%	95%	ວ
	(years)		Н	Ч		Н	Ы		Ч	Ы		Ч	Ы	I	Н	٩L	I	F	Ч
Persons	18–24	39.0*	21.9	59.3	29.7*	15.4	49.6	38.7*	22.0	58.6	21.5*	0.0	42.9	35.3*	18.9	56.0	0.0		
	25-34	36.4	25.6	48.9	34.6	23.8	47.3	38.0	27.1	50.2	14.3*	7,1	26.5	31.5	21.4	43.6	* *		
	35-44	44.0	38.8	49.3	42.5	37.4	47.8	45.2	40.1	50.5	32.4	27.7	37.6	41.8	36.7	47.1	1.3*	0.5	3.2
	45-54	47.8	44.1	51.5	47.8	44.2	51.5	54.9	51.2	58.6	57.0	53.3	60.5	49.2	45.5	52.8	1.4*	0.7	3.0
	55-64	48.4	45.8	50.9	50.0	47.4	52.5	57.3	54.8	59.8	75.7	73.5	77.8	51.0	48.4	53.5	1.3	0.9	2.0
	65-74	41.7	39.6	43.8	40.1	38.0	42.2	57.7	55.6	59.8	87.8	86.3	89.1	45.0	42.9	47.2	1.1	0.8	1.7
	75-84	32.1	29.8	34.5	23.5	21.5	25.7	46.6	44.1	49.1	88.6	86.9	0.06	37.5	35.1	40.0	1.5	0.9	2.4
	85+	21.7	18.1	25.9	12.2	9.5	15.5	40.4	35.7	45.3	89.3	86.0	91.9	33.9	29.4	38.6	* *		
	Victoria	41.9	37.8	46.1	39.5	35.4	43.7	46.5	42.5	50.5	46.1	43.4	48.8	40.2	36.6	43.9	0.9	0.6	1.2

Table 8.14: Proportion (%) of adult population with high blood pressure,<sup>a</sup> by method of management,<sup>b</sup> age group and sex, Victoria, 2014 (continued)

Data are age group specific estimates, except for the estimates for 'Victoria', which were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \*100; interpretation below:

 $^{st}$  Estimate has a RSE 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.

<sup>a</sup> Excludes pregnancy induced hypertension.

<sup>b</sup> Respondents responded either 'Yes' or 'No' to each possible method, responses were mutually exclusive.

Table 8.15 shows the proportion of the adult population with high blood pressure, by method of management and departmental region. A significantly higher proportion of adults who lived in Barwon-South Western Region reported modifying their diet to help control their blood pressure compared with all Victorian adults. A significantly higher proportion of adults who lived in Barwon-South Western Region reported that they exercised to control their blood pressure compared with all Victorian adults. Table 8.15: Proportion (%) of adult population with high blood pressure,<sup>a</sup> by method of management<sup>b</sup> and Department of Health and Human Services region, Victoria, 2014

