2. Health and Lifestyle




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 South Gippsland Southern Grampians 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 South Gippsland Southern Grampians 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 South Gippsland Southern Grampians 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 South Gippsland Southern Grampians 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 South Gippsland Southern Grampians 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

2. Health and lifestyle

A range of lifestyle behaviours influence the health status and health risk profile of individuals. Lifestyle related risk factors contribute significantly to the burden of disease in Australia, influencing the onset, maintenance and prognosis of a variety of health conditions and their complications. The risk factors associated with health and lifestyle behaviours are largely avoidable or modifiable, providing considerable scope for health gain. This section presents information on lifestyle behaviours that influence health, including intake of fruit and vegetables, alcohol consumption, tobacco use and physical activity, as well as participation in health screening programs and eye checks.

Survey results

Nutrition

- **Vegetable consumption**
  - Most Victorians (56.9 per cent) consumed one to two serves of vegetables per day. Almost two-thirds (64.5 per cent) of males and almost half (49.6 per cent) of the female population aged 18 years and over consumed one to two serves of vegetables per day. More than twice as many females (10.5 per cent) as males (4.9 per cent) consumed five or more serves of vegetables per day.
  - Older persons were more likely than younger persons to consume five or more serves of vegetables per day. Males aged 65 years and over were more than twice as likely as males aged 18–24 years to consume five or more serves of vegetables a day (7.8 per cent and 2.9 per cent respectively). Similarly, the proportion of females aged 65 years and over who consumed five or more serves of vegetables per day was higher than the proportion of females aged 18–24 years (12.5 per cent and 6.0 per cent respectively).
  - The proportion of persons reporting that they consumed five or more serves of vegetables a day was higher for persons living in rural areas (9.8 per cent), compared with the metropolitan area (7.0 per cent).
  - The proportion of persons who reported that they did not consume any serves of vegetables on a daily basis was significantly above the average for Victoria (5.8 per cent) in two LGAs: Colac–Otway (9.6 per cent) and Greater Dandenong (12.4 per cent).
  - The proportion of persons who reported that they consume five or more serves of vegetables a day was significantly above the Victorian average (7.7 per cent) for eight rural local government areas: Bass Coast, Glenelg, Greater Bendigo, Latrobe, Queenscliffe, South Gippsland, Wangaratta and Wellington.
- **Fruit consumption**
  - Most persons (48.6 per cent) aged 18 years and over reported that they consumed two or more serves of fruit per day. More than half of the female population (54.6 per cent) reported consuming two or more serves of fruit daily in 2008, compared with 42.3 per cent of the male population.
  - More than one in six males (17.9 per cent) reported no daily intake of fruit, compared with approximately one in ten females (10.8 per cent).
  - The proportion of males and females who consumed two or more serves of fruit each day was similar for younger and older age groups. The proportion of females reporting a daily intake of two or more serves of fruit was greater across all age groups compared with males.
  - The proportion of persons reporting that they consumed two or more serves of fruit a day was similar to the average for Victoria (48.6 per cent) for persons living in metropolitan and rural areas of Victoria.
  - The proportion of persons reporting that they consumed two or more serves of fruit each day was significantly above the Victorian average (48.6 per cent) for seven local government areas, five metropolitan (Banyule, Bayside, Kingston, Melbourne, Moonee Valley) and two rural (Queenscliffe and Surf Coast).
  - The proportion of persons who did not consume any fruit was above the average for Victoria (14.3 per cent) in 12 LGAs (10 rural and two metropolitan).
- **Fruit and vegetable guidelines**
  - Nine out of 10 persons (90.0 per cent) aged 18 years and over did not meet the guidelines for vegetable intake (four or more serves for those aged 18 years and five or more serves daily for those aged 19 years and over) in 2008.
  - A higher proportion of males (92.7 per cent) than females (87.4 per cent) did not meet the guidelines for the number of daily serves of vegetables.
  - Less than half (47.4 per cent) of persons aged 18 years and over met the guidelines for fruit intake (three or more serves per day for those aged 18 years and two or more serves daily for those aged 19 years and over).
  - More than half (53.5 per cent) of all females reported sufficient serves of fruit to meet the guidelines compared with 41.0 per cent of males. Persons from older age groups were more likely than younger persons to meet the guidelines.
  - In 2008, less than one in ten females (8.0 per cent) and 3.2 per cent of males met both the guidelines for fruit and vegetables.
  - The proportion of persons who met the guidelines for both fruit and vegetable consumption decreased from 9.0 per cent in 2002 to 5.7 per cent in 2008.
  - The proportion of persons who met the guidelines for fruit consumption decreased between 2002 and 2008, but the proportion of persons who met the guidelines for vegetable consumption remained constant over this period.

