

4. Oral health

ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDARA BRIMBANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMITE DAREBIN EAST GIPPSLAND FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BENDIGO GREATER DANDENONG GREATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSONS BAY HORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MANSFIELD MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONEE VALLEY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NILLUMBIK NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUTH GIPPSLAND STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOOL WELLINGTON WEST WIMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARRIAMBIACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDARA BRIMBANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMITE DAREBIN EAST GIPPSLAND FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BENDIGO GREATER DANDENONG GREATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSONS BAY HORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MANSFIELD MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONEE VALLEY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NILLUMBIK NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUTH GIPPSLAND STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOOL WELLINGTON WEST WIMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARRIAMBIACK ALPINE ARARAT BALLARAT BANYULE BASS COAST BAW BAW BAYSIDE BENALLA BOROONDARA BRIMBANK BULOKE CAMPASPE CARDINIA CASEY CENTRAL GOLDFIELDS COLAC-OTWAY CORANGAMITE DAREBIN EAST GIPPSLAND FRANKSTON GANNAWARRA GLEN EIRA GLENELG GOLDEN PLAINS GREATER BENDIGO GREATER DANDENONG GREATER GEELONG GREATER SHEPPARTON HEPBURN HINDMARSH HOBSONS BAY HORSHAM HUME INDIGO KINGSTON KNOX LATROBE LODDON MACEDON RANGES MANNINGHAM MANSFIELD MARIBYRNONG MAROONDAH MELBOURNE MELTON MILDURA MITCHELL MOIRA MONASH MOONEE VALLEY MOORABOOL MORELAND MORNINGTON PENINSULA MOUNT ALEXANDER MOYNE MURRINDINDI NILLUMBIK NORTHERN GRAMPIANS PORT PHILLIP PYRENEES QUEENSCLIFFE SOUTHERN GRAMPIANS SOUTH GIPPSLAND STONNINGTON STRATHBOGIE SURF COAST SWAN HILL TOWONG WANGARATTA WARRNAMBOOL WELLINGTON WEST WIMMERA WHITEHORSE WHITTLESEA WODONGA WYNDHAM YARRA YARRA RANGES YARRIAMBIACK





4. Oral health

Introduction

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

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

For the first time, questions were included in the Victorian Population Health Survey to measure self-rated oral health, the period of time since the last visit to a dental professional, and avoidance or delaying a dental visit because of cost. Analyses of the answers to these questions will assist in identifying which Victorians are at higher risk of poorer oral health and what can be done to address this. Inclusion of these questions in future Victorian Population Health Surveys will allow monitoring of trends and the impact of oral health promotion interventions.

Survey results

Self-rated dental health

- Overall, 15.9 per cent of Victorian adults rated their dental health as excellent. A further 27.4 per cent rated their dental health as very good, while 31.7 per cent rated their dental health as good. Among all Victorian adults, 5.6 per cent reported having no natural teeth.
- A lower proportion of men rated their dental health as excellent compared with their female counterparts. Fewer people aged 65 years or over rated their dental health as excellent, very good or good compared with all Victorian adults.
- Self-rated dental health was similar between adults who lived in rural and metropolitan Victoria. However, a significantly higher proportion of adults in rural Victoria did not have any natural teeth compared with their metropolitan counterparts.
- A higher proportion of adults in the LGAs of Banyule (C), Boroondara (C), Glen Eira (C), Melbourne (C), Queenscliffe (B), Stonnington (C) and Yarra (C) rated their dental health as excellent compared with all Victorian adults.
- In contrast, the proportion of adults who rated their dental health as poor was higher in the LGAs of Brimbank (C), Central Goldfields (S), Hindmarsh (S), Melton (S), Mount Alexander (S) and Yarriambiack (S) compared with all Victorian adults.

Visits to a dental professional

- In 2011–12, just over half (56.7 per cent) of Victorian adults reported they had visited a dental professional within the preceding 12 months. A further 18.2 per cent of adults reported that they visited a dental professional between 12 months to less than two years prior to the survey. Just over 10 per cent of Victorian adults reported that it was five or more years since they last visited a dental professional.
- A higher proportion of adults who lived in metropolitan Victoria had visited a dental professional within the preceding 12 months compared with their rural counterparts.
- There were eight LGAs where a higher proportion of adults reported they had visited a dental professional within the previous 12 months compared with all Victorian adults – Bayside (C), Boroondara (C), Glen Eira (C), Manningham (C), Port Phillip (C), Queenscliffe (B), Stonnington (C) and Yarra (C).
- In contrast, there were 17 LGAs where the proportion of adults who reported they had visited a dental professional within the previous 12 months was lower compared with all Victorian adults – Campaspe (S), Cardinia (S), Casey (C), Corangamite (S), Gannawarra (S), Greater Bendigo (S), Greater Dandenong (C), Indigo (S), Knox (C), Loddon (S), Mitchell (S), Moira (S), Moorabool (S), Northern Grampians (S), South Gippsland (S), Swan Hill (RC) and Yarriambiack (S).
- A substantial proportion (30.1 per cent) of Victorian adults had avoided or delayed visiting a dental professional during the 12 months prior to the survey due to the cost. This was higher among women (33.3 per cent) compared with their male counterparts (26.7 per cent).

Self-rated dental health

Initially respondents were asked 'How would you rate your dental health?' Table 4.1 and Figures 4.1 and 4.2 show self-rated dental health, by age group and sex. Overall, 15.9 per cent of people rated their dental health as being 'excellent', 27.4 per cent responded 'very good', 31.7 per cent responded 'good', 13.5 per cent responded 'fair', 5.7 per cent responded 'poor' and the question was not applicable to 5.6 per cent as they had no natural teeth. There was a significant difference between men and women with higher proportions of men who rated their dental health as good, fair or poor and a lower proportion who rated their dental health as excellent.

Overall poor dental health appeared to be age-related. There were significantly lower proportions of men and women aged 65 years or over who reported excellent, very good or good dental health compared with all men and women. This is partly because 21.5 per cent of people in this age group had no natural teeth, suggesting a history of poor dental health. Significantly higher proportions of men and women aged 55–64 years also reported poor dental health compared with all men and women. By contrast significantly higher proportions of women aged 35–44 years reported excellent or very good dental health compared with all women and significantly higher proportions of men and women aged 18–24 years reported very good dental health compared with all men and women.

Table 4.1: Self-rated dental health, by age group and sex, Victoria, 2011–12

Age group (years)	Excellent			Very good			Good			Fair			Poor			Not applicable (has dentures, no natural teeth)		
	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI		%
	LL	UL		LL	UL		LL	UL		LL	UL		LL	UL		LL	UL	
Males																		
18–24	15.3	11.4	20.2	30.3	41.0	36.5	31.1	42.3	10.0	7.1	13.9	2.3*	1.2	4.4	0.0	-	-	-
25–34	14.3	11.2	18.1	24.8	34.1	35.5	30.7	40.6	14.9	11.9	18.6	5.5	3.8	8.1	**	**	**	**
35–44	14.4	12.4	16.7	25.6	31.3	35.0	32.0	38.2	15.9	13.6	18.3	5.9	4.5	7.8	0.4*	0.2	0.9	0.9
45–54	11.7	10.0	13.6	24.0	28.9	33.4	30.8	36.0	17.5	15.5	19.8	8.4	7.0	10.1	2.5	1.8	3.5	3.5
55–64	11.7	10.2	13.4	23.3	25.7	33.1	30.6	35.6	16.7	14.8	18.7	8.6	7.3	10.2	6.5	5.4	7.8	7.8
65+	9.6	8.4	10.9	18.5	20.2	28.5	26.7	30.5	16.7	15.2	18.4	6.9	5.9	8.0	19.4	17.8	21.1	21.1
Total	12.8	11.7	13.9	26.5	27.9	33.6	32.1	35.1	15.5	14.4	16.6	6.3	5.7	7.0	5.2	4.8	5.6	5.6
Females																		
18–24	24.1	19.8	29.0	33.0	43.4	31.2	26.2	36.6	4.3	2.8	6.5	2.0*	1.1	3.8	**	**	**	**
25–34	20.4	17.4	23.8	25.6	32.2	33.2	29.7	36.9	12.3	10.0	14.9	4.2	2.9	6.2	**	**	**	**
35–44	23.5	21.5	25.5	32.4	36.9	25.8	23.8	28.0	10.3	8.8	11.9	5.3	4.2	6.6	0.5*	0.2	1.0	1.0
45–54	19.5	17.8	21.3	27.8	29.8	31.4	29.4	33.5	14.1	12.6	15.7	5.7	4.7	6.9	1.5	1.1	2.0	2.0
55–64	16.3	14.8	18.0	24.6	26.4	30.5	28.6	32.6	13.8	12.3	15.4	7.3	6.2	8.5	7.3	6.3	8.4	8.4
65+	11.0	9.9	12.1	19.0	20.5	27.1	25.6	28.7	13.7	12.5	15.0	5.5	4.7	6.5	23.3	21.9	24.8	24.8
Total	19.0	18.0	20.1	28.3	29.4	29.9	28.7	31.1	11.5	10.8	12.2	5.0	4.5	5.5	6.0	5.7	6.3	6.3
Persons																		
18–24	19.6	16.6	23.0	33.1	40.5	33.9	30.2	37.8	7.2	5.5	9.4	2.2	1.4	3.4	**	**	**	**
25–34	17.3	15.1	19.8	26.2	32.0	34.3	31.3	37.5	13.6	11.7	15.8	4.9	3.7	6.4	**	**	**	**
35–44	19.0	17.6	20.5	29.8	33.4	30.4	28.5	32.3	13.0	11.7	14.5	5.6	4.7	6.7	0.4*	0.2	0.8	0.8
45–54	15.7	14.5	17.0	27.1	28.7	32.4	30.7	34.1	15.8	14.5	17.1	7.0	6.2	8.0	2.0	1.6	2.5	2.5
55–64	14.1	12.9	15.3	24.0	25.4	31.8	30.2	33.4	15.2	14.0	16.5	7.9	7.1	8.9	6.9	6.1	7.7	7.7
65+	10.4	9.6	11.2	18.8	19.9	27.8	26.6	29.0	15.1	14.1	16.1	6.1	5.5	6.9	21.5	20.5	22.6	22.6
Total	15.9	15.2	16.7	27.4	28.3	31.7	30.7	32.7	13.5	12.8	14.1	5.7	5.3	6.1	5.6	5.4	5.9	5.9

Data are age-specific estimates, except for 'Total', which represent the estimates for Victoria and have been age-standardised to the 2011 Victorian population.

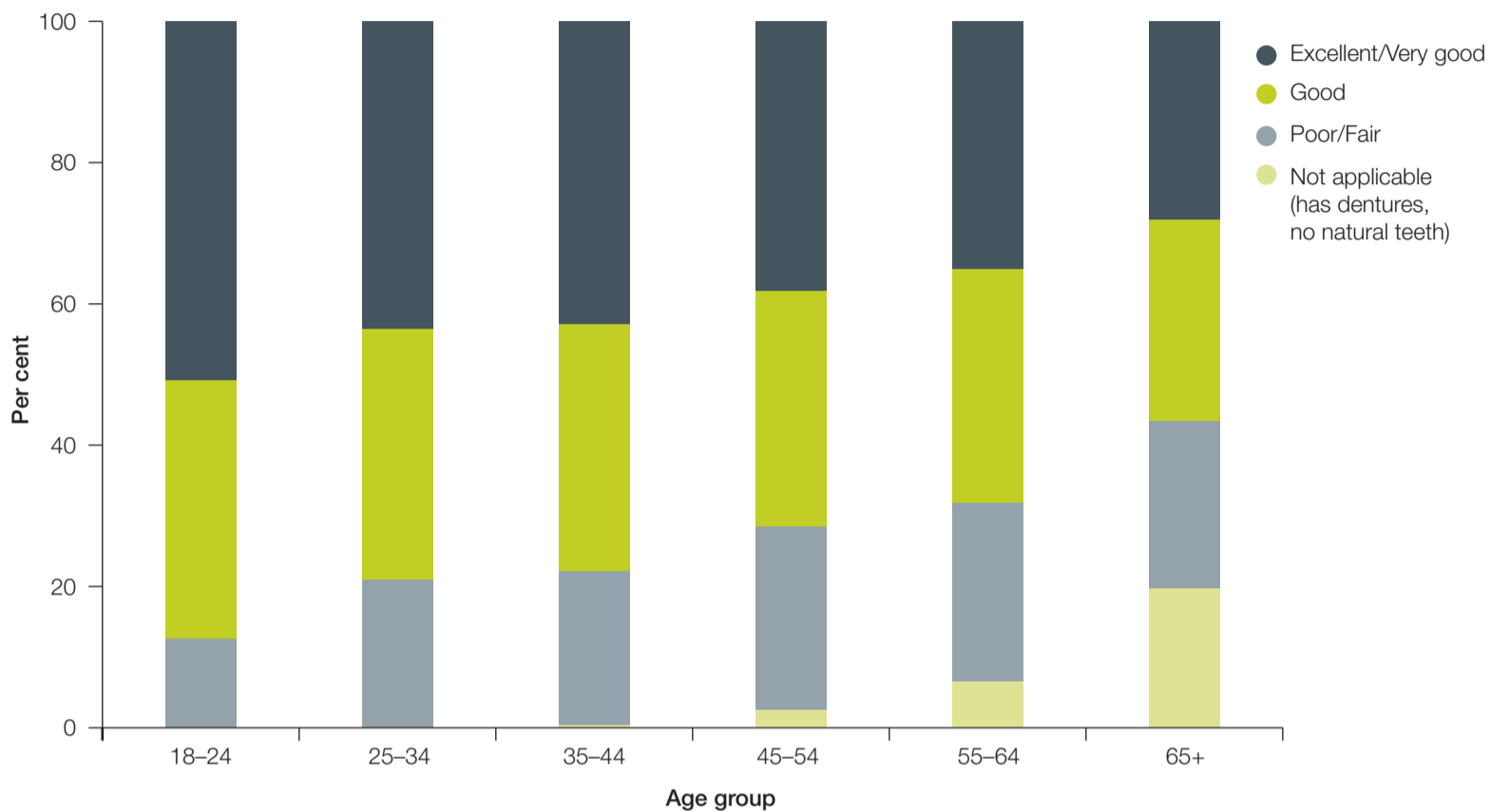
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

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

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

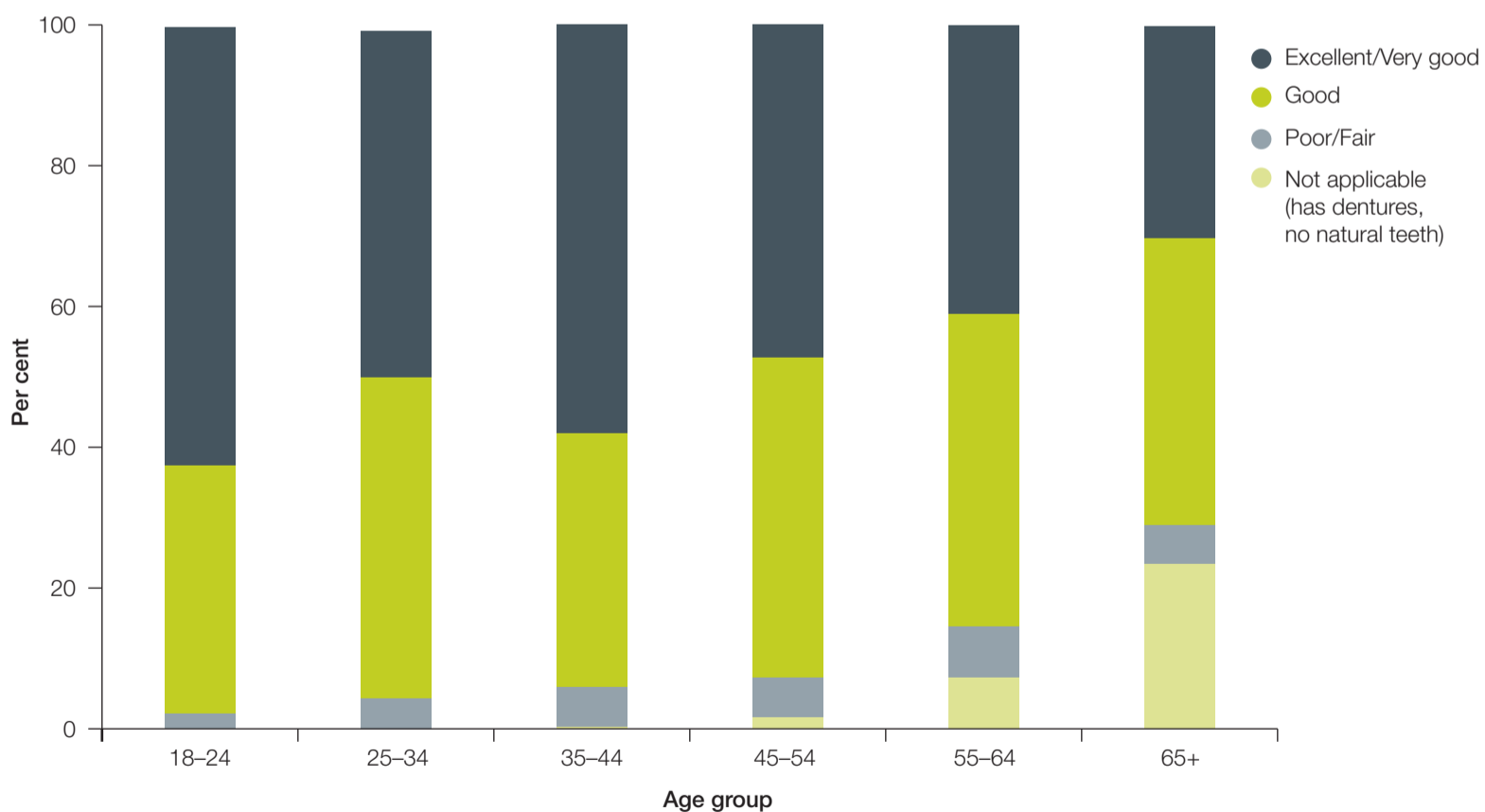
** Estimate has a RSE greater than 50 per cent and is not reported as it is unreliable for general use.