		Diet			Weight		ш	xercise	- 0)-	Σ	ledicin	Ø		Stress			Other	
	%	95%	C v	%	95%	°C	%	95%	C	%	95%	C	%	95%	CI	%	95%	S CI
Region		۲	Ч		Ч	Ы		Ч	Ы		۲	Ч		H	Ъ		Н	٦L
People (18+ years)																		
Eastern Metropolitan	44.9	34.8	55.4	36.2	27.2	46.3	47.6	40.2	55.1	41.8	38.6	45.2	38.2	29.3	47.9	*		
North & West Metropolitan	39.6	33.6	46.0	39.2	33.2	45.5	43.8	37.8	49.9	47.9	42.4	53.4	36.5	31.3	42.0	1.1*	0.7	1.8
Southern Metropolitan	40.9	32.9	49.3	40.7	32.7	49.3	42.7	36.3	49.3	45.6	40.6	50.7	45.2	37.3	53.4	0.9	0.5	1.4
All metropolitan regions	41.3	36.7	46.0	39.4	34.8	44.2	44.4	40.5	48.3	46.0	42.7	49.3	40.4	35.9	45.1	0.9	0.6	1.3
Barwon-South Western	53.8	46.1	61.4	49.6	42.6	56.6	61.3	53.1	68.8	42.2	35.6	49.1	41.3	33.3	49.8	0.5*	0.2	1.0
Gippsland	43.8	31.3	57.2	32.0	26.8	37.6	40.1	34.4	46.0	44.8	40.0	49.7	33.7	29.2	38.4	1.0*	0.4	2.3
Grampians	33.7	28.6	39.3	32.8	27.4	38.6	51.5	42.0	60.9	53.4	40.3	66.1	45.3	33.1	58.1	1.3*	0.6	2.6
Hume	42.7	34.7	51.1	41.7	32.9	51.0	49.9	41.1	58.7	49.7	42.7	56.6	44.9	35.8	54.4	0.3*	0.2	0.6
Loddon Mallee	37.9	31.8	44.5	37.9	29.7	46.8	45.2	38.0	52.6	45.4	41.3	49.6	37.1	29.6	45.3	0.7*	0.3	1.6
All rural regions	42.8	35.7	50.1	39.1	31.8	46.8	49.9	43.0	56.9	46.6	42.2	51.1	40.5	35.3	45.8	0.7	0.5	1.1
Victoria	41.9	37.8	46.1	39.5	35.4	43.7	46.5	42.5	50.5	46.1	43.4	48.8	40.2	36.6	43.9	0.9	0.6	1.2
Matronolitan and rural radions ar	a idantifia		ur ac follow	see motron	olitan /run	7												

Data were age-standardised to the 2011 Victorian population.

LL/LU 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 or below.

Estimates may not add to 100 per cent due to a proportion of 'don't know' or 'refused to say' responses, not reported here.

Relative standard error (RSE) = standard error/point estimate \* 100; interpretation below:

\*\* RSE greater than, or equal to 50 per cent; point estimate (%) is unreliable, hence not reported. \* RSE between 25 and 50 per cent; point estimate (%) should be interpreted with caution.

<sup>a</sup> Excludes pregnancy induced hypertension.

<sup>b</sup> Respondents responded either 'Yes' or 'No' to each possible method, responses were mutually exclusive.
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# Appendix

## Appendix: Questionnaire items for the Victorian Population Health Survey 2014

#### Alcohol

Whether had an alcoholic drink of any kind in previous 12 months Frequency of having an alcoholic drink of any kind Amount of standard drinks consumed when drinking Level of frequency of high-risk drinking

#### **Blood pressure**

High blood pressure status Management of high blood pressure

#### Body weight status

Self-reported height and weight

#### **Chronic diseases**

Heart disease Stroke Cancer Osteoporosis Systemic lupus erythematosus (SLE) Arthritis

#### Demographics

Age Sex Marital status Household composition Country of birth Country of birth of mother Country of birth of father Year of arrival Main language spoken at home Highest level of education Employment status Main field of occupation Household income Housing tenure Whether have private health insurance Aboriginal status Area of state (Department of Health and Human Services region)

#### Diabetes

Diabetes status Type of diabetes Age first diagnosed with diabetes Current treatment for diabetes

#### Eye care

Change in vision in previous 12 months Visits to eye healthcare professional Selected eye diseases and conditions Wears glasses or contact lenses Difficulties with vision limiting daily activities

#### **Health checks**

Whether had a blood pressure check in previous two years Whether had a cholesterol check in previous two years Whether had a test for diabetes or elevated blood glucose levels in previous two years Examination for bowel cancer Participated in the National Bowel Cancer Screening program Last time consulted a doctor about own health Had a mammogram Had a Pap test Had HPV vaccine

#### Mental health

Psychological distress (Kessler 10 Psychological Distress Scale) Sought help for mental health problem Depression and/or anxiety

#### Nutrition

Daily vegetable consumption Daily fruit consumption Consumption of take-away meals or snacks Water consumption Food security Consumption of sugar-sweetened drinks

#### **Physical activity**

Frequency and amount of vigorous physical activity in past week Physical activity at work Active transport Sitting time

#### Health and wellbeing

Self-reported health status Satisfaction with life

#### Smoking

Smoking status Frequency of smoking

#### **Social capital**

Social networks and support structures Capacity of social networks Social and community participation Trust in people and social institutions Tolerance of diversity Social inclusion