Alcohol consumption

- Less than one in five Victorians (18.0 per cent) aged 18 years and over were abstainers or non drinkers in 2008.
- A higher proportion of females (23.0 per cent) than males (12.6 per cent) were abstainers or non drinkers.

• **Short-term risk of harm**

- Less than half (45.2 per cent) of all respondents reported that they consumed alcohol (weekly, monthly or yearly) at levels regarded as risky or high risk for harm in the short-term (based on the NHMRC 2001 guidelines).
- A higher proportion of males (53.7 per cent) than females (37.2 per cent) consumed alcohol (weekly, monthly or yearly) at levels that are risky or high risk for short term harm.
- Drinking alcohol at risky or high risk levels at least weekly was greatest among males and females aged 18–24 years (21.0 per cent and 17.1 per cent respectively). Except for those aged 18–24 years, the proportion of males who consumed alcohol at risky or high risk levels at least once each week was higher than for females across all age groups.
- The proportion of males at risk of short-term harm was greater for those living in rural areas compared with the metropolitan area (61.2 per cent and 51.1 per cent respectively). Similarly, the proportion of females at risk of short-term harm from alcohol consumption was higher for those living in rural parts of Victoria (42.7 per cent) than for those living in the metropolitan area (35.4 per cent).
- The proportion of persons who were at risk of short-term harm (weekly consumption) was higher than the average for Victoria (10.2 per cent) in 12 LGAs: Bass Coast, Corangamite, Indigo, Mansfield, Mildura, Moira, Mornington Peninsula, Port Phillip, Southern Grampians, Strathbogie, Surf Coast and Yarra. With the exception of Mornington Peninsula, Port Phillip and Yarra, these LGAs are located in rural areas.
- The proportion of males and females who consumed alcohol at risky or high risk levels for short-term harm (weekly, monthly and yearly consumption) remained constant between 2002 and 2008.

• **Long-term risk of harm**

- Most persons aged 18 years and over (95.5 per cent) were not at risk of long-term harm, based on their frequency and volume of alcohol consumption. The proportion of persons aged 18 years and over whose pattern of alcohol consumption was associated with long-term risk of harm (based on the NHMRC 2001 guidelines) was low, at 3.7 per cent.
- The proportion of males who were at risk of long-term harm from alcohol consumption was higher than for females (4.3 per cent and 3.1 per cent respectively).
- There were three LGAs where the proportion of persons who were not at risk of long-term harm was below the average for Victoria (95.5 per cent): Greater Geelong, Pyrenees and Yarra.

Smoking

- Less than one fifth (19.1 per cent) of Victorians aged 18 years and over were current smokers. On average, approximately one in five males (21.4 per cent) in Victoria reported that they smoked daily or occasionally, compared with 16.9 per cent of females.
- Males in the 25–34 year age group were found to have the highest prevalence of current smoking (31.7 per cent). For females, the highest prevalence of current smoking was in the 18–24 year age group, at 22.2 per cent.
- Most persons who were current smokers smoked on a daily basis, as opposed to smoking occasionally. For males aged 18–24 years the prevalence of occasional smoking (9.3 per cent) was similar to the prevalence of daily smoking (13.1 per cent). For females the prevalence of occasional smoking (7.4 per cent) was highest for those aged 18–24 years.
- The proportion of males who were current smokers was similar for rural (22.0 per cent) and metropolitan (21.2 per cent) areas of Victoria.
- The prevalence of current smoking was above the average for Victoria (19.1 per cent) in six LGAs. Four of these LGAS were located in rural areas (Greater Shepparton, Latrobe, Moira and Pyrenees). The two remaining LGAs were in the metropolitan area: Hume and Knox.
- There were four metropolitan LGAs, Bayside, Melbourne, Port Phillip and Stonnington, and three rural LGAs, Horsham, Surf Coast and Wangaratta, where the proportion of persons who were current smokers was below the average for Victoria.