Figure 4.1: Self-rated dental health in males, by age group, Victoria, 2011–12



Data are age-specific estimates.

Figure 4.2: Self-rated dental health in females, by age group, Victoria, 2011–12



Data are age-specific estimates.

Table 4.2 shows self-rated dental health, by Department of Health region and sex. Overall there were no significant differences in the self-rated dental health of men or women who lived in rural compared with metropolitan Victoria. However, there were significantly higher proportions of men and women in rural Victoria who did not have any natural teeth compared with their metropolitan counterparts. This suggests that people who lived in rural Victoria have a greater history of poor dental health than those who lived in metropolitan Victoria. Attitudes to dental health and access to dental care may be explanatory factors.

There were significantly lower proportions of people who lived Gippsland Region and Loddon Mallee Region who reported their dental health as excellent compared with all Victorian adults. By contrast there was a significantly higher proportion of women who lived in North & West Metropolitan Region who reported their dental health as poor compared with all women.

Table 4.2: Self-rated dental health, by Department of Health region and sex, Victoria, 2011–12

Region	Excellent			Very good			Good			Fair			Poor			Not applicable (has dentures, no natural teeth)		
	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL
Males																		
Eastern Metropolitan	15.6	12.9	18.8	28.1	24.7	31.7	32.9	29.4	36.5	12.4	10.3	14.9	7.1	5.5	9.2	3.5	2.7	4.6
North & West Metropolitan	11.3	9.8	13.1	27.1	24.7	29.6	32.4	29.9	35.0	16.8	15.0	18.8	6.8	5.6	8.2	5.5	4.7	6.5
Southern Metropolitan	15.1	12.7	17.8	25.0	22.4	27.8	33.6	30.5	36.8	16.5	14.1	19.1	5.1	4.1	6.4	4.6	3.8	5.5
Metropolitan males	13.5	12.3	14.9	27.0	25.4	28.7	32.8	31.1	34.6	15.5	14.3	16.8	6.4	5.6	7.2	4.6	4.1	5.2
Barwon-South Western	10.0	6.5	14.9	22.5	18.3	27.4	42.8	35.6	50.2	15.6	11.1	21.6	4.2	2.8	6.2	4.9	3.9	6.1
Gippsland	11.2	8.6	14.7	22.0	18.3	26.3	34.3	29.9	38.9	17.5	14.5	21.1	7.5	5.5	10.1	7.2	6.0	8.5
Grampians	12.3	9.1	16.3	28.1	23.8	32.9	29.1	25.0	33.6	15.5	12.0	19.8	6.5	5.0	8.4	8.4	6.8	10.4
Hume	10.7	8.3	13.7	25.1	21.2	29.3	36.6	32.2	41.2	13.6	11.6	15.9	7.2	5.5	9.3	6.3	5.4	7.4
Loddon Mallee	8.7	6.9	10.8	26.4	21.5	32.0	36.9	32.1	41.9	14.7	12.1	17.8	6.4	5.1	8.0	6.8	5.5	8.2
Rural males	10.3	8.7	12.0	24.7	22.4	27.1	36.7	33.7	39.7	15.4	13.7	17.4	6.3	5.5	7.1	6.5	6.0	7.2
Total	12.8	11.7	13.9	26.5	25.1	27.9	33.6	32.1	35.1	15.5	14.4	16.6	6.3	5.7	7.0	5.2	4.8	5.6

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

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

Table 4.2: Self-rated dental health, by Department of Health region and sex, Victoria, 2011–12 (continued)

Region	Excellent			Very good			Good			Fair			Poor			Not applicable (has dentures, no natural teeth)			
	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	
Females																			
Eastern Metropolitan	20.3	17.4	23.7	29.1	25.9	32.5	29.0	25.9	32.3	12.6	10.8	14.5	4.3	3.3	5.7	4.4	3.8	5.2	5.2
North & West Metropolitan	18.4	16.7	20.1	26.5	24.7	28.4	30.3	28.3	32.3	11.9	10.7	13.2	6.7	5.8	7.9	5.7	5.1	6.5	6.5
Southern Metropolitan	19.8	17.8	22.1	30.8	28.3	33.4	28.8	26.3	31.3	11.0	9.4	12.9	4.1	3.2	5.2	5.2	4.4	6.0	6.0
Metropolitan females	19.4	18.2	20.7	28.3	26.9	29.7	29.7	28.3	31.1	11.8	10.9	12.7	5.2	4.7	5.9	5.1	4.7	5.6	5.6
Barwon-South Western	20.8	16.1	26.4	29.5	24.9	34.6	29.4	24.7	34.6	8.9	6.7	11.7	4.1	2.8	6.0	7.2	6.0	8.7	8.7
Gippsland	14.1	11.8	16.8	27.9	24.5	31.6	32.8	29.2	36.6	10.5	8.6	12.7	5.0	3.7	6.9	9.6	8.5	10.8	10.8
Grampians	20.6	17.4	24.3	28.3	24.6	32.4	26.4	22.7	30.5	11.0	8.5	14.1	4.6	3.6	5.9	8.9	7.8	10.1	10.1
Hume	18.7	16.0	21.7	27.9	25.1	30.9	28.5	25.7	31.5	13.0	11.0	15.3	4.1	3.3	5.2	7.4	6.7	8.3	8.3
Loddon Mallee	14.5	12.4	16.9	27.6	24.5	30.9	35.4	31.7	39.2	10.7	9.1	12.6	4.5	3.4	6.1	7.3	6.5	8.2	8.2
Rural females	17.8	16.1	19.7	28.3	26.5	30.3	30.7	28.6	32.8	10.6	9.6	11.7	4.4	3.8	5.1	8.0	7.5	8.5	8.5
Total	19.0	18.0	20.1	28.3	27.1	29.4	29.9	28.7	31.1	11.5	10.8	12.2	5.0	4.5	5.5	6.0	5.7	6.3	6.3

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Table 4.2: Self-rated dental health, by Department of Health region and sex, Victoria, 2011–12 (continued)

Region	Excellent			Very good			Good			Fair			Poor			Not applicable (has dentures, no natural teeth)			
	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	
Persons																			
Eastern Metropolitan	17.8	15.8	20.0	28.7	26.3	31.1	30.8	28.4	33.2	12.7	11.2	14.3	5.8	4.7	7.0	4.0	3.5	4.7	
North & West Metropolitan	14.9	13.7	16.2	26.8	25.3	28.4	31.3	29.7	32.9	14.3	13.2	15.5	6.8	6.0	7.7	5.6	5.1	6.2	
Southern Metropolitan	17.6	16.0	19.3	27.9	26.1	29.9	31.1	29.1	33.1	13.7	12.2	15.2	4.6	3.9	5.5	4.9	4.3	5.5	
Metropolitan persons	16.5	15.6	17.5	27.7	26.6	28.8	31.2	30.1	32.3	13.6	12.9	14.4	5.8	5.3	6.3	4.9	4.6	5.2	
Barwon-South Western	15.3	12.2	19.0	26.5	22.9	30.4	36.3	31.5	41.4	11.7	9.2	14.6	4.2	3.2	5.6	6.0	5.2	6.9	
Gippsland	12.5	10.6	14.6	25.0	22.4	27.8	33.7	30.8	36.7	13.9	12.1	16.0	6.2	5.0	7.8	8.5	7.7	9.4	
Grampians	16.7	14.2	19.5	28.1	25.2	31.3	27.6	24.8	30.6	13.2	10.9	16.0	5.5	4.6	6.6	8.7	7.7	9.8	
Hume	14.8	12.8	16.9	26.5	24.1	29.1	32.4	29.7	35.1	13.4	11.9	15.0	5.7	4.7	6.8	6.9	6.3	7.5	
Loddon Mallee	11.3	9.9	12.9	27.0	23.9	30.3	36.2	33.0	39.7	12.8	11.2	14.6	5.5	4.5	6.6	7.1	6.4	7.9	
Rural persons	14.0	12.8	15.3	26.5	25.0	28.1	33.7	31.8	35.7	12.9	11.9	14.0	5.3	4.8	5.9	7.3	6.9	7.7	
Total	15.9	15.2	16.7	27.4	26.5	28.3	31.7	30.7	32.7	13.5	12.8	14.1	5.7	5.3	6.1	5.6	5.4	5.9	

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Oral health

Table 4.3 shows self-rated dental health, by LGA. There were significantly higher proportions of people who lived in the LGAs of Banyule (C), Boroondara (C), Glen Eira (C), Melbourne (C), Queenscliffe (B), Stonnington (C) and Yarra (C) who reported excellent dental health compared with all Victorian adults. With the exception of Yarra (C), which was neither a high nor low SES LGA according to the 2006 IRSED, the remaining LGAs were of high SES being in the fourth or fifth IRSED quintile.

By contrast there were significantly lower proportions of people who lived in the LGAs of Alpine (S), Benalla (RC), Brimbank (C), Corangamite (S), Gannawarra (S), Greater Bendigo (C), Greater Dandenong (C), Hindmarsh (S), Hume (C), Melton (S), Pyrenees (S), Swan Hill (RC), Whittlesea (C) and Yarriambiack (S) who reported excellent dental health compared with all Victorian adults. With the exception of Melton (S), which was neither a high nor low SES LGA according to the 2006 IRSED, the remaining LGAs were of low SES being in the first or second IRSED quintile.

There were significantly higher proportions of people who lived in the LGAs of Brimbank (C), Central Goldfields (S), Hindmarsh (S), Melton (S), Mount Alexander (S) and Yarriambiack (S) who reported poor dental health compared with all Victorian adults. These LGAs were in the first or second IRSED quintile indicating low SES, with the exception of Melton (S), which was in the third IRSED quintile. By contrast there were significantly lower proportions of people who lived in the LGAs of Boroondara (C), Glen Eira (C), Greater Shepparton (C), Moyne (S), Nillumbik (S) and Southern Grampians (S) who reported poor dental health compared with all Victorian adults. While three of the latter LGAs were in the fifth quintile indicating very high SES, the remaining three LGAs were in the first, second and third IRSED quintiles.

Figure 4.3 and Map 4.1 show the proportion of Victorian adults who reported their dental health as poor, by LGA.

Table 4.3: Self-rated dental health, by LGA, Victoria, 2011–12

Region	Excellent			Very good			Good			Fair			Poor			Not applicable (has dentures, no natural teeth)		
	95% CI			95% CI			95% CI			95% CI			95% CI			95% CI		
	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%
Alpine (S)	7.0	14.9	23.1	17.6	29.5	40.5	31.9	49.7	15.7*	9.3	25.3	4.7	3.0	7.3	5.8	4.4	7.6	7.6
Ararat (RC)	12.7	26.1	25.4	19.3	32.6	28.2	21.8	35.5	11.5	7.7	16.8	6.3	3.9	10.0	9.9	6.9	14.1	14.1
Ballarat (C)	15.8	26.4	25.4	20.1	31.5	28.4	22.9	34.6	13.0	8.7	18.8	3.7*	2.1	6.4	8.8	6.7	11.4	11.4
Banyule (C)	18.1	29.8	29.3	23.5	35.9	27.1	21.5	33.5	10.4	7.0	15.1	4.5*	2.2	9.2	5.2	3.9	7.0	7.0
Bass Coast (S)	10.3	20.7	25.0	18.8	32.4	33.0	25.7	41.3	14.4	9.1	21.9	6.9*	3.6	13.0	5.8	4.5	7.4	7.4
Baw Baw (S)	8.4	16.0	22.8	17.8	28.7	38.6	32.5	45.1	11.6	8.1	16.3	6.1*	3.6	10.3	9.1	7.2	11.5	11.5
Bayside (C)	14.8	26.0	35.8	28.6	43.6	32.9	25.5	41.3	8.0*	4.4	14.2	**	**	**	1.8	1.1	2.9	2.9
Benalla (RC)	6.8	13.5	29.5	20.9	39.9	32.3	23.7	42.3	16.2	11.0	23.4	5.0	3.3	7.3	6.5	4.9	8.6	8.6
Boroondara (C)	19.8	33.0	32.4	26.2	39.2	28.6	22.7	35.2	8.3	5.6	12.0	2.0*	1.1	3.7	2.8	1.9	4.1	4.1
Brimbank (C)	5.1	10.6	23.8	19.2	29.1	34.5	29.2	40.3	17.2	13.7	21.4	9.6	6.9	13.3	7.2	5.2	9.9	9.9
Buloke (S)	10.6	25.3	21.0	15.0	28.6	31.0	24.5	38.4	13.6	10.2	17.9	7.7	4.9	11.9	9.9	7.9	12.2	12.2
Campaspe (S)	9.1	21.1	27.1	20.8	34.5	29.6	23.7	36.2	14.3	9.8	20.4	6.7	4.1	10.8	8.2	6.4	10.4	10.4
Cardinia (S)	12.2	21.1	25.9	21.1	31.4	34.9	29.7	40.6	11.9	8.7	16.2	5.6	3.8	8.3	5.4	3.8	7.5	7.5
Casey (C)	11.4	21.0	27.2	22.1	32.9	32.3	26.9	38.2	13.3	10.0	17.4	4.5	2.9	7.0	6.7	4.9	9.1	9.1
Central Goldfields (S)	11.2	33.0	20.1	13.5	28.9	25.3	19.0	33.0	14.1	10.5	18.6	13.2	8.0	20.9	7.3	5.8	9.2	9.2
Colac-Otway (S)	11.3	22.8	27.8	21.8	34.6	29.4	23.0	36.7	14.5	9.7	21.0	4.0	2.5	6.3	8.1	6.5	10.0	10.0
Corangamite (S)	7.9	14.6	27.5	20.8	35.4	33.4	25.9	41.9	14.5	10.6	19.5	5.5*	3.1	9.6	8.0	6.3	10.2	10.2
Darebin (C)	12.1	20.9	27.8	22.4	33.9	24.7	19.9	30.2	19.3	14.6	25.2	6.6	4.2	10.2	5.4	4.0	7.3	7.3
East Gippsland (S)	8.4	17.7	22.2	16.8	28.7	37.4	30.8	44.6	11.8	8.5	16.3	8.3	5.1	13.5	7.9	5.7	10.8	10.8
Frankston (C)	10.5	19.2	29.5	23.7	36.1	30.1	24.3	36.6	14.1	10.4	18.7	4.3*	2.6	7.1	7.0	4.8	10.1	10.1
Gannawarra (S)	4.7	11.3	31.2	23.5	40.1	30.0	23.0	38.0	17.0	11.4	24.5	4.2	2.7	6.6	10.2	8.0	13.0	13.0
Glen Eira (C)	16.9	28.4	30.4	24.8	36.6	29.5	24.2	35.4	11.2	7.5	16.4	2.7*	1.3	5.2	4.1	2.9	5.9	5.9
Glenelg (S)	8.6	19.6	29.0	22.4	36.7	35.2	27.7	43.6	11.5	8.2	15.8	3.3	2.1	5.3	7.8	6.0	10.0	10.0
Golden Plains (S)	8.9	19.7	36.3	30.0	43.0	25.9	21.5	30.8	10.9	8.0	14.8	6.7	4.6	9.7	6.7	4.9	9.0	9.0

Table 4.3: Self-rated dental health, by LGA, Victoria, 2011–12 (continued)

Region	Excellent			Very good			Good			Fair			Poor			Not applicable (has dentures, no natural teeth)		
	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL
Greater Bendigo (C)	9.5	7.1	12.4	25.8	19.6	33.1	43.0	37.1	49.1	10.7	7.8	14.4	4.1*	2.3	7.2	6.9	5.3	8.9
Greater Dandenong (C)	8.7	6.0	12.5	20.1	15.8	25.3	37.7	32.3	43.4	17.9	13.9	22.9	7.9	5.5	11.2	7.3	5.7	9.3
Greater Geelong (C)	16.0	11.0	22.7	24.0	18.9	30.0	39.5	32.3	47.2	11.1	7.7	15.8	4.5	2.9	6.9	4.8	3.5	6.6
Greater Shepparton (C)	14.4	9.9	20.4	25.7	18.8	34.1	36.2	28.6	44.5	11.5	8.8	14.9	3.2	2.0	5.1	8.7	6.8	11.1
Hepburn (S)	11.6	7.6	17.5	41.9	35.3	48.9	21.4	17.2	26.2	11.9	9.1	15.5	7.0	5.0	9.5	6.1	4.7	7.9
Hindmarsh (S)	7.7*	4.5	12.8	26.2	18.8	35.3	25.6	20.2	31.9	16.8	11.5	24.0	11.1*	6.3	18.8	12.6	10.5	14.9
Hobsons Bay (C)	12.6	9.2	17.1	29.3	23.8	35.4	31.3	25.6	37.7	13.0	9.3	17.8	8.2	5.5	11.9	5.5	4.1	7.4
Horsham (RC)	15.8	10.3	23.4	35.0	27.1	43.8	26.5	21.4	32.3	9.8	7.0	13.5	4.5	2.9	6.9	8.3	6.7	10.4
Hume (C)	10.3	7.4	14.3	22.6	18.0	28.0	36.1	30.7	41.9	14.1	10.7	18.3	8.8	5.8	13.1	6.7	4.6	9.5
Indigo (S)	16.2	11.5	22.3	33.6	26.8	41.2	24.1	18.8	30.4	11.1	8.0	15.2	8.8*	5.1	14.9	5.4	3.7	7.9
Kingston (C)	19.8	14.9	25.9	27.3	21.6	33.8	25.7	20.7	31.4	17.1	12.2	23.4	5.0*	3.0	8.4	5.0	3.6	7.0
Knox (C)	14.3	10.7	18.8	28.4	23.1	34.3	27.7	22.6	33.4	14.9	11.3	19.4	8.6	5.6	12.9	5.4	4.0	7.4
Latrobe (C)	13.9	9.9	19.0	26.0	20.7	32.0	29.9	24.2	36.1	15.8	12.2	20.3	4.4	2.7	6.9	10.0	8.1	12.3
Loddon (S)	16.7*	9.5	27.6	26.1	19.2	34.4	28.6	23.0	34.9	8.2	6.0	11.1	9.8*	5.1	18.2	10.6	8.5	13.2
Macedon Ranges (S)	12.3	9.4	16.1	36.6	30.2	43.5	32.7	26.6	39.5	10.5	7.7	14.1	3.9	2.5	6.0	3.8	2.6	5.6
Manningham (C)	17.2	12.3	23.5	28.5	22.8	34.9	34.1	27.9	40.9	13.2	9.4	18.1	4.7*	2.7	7.9	2.2	1.4	3.5
Mansfield (S)	13.9	10.1	18.8	33.0	25.4	41.7	24.8	18.9	31.8	17.0	11.3	24.8	5.4	3.3	8.7	5.8	4.4	7.6
Maribyrnong (C)	16.4	12.3	21.5	22.2	17.1	28.2	33.9	27.2	41.3	16.0	11.8	21.3	5.8	3.7	9.0	5.6	3.6	8.7
Maroondah (C)	16.2	12.3	21.0	30.8	24.9	37.4	29.3	23.6	35.7	14.2	10.2	19.4	5.8	3.5	9.4	3.7	2.5	5.4
Melbourne (C)	22.8	18.0	28.4	33.5	27.8	39.6	27.6	22.4	33.5	8.9	6.4	12.3	5.1	3.2	8.1	1.9*	1.1	3.2
Melton (S)	10.1	7.5	13.4	23.4	19.0	28.3	35.4	29.9	41.3	13.8	10.6	17.6	8.6	6.0	12.2	8.8	6.4	12.1

Data were age-standardised to the 2011 Victorian population, using 10-year age groups.