• **Smoking during pregnancy**

- Among females, aged 18 to 49 years, who reported they were currently pregnant, 6.3 per cent were current smokers, compared with 21.4 per cent of females in this age group who were not pregnant.

Physical activity

• **Physical activity for health benefits**

- More than six in 10 persons (60.3 per cent) aged 19 years and over reported undertaking sufficient levels of physical activity to meet the national guidelines (DoHA 1999). In 2008, the proportion of males and females who undertook sufficient physical activity was similar (61.0 per cent and 59.7 per cent respectively), as was the proportion who were sedentary or physically inactive (5.1 per cent and 5.4 per cent respectively).
- A higher proportion of younger persons than older persons undertook sufficient physical activity. Approximately half (50.1 per cent) of males aged 65 years and over compared with 70.5 per cent of males aged 19–24 years. Similarly, among females aged 19–24 years, 69.6 per cent did sufficient physical activity, compared with 42.1 per cent of females aged 65 years and over.

- The proportion of males aged 19 years and over who undertook a sufficient level of physical activity was similar for the rural (60.7 per cent) and metropolitan (61.2 per cent) areas of Victoria. For the female population, the proportion who did sufficient physical activity was also similar between rural (60.4 per cent) and metropolitan areas (59.5 per cent) of Victoria.
- There were 10 LGAs where the proportion of persons undertaking sufficient physical activity levels was above the average for Victoria. Five of these LGAs were located in rural areas of the state: Mount Alexander, Murrindindi, Queenscliffe, Southern Grampians and Surf Coast. The remaining five metropolitan LGAs were Bayside, Boroondara, Melbourne, Port Phillip and Stonnington.
- There were seven LGAs where the proportion of persons who did sufficient physical activity was below the average for Victoria: Brimbank, Casey, Gannawarra, Greater Dandenong, Hindmarsh, Hume and Mitchell.

• **Incidental physical activity**
- Walking or cycling for transport, especially for short trips, is described as incidental physical activity. More than six in 10 persons (61.7 per cent) reported that they did not walk or cycle for transport for trips taking longer than 10 minutes on any day during the past week. Almost one-tenth of the population (9.6 per cent) reported undertaking some incidental physical activity on 4–5 days per week. Patterns of incidental physical activity were similar for males and females.
- Older persons were more likely not to undertake any incidental physical activity. For example, almost half (47.9 per cent) of persons aged 18–24 years reported that they did not walk or cycle to get from place to place (for example, to school, work, the shops or the train station), compared to almost a third (66.2 per cent) of persons aged 65 years and over.
- There were 28 LGAs where the proportion of persons who reported doing no incidental physical activity was above the average for Victoria (61.7 per cent).
- Among persons aged 18 years and over with children at primary or secondary school, more than three quarters (75.4 per cent) did not walk or cycle all or part of the way to school with their child/children.

• **Physical activity at work**
- Slightly less than two-thirds of employed persons (64.2 per cent) mostly sat or stood when doing their work. A higher proportion of females (69.5 per cent) than males (60.3 per cent) reported that their work-related activities involved mostly sitting or standing.
- Approximately one in every five employed persons (20.5 per cent) indicated that their work activities involved mostly walking.
- More than one in ten (13.3 per cent) employed persons indicated that their work activities involved mostly labour or physically demanding work.

Eye health

• **Sun protective behaviour**
- Almost three quarters (74.0 per cent) of all persons reported usually wearing sunglasses and more than half (52.6 per cent) reported usually wearing a hat, when out in the sun.
- Females were more likely than males to report wearing sunglasses (79.7 per cent and 68.0 per cent respectively) and males were more likely than females to report wearing a hat (62.5 per cent and 43.2 per cent respectively).
- The proportion of persons reporting that they usually wear a hat when out in the sun was higher for persons living in rural (59.5 per cent) areas of the state, compared with the metropolitan area (50.2 per cent).
- The proportion of persons reporting that they usually wear sunglasses when out in the sun was higher for persons living in rural (76.1 per cent) areas of the state, compared with the metropolitan area (73.5 per cent).
- There were three LGAs, all in the metropolitan area, where the proportion of persons who did not wear either a hat or sunglasses was higher than the average for Victoria (14.1 per cent): Brimbank (22.6 per cent), Greater Dandenong (22.5 per cent) and Melbourne (22.4 per cent).