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

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

LGA= Local government area; B = Borough; C = City; S = Shire; RC = Rural City.

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

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

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

Table 4.3: Self-rated dental health, by LGA, Victoria, 2011–12 (continued)

Region	Excellent			Very good			Good			Fair			Poor			Not applicable (has dentures, no natural teeth)		
	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI		%
	LL	UL		LL	UL		LL	UL		LL	UL		LL	UL		LL	UL	
Mildura (RC)	11.8	8.5	16.1	29.1	22.8	36.2	32.7	26.5	39.7	14.2	10.6	18.8	4.1	2.6	6.6	7.8	5.4	11.0
Mitchell (S)	14.1	9.8	19.8	23.1	17.8	29.4	34.5	28.2	41.5	15.0	11.1	20.1	6.2*	3.6	10.3	6.6	4.9	8.7
Moira (S)	15.9	10.3	23.9	23.6	17.7	30.7	29.0	23.2	35.5	13.3	8.7	19.6	10.7*	6.0	18.3	7.0	5.5	8.8
Monash (C)	16.6	11.7	22.9	28.4	22.8	34.7	32.8	27.1	39.1	12.7	9.4	17.0	5.4	3.6	7.8	3.9	2.7	5.6
Moonee Valley (C)	17.6	13.1	23.3	32.1	26.2	38.5	25.0	20.1	30.6	14.8	11.3	19.1	6.9*	3.6	12.8	3.5	2.3	5.2
Moorabool (S)	14.8	10.4	20.6	28.1	22.5	34.5	27.6	22.2	33.7	14.1	10.1	19.2	7.2	4.7	10.8	8.3	6.4	10.6
Moreland (C)	14.8	10.4	20.6	29.6	23.8	36.0	30.8	25.5	36.7	12.1	9.3	15.6	7.0	4.5	10.8	5.7	4.3	7.6
Mornington Peninsula (S)	17.6	12.8	23.8	30.1	23.8	37.3	30.1	24.0	37.0	14.0	9.8	19.6	3.6*	2.1	6.2	3.8	2.7	5.3
Mount Alexander (S)	19.8	13.3	28.6	19.1	13.8	25.7	30.0	22.3	39.0	16.0	11.7	21.6	10.1	6.1	16.2	5.0	3.7	6.8
Moyno (S)	12.8	9.0	17.8	34.1	26.6	42.5	30.8	24.3	38.1	12.4	8.8	17.2	3.0*	1.8	5.0	7.0	5.5	9.0
Murrindindi (S)	12.0	8.3	17.2	21.2	15.0	29.1	35.8	27.8	44.7	19.8	13.7	27.8	5.5*	3.2	9.5	5.5	4.2	7.2
Nilumbik (S)	17.9	13.6	23.3	33.9	27.5	41.0	31.6	25.4	38.5	11.1	7.2	16.8	2.7	1.7	4.4	2.7*	1.4	4.8
Northern Grampians (S)	13.2	8.9	19.1	31.3	22.4	41.8	26.9	20.7	34.3	10.8	7.2	16.0	8.6*	4.8	15.2	8.9	6.9	11.5
Port Phillip (C)	21.3	16.6	26.9	30.1	24.0	37.1	27.6	21.2	35.1	12.6	8.1	19.1	5.1	3.3	7.8	3.3	2.1	5.2
Pyrenees (S)	6.8	4.6	10.0	25.2	16.0	37.5	34.1	24.1	45.7	16.8	11.6	23.6	6.8*	4.0	11.2	10.2	7.5	13.6
Queenscliffe (B)	25.5	17.9	35.1	33.2	23.4	44.7	25.3	18.6	33.3	5.5	3.8	7.9	6.1*	2.4	14.9	4.4	3.0	6.2
South Gippsland (S)	10.0	6.1	15.8	30.0	22.3	39.0	31.6	23.7	40.6	13.0	9.3	17.9	7.6	5.0	11.5	7.4	5.8	9.4
Southern Grampians (S)	24.7	15.8	36.6	24.8	17.3	34.1	27.5	22.4	33.3	12.4	8.4	18.0	2.3*	1.3	4.0	8.1	6.5	10.1
Stonnington (C)	25.0	19.8	31.1	30.1	24.9	36.0	25.8	20.5	32.0	12.0	8.1	17.3	5.0*	2.5	9.7	2.0*	1.1	3.7
Strathbogie (S)	13.9*	8.3	22.3	36.8	29.2	45.1	23.9	18.5	30.4	12.6	8.8	17.6	6.6	4.1	10.5	5.3	4.1	6.7
Surf Coast (S)	14.7	10.6	20.0	39.5	31.7	47.9	26.9	20.2	35.0	9.9	6.7	14.4	4.1*	2.5	6.9	4.8	3.4	6.7
Swan Hill (RC)	8.0	4.9	13.0	24.6	18.7	31.8	36.0	29.5	43.2	18.0	13.3	23.8	5.7	3.7	8.6	7.6	6.1	9.5
Towong (S)	17.4	11.4	25.5	26.2	20.8	32.4	35.5	28.2	43.6	10.7	7.9	14.3	5.1	3.2	7.9	5.1	3.7	6.9
Wangaratta (RC)	15.3	10.6	21.6	25.5	20.0	31.9	32.8	26.5	39.8	14.7	10.9	19.5	4.3	2.7	6.6	6.0	4.6	7.8

Table 4.3: Self-rated dental health, by LGA, Victoria, 2011–12 (continued)

Region	Excellent			Very good			Good			Fair			Poor			Not applicable (has dentures, no natural teeth)		
	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL
Warrnambool (C)	17.9	13.0	24.0	31.8	26.3	37.9	28.1	22.5	34.4	10.4	7.5	14.2	3.1*	1.8	5.4	8.5	6.7	10.8
Wellington (S)	7.9	5.7	10.8	23.6	17.1	31.7	36.4	28.7	44.8	16.5	11.3	23.4	6.1*	3.2	11.2	9.4	7.6	11.5
West Wimmera (S)	13.9	10.0	18.9	27.8	22.0	34.5	24.4	18.9	30.9	18.0	13.7	23.3	5.7*	3.4	9.5	10.2	8.2	12.5
Whitehorse (C)	17.4	13.4	22.4	28.0	22.1	34.7	32.3	26.1	39.2	12.0	8.8	16.2	5.5*	3.2	9.3	4.5	3.2	6.3
Whittlesea (C)	10.2	7.2	14.3	24.4	19.7	29.9	36.3	30.8	42.2	17.6	13.6	22.3	5.2	3.5	7.9	6.0	4.3	8.3
Wodonga (RC)	16.0	11.4	21.8	31.7	25.3	38.7	26.9	21.2	33.4	11.2	7.5	16.6	6.3	4.0	9.8	7.9	6.4	9.9
Wyndham (C)	14.1	10.6	18.6	23.0	18.8	27.7	36.4	31.3	41.8	13.4	10.1	17.6	7.2	4.6	11.2	5.9	4.1	8.6
Yarra (C)	24.6	18.7	31.6	32.1	25.0	40.1	20.3	16.1	25.3	13.8	9.3	19.9	6.0	3.7	9.4	2.9	1.8	4.6
Yarra Ranges (S)	13.7	10.1	18.3	24.2	18.7	30.8	33.9	27.6	40.9	13.8	9.9	18.9	7.6	4.8	11.8	6.0	4.3	8.4
Yarriambiack (S)	9.3	6.7	12.7	32.9	25.5	41.3	24.5	18.2	32.0	11.7	8.2	16.3	10.9*	6.5	17.7	10.7	8.8	12.8
Victoria	15.9	15.2	16.7	27.6	26.7	28.5	31.7	30.7	32.7	13.4	12.8	14.0	5.6	5.2	6.0	5.6	5.3	5.8

Data were age-standardised to the 2011 Victorian population, using 10-year age groups.

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

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

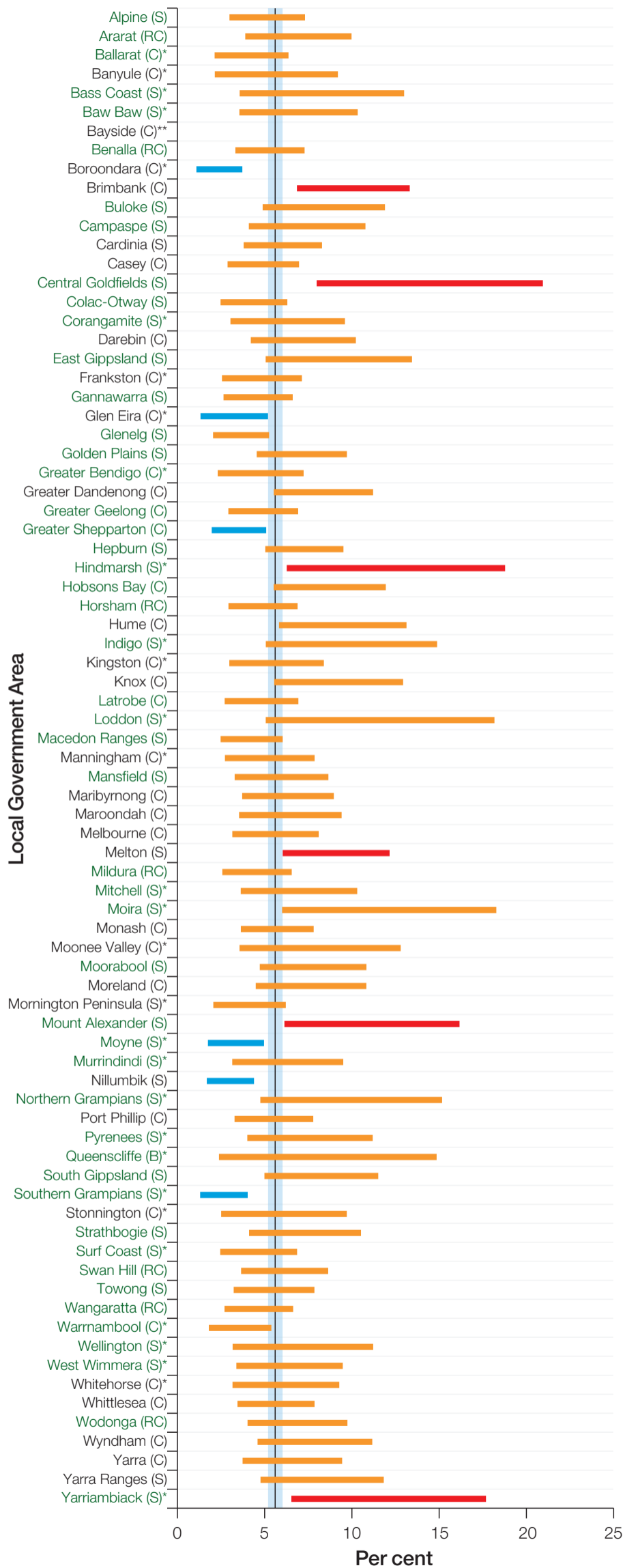
LGA= Local government area; B = Borough; C = City; S = Shire; RC = Rural City.

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

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

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

Figure 4.3: Prevalence of poor self-rated dental health, by LGA, Victoria, 2011–12



Data were age-standardised to the 2011 Victorian population using 10-year age groups.

The horizontal bars represent the 95% CI around the estimate for each LGA.

The vertical line on the graph is the Victorian estimate and the vertical column is the 95% CI around the estimate for Victoria.

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

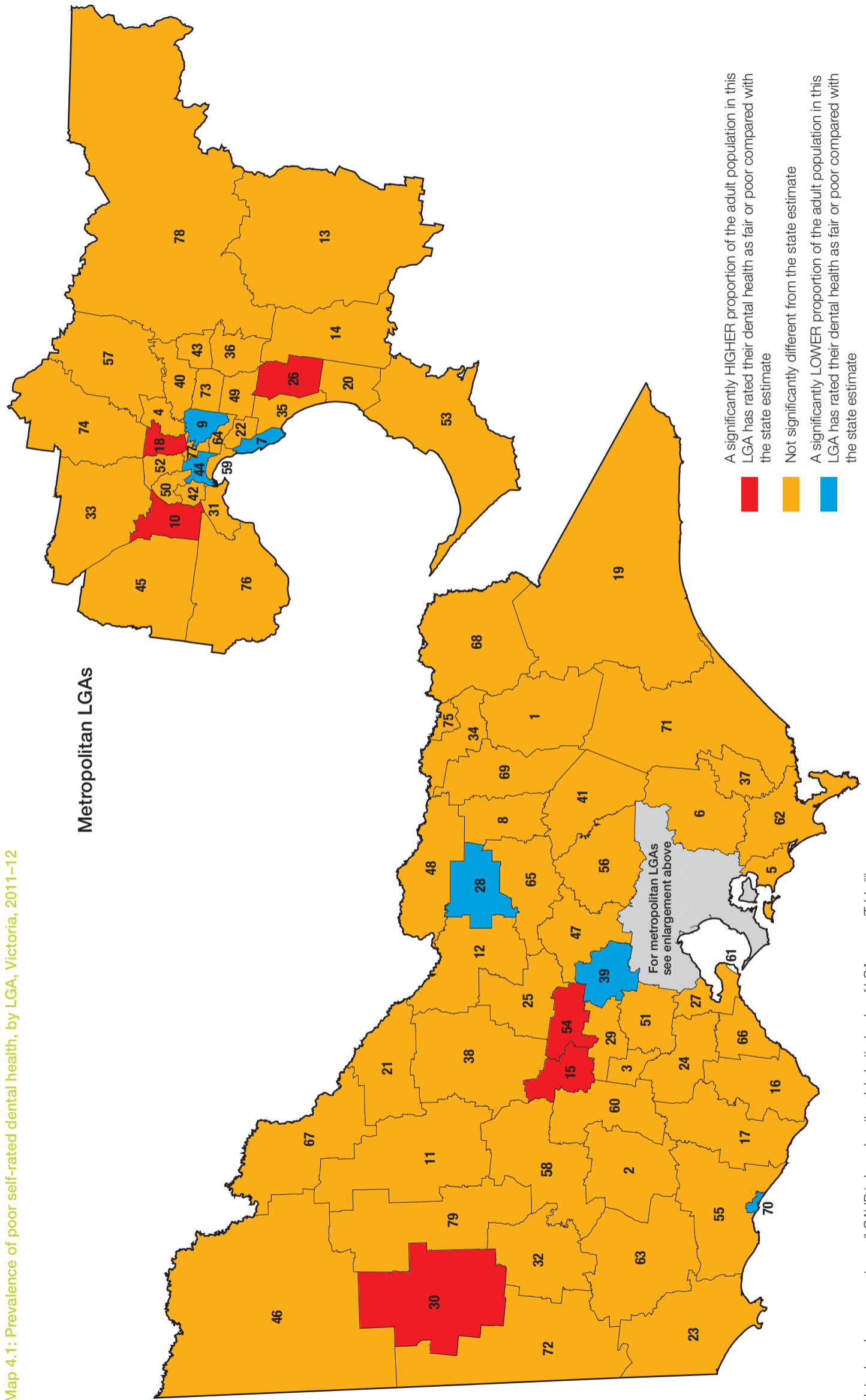
95% CI = 95 per cent confidence interval; LGA= Local government area; B = Borough; C = City; S = Shire; RC = Rural City.

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

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

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

Map 4.1: Prevalence of poor self-rated dental health, by LGA, Victoria, 2011–12



Oral health

Table 4.4 shows self-rated dental health by selected socioeconomic determinants, modifiable risk factors and health status.

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

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

When compared with all Victorian women, a significantly *higher* prevalence of 'excellent' dental health was reported among women with the following characteristics:

- employed
- low level of psychological distress
- sufficiently physically active
- met guidelines for vegetable or both fruit and vegetable consumption.

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

- only completed a primary education
- unemployed
- total annual household income of less than \$40,000
- high level of psychological distress
- sedentary or insufficiently physically active
- current smoker
- good, fair or poor self-reported health status.

When compared with all Victorian women, a significantly *lower* prevalence of 'excellent' dental health was reported among women with the following characteristics:

- very high level of psychological distress
- abstained from alcohol consumption
- obese.