• **Change in vision**
- More than four in ten (41.0 per cent) persons reported having noticed a change in their vision in the past 12 months.
- Females (43.6 per cent) were more likely than males (38.5 per cent) to report having noticed a change in their vision in the past 12 months.
- Among persons aged 18–49 years, more than a third (33.6 per cent) reported having noticed a change in their vision in the past 12 months, compared with more than half (52.3 per cent) of persons aged 50 years and over.
- There were no differences between the metropolitan area and rural areas of the state in the proportion of persons who reported having noticed a change in their vision in the past 12 months.
- There was one LGA where the proportion of persons aged 18–49 years who reported a change in vision was higher than the average for Victoria (33.6 per cent)– Central Goldfields.
- There was one LGA where the proportion of persons aged 50 years and over who reported a change in vision was higher than the average for Victoria (52.3 per cent) – Knox.

• **Use of health care services**
- More than three quarters (77.7 per cent) of all persons surveyed had consulted an eye care specialist or attended an eye clinic at least once in their lifetime, whilst more than one in five (22.3 per cent) persons had never visited an eye care specialist or attended an eye clinic.
- A higher proportion of females (81.0 per cent) reported having ever consulted an eye care specialist or attended an eye clinic, compared with males (74.3 per cent).
- The proportion of persons who reported having ever consulted an eye care specialist or attended an eye clinic, was similar between metropolitan and rural areas of the state.

- The proportion of persons who reported having ever consulted an eye care specialist or attended an eye clinic, was lower than the average for Victoria in the LGAs of Brimbank, Murrindindi, Towong and Wyndham.
- More than one in five (21.1 per cent) persons had visited an eye care specialist or attended an eye clinic in the past six months and 19.7 per cent had visited a specialist or clinic between six months to one year before the survey. A further 15.4 per cent of persons reported having visited an eye care specialist or attended an eye clinic more than one year, but less than two years before the survey, 13.0 per cent of persons reported having visited a specialist or clinic between two and five years before the survey and 8.3 per cent reported having visited an eye care specialist or attended an eye clinic more than five years before the survey.

- **Selected eye conditions**
  - Less than one in ten (8.3 per cent) persons who had ever seen an eye care specialist or visited an eye clinic had ever had a cataract, 2.3 per cent reported having had glaucoma, 2.1 per cent reported having macular degeneration and 0.6 per cent reported having been diagnosed with diabetic retinopathy.

Health checks

- **Blood pressure checks**
  - In 2008, 79.5 per cent of persons aged 18 years and over reported having had their blood pressure checked in the past two years.
  - Females (83.5 per cent) were more likely than their male (75.6 per cent) counterparts to report having had their blood pressure checked in the past two years.
  - The proportion of persons who reported having had a blood pressure check in the past two years was similar between metropolitan and rural areas of the state.
  - The proportion of persons aged 50 years and over who had had their blood pressure checked was below the average for Victoria (93.1 per cent) in the LGAs of Mansfield (88.9 per cent), Colac–Otway (88.2 per cent), Yarra Ranges (86.5 per cent) and Melbourne (85.5 per cent).
  - The proportion of persons aged 18–49 years who had had their blood pressure checked in the past two years was below the average for Victoria (70.6 per cent) in the LGAs of Mansfield (60.0 per cent), Loddon (57.8 per cent), Colac–Otway (57.7 per cent) and Northern Grampians (57.7 per cent).

- **Cholesterol checks**
  - More than half (56.5 per cent) of all persons aged 18 years and over reported having had a blood cholesterol test in the past two years.
  - A higher proportion of males than females reported that they had had a blood cholesterol test in the past two years (57.9 per cent and 55.2 per cent respectively).
  - A higher proportion of persons from the metropolitan area (57.7 per cent) reported that they had had a blood cholesterol check in the past two years, compared with persons from rural areas (52.8 per cent) of Victoria.
  - There were 15 LGAs where the proportion of persons aged 18-49 years who reported having had a cholesterol check was below the average for Victoria.
  - There were 13 LGAs where the proportion of persons aged 50 years and over who reported having had a cholesterol check was below the average for Victoria.