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

- only completed a primary education
- not in the labour force
- total annual household income of less than \$40,000
- high or very high levels of psychological distress
- sedentary
- current smoker
- fair or poor self-reported health status
- underweight.

When compared with all Victorian men, a significantly *higher* prevalence of 'poor' dental health was reported among men with the following characteristic:

- at long-term risk of alcohol-related harm.

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

- unemployed
- abstained from consumption of alcohol.

Table 4.4: Self-rated dental health, by selected socioeconomic determinants, modifiable risk factors and health status, Victoria, 2011–12

	Excellent			Very good			Good			Fair			Poor			Not applicable (has dentures, no natural teeth)		
	95% CI			95% CI			95% CI			95% CI			95% CI			95% CI		
	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL
Males	12.8	11.7	13.9	26.5	25.1	27.9	33.6	32.1	35.1	15.5	14.4	16.6	6.3	5.7	7.0	5.2	4.8	5.6
<i>Area of Victoria</i>																		
Rural	10.3	8.7	12.0	24.7	22.4	27.1	36.7	33.7	39.7	15.4	13.7	17.4	6.3	5.5	7.1	6.5	6.0	7.2
Metropolitan	13.5	12.3	14.9	27.0	25.4	28.7	32.8	31.1	34.6	15.5	14.3	16.8	6.4	5.6	7.2	4.6	4.1	5.2
<i>Education level</i>																		
Primary	9.0	7.2	11.1	19.1	16.8	21.7	36.1	33.0	39.4	18.4	16.3	20.7	9.9	8.3	11.8	7.3	6.6	8.0
Secondary	10.9	9.4	12.6	27.7	25.4	30.1	34.3	31.8	36.9	15.3	13.5	17.3	6.8	5.7	8.2	4.6	4.0	5.4
Tertiary	17.5	15.5	19.7	33.3	31.0	35.7	31.0	28.6	33.4	12.6	11.2	14.2	3.4	2.7	4.3	2.2	1.7	2.9
<i>Employment status (age < 65 years)</i>																		
Employed	14.0	12.5	15.7	28.8	26.9	30.8	35.7	33.6	37.8	14.7	13.4	16.0	5.1	4.4	5.9	1.4	1.2	1.8
Unemployed	6.3*	3.7	10.6	17.8	13.0	23.8	45.4	38.1	52.9	19.3	14.1	25.8	9.0	6.0	13.2	2.3*	1.2	4.4
Not in labour force	11.9	8.9	15.8	21.4	17.2	26.3	29.7	24.3	35.7	16.6	12.3	21.9	17.2	12.7	23.0	3.2	2.2	4.6
<i>Total annual household income</i>																		
< \$40,000	7.6	5.7	10.2	18.2	14.8	22.2	32.2	28.2	36.4	21.5	18.1	25.4	12.5	10.2	15.3	7.6	6.7	8.6
\$40,000 to < \$100,000	11.1	9.6	12.7	25.6	23.3	28.0	37.2	34.7	39.9	16.0	14.3	17.8	6.4	5.3	7.8	3.6	2.9	4.4
≥ \$100,000	18.3	15.8	21.1	33.2	30.2	36.3	30.9	28.0	33.9	11.7	10.0	13.7	3.2	2.3	4.6	2.6	1.8	3.9
<i>Psychological distress level^a</i>																		
Low (< 16)	13.9	12.6	15.3	29.6	27.8	31.4	33.7	31.8	35.6	13.4	12.3	14.7	4.3	3.8	5.0	4.9	4.5	5.5
Moderate (16–21)	12.0	9.8	14.6	23.3	20.6	26.2	32.7	29.7	35.9	18.2	16.0	20.7	8.4	6.8	10.2	5.4	4.5	6.4
High (22–29)	5.8	3.8	8.8	14.8	11.2	19.2	32.1	27.1	37.5	23.9	19.4	29.0	15.3	11.5	20.2	7.3	5.7	9.2
Very high (≥ 30)	7.8*	3.8	15.4	9.7	6.1	15.3	37.2	28.8	46.5	18.7	13.0	26.1	20.4	15.0	27.1	6.1	3.9	9.6
<i>Physical activity^b</i>																		
Sedentary	6.0	3.6	9.6	16.2	11.7	22.1	37.7	31.4	44.4	18.8	14.5	24.2	12.9	9.9	16.6	8.2	6.2	10.7
Insufficient time and sessions	9.4	7.7	11.5	25.3	22.4	28.4	35.1	31.8	38.6	17.2	15.0	19.6	7.3	6.1	8.6	5.4	4.7	6.2
Sufficient time and sessions	14.4	13.1	15.8	28.1	26.4	29.8	33.0	31.2	34.8	14.5	13.3	15.8	5.3	4.6	6.2	4.5	4.1	5.1
<i>Met fruit / vegetable guidelines^c</i>																		
Both guidelines	13.6	9.4	19.4	35.7	29.1	43.0	30.4	24.2	37.4	11.7	7.6	17.6	4.3	2.6	6.9	4.2	2.7	6.5
Vegetable guidelines ^d	16.8	12.5	22.3	34.0	28.3	40.2	27.6	22.7	33.2	12.0	8.5	16.5	5.0	3.3	7.4	4.6	3.3	6.4
Fruit guidelines ^d	15.0	13.1	17.1	28.6	26.3	30.9	33.3	30.9	35.9	13.5	12.0	15.1	4.7	3.9	5.7	4.7	4.2	5.3
Neither	11.3	10.1	12.7	25.0	23.2	26.8	34.1	32.1	36.1	16.7	15.3	18.1	7.4	6.5	8.4	5.4	4.9	6.0

Table 4.4: Self-rated dental health, by selected socioeconomic determinants, modifiable risk factors and health status, Victoria, 2011–12 (continued)

	Excellent			Very good			Good			Fair			Poor			Not applicable (has dentures, no natural teeth)		
	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI		%
	LL	UL		LL	UL		LL	UL		LL	UL		LL	UL		LL	UL	
Smoking status																		
Current smoker	6.6	10.7	17.1	14.6	20.0	33.3	29.9	36.9	19.4	16.8	22.3	13.0	11.0	15.3	8.6	7.2	10.2	
Ex-smoker	14.6	18.6	21.9	18.9	25.1	32.9	28.9	37.3	17.4	15.1	20.1	7.0	5.6	8.7	5.9	5.3	6.6	
Non-smoker	14.5	16.0	31.1	29.1	33.1	34.9	32.9	36.9	12.9	11.7	14.2	3.3	2.7	3.9	3.3	2.9	3.8	
Long-term risk of alcohol-related harm^e																		
Abstainer	9.6	12.6	21.2	17.8	25.1	36.0	31.8	40.5	15.8	12.9	19.2	8.4	6.5	10.9	8.7	7.5	10.1	
Low risk	13.3	14.6	27.6	26.1	29.2	33.9	32.2	35.6	15.1	14.0	16.3	5.7	5.0	6.5	4.3	3.9	4.7	
Risky or high risk	13.4	19.7	23.8	18.3	30.5	21.3	16.5	27.0	23.1	17.9	29.3	11.0	7.9	15.2	6.0	4.1	8.6	
Self-reported health status																		
Excellent / very good	20.1	18.3	22.0	36.3	34.1	38.5	27.6	25.6	29.8	9.2	8.0	10.6	2.5	2.0	3.1	4.2	3.7	4.9
Good	7.5	6.2	9.1	21.4	19.3	23.6	42.8	40.3	45.4	16.5	14.9	18.3	6.4	5.3	7.6	5.0	4.4	5.7
Fair / poor	4.7	3.1	7.0	10.6	8.3	13.4	30.0	26.0	34.3	30.3	26.7	34.2	16.7	14.2	19.6	7.3	6.4	8.5
Body weight status^f																		
Underweight	10.9*	4.9	22.4	37.2	25.1	51.1	18.1	11.7	26.8	9.1*	5.2	15.3	17.8*	9.6	30.6	7.0*	4.2	11.3
Normal	14.8	13.1	16.7	26.9	24.7	29.2	32.2	29.9	34.6	15.0	13.3	16.8	6.4	5.4	7.7	4.5	3.9	5.3
Overweight	13.3	11.4	15.4	26.6	24.3	29.1	35.2	32.7	37.8	14.1	12.6	15.8	5.6	4.6	6.8	5.0	4.5	5.7
Obese	10.4	8.0	13.4	22.3	19.1	25.9	35.0	31.2	39.0	18.4	15.6	21.6	7.3	6.0	9.0	6.3	5.4	7.4
Diabetes (excluding gestational)^g																		
No diabetes	13.1	12.0	14.2	27.0	25.6	28.5	33.4	31.9	35.0	15.3	14.3	16.4	6.1	5.4	6.8	4.9	4.5	5.4
Diabetes	10.6*	3.9	25.5	30.1	19.6	43.2	31.9	25.1	39.6	15.8	10.6	22.7	5.5	4.3	7.2	6.0	5.1	7.1

a. Based on the Kessler 10 scale for psychological distress.

b. Based on national guidelines (DoHA 1999).

c. Based on national guidelines (NHMRC 2003a).

d. Includes those meeting both guidelines.

e. Long-term risk of alcohol-related harm refers to the increased risk of developing various cancers, cirrhosis of the liver, cognitive problems and dementia, and alcohol dependence.

f. Based on body mass index (BMI).

g. Data were age-standardised to the 2011 Victorian population using 10-year age groups (other variables were standardised using 5-year age groups).

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

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

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

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

Table 4.4: Self-rated dental health, by selected socioeconomic determinants, modifiable risk factors and health status, Victoria, 2011–12 (continued)

	Excellent			Very good			Good			Fair			Poor			Not applicable (has dentures, no natural teeth)		
	95% CI			95% CI			95% CI			95% CI			95% CI			95% CI		
	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL
Females	19.0	18.0	20.1	28.3	27.1	29.4	29.9	28.7	31.1	11.5	10.8	12.2	5.0	4.5	5.5	6.0	5.7	6.3
<i>Area of Victoria</i>																		
Rural	17.8	16.1	19.7	28.3	26.5	30.3	30.7	28.6	32.8	10.6	9.6	11.7	4.4	3.8	5.1	8.0	7.5	8.5
Metropolitan	19.4	18.2	20.7	28.3	26.9	29.7	29.7	28.3	31.1	11.8	10.9	12.7	5.2	4.7	5.9	5.1	4.7	5.6
<i>Education level</i>																		
Primary	12.4	10.6	14.5	22.4	19.9	25.1	31.9	29.0	35.1	16.8	14.9	19.0	7.8	6.4	9.3	8.0	7.2	8.8
Secondary	17.8	16.3	19.4	28.6	26.8	30.5	32.0	30.0	34.0	11.2	10.0	12.6	5.1	4.4	6.0	5.0	4.4	5.6
Tertiary	24.7	22.9	26.7	33.6	31.8	35.5	26.9	25.2	28.8	8.4	7.4	9.6	3.2	2.6	4.0	2.8	2.2	3.5
<i>Employment status (age < 65 years)</i>																		
Employed	22.9	21.2	24.6	31.6	29.9	33.4	30.4	28.6	32.2	10.1	9.2	11.1	3.8	3.2	4.5	1.1	0.9	1.4
Unemployed	12.7	9.0	17.6	22.4	17.0	28.9	39.7	33.3	46.3	13.1	9.5	17.7	10.3	7.3	14.1	2.0*	1.2	3.2
Not in labour force	18.1	16.0	20.4	27.6	25.4	30.0	29.8	27.2	32.5	13.7	11.9	15.8	7.4	6.1	8.8	2.8	2.3	3.5
<i>Total annual household income</i>																		
< \$40,000	12.1	10.2	14.4	21.9	19.3	24.8	31.9	28.8	35.2	15.9	13.9	18.1	10.2	8.5	12.2	7.7	7.1	8.3
\$40,000 to < \$100,000	17.4	15.8	19.1	29.6	27.7	31.7	33.2	31.1	35.5	11.7	10.4	13.1	4.3	3.6	5.1	3.6	2.9	4.4
≥ \$100,000	29.9	26.6	33.5	34.4	31.2	37.7	26.2	23.5	29.1	5.9	4.8	7.1	1.8	1.1	2.9	1.9*	1.0	3.4
<i>Psychological distress level^a</i>																		
Low (< 16)	21.5	20.1	23.0	30.8	29.2	32.4	28.8	27.2	30.4	10.0	9.1	11.0	3.0	2.5	3.7	5.5	5.2	5.9
Moderate (16–21)	17.0	15.1	19.2	27.1	25.0	29.4	30.4	28.2	32.7	12.6	11.2	14.1	6.2	5.2	7.4	6.4	5.7	7.3
High (22–29)	11.0	8.8	13.7	20.5	17.6	23.7	36.1	32.5	39.9	16.0	13.7	18.6	8.8	7.1	10.9	7.2	6.0	8.6
Very high (≥ 30)	11.3	7.5	16.6	16.8	12.4	22.5	26.6	20.8	33.3	16.5	12.6	21.3	20.3	16.2	25.0	8.5	6.5	11.1
<i>Physical activity^b</i>																		
Sedentary	8.4	5.4	12.9	15.8	11.3	21.8	31.7	25.7	38.4	20.4	15.6	26.3	11.5	7.6	17.1	9.8	7.4	12.8
Insufficient time and sessions	15.8	14.1	17.7	26.8	24.5	29.2	33.6	31.2	36.2	11.8	10.4	13.3	5.5	4.6	6.7	6.1	5.6	6.7
Sufficient time and sessions	21.6	20.2	23.0	30.6	29.1	32.1	28.0	26.6	29.4	10.4	9.6	11.3	4.2	3.7	4.8	5.1	4.7	5.6
<i>Met fruit / vegetable guidelines^c</i>																		
Both guidelines	27.6	23.0	32.6	28.3	24.1	33.0	26.7	22.9	30.9	7.4	5.5	10.0	4.6*	2.7	7.9	5.3	4.4	6.4
Vegetable guidelines ^d	26.0	22.2	30.1	28.0	24.4	32.0	26.4	23.0	30.0	9.4	7.5	11.8	4.8	3.1	7.5	5.4	4.6	6.3
Fruit guidelines ^d	20.4	18.8	22.1	28.4	26.7	30.1	30.7	28.9	32.5	10.5	9.5	11.7	4.4	3.7	5.2	5.4	5.0	5.8
Neither	17.6	16.2	19.1	28.1	26.5	29.8	29.1	27.5	30.8	12.2	11.2	13.3	5.7	5.0	6.5	6.9	6.3	7.5

Table 4.4: Self-rated dental health, by selected socioeconomic determinants, modifiable risk factors and health status, Victoria, 2011–12 (continued)

	Excellent			Very good			Good			Fair			Poor			Not applicable (has dentures, no natural teeth)		
	95% CI			95% CI			95% CI			95% CI			95% CI			95% CI		
	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL
Smoking status																		
Current smoker	11.9	9.8	14.3	21.0	18.4	23.9	31.1	28.0	34.4	15.1	13.2	17.4	11.7	9.6	14.1	9.0	7.5	10.7
Ex-smoker	18.4	15.3	22.1	29.5	26.2	33.0	29.3	25.5	33.4	12.3	10.5	14.3	4.2	3.0	5.9	6.2	5.6	6.9
Non-smoker	20.6	19.3	22.0	29.2	27.8	30.7	29.7	28.2	31.2	10.5	9.6	11.4	4.3	3.7	5.0	5.3	4.9	5.7
Long-term risk of alcohol-related harm^e																		
Abstainer	13.7	11.7	15.9	21.6	19.3	24.1	34.1	31.3	37.0	13.9	12.2	15.7	7.9	6.4	9.6	8.3	7.5	9.1
Low risk	20.5	19.3	21.7	30.4	29.0	31.7	29.0	27.7	30.3	10.7	9.9	11.6	4.3	3.8	4.8	5.0	4.6	5.4
Risky or high risk	23.3	18.3	29.3	24.9	20.0	30.5	25.3	19.9	31.6	12.9	8.7	18.8	8.8*	5.2	14.3	4.6	3.1	6.7
Self-reported health status																		
Excellent / very good	27.8	26.1	29.5	34.5	32.9	36.2	24.4	22.8	26.0	6.2	5.4	7.1	1.9	1.5	2.3	4.9	4.4	5.3
Good	11.8	10.5	13.3	25.2	23.4	27.1	39.4	37.4	41.4	12.7	11.5	14.0	4.6	3.9	5.5	6.1	5.6	6.6
Fair / poor	8.5	6.9	10.6	16.2	13.4	19.5	25.7	22.6	29.2	24.8	22.1	27.7	15.6	13.1	18.4	8.4	7.4	9.4
Body weight status^f																		
Underweight	22.3	17.4	28.1	22.2	17.6	27.5	29.2	23.9	35.2	9.1	6.2	13.0	8.5	5.7	12.7	8.2	5.9	11.3
Normal	21.4	19.8	23.0	30.5	28.8	32.2	28.2	26.6	29.9	10.9	9.8	12.0	4.5	3.8	5.3	4.5	4.1	5.0
Overweight	17.8	15.6	20.1	28.7	26.3	31.3	31.6	28.9	34.3	11.1	9.7	12.6	4.4	3.6	5.3	6.3	5.7	6.9
Obese	14.1	12.0	16.5	25.0	21.9	28.3	33.3	29.8	37.1	13.1	11.3	15.1	6.8	5.5	8.5	7.5	6.6	8.5
Diabetes (excluding gestational)^g																		
No diabetes	19.2	18.2	20.3	28.7	27.5	29.9	29.9	28.7	31.1	11.4	10.6	12.1	4.9	4.4	5.4	5.6	5.3	6.0
Diabetes	20.3	16.6	24.5	12.1	8.8	16.4	33.4	26.0	41.8	19.1	12.6	27.7	6.0	3.7	9.7	9.0	7.6	10.6

a. Based on the Kessler 10 scale for psychological distress.

b. Based on national guidelines (DoHA 1999).

c. Based on national guidelines (NHMRC 2003a).

d. Includes those meeting both guidelines.

e. Long-term risk of alcohol-related harm refers to the increased risk of developing various cancers, cirrhosis of the liver, cognitive problems and dementia, and alcohol dependence.

f. Based on body mass index (BMI).

g. Data were age-standardised to the 2011 Victorian population using 10-year age groups (other variables were standardised using 5-year age groups). Note that the figures may not add to 100 per cent due to a proportion of 'don't know' or 'refused' responses, not reported here.

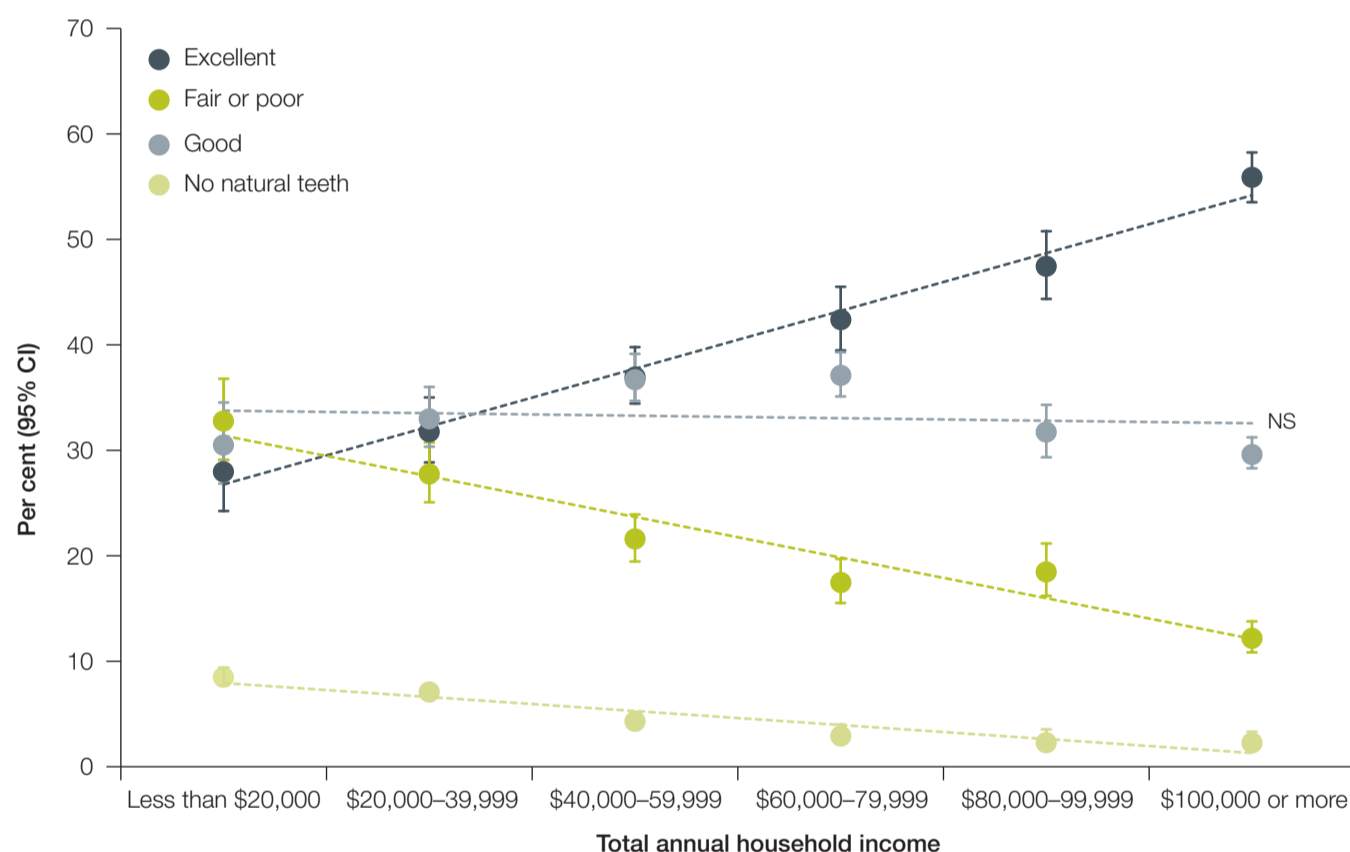
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

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

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

The relationship, if any, was investigated between SES and the age-adjusted prevalence of self-rated dental health, using total annual household income as a measure of SES (Figure 4.4). Self-rated dental health was strongly related to SES. The prevalence of excellent or very good dental health significantly increased with increasing total annual household income, in both men and women. Conversely, the prevalence of both fair or poor dental health and not having any natural teeth decreased with increasing income. There was no relationship between the prevalence of good self-rated dental health and total annual household income. In conclusion, self-rated dental health status follows a typical SES gradient, where poorer outcomes are associated with declining SES.

Figure 4.4: Self-rated dental health, by total annual household income, Victoria, 2011–12



Data were age-standardised to the 2011 Victorian population.
 95% CI = 95 per cent confidence interval.
 Ordinary least squares linear regression was used to test for statistical significance.

Visits to a dental professional

Respondents were next asked 'How long ago did you last visit a dental professional about your teeth, dentures or gums?'. Table 4.5 shows the recency of the last visit to a dental health professional, by age group and sex. Just over half (56.7 per cent) of Victorian adults had visited a dental professional within the previous 12 months, with a further 18.2 per cent one to less than two years previously. Just over 10 per cent of Victorian adults had not seen a dental professional within the previous five years.

There did not appear to be any particular age-related pattern with the exception that there were significantly higher proportions of men and women aged 65 years or over who had not been to a dental professional in the previous 10 years.

Table 4.5: Last visit to a dental professional, by age group and sex, Victoria, 2011–12

Age group (years)	Less than 12 months ago			1 year to less than 2 years ago			2 years to less than 5 years ago			5 years to less than 10 years ago			10 years ago or more			Never visited a dental professional		
	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL
Males																		
18–24	58.0	52.2	63.6	21.9	17.2	27.4	12.1	9.0	16.1	6.1	3.9	9.5	1.0*	0.4	2.4	**	**	**
25–34	46.9	41.9	52.0	19.7	15.9	24.2	17.7	14.3	21.7	6.9	4.8	9.8	7.2	4.7	10.7	1.3*	0.6	2.8
35–44	49.9	46.7	53.1	20.7	18.2	23.5	17.0	14.7	19.7	5.7	4.4	7.2	6.0	4.7	7.6	**	**	**
45–54	54.5	51.7	57.2	17.9	15.8	20.1	16.5	14.4	18.7	5.3	4.1	6.6	5.9	4.7	7.3	**	**	**
55–64	58.0	55.4	60.6	16.1	14.2	18.1	14.3	12.5	16.2	5.5	4.5	6.7	5.6	4.6	6.8	**	**	**
65+	55.7	53.6	57.8	13.8	12.4	15.3	13.0	11.7	14.5	6.7	5.7	7.8	9.9	8.8	11.1	**	**	**
Total	52.9	51.3	54.5	18.3	17.1	19.6	15.5	14.4	16.7	6.1	5.4	6.9	6.3	5.6	7.1	0.4*	0.2	0.7
Females																		
18–24	67.5	62.2	72.3	17.6	13.7	22.2	11.2	8.1	15.2	2.0*	1.0	3.9	1.5*	0.7	3.1	**	**	**
25–34	57.0	53.2	60.6	21.8	18.9	25.0	12.8	10.6	15.3	3.8	2.7	5.3	3.7	2.5	5.7	0.7*	0.3	1.6
35–44	61.1	58.7	63.4	18.4	16.6	20.2	14.0	12.4	15.7	3.1	2.4	4.1	2.8	2.1	3.7	0.3*	0.1	0.7
45–54	65.1	62.9	67.2	18.8	17.1	20.6	10.8	9.5	12.2	3.0	2.4	3.9	1.7	1.3	2.3	**	**	**
55–64	64.6	62.5	66.6	15.7	14.2	17.4	11.7	10.4	13.1	4.4	3.6	5.3	3.1	2.5	3.9	**	**	**
65+	54.4	52.7	56.2	14.9	13.7	16.3	14.5	13.3	15.8	7.0	6.1	7.9	8.2	7.4	9.1	**	**	**
Total	60.6	59.4	61.9	18.1	17.1	19.1	12.7	11.9	13.5	4.1	3.7	4.5	3.8	3.4	4.2	0.3*	0.2	0.5
Persons																		
18–24	62.6	58.7	66.4	19.8	16.7	23.3	11.7	9.4	14.4	4.1	2.8	6.0	1.3*	0.7	2.2	**	**	**
25–34	51.9	48.7	55.1	20.7	18.3	23.4	15.2	13.2	17.6	5.4	4.1	7.0	5.5	4.0	7.4	1.0*	0.6	1.8
35–44	55.6	53.6	57.6	19.5	18.0	21.2	15.5	14.0	17.0	4.4	3.6	5.3	4.3	3.6	5.2	0.3*	0.2	0.6
45–54	59.9	58.1	61.6	18.3	17.0	19.7	13.6	12.4	14.9	4.1	3.5	4.9	3.8	3.1	4.5	**	**	**
55–64	61.4	59.7	63.0	15.9	14.7	17.2	13.0	11.9	14.1	4.9	4.3	5.7	4.3	3.7	5.0	0.1*	0.0	0.2
65+	55.0	53.7	56.3	14.4	13.5	15.4	13.8	12.9	14.8	6.8	6.2	7.5	9.0	8.3	9.7	0.1*	0.0	0.2
Total	56.7	55.7	57.7	18.2	17.4	19.1	14.2	13.5	14.9	5.1	4.7	5.6	5.0	4.6	5.5	0.4	0.2	0.5

Data are age-specific estimates, except for 'Total', which represent the estimates for Victoria and have been age-standardised to the 2011 Victorian population.

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

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

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

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

Table 4.6 shows the recency of the last visit to a dental professional, by Department of Health region and sex.

There were significantly higher proportions of men and women who lived in metropolitan Victoria who had visited a dental professional within the previous 12 months compared with their rural counterparts. This was also reflected in significantly lower proportions of people who lived in all rural Department of Health regions, with the exception of Barwon-South Western Region, who had visited a dental professional within the previous 12 months compared with all Victorian adults. By contrast there were significantly higher proportions of people who lived in all rural Department of Health regions, with the exception of Barwon-South Western Region, who had not visited a dental professional within the previous 10 years compared with all Victorian adults. Taken together, these findings suggest that people who live in rural Victoria are seen less often by a dental health professional than people who live in metropolitan Victoria.

There was a significantly higher proportion of people who lived in Eastern Metropolitan Region who had visited a dental professional within the previous 12 months compared with all Victorian adults.

Table 4.6: Last visit to a dental professional, by Department of Health region and sex, Victoria, 2011–12

Region	Less than 12 months ago			1 year to less than 2 years ago			2 years to less than 5 years ago			5 years to less than 10 years ago			10 years ago or more			Never visited a dental professional		
	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL
Males																		
Eastern Metropolitan	58.6	54.8	62.3	16.7	13.8	20.0	14.6	12.1	17.5	5.4	3.9	7.5	4.0	2.9	5.5	**	**	**
North & West Metropolitan	54.5	51.9	57.1	16.6	14.8	18.6	16.2	14.3	18.4	6.0	4.8	7.4	5.7	4.6	6.9	0.7*	0.3	1.5
Southern Metropolitan	53.5	50.2	56.8	19.3	16.8	22.1	14.9	12.6	17.5	6.2	4.5	8.3	5.6	4.4	7.0	**	**	**
Metropolitan males	55.3	53.5	57.2	17.4	16.0	18.8	15.4	14.1	16.8	5.8	5.0	6.7	5.3	4.6	6.1	0.4*	0.2	0.8
Barwon-South Western	46.2	41.3	51.3	25.0	19.2	31.9	12.7	9.5	16.7	5.0	3.6	7.1	9.5*	5.2	16.4	**	**	**
Gippsland	49.5	44.8	54.2	18.5	15.3	22.3	16.2	13.0	20.0	6.9	5.0	9.4	8.1	6.3	10.4	**	**	**
Grampians	49.6	44.6	54.5	17.9	14.4	22.1	14.8	12.1	18.0	8.7	5.9	12.7	8.0	6.4	10.0	**	**	**
Hume	46.6	42.4	50.9	19.8	16.5	23.5	17.3	14.5	20.6	7.0	5.1	9.5	8.3	6.7	10.2	0.6*	0.3	1.5
Loddon Mallee	40.9	36.2	45.8	24.6	19.3	30.9	16.0	13.3	19.1	7.5	5.7	10.0	9.8	7.3	13.0	**	**	**
Rural males	46.2	43.4	48.9	21.5	18.7	24.7	15.2	13.7	16.8	6.9	5.8	8.2	9.0	6.9	11.7	0.4*	0.2	1.0
Total	52.9	51.3	54.5	18.3	17.1	19.6	15.5	14.4	16.7	6.1	5.4	6.9	6.3	5.6	7.1	0.4*	0.2	0.7

Data were age-standardised to the 2011 Victorian population.

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

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

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

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

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

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

Table 4.6: Last visit to a dental professional, by Department of Health region and sex, Victoria, 2011–12 (continued)

Region	Less than 12 months ago			1 year to less than 2 years ago			2 years to less than 5 years ago			5 years to less than 10 years ago			10 years ago or more			Never visited a dental professional		
	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL
Females																		
Eastern Metropolitan	63.9	60.3	67.2	17.9	15.3	20.8	11.2	9.0	13.8	3.7	2.8	5.0	3.0	2.1	4.3	**	**	**
North & West Metropolitan	61.0	58.9	63.0	18.2	16.6	19.9	12.9	11.6	14.3	4.0	3.3	4.9	2.7	2.1	3.4	0.5*	0.3	1.0
Southern Metropolitan	63.6	60.9	66.3	18.6	16.4	21.0	10.5	8.9	12.4	3.0	2.3	3.9	3.9	3.0	5.0	**	**	**
Metropolitan females	62.9	61.4	64.3	18.1	16.9	19.3	11.5	10.6	12.5	3.6	3.1	4.1	3.2	2.7	3.7	0.3*	0.2	0.6
Barwon-South Western	58.1	53.0	63.0	18.9	14.6	24.2	14.0	11.6	16.8	4.6	3.5	6.2	4.0	2.8	5.7	**	**	**
Gippsland	51.2	47.4	55.0	17.9	15.5	20.7	18.3	15.2	21.9	6.8	5.5	8.5	5.4	4.2	6.8	0.0	.	.
Grampians	53.9	49.8	58.0	17.2	14.6	20.3	15.5	13.1	18.4	5.2	3.7	7.2	7.5	5.3	10.4	**	**	**
Hume	53.3	50.1	56.5	19.7	17.4	22.3	16.0	13.9	18.4	5.8	4.3	7.8	4.5	3.7	5.5	0.2*	0.1	0.4
Loddon Mallee	55.3	50.8	59.7	16.8	13.7	20.4	17.1	13.7	21.3	4.8	3.6	6.3	5.6	4.5	6.9	**	**	**
Rural females	54.5	52.4	56.6	18.2	16.5	20.1	16.2	14.7	17.7	5.4	4.8	6.1	5.2	4.6	5.9	0.1*	0.0	0.1
Total	60.6	59.4	61.9	18.1	17.1	19.1	12.7	11.9	13.5	4.1	3.7	4.5	3.8	3.4	4.2	0.3*	0.2	0.5

Data were age-standardised to the 2011 Victorian population.

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

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

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

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

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

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

Table 4.6: Last visit to a dental professional, by Department of Health region and sex, Victoria, 2011–12 (continued)

Region	Less than 12 months ago			1 year to less than 2 years ago			2 years to less than 5 years ago			5 years to less than 10 years ago			10 years ago or more			Never visited a dental professional			
	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	
Persons																			
Eastern Metropolitan	61.2	58.7	63.7	17.1	15.1	19.2	12.9	11.2	14.9	4.7	3.7	6.0	3.5	2.7	4.4	**	**	**	
North & West Metropolitan	57.7	56.0	59.4	17.5	16.2	18.8	14.6	13.4	15.9	5.0	4.3	5.8	4.2	3.6	4.9	0.6*	0.4	1.0	
Southern Metropolitan	58.7	56.6	60.8	18.9	17.2	20.7	12.7	11.3	14.3	4.5	3.6	5.7	4.7	3.9	5.5	0.2*	0.1	0.4	
Metropolitan persons	59.1	57.9	60.2	17.7	16.8	18.7	13.5	12.7	14.4	4.7	4.2	5.2	4.2	3.8	4.7	0.4	0.2	0.6	
Barwon-South Western	51.9	47.7	56.2	21.9	17.5	26.9	13.4	11.2	15.8	4.8	3.9	6.1	7.1*	4.1	12.0	**	**	**	
Gippsland	50.2	47.2	53.3	18.1	16.0	20.4	17.5	15.1	20.1	7.0	5.7	8.4	6.7	5.6	8.0	**	**	**	
Grampians	51.7	48.3	55.0	17.6	15.2	20.3	15.2	13.3	17.3	7.1	5.2	9.6	7.5	6.2	9.1	**	**	**	
Hume	49.9	47.2	52.7	19.7	17.7	22.0	16.8	15.0	18.8	6.4	5.2	7.9	6.4	5.5	7.4	0.4*	0.2	0.8	
Loddon Mallee	48.0	44.3	51.8	20.8	17.2	24.9	16.7	14.2	19.6	6.1	5.0	7.5	7.4	6.1	9.0	**	**	**	
Rural persons	50.2	48.4	52.1	20.0	18.2	21.9	15.7	14.6	16.9	6.1	5.5	6.8	7.1	5.9	8.7	0.2*	0.1	0.5	
Total	56.7	55.7	57.7	18.2	17.4	19.1	14.2	13.5	14.9	5.1	4.7	5.6	5.0	4.6	5.5	0.4	0.2	0.5	

Data were age-standardised to the 2011 Victorian population.