- **Blood glucose checks**
  - More than half (52.2 per cent) of all persons aged 18 years and over reported having had a blood glucose test in the past two years.
  - Females aged 18–49 years were more likely to report having had their blood glucose checked in the past two years than males aged 18–49 years, and among those aged 50 years and over, males were more likely than females to have had their blood glucose checked.
  - The proportion of persons aged 50 years and over living in the metropolitan area (73.1 per cent), who had had their blood glucose checked in the past two years, was higher than the proportion living in rural areas (69.8 per cent) of Victoria.
  - There were eight LGAs where the proportion of persons, aged 50 years and over, who had had a blood glucose check, was below the average for Victoria.
  - There were four LGAs where the proportion of persons aged 18–49 years was above the average for Victoria.

Cancer screening

- **Bowel cancer screening**
  - More than a quarter (29.4 per cent) of all persons aged 50 years and over reported having had a test to detect bowel cancer in the past two years.
  - Males (33.5 per cent) were more likely to report having had a test to detect bowel cancer than females (25.6 per cent).
  - Almost one in five (19.2 per cent) persons aged 50 years and over who had had a test to detect bowel cancer in the past two years had had a colonoscopy and more than one in ten (11.3 per cent) had had a faecal occult blood test (FOBT).
  - The proportion of the male population aged 50 years and over who had had a test to detect bowel cancer was similar between the metropolitan area and rural areas of Victoria (33.0 per cent and 34.2 per cent respectively).
  - There were three LGAs where the proportion of persons aged 50 years and over, who had had a test to detect bowel cancer, was below the average for Victoria (29.4 per cent)– Horsham, Maribyrnong and Moorabool.
- **Cervical screening**
  - In 2008, 87.2 per cent of all females reported having ever had at least one Pap smear in their lifetime and more than one in ten (12.4 per cent) reported never having had a Pap smear.
  - Among the female population, aged 20–69 years, for whom two-yearly Pap smears are applicable, almost three quarters (71.1 per cent) reported having had a Pap smear in the past two years and more than a quarter (28.4 per cent) reported not having had a Pap smear in the past two years.
  - The proportion of the female population, aged 20–69 years, who had had a Pap smear in the past two years was similar between rural and metropolitan areas of Victoria (71.4 per cent and 71.2 per cent respectively).
  - There were three LGAs where the proportion of females, aged 20–69 years, who reported having had a Pap smear in the past two years was lower than the average for Victoria (71.1 per cent)– Central Goldfields, Greater Dandenong and Hume.
  - There were three LGAs where the proportion of females, aged 20–69 years, who reported not having had a Pap smear was higher than the average for Victoria (28.4 per cent)– Central Goldfields, Greater Dandenong and Wyndham.
- **Breast screening**
  - In 2008, 87.7 per cent of all females aged 50 years and over reported having had a mammogram at least once in their lifetime and more than one in ten (11.9 per cent) reported never having had a mammogram.
  - Among the female population, aged 50–69 years, for whom two-yearly mammograms are applicable, more than three quarters (75.9 per cent) reported having had a mammogram in the past two years and 23.6 per cent reported not having had a mammogram in the past two years.
  - The proportion of the female population, aged 50–69 years, who had had a mammogram in the past two years was similar between rural and metropolitan areas of Victoria (74.4 per cent and 76.5 per cent respectively).
  - There were two LGAs where the proportion of females, aged 50–69 years, who reported having had a mammogram in the past two years was lower than the average for Victoria (75.9 per cent)– Central Goldfields and Pyrenees.

Fruit and vegetable intake

The current Australian guidelines recommend a minimum daily vegetable intake of four serves for persons aged 12–18 years and five serves for persons aged 19 years and over, where a serve is defined as half a cup of cooked vegetables or a cup of salad vegetables (NHMRC 2003a, 2003b). The recommended minimum daily fruit intake is three serves for persons aged 12–18 years and two serves for persons aged 19 years and over, where a serve is defined as one medium piece or two small pieces of fruit or one cup of diced pieces (table 2.1).

Table 2.1: Recommended daily intake of fruit and vegetables

Guideline	Age group[(a)]	Recommended daily intake
Fruit	Persons aged 12–18	Three serves
	Persons aged 19 years and over	Two serves
Vegetables	Persons aged 12–18	Four serves
	Persons aged 19 years and over	Five serves

Source: NHMRC 2003a, 2003b.

(a) Excludes pregnant or breastfeeding women.

Table 2.2 and figure 2.1 show vegetable consumption by age group for males. The data show that males in older age groups had higher levels of vegetable consumption than males in younger age groups. Fewer than three in one hundred males (2.9 per cent) aged 18–24 years consumed five or more serves of vegetables per day, compared with less than eight in one hundred males (7.8 per cent) aged 65 years and over who consumed the recommended number of serves of vegetables each day. Across all age groups, males most commonly consumed one or two serves of vegetables per day.

Table 2.2: Daily vegetable consumption, by age group, males, 2008

	Serves[(a)] per day											
	None			1–2 serves			3–4 serves			5 or more serves		
Age group (years)	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
18–24	**9.0**	6.5	12.3	**69.0**	64.4	73.3	**17.5**	14.1	21.6	**2.9**	1.7	4.8
25–34	**9.3**	6.8	12.7	**67.7**	63.8	71.4	**18.4**	15.7	21.5	**3.8**	2.6	5.4
35–44	**7.1**	5.7	8.9	**68.1**	65.3	70.8	**20.1**	17.8	22.6	**3.3**	2.4	4.4
45–54	**5.3**	4.3	6.7	**66.1**	63.4	68.7	**22.6**	20.3	25.0	**5.0**	3.9	6.4
55–64	**5.9**	4.7	7.4	**58.7**	56.1	61.3	**26.9**	24.6	29.3	**7.3**	6.0	8.8
65+	**4.0**	3.3	4.9	**56.5**	54.3	58.8	**28.5**	26.4	30.6	**7.8**	6.7	9.1
Total	**6.8**	**6.1**	**7.6**	**64.5**	**63.2**	**65.7**	**22.2**	**21.2**	**23.3**	**4.9**	**4.4**	**5.4**

(a) A serve is half a cup of cooked vegetables or a cup of salad vegetables.

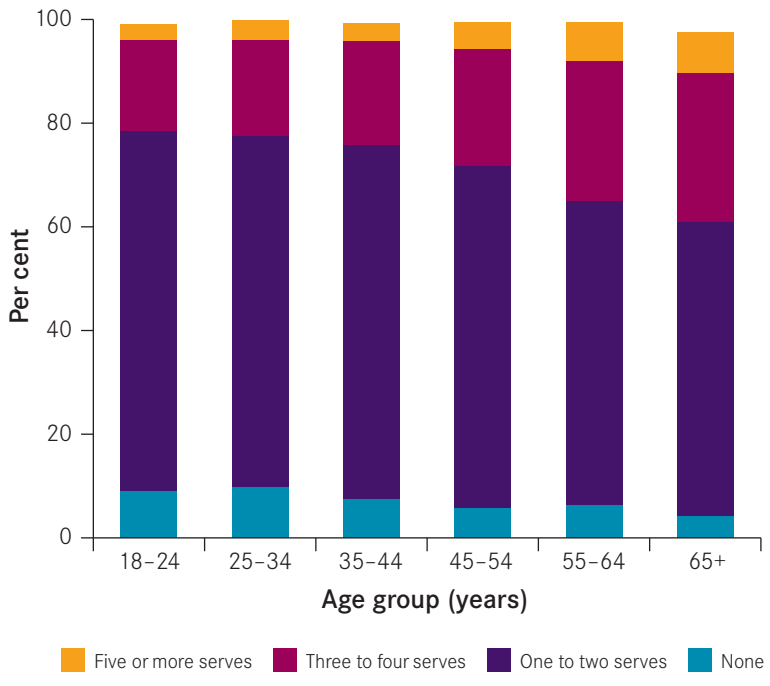
95% CI = 95 per cent confidence interval.

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

Data are crude estimates, except for the totals, which represent the estimates for Victoria and have been age standardised to the 2006 Victorian population.

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

Figure 2.1: Daily vegetable consumption[(a)], by age group, males, 2008



(a) A serve is half a cup of cooked vegetables or a cup of salad vegetables.

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

Data are crude estimates, they have not been age standardised.