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

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

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

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

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

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

Oral health

Table 4.7 shows the recency of the last visit to a dental professional, by LGA. There were significantly higher proportions of people who lived in the LGAs of Bayside (C), Boroondara (C), Glen Eira (C), Manningham (C), Port Phillip (C), Queenscliffe (B), Stonnington (C) and Yarra (C) who had visited a dental professional within the previous 12 months compared with all Victorian adults. All of these LGAs with the exception of two were of high SES being in the fifth IRSED quintile. Of the remaining two, one was in the fourth quintile also indicating higher SES, while the other was in the third quintile indicating neither low nor high SES.

There were significantly lower proportions of people who lived in the LGAs of Campaspe (S), Cardinia (S), Casey (C), Corangamite (S), Gannawarra (S), Greater Bendigo (C), Greater Dandenong (C), Indigo (S), Knox (C), Loddon (S), Mitchell (S), Moira (S), Moorabool (S), Northern Grampians (S), South Gippsland (S), Swan Hill (RC) and Yarriambiack (S) who had visited a dental professional within the previous 12 months compared with all Victorian adults. Ten of these 17 LGAs were of low SES (IRSED quintile 1 or 2), five were neither low nor high SES (IRSED quintile 3), and two LGAs were of high SES (IRSED quintile 4).

There were significantly higher proportions of people who lived in the LGAs of Campaspe (S), Central Goldfields (S), Corangamite (S), Gannawarra (S), Golden Plains (S), Hindmarsh (S), Indigo (S), Latrobe (C), Loddon (S), Moira (S), Moorabool (S), Swan Hill (RC), Wellington (S), West Wimmera (S) and Yarriambiack (S) who had not visited a dental professional in the previous 10 years compared with all Victorian adults. The majority of these 15 LGAs were of low SES (IRSED quintile 1 or 2), while the remaining three were neither high nor low SES (IRSED quintile 3).

There were significantly lower proportions of people who lived in the LGAs of Bayside (C), Darebin (C), Manningham (C), Monash (C), Moreland (C), Nillumbik (S) and Port Phillip (C) who had not visited a dental professional in the previous 10 years compared with all Victorian adults. Of these seven LGAs, five were of high SES (IRSED quintile 4 or 5) and two were of low SES (IRSED quintile 1 or 2). Figure 4.5 shows the proportion of people who had not visited a dental professional in the previous 10 years, by LGA.

Table 4.7: Last visit to a dental professional, by LGA, Victoria, 2011–12

LGA	Less than 12 months ago			1 year to less than 2 years ago			2 years to less than 5 years ago			5 years to less than 10 years ago			10 years ago or more			Never visited a dental professional			
	%	95% CI	LL	UL	%	95% CI	LL	UL	%	95% CI	LL	UL	%	95% CI	LL	UL	%	95% CI	
Alpine (S)	52.5	43.4	61.4	18.5	14.4	23.5	19.1	11.9	29.4	5.7	3.8	8.4	3.7	2.5	5.4	5.4	3.7	2.5	5.4
Ararat (RC)	55.5	48.0	62.8	23.8	17.6	31.3	9.4	6.9	12.6	5.6	3.7	8.4	5.0	3.4	7.4	7.4	5.0	3.4	7.4
Bairarat (C)	56.4	49.9	62.6	15.2	11.4	19.9	13.2	10.0	17.3	6.8*	3.5	12.8	7.6	5.1	11.2	11.2	7.6	5.1	11.2
Banyule (C)	61.8	55.2	68.0	21.2	15.9	27.7	10.3	7.1	14.7	2.1*	1.2	3.5	4.0*	2.3	6.7	6.7	4.0*	2.3	6.7
Bass Coast (S)	49.1	41.4	56.9	19.8	13.7	27.7	18.4	13.2	25.1	6.3*	3.5	11.2	5.6*	3.4	9.1	9.1	5.6*	3.4	9.1
Baw Baw (S)	51.9	45.4	58.5	21.0	15.9	27.2	14.2	10.3	19.3	6.5	4.2	9.8	5.1	3.3	7.8	7.8	5.1	3.3	7.8
Bayside (C)	70.5	62.9	77.1	12.7	8.7	18.2	9.6	6.2	14.7	6.0*	2.5	13.8	1.0*	0.4	2.5	2.5	1.0*	0.4	2.5
Benalla (RC)	47.9	38.3	57.6	23.1	15.2	33.4	17.3	11.2	25.9	5.8	3.6	9.3	5.3	3.4	8.1	8.1	5.3	3.4	8.1
Boroondara (C)	73.1	66.8	78.6	13.7	9.6	19.2	7.9	5.4	11.5	2.1*	0.8	5.5	3.1*	1.3	7.0	7.0	3.1*	1.3	7.0
Brimbank (C)	53.9	48.2	59.5	18.0	14.1	22.7	15.3	11.5	20.2	4.3*	2.6	7.0	5.7*	3.4	9.4	9.4	5.7*	3.4	9.4
Buloke (S)	53.0	45.4	60.5	16.7	11.6	23.4	15.1	11.2	20.1	7.4	4.6	11.7	6.8	4.4	10.3	10.3	6.8	4.4	10.3
Campaspe (S)	44.1	36.9	51.6	22.3	16.3	29.6	14.7	11.0	19.4	6.9*	4.2	11.1	10.3	7.3	14.5	14.5	10.3	7.3	14.5
Cardinia (S)	49.9	44.2	55.7	18.4	14.6	22.8	18.0	14.0	23.0	8.8	6.0	12.9	4.8	3.0	7.5	7.5	4.8	3.0	7.5
Casey (C)	48.7	42.8	54.5	22.4	17.7	27.8	15.3	11.2	20.6	5.9*	3.4	10.3	6.8	4.6	10.0	10.0	6.8	4.6	10.0
Central Goldfields (S)	55.1	48.1	61.9	14.2	10.0	19.9	16.2	12.1	21.3	6.2	3.8	10.1	7.8	5.5	11.0	11.0	7.8	5.5	11.0
Colac-Otway (S)	49.9	42.6	57.3	17.9	12.8	24.5	15.8	11.2	21.8	6.3	4.0	9.9	7.4	5.3	10.2	10.2	7.4	5.3	10.2
Corangamite (S)	40.1	32.6	48.2	20.0	14.4	27.2	21.4	16.0	28.0	8.5*	4.1	17.1	8.4	6.0	11.7	11.7	8.4	6.0	11.7
Darebin (C)	56.8	50.5	62.9	19.0	14.6	24.4	16.3	11.9	21.8	5.6	3.5	8.7	1.9*	1.1	3.3	3.3	1.9*	1.1	3.3
East Gippsland (S)	54.4	47.9	60.7	19.3	14.6	25.1	13.5	9.7	18.5	6.5	4.1	10.0	6.3	4.0	10.0	10.0	6.3	4.0	10.0
Frankston (C)	54.4	48.2	60.5	22.0	17.1	27.8	13.3	9.7	17.9	3.0*	1.8	5.1	6.9	4.4	10.6	10.6	6.9	4.4	10.6
Gannawarra (S)	42.3	34.4	50.5	19.4	12.7	28.6	20.6	14.0	29.2	8.9	5.4	14.2	8.2	6.0	11.1	11.1	8.2	6.0	11.1
Glen Eira (C)	67.5	61.1	73.3	17.6	13.1	23.2	7.4	4.6	11.7	3.5*	1.8	6.8	3.5*	1.9	6.5	6.5	3.5*	1.9	6.5
Glenelg (S)	60.0	54.4	65.3	13.6	10.6	17.3	13.9	10.3	18.5	4.9	3.4	7.2	6.4	3.9	10.2	10.2	6.4	3.9	10.2
Golden Plains (S)	55.1	47.9	62.2	14.7	11.5	18.5	17.4	11.7	25.1	3.6*	2.1	6.0	8.9	6.0	13.0	13.0	8.9	6.0	13.0

Table 4.7: Last visit to a dental professional, by LGA, Victoria, 2011–12 (continued)

LGA	Less than 12 months ago			1 year to less than 2 years ago			2 years to less than 5 years ago			5 years to less than 10 years ago			10 years ago or more			Never visited a dental professional		
	%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI		%	95% CI	
		LL	UL		LL	UL		LL	UL		LL	UL		LL	UL		LL	UL
Greater Bendigo (C)	45.3	37.3	53.5	24.0	16.0	34.3	17.2	11.7	24.6	5.3	3.3	8.6	8.1	5.3	12.1	**	**	**
Greater Dandenong (C)	48.1	42.5	53.8	23.0	18.4	28.3	16.0	12.3	20.6	5.5	3.7	8.2	6.4	4.1	9.9	**	**	**
Greater Geelong (C)	52.8	46.6	58.9	24.2	18.3	31.4	12.0	9.0	15.7	4.1	2.7	6.1	6.0*	2.3	14.6	0.0	-	-
Greater Shepparton (C)	56.2	49.1	63.1	18.1	13.4	24.0	12.2	8.5	17.0	7.4*	4.4	12.2	5.3	3.8	7.3	**	**	**
Hepburn (S)	48.8	39.7	57.8	17.2	12.1	23.7	18.9	11.8	28.8	8.5*	4.6	15.1	6.3	4.4	9.0	0.0	-	-
Hindmarsh (S)	51.7	43.9	59.4	14.5	10.2	20.3	14.7	11.4	18.9	9.5*	5.0	17.4	8.5	6.1	11.9	**	**	**
Hobsons Bay (C)	58.2	51.8	64.4	16.0	12.0	21.0	13.8	9.8	19.1	4.5*	2.6	7.9	6.8*	3.9	11.4	**	**	**
Horsham (RC)	46.0	35.8	56.6	23.9	15.1	35.8	17.2	13.6	21.5	5.2	3.5	7.8	6.4	4.2	9.7	**	**	**
Hume (C)	52.8	46.8	58.8	18.4	14.5	22.9	15.6	11.6	20.7	7.0	4.6	10.3	4.8	3.1	7.4	**	**	**
Indigo (S)	47.1	40.1	54.3	16.9	12.7	22.1	21.2	15.6	28.2	4.9*	2.8	8.3	9.7	6.0	15.2	0.0	-	-
Kingston (C)	62.4	56.0	68.4	15.9	11.7	21.2	12.6	8.7	17.8	3.8*	1.9	7.6	4.6*	2.7	7.7	0.0	-	-
Knox (C)	49.8	43.9	55.7	20.3	15.7	25.8	16.1	12.0	21.3	7.6	4.9	11.8	5.0	3.3	7.5	**	**	**
Latrobe (C)	51.8	45.8	57.8	15.8	12.1	20.3	17.3	13.0	22.7	7.0	4.5	10.6	7.9	5.7	10.8	0.0	-	-
Loddon (S)	45.7	37.4	54.2	12.7	8.9	17.7	25.4	17.4	35.4	5.8*	3.5	9.4	10.1	7.2	14.0	0.0	-	-
Macedon Ranges (S)	54.9	48.1	61.5	17.6	12.9	23.6	16.8	12.0	23.1	6.1*	3.6	10.2	4.3	2.7	6.8	0.0	-	-
Manningham (C)	68.4	61.7	74.4	14.2	9.8	20.1	13.0	9.0	18.4	2.2*	0.9	5.2	1.8*	0.8	4.2	0.0	-	-
Mansfield (S)	48.7	40.8	56.7	17.1	12.3	23.3	20.5	13.9	29.1	5.7*	2.3	13.2	7.8*	4.5	13.2	**	**	**
Maribyrnong (C)	62.3	55.9	68.3	12.1	8.8	16.4	14.2	10.8	18.3	6.6*	3.6	12.1	3.5*	2.0	5.9	**	**	**
Maroondah (C)	59.6	53.0	66.0	15.0	11.1	20.0	16.3	11.7	22.3	3.9*	2.4	6.5	4.6*	2.8	7.6	0.0	-	-
Melbourne (C)	61.8	55.7	67.6	15.2	11.1	20.4	15.4	11.3	20.7	4.5*	2.5	7.9	2.3*	1.1	4.6	**	**	**
Melton (S)	55.2	49.7	60.6	16.3	13.0	20.4	15.7	12.2	20.1	7.0	4.3	11.0	4.6*	2.7	7.5	**	**	**

Data were age-standardised to the 2011 Victorian population, using 10-year age groups.

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

LGA= Local government area; B = Borough; C = City; S = Shire; RC = Rural City.

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

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

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

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

Table 4.7: Last visit to a dental professional, by LGA, Victoria, 2011–12 (continued)

LGA	Less than 12 months ago			1 year to less than 2 years ago			2 years to less than 5 years ago			5 years to less than 10 years ago			10 years ago or more			Never visited a dental professional		
	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL
Mildura (RC)	52.2	45.2	59.1	15.6	11.9	20.1	17.9	13.6	23.2	7.6*	3.7	15.1	5.3	3.6	7.7	0.0	-	-
Mitchell (S)	45.7	39.2	52.4	22.6	16.8	29.7	19.3	14.8	24.6	6.0*	3.7	9.8	5.9	4.0	8.7	**	**	**
Moira (S)	44.2	36.5	52.1	20.7	15.0	27.8	16.5	11.8	22.5	7.6*	4.1	13.9	9.4*	5.6	15.2	**	**	**
Monash (C)	61.7	55.1	67.8	20.4	15.2	26.7	12.8	8.7	18.5	2.5*	1.4	4.5	2.0*	1.0	4.0	0.0	-	-
Moonee Valley (C)	63.1	56.7	69.2	17.4	13.2	22.7	13.5	8.9	19.9	2.6*	1.5	4.6	3.1*	1.8	5.3	0.0	-	-
Moorabool (S)	48.4	42.0	54.9	18.8	13.9	24.8	16.2	11.8	21.8	6.2	4.2	9.2	9.0	6.1	13.0	**	**	**
Moreland (C)	64.6	58.4	70.2	19.3	14.6	25.1	11.5	8.6	15.3	2.0*	1.0	3.9	2.2*	1.1	4.4	**	**	**
Mornington Peninsula (S)	55.9	48.8	62.8	19.7	14.3	26.5	15.7	10.8	22.1	3.4*	1.7	7.0	5.2*	2.6	10.0	0.0	-	-
Mount Alexander (S)	52.0	43.7	60.3	25.7	18.5	34.5	10.8	8.0	14.5	5.6*	2.6	11.5	5.5	3.4	8.8	0.0	-	-
Moyne (S)	48.9	40.9	57.0	18.3	13.4	24.7	18.8	13.6	25.5	6.5*	3.8	10.8	7.4	4.7	11.7	0.0	-	-
Murrindindi (S)	51.2	42.7	59.7	22.1	15.2	30.9	16.9	11.4	24.5	5.0*	2.4	10.0	4.0	2.7	6.0	**	**	**
Nilumbik (S)	57.8	50.7	64.5	23.9	18.1	30.8	11.7	7.5	17.7	4.6*	2.1	10.1	1.9*	0.9	4.0	0.0	-	-
Northern Grampians (S)	38.0	31.4	45.1	23.4	15.7	33.5	20.0	14.8	26.5	11.4*	6.6	18.8	6.2	4.4	8.8	**	**	**
Port Phillip (C)	69.2	61.7	75.9	14.9	9.9	21.8	9.0	5.6	14.2	4.4*	1.9	10.0	2.3*	1.3	4.1	**	**	**
Pyrenees (S)	52.1	44.6	59.6	14.7	10.1	20.9	18.3	13.3	24.8	7.8	5.0	12.0	6.7	4.4	10.1	**	**	**
Queenscliffe (B)	69.9	60.0	78.2	7.2	4.7	10.9	9.1*	5.1	15.9	10.6*	4.9	21.3	3.2*	1.5	6.5	0.0	-	-
South Gippsland (S)	42.5	34.3	51.1	21.4	15.7	28.5	20.2	13.2	29.7	9.1	6.0	13.5	6.5	4.1	10.1	**	**	**
Southern Grampians (S)	64.5	57.4	70.9	13.8	9.3	20.0	10.0	6.9	14.4	4.2	2.7	6.5	6.4	4.8	8.4	0.0	-	-
Stonnington (C)	74.5	68.3	79.8	14.3	10.3	19.5	6.4*	3.5	11.6	2.3*	1.0	5.3	2.3*	1.1	5.1	0.0	-	-
Strathbogie (S)	56.0	45.6	66.0	20.4	12.8	31.0	11.9	8.1	17.2	5.2*	2.9	9.3	6.2	4.0	9.6	0.0	-	-
Surf Coast (S)	58.1	50.1	65.8	13.9	9.9	19.1	18.2	12.6	25.6	4.3*	2.2	8.2	5.2	3.4	7.8	0.0	-	-
Swan Hill (RC)	46.5	39.6	53.5	18.4	13.4	24.7	16.2	12.0	21.5	6.7*	4.0	10.9	9.1	6.1	13.2	**	**	**
Towong (S)	48.6	40.7	56.6	19.2	14.9	24.4	16.7	10.4	25.7	7.9*	4.2	14.2	6.9	4.8	9.9	**	**	**
Wangaratta (RC)	53.0	46.0	59.9	15.3	11.1	20.8	18.8	14.0	24.7	5.5*	3.2	9.3	7.3	4.6	11.4	0.0	-	-

Table 4.7: Last visit to a dental professional, by LGA, Victoria, 2011–12 (continued)

LGA	Less than 12 months ago			1 year to less than 2 years ago			2 years to less than 5 years ago			5 years to less than 10 years ago			10 years ago or more			Never visited a dental professional		
	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL	%	LL	UL
Warrnambool (C)	53.0	46.9	59.0	17.7	13.5	22.7	13.6	10.6	17.3	7.3	4.6	11.2	8.4	5.4	13.1	0.0	-	-
Wellington (S)	49.9	41.9	58.0	15.7	11.7	20.8	18.9	12.3	28.0	6.4*	3.7	11.0	7.7	5.5	10.5	0.0	-	-
West Wimmera (S)	50.6	44.0	57.3	18.4	13.3	24.9	12.2	9.1	16.2	9.3	6.0	14.2	8.4	5.6	12.5	0.0	-	-
Whitehorse (C)	63.0	56.5	69.1	15.5	11.4	20.7	10.5	7.4	14.8	5.6*	3.2	9.6	5.0*	2.9	8.6	**	**	**
Whittlesea (C)	51.9	46.1	57.6	17.1	13.2	21.8	20.5	16.1	25.9	5.7*	3.2	10.0	4.0	2.5	6.4	**	**	**
Wodonga (RC)	51.0	44.3	57.7	20.7	15.3	27.4	18.1	13.2	24.2	4.1	2.6	6.4	5.1*	3.1	8.3	**	**	**
Wyndham (C)	52.2	46.7	57.7	15.7	12.3	19.8	16.8	13.1	21.2	5.6	3.7	8.5	7.2	4.5	11.5	**	**	**
Yarra (C)	71.7	64.4	78.0	13.3	8.6	20.0	7.2	5.0	10.2	4.7*	2.2	9.5	2.5*	1.1	5.8	0.0	-	-
Yarra Ranges (S)	58.4	51.7	64.8	16.3	12.0	21.7	13.2	9.6	17.9	7.8	4.8	12.4	3.8*	2.2	6.5	0.0	-	-
Yarriambiack (S)	47.5	39.6	55.6	18.9	12.8	27.0	16.6	12.1	22.3	8.0	5.6	11.4	7.9	5.8	10.8	0.0	-	-
Victoria	57.1	56.1	58.1	18.1	17.3	19.0	14.0	13.3	14.7	5.1	4.6	5.5	4.9	4.5	5.4	0.3	0.2	0.5

Data were age-standardised to the 2011 Victorian population, using 10-year age groups.

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

LGA= Local government area; B = Borough; C = City; S = Shire; RC = Rural City.

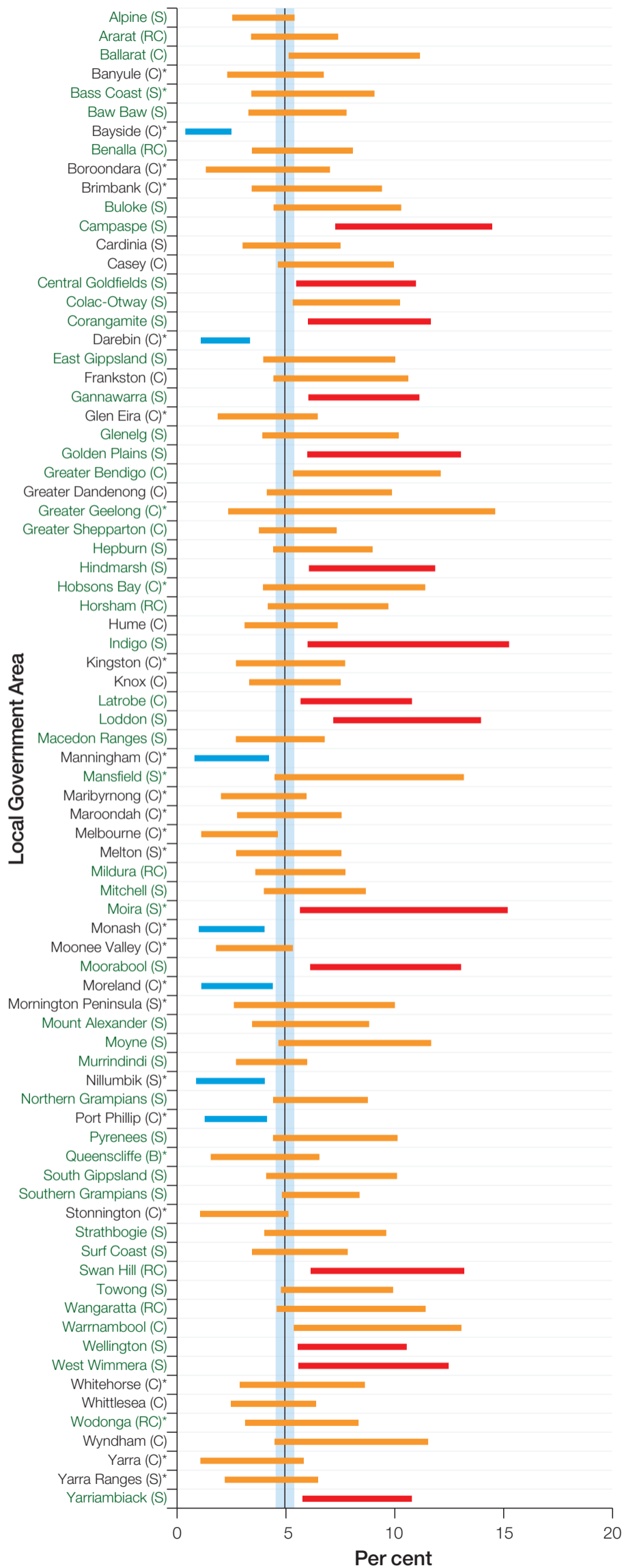
Metropolitan and rural LGAs are identified by colour as follows: metropolitan/rural.

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

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

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

Figure 4.5: Proportion of people who had not visited a dental professional in the previous 10 years, by LGA, Victoria, 2011–12



Data were age-standardised to the 2011 Victorian population using 10 year age groups.

The horizontal bars represent the 95% CI around the estimate for each LGA.

The vertical line on the graph is the Victorian estimate and the vertical column is the 95% CI around the estimate for Victoria.

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

95% CI = 95 per cent confidence interval; LGA= local government area; B = Borough; C = City; S = Shire; RC = Rural City.

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

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

Respondents were next asked 'During the last 12 months, have you avoided or delayed visiting a dental professional because of the cost?'. Table 4.8 shows the proportion of people who avoided or delayed visiting a dental professional due to cost, by age group and sex.

A substantial proportion (30.1 per cent) of Victorian adults had avoided or delayed visiting a dental professional due to the cost. This was significantly higher for women (33.3 per cent) compared with their male counterparts (26.7 per cent).

There were significantly higher proportions of women aged 25–54 years and men aged 25–44 years who had avoided or delayed visiting a dental professional due to the cost compared with all Victorian men and women respectively.

Table 4.8: Avoided or delayed visiting a dental professional due to cost, by age group and sex, Victoria, 2011–12

Age group (years)	%	Yes 95% CI		%	No 95% CI	
		LL	UL		LL	UL
Males						
18–24	19.2	15.0	24.3	80.5	75.5	84.8
25–34	36.1	31.5	41.0	63.8	58.9	68.4
35–44	33.5	30.5	36.6	66.3	63.2	69.3
45–54	30.3	27.8	32.9	69.6	67.0	72.1
55–64	21.4	19.3	23.6	78.3	76.1	80.4
65+	15.7	14.2	17.4	83.9	82.2	85.4
Total	26.7	25.4	28.2	73.0	71.6	74.4
Females						
18–24	28.3	23.8	33.2	71.5	66.5	76.0
25–34	40.8	37.2	44.5	58.8	55.1	62.5
35–44	39.5	37.2	41.9	60.2	57.9	62.6
45–54	37.9	35.8	40.1	61.8	59.6	64.0
55–64	30.9	28.9	32.9	68.8	66.8	70.8
65+	20.1	18.7	21.6	79.4	77.9	80.8
Total	33.3	32.1	34.5	66.4	65.2	67.6
Persons						
18–24	23.7	20.5	27.1	76.1	72.6	79.3
25–34	38.5	35.5	41.5	61.3	58.3	64.3
35–44	36.6	34.7	38.5	63.2	61.3	65.1
45–54	34.2	32.5	35.9	65.6	63.9	67.3
55–64	26.2	24.8	27.7	73.5	71.9	74.9
65+	18.1	17.1	19.2	81.4	80.3	82.5
Total	30.1	29.2	31.0	69.6	68.7	70.5

Data are age-specific estimates, except for 'Total', which represent the estimates for Victoria and have been age-standardised to the 2011 Victorian population.

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

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

Table 4.9 shows the proportion of people who had avoided or delayed visiting a dental professional due to cost, by Department of Health region and sex. There were no significant differences between men or women who lived in rural compared with metropolitan Victoria. The only significant regional differences observed were in Gippsland Region for women and Eastern Metropolitan Region for people. There was a significantly higher proportion of women who lived in Gippsland Region who had avoided or delayed visiting a dental professional due to the cost compared with all Victorian women. By contrast there was a significantly lower proportion of people who lived in Eastern Metropolitan Region who had avoided or delayed visiting a dental professional due to the cost compared with all Victorian adults.

Table 4.9: Avoided or delayed visiting a dental professional because of the cost, by Department of Health region and sex, Victoria, 2011–12

Region	%	Yes 95% CI		%	No 95% CI		
		LL	UL		LL	UL	
Males							
Eastern Metropolitan	22.7	19.7	26.0	76.9	73.6	80.0	
North & West Metropolitan	28.0	25.7	30.4	71.7	69.3	74.0	
Southern Metropolitan	27.6	24.7	30.7	72.2	69.1	75.2	
Metropolitan males	26.5	24.9	28.1	73.3	71.6	74.8	
Barwon-South Western	28.5	21.7	36.3	71.5	63.7	78.3	
Gippsland	27.3	23.2	31.8	72.7	68.2	76.8	
Grampians	25.1	21.5	29.1	74.1	70.1	77.7	
Hume	26.1	22.7	29.8	73.8	70.0	77.2	
Loddon Mallee	31.2	26.5	36.3	68.6	63.5	73.3	
Rural males	27.7	24.9	30.7	72.1	69.1	74.9	
Total	26.7	25.4	28.2	73.0	71.6	74.4	
Females							
Eastern Metropolitan	30.7	27.5	34.1	68.9	65.5	72.1	
North & West Metropolitan	34.2	32.2	36.2	65.3	63.2	67.2	
Southern Metropolitan	33.3	30.8	36.0	66.5	63.8	69.1	
Metropolitan females	33.0	31.6	34.4	66.6	65.2	68.1	
Barwon-South Western	30.6	25.9	35.7	69.4	64.3	74.1	
Gippsland	39.7	36.0	43.5	60.1	56.3	63.8	
Grampians	31.7	27.9	35.7	68.2	64.2	72.0	
Hume	36.6	33.5	39.7	63.3	60.1	66.4	
Loddon Mallee	35.8	32.4	39.5	64.0	60.3	67.5	
Rural females	34.6	32.6	36.5	65.3	63.4	67.2	
Total	33.3	32.1	34.5	66.4	65.2	67.6	
Persons							
Eastern Metropolitan	26.8	24.6	29.1	72.8	70.5	75.0	
North & West Metropolitan	31.2	29.6	32.7	68.4	66.8	70.0	
Southern Metropolitan	30.5	28.6	32.6	69.3	67.3	71.3	
Metropolitan persons	29.8	28.7	30.9	69.9	68.8	70.9	
Barwon-South Western	29.0	24.7	33.9	71.0	66.1	75.3	
Gippsland	33.6	30.7	36.6	66.3	63.3	69.2	
Grampians	28.1	25.5	30.9	71.5	68.7	74.1	
Hume	31.4	29.0	33.9	68.5	66.0	70.9	
Loddon Mallee	34.2	30.8	37.7	65.6	62.1	69.0	
Rural persons	31.2	29.4	33.0	68.7	66.8	70.4	
Total	30.1	29.2	31.0	69.6	68.7	70.5	

Data were age-standardised to the 2011 Victorian population.

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

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

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

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

Oral health

Table 4.10 and Figure 4.6 show the proportion of people who had avoided or delayed visiting a dental professional due to cost, by LGA. Significantly higher proportions of people who lived in the LGAs of Casey (C), Macedon Ranges (S), Melton (S), Moreland (C) and Mount Alexander (S) had avoided or delayed visiting a dental professional due to cost compared with all Victorian adults. There was no notable pattern in the LGAs by IRSED quintile.

By contrast significantly lower proportions of people who lived in the LGAs of Banyule (C), Boroondara (C), Glen Eira (C), Glenelg (S), Hindmarsh (S), Horsham (RC), Manningham (C), Melbourne (C), Southern Grampians (S), Stonnington (C), Warrnambool (C) and West Wimmera (S) had avoided or delayed visiting a dental professional due to cost compared with all Victorian adults. There was no notable pattern in the LGAs by IRSED quintile.

Table 4.10: Avoided or delayed visiting a dental professional due to cost, by LGA, Victoria, 2011–12

LGA	%	Yes 95% CI		%	No 95% CI	
		LL	UL		LL	UL
Alpine (S)	34.0	25.1	44.2	65.9	55.7	74.8
Ararat (RC)	24.3	19.0	30.5	75.5	69.2	80.8
Ballarat (C)	27.0	22.3	32.2	72.8	67.5	77.5
Banyule (C)	20.8	15.8	26.8	79.1	73.1	84.1
Bass Coast (S)	33.1	26.1	40.9	66.8	59.0	73.9
Baw Baw (S)	35.5	29.6	41.9	64.5	58.1	70.4
Bayside (C)	23.8	17.8	31.1	76.2	68.9	82.2
Benalla (RC)	33.9	25.0	44.2	65.7	55.5	74.7
Boroondara (C)	18.4	14.2	23.4	81.6	76.6	85.8
Brimbank (C)	31.6	26.7	36.9	67.6	62.2	72.5
Buloke (S)	26.7	21.1	33.3	72.9	66.3	78.5
Campaspe (S)	36.2	29.3	43.7	63.7	56.1	70.6
Cardinia (S)	33.1	28.2	38.4	66.9	61.6	71.8
Casey (C)	36.7	31.1	42.7	63.3	57.3	68.9
Central Goldfields (S)	32.8	25.6	40.9	66.9	58.8	74.1
Colac-Otway (S)	31.1	24.8	38.3	68.9	61.7	75.2
Corangamite (S)	27.9	21.0	36.0	72.1	64.0	79.0
Darebin (C)	33.3	27.7	39.4	66.3	60.3	71.9
East Gippsland (S)	33.9	27.4	41.0	66.1	59.0	72.6
Frankston (C)	36.4	30.4	42.8	63.5	57.1	69.5
Gannawarra (S)	35.0	27.6	43.3	65.0	56.7	72.4
Glen Eira (C)	21.1	16.3	27.0	78.4	72.6	83.3
Glenelg (S)	18.1	14.7	22.2	81.9	77.8	85.3
Golden Plains (S)	34.3	27.2	42.2	65.7	57.8	72.8
Greater Bendigo (C)	31.1	23.4	40.0	68.2	59.4	76.0
Greater Dandenong (C)	33.7	28.5	39.4	66.2	60.5	71.4
Greater Geelong (C)	33.0	26.2	40.7	67.0	59.3	73.8
Greater Shepparton (C)	24.4	19.1	30.6	75.5	69.4	80.8
Hepburn (S)	37.9	29.0	47.7	57.4	47.6	66.6
Hindmarsh (S)	19.1	13.6	26.3	80.9	73.7	86.4
Hobsons Bay (C)	29.8	24.3	35.9	69.8	63.7	75.3
Horsham (RC)	19.6	15.0	25.3	80.4	74.7	85.0
Hume (C)	36.0	30.7	41.7	62.3	56.6	67.8
Indigo (S)	26.5	20.8	33.1	73.5	66.9	79.2
Kingston (C)	30.1	24.2	36.7	69.9	63.3	75.8
Knox (C)	35.4	29.8	41.4	64.4	58.4	70.0
Latrobe (C)	32.0	26.4	38.3	67.9	61.7	73.5
Loddon (S)	27.5	20.7	35.7	72.3	64.2	79.2
Macedon Ranges (S)	38.0	31.6	44.9	62.0	55.1	68.4
Manningham (C)	22.0	16.9	28.0	76.7	70.4	81.9
Mansfield (S)	36.2	28.7	44.4	63.6	55.4	71.1
Maribyrnong (C)	33.0	27.0	39.7	66.7	60.1	72.8

Table 4.10: Avoided or delayed visiting a dental professional due to cost, by LGA, Victoria, 2011–12 (continued)

LGA	%	Yes 95% CI		%	No 95% CI	
		LL	UL		LL	UL
Maroondah (C)	31.2	25.3	37.9	68.8	62.1	74.7
Melbourne (C)	22.1	17.6	27.3	77.7	72.4	82.2
Melton (S)	40.3	34.9	46.0	59.7	54.0	65.1
Mildura (RC)	34.0	27.9	40.6	66.0	59.4	72.1
Mitchell (S)	33.9	28.2	40.2	65.9	59.6	71.7
Moira (S)	33.7	26.4	41.8	65.9	57.8	73.2
Monash (C)	23.9	18.9	29.7	75.5	69.7	80.5
Moonee Valley (C)	24.1	18.6	30.8	75.1	68.4	80.8
Moorabool (S)	34.3	28.4	40.7	65.4	59.0	71.3
Moreland (C)	37.0	31.0	43.3	63.0	56.7	69.0
Mornington Peninsula (S)	32.9	26.5	40.0	66.5	59.4	72.9
Mount Alexander (S)	42.1	33.8	50.8	57.9	49.2	66.2
Moyne (S)	23.3	17.6	30.3	76.7	69.7	82.4
Murrindindi (S)	29.6	22.1	38.4	70.3	61.6	77.8
Nillumbik (S)	27.6	21.5	34.6	71.9	64.8	78.1
Northern Grampians (S)	22.6	16.9	29.6	77.3	70.3	83.1
Port Phillip (C)	24.3	18.6	31.0	75.7	69.0	81.4
Pyrenees (S)	25.2	20.3	30.8	74.8	69.2	79.7
Queenscliffe (B)	22.3	14.5	32.7	77.7	67.3	85.5
South Gippsland (S)	33.9	25.9	42.9	66.1	57.1	74.1
Southern Grampians (S)	18.7	12.9	26.4	81.2	73.6	87.0
Stonnington (C)	21.6	16.4	27.8	78.4	72.2	83.6
Strathbogie (S)	26.0	20.0	33.0	74.0	67.0	80.0
Surf Coast (S)	27.7	21.1	35.3	72.3	64.6	78.9
Swan Hill (RC)	34.6	28.1	41.7	65.4	58.3	71.9
Towong (S)	24.2	19.5	29.5	75.8	70.5	80.5
Wangaratta (RC)	32.2	26.2	39.0	67.8	61.0	73.8
Warrnambool (C)	17.1	13.2	21.9	82.9	78.1	86.8
Wellington (S)	32.6	25.1	41.1	67.0	58.5	74.5
West Wimmera (S)	22.4	17.6	28.1	77.1	71.4	82.0
Whitehorse (C)	25.1	19.8	31.3	74.7	68.5	80.0
Whittlesea (C)	34.7	29.7	40.1	64.9	59.6	69.9
Wodonga (RC)	34.8	28.4	41.9	65.0	58.0	71.4
Wyndham (C)	33.2	28.3	38.5	66.1	60.8	71.0
Yarra (C)	23.6	17.8	30.7	76.4	69.3	82.2
Yarra Ranges (S)	30.3	24.6	36.6	69.3	63.0	75.0
Yarriambiack (S)	23.1	17.5	29.9	76.3	69.5	81.9
Victoria	29.8	28.9	30.7	70.0	69.0	70.9

Data were age-standardised to the 2011 Victorian population, using 10-year age groups.

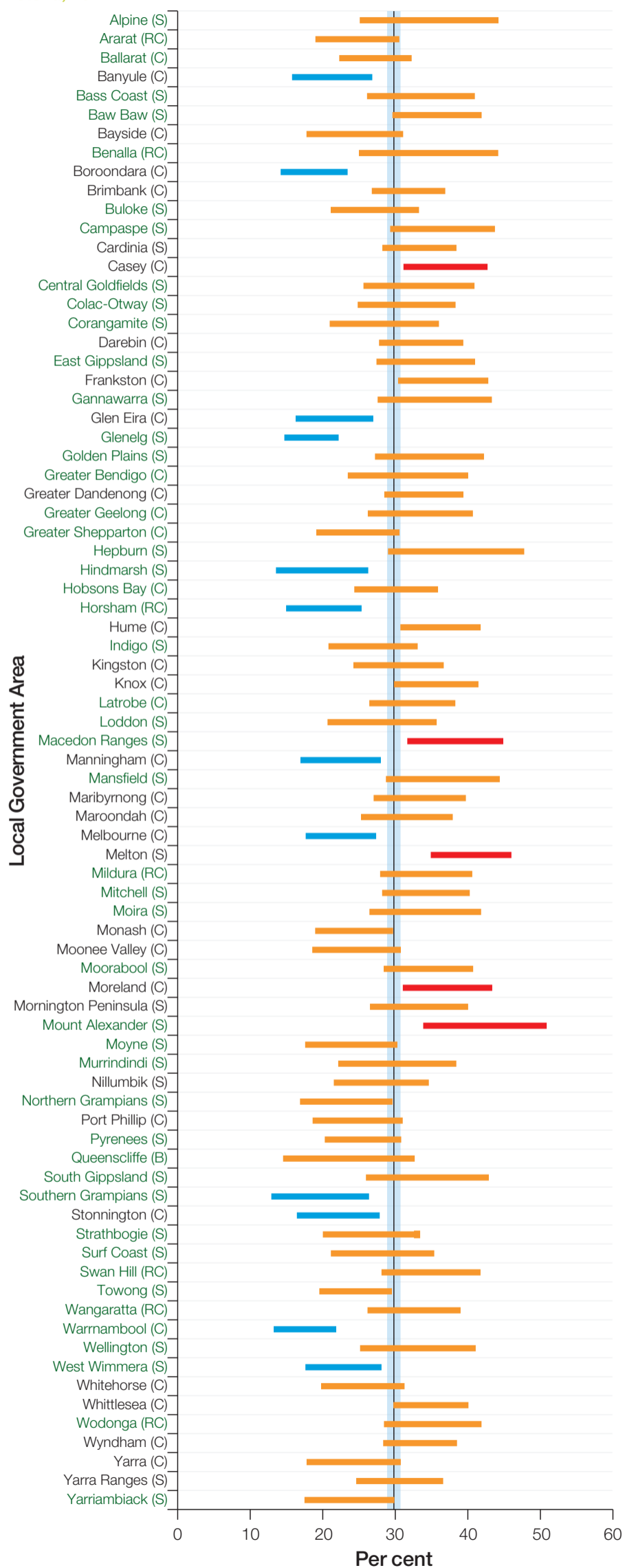
LL/UL 95% CI = lower/upper limit of 95 per cent confidence interval.

LGA= local government area; B = Borough; C = City; S = Shire; RC = Rural City.

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

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

Figure 4.6: Proportion of the adult population who avoided or delayed visiting a dental professional due to cost, by LGA, Victoria, 2011–12



Data were age-standardised to the 2011 Victorian population using 10 year age groups.

The horizontal bars represent the 95% CI around the estimate for each LGA.

The vertical line on the graph is the Victorian estimate and the vertical column is the 95% CI around the estimate for Victoria.

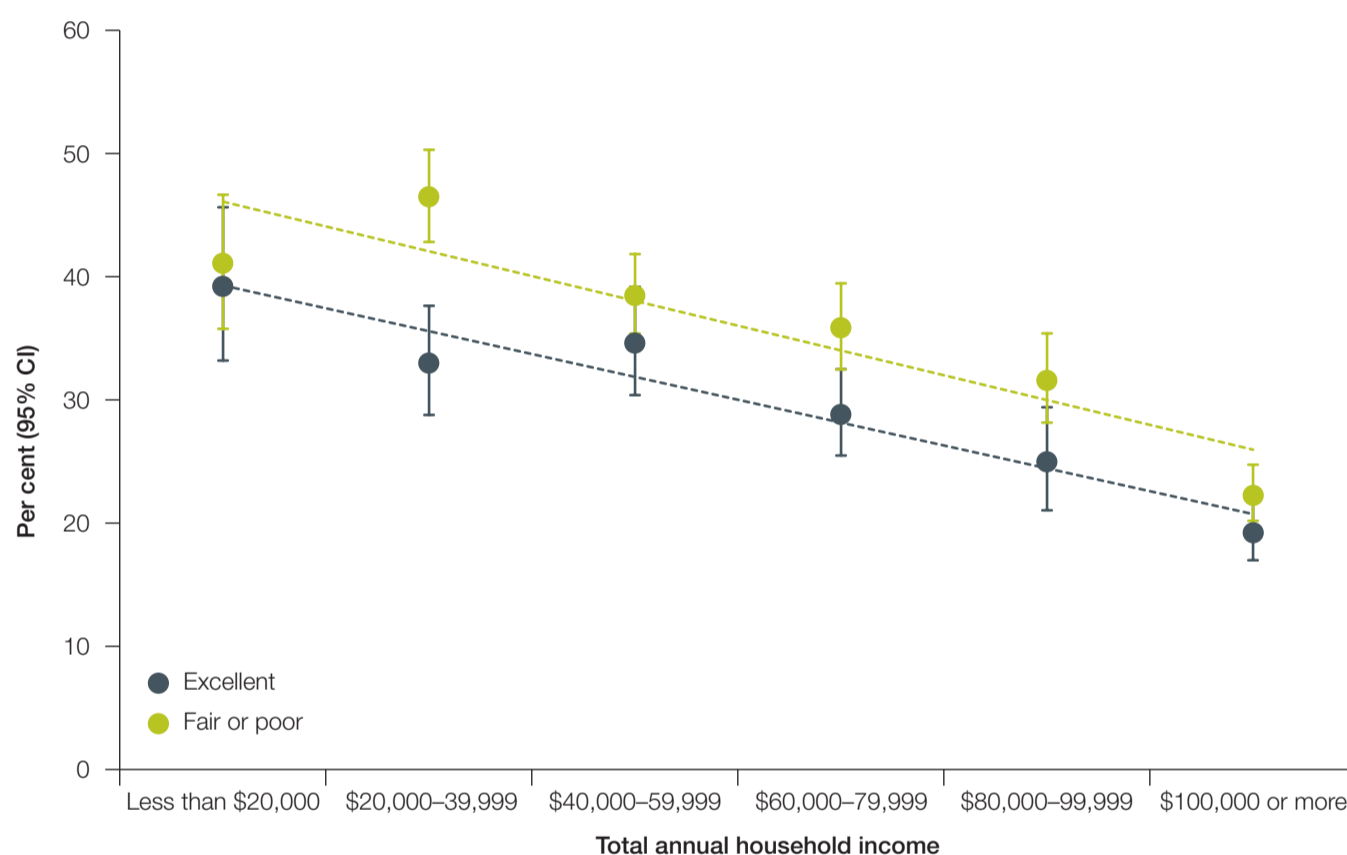
Metropolitan and rural LGAs are identified by colour as follows: metropolitan/rural.

95% CI = 95 per cent confidence interval; LGA= local government area; B = Borough; C = City; S = Shire; RC = Rural City.

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

We investigated the relationship, if any, between SES and the age-adjusted prevalence of the proportion of people who avoided or delayed visiting a dental professional due to the cost, using total annual household income as a measure of SES (Figure 4.7). We found that the proportion of people who avoided or delayed visiting a dental professional due to the cost significantly decreased with increasing total annual household income, in both men and women. This suggests that those with lower household incomes may have been avoiding or delaying seeking dental care due to lack of affordability.

Figure 4.7: Proportion of people who avoided or delayed visiting a dental professional due to cost, by total annual household income and sex, Victoria, 2011–12



Data were age-standardised to the 2011 Victorian population.

95% CI = 95 per cent confidence interval.

Ordinary least squares linear regression was used to test for statistical significance.

Discussion

Interpretation of the findings

The term 'oral' will be used in this section as it better captures all the conditions of the mouth, not just the teeth (dental). While most Victorians reported that they enjoyed good oral health (approximately 75 per cent), attended the dentist at least every two years (74 per cent) and did not avoid or delay a dental visit due to cost (70 per cent), there was a significant minority who had poor oral health and did not make regular dental visits. One-quarter (25 per cent) of people reported that their oral health was fair, poor or that they had no natural teeth.

Table 4.11 summarises the factors associated with poorer oral health in Victoria. The key factors are gender, age, SES and geographic location. Men were more likely to report fair or poor self-rated oral health and less likely to have visited a

dentist in the preceding 12 months compared with their female counterparts. Almost a third of adult Victorians reported that they had avoided or delayed a dental visit because of the cost, significantly higher in women than men. Older people reported poorer oral health; those aged 65 years or over were more than twice as likely to have reported fair or poor dental health compared with those aged 18–24 years.

There was a strong socioeconomic gradient in self-rated oral health where the proportion reporting fair or poor oral health significantly declined with increasing total annual household income. Fair or poor self-rated oral health was also associated with lower educational levels, high or very high psychological distress levels, physical inactivity, not meeting fruit and vegetable consumption guidelines, smoking and fair or poor self-reported

general health status. In women, fair or poor self-rated oral health was also associated with obesity and diabetes, while in men it was associated with not being in the labour force, long-term risk of alcohol-related harm and underweight. There were also strong socioeconomic gradients for recency of dental visit and cost being a barrier to dental care.

Rural and metropolitan residents had similar levels of self-rated oral health; however, more rural residents reported having no natural teeth. Considerable variations were found at the LGA level, which generally was associated with the SES of residents as measured by the IRSED quintile indicator of the LGA. For example Hindmarsh, which is in the lowest IRSED quintile, had three times the proportion of residents with poorer oral health than Boroondara, which is in the highest IRSED quintile (42 per cent versus 13 per cent).

There was a strong gender bias in the self-rated oral health status of people who said that they had diabetes. Approximately one-third (34 per cent) of females with diabetes rated their oral health as poor compared with approximately one-fifth (22 per cent) of those without diabetes. There was no appreciable difference in the self-rated oral health of men with (27 per cent) or without (26 per cent) diabetes. As people with diabetes have a greater risk of gum disease, it may be that men who have been diagnosed by a doctor with diabetes, are not aware of their gum disease.

Table 4.11: Summary of factors associated with poorer oral health

Factors	Fair or poor self-rated oral health	Less recent dental visit	Cost as a barrier to accessing dental care
Gender	Men	Men	Women
Age	Older people	Older people	Middle aged people
Socioeconomic status (SES)	Low SES	Low SES	Low SES
Residence – metropolitan or rural	*	*	*
Residence – by LGA	Low SES	Low SES	Low SES

* not significantly different

Other sources of data

Table 4.12 summarises the comparison of survey findings with other data sources. The National Survey of Adult Oral Health (NSAOH) 2004–06 includes similar questions to the Victorian Population Health Survey (AIHW Dental Statistics and Research Unit 2008; Slade 2007). However, it is not possible to compare these statistics with the Victorian Population Health Survey findings for all age groups. The Victorian Population Health Survey interviewed adults aged 18 or over, while the NSAOH surveyed a nationally representative sample of Australians aged 15 or over. The data was reported by the following age groups: 15–34, 35–54 and 55 years or over. Victoria participated in the NSAOH that was conducted from 2004 to 2006. It is anticipated this will be repeated, as recommended by the National oral health plan, in the period 2014–2016. The NSAOH reported that Victorians were equally as likely as other Australians (aged 15 years or over) to report that their oral health was fair or poor (13.9 per cent and 16.4 per cent, respectively). The difference was not statistically significant. However, both NSAOH estimates were significantly lower than the estimate reported in the 2011–12 Victorian Population Health Survey. Whether this is largely due to methodological differences between the two surveys and/or reflects a decline in oral health since 2006 cannot be determined.

Over the past 25 years there has been a general increase in the proportion of adults visiting dental professionals within the previous 12 months of the survey. In the NSAOH the time since the last dental visit was also assessed in the interview by asking ‘How long ago did you last see a dental professional about your teeth, dentures or gums?’ A little less than 60 per cent (59.7 per cent versus 59.4 per cent) of Victorians and other Australians had visited a dental professional within the preceding 12 months. The NSAOH noted that being dentate, insured, residing in the metropolitan region, living in high SES areas and being ineligible for public dental care were all associated with a recent dental visit. Cost as a barrier was also assessed in the NSAOH, with almost a third of Victorians (29.2 per cent) as likely as other Australians (30.0 per cent) aged 15 years or over to have avoided or delayed a dental visit because of cost. The NSAOH also observed that women were more likely than men to report cost as a barrier in the same direction as reported in the 2011–12 Victorian Population Health Survey.

The Australian Research Centre for Population Oral Health (ARCPOH) conducted the National Dental Telephone Interview Survey in 2010, including questions about insurance and use of dental services (AIHW 2011). ARCPOH reported that approximately two-thirds (64 per cent) of Australians aged five

or over had visited a dental professional within the preceding 12 months. This number was higher among females (67.4 per cent) than males (60.6 per cent), while 28.2 per cent of Australians reported cost as a barrier for avoiding or delaying a dental visit. They also observed a significant relationship with SES, which is similar to the 2011–12 Victorian Population Health Survey.

Table 4.12: Comparison with other data sources

Data sources	Fair or poor self-rated oral health		Visited a dentist within previous 12 months		Cost as a barrier to accessing dental care	
	%	95% CI	%	95% CI	%	95% CI
VPHS 2011–12	19.1	(18.4–19.9)	56.7	(55.7–57.7)	30.1	(29.2–31.0)
NSAOH 2004–06 (Victoria)	13.9	(12.2–15.8)	59.7	(57.9–62.3)	29.2	(27.0–31.5)
NSAOH 2004–06 (Australia)	16.4	(15.5–17.4)	59.4	(58.2–60.5)	30.0	(28.9–31.2)
NDTIS (Australia)	-		64.0	(62.5–65.5)	28.2	(26.7–29.6)

NSAOH = National Survey of Adult Oral Health; NDTIS = National Dental Telephone Interview Survey.
95% CI = 95 per cent confidence interval.

Concluding remarks

While the majority of Victorians enjoy good oral health there is a significant minority who are burdened by oral disease. Lower socioeconomic groups are more likely to report poorer oral health and that cost is a barrier to dental visits. They are less likely to make regular dental visits.

These results are consistent with national and international evidence that the broader determinants of oral health are those that affect the general health of individuals. The 'upstream' factors such as economic, social and environmental conditions are crucial because they impact on resources and oral health knowledge, skills and behaviour (Department of Health 2013). Population-wide as well as targeted approaches are required to improve the health of all Victorians.

References

Australian Institute of Health and Welfare (AIHW), Dental Statistics and Research Unit 2008, *The National Survey of Adult Oral Health 2004-06: Victoria*, Dental statistics and research series no. 45. cat. no. DEN 181, AIHW, Canberra.

Australian Institute of Health and Welfare (AIHW) 2011, *Oral health and dental care in Australia: key facts and figures 2011*, cat. no. DEN 214, AIHW, Canberra.

Department of Health 2013, *Action plan for oral health promotion 2013–2017*, Department of Health, Government of Victoria, Melbourne, viewed 7 October 2013, <[http://docs.health.vic.gov.au/docs/doc/CF4AB51AD4A9E531CA257B770082A637/\\$FILE/1303009_htv_oral_health_WEB.pdf](http://docs.health.vic.gov.au/docs/doc/CF4AB51AD4A9E531CA257B770082A637/$FILE/1303009_htv_oral_health_WEB.pdf)>

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

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

Rogers JG & Morgan M 2012, 'Changes in preventable dental hospitalisation of children by socioeconomic status', *Journal of Dental Research*, 91, Special Issue B.

Slade GD, Spencer AJ, Roberts-Thomson KF (Editors) 2007, *Australia's dental generations: the National Survey of Adult Oral Health 2004–06*, AIHW cat. no. DEN 165 (Dental Statistics and Research Series No. 34), AIHW, Canberra.