Table 2.3 and figure 2.2 show vegetable consumption by age group for females. The data show that females across all age groups most commonly consumed one or two serves of vegetables per day. Similar to the pattern for males, higher levels of vegetable consumption were higher among females in older age groups, compared with females in younger age groups. The proportion of females who reported a daily vegetable intake of five or more serves was greater than for males across all age groups, with the exception of the age group 18–24 years.

Table 2.3: Daily vegetable consumption, by age group, females, 2008

	Serves[(a)] per day											
	None			1–2 serves			3–4 serves			5 or more serves		
Age group (years)	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
18–24	7.4	5.5	10.0	57.9	53.5	62.3	27.5	23.6	31.7	6.0	4.3	8.3
25–34	**4.5**	3.4	5.9	57.2	54.3	60.0	**30.3**	27.7	33.0	7.6	6.2	9.3
35–44	**4.6**	3.8	5.6	**52.2**	50.1	54.3	**33.3**	31.4	35.3	**9.1**	7.9	10.4
45–54	**4.7**	3.8	5.8	44.2	42.0	46.5	37.3	35.1	39.5	12.8	11.4	14.4
55–64	**3.5**	2.8	4.4	41.4	39.2	43.5	38.1	36.0	40.2	16.1	14.6	17.7
65+	**3.8**	3.1	4.5	43.3	41.4	45.2	36.9	35.1	38.8	12.5	11.3	13.7
Total	**4.7**	**4.3**	**5.3**	**49.6**	**48.5**	**50.6**	**33.9**	**32.9**	**34.9**	**10.5**	**9.9**	**11.1**

(a) A serve is half a cup of cooked vegetables or a cup of salad vegetables.

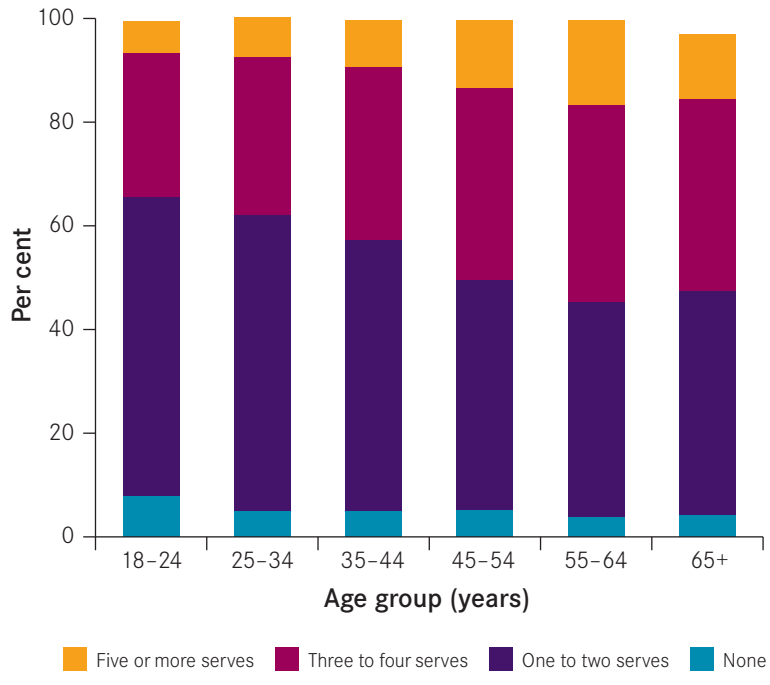
95% CI = 95 per cent confidence interval.

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

Data are crude estimates, except for the totals, which represent the estimates for Victoria and have been age standardised to the 2006 Victorian population.

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

Figure 2.2: Daily vegetable consumption[(a)], by age group, females, 2008



(a) A serve is half a cup of cooked vegetables or a cup of salad vegetables.

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

Data are crude estimates, they have not been age standardised.

Table 2.4 shows the proportion of males, females and persons who reported consuming a given number of serves of vegetables each day. These data are age standardised to the 2006 population to allow for comparison with other groups within the population that may have a different age structure. More than half of all persons (56.9 per cent) reported consuming one or two serves of vegetables daily. A small proportion (5.8 per cent) of persons reported consuming no serves of vegetables on a daily basis and 28.2 per cent reported consuming three or four serves of vegetables per day.

More than nine in ten females (83.5 per cent) reported consuming one to four serves of vegetables daily in 2008 (table 2.4). More than six in 10 males (64.5 per cent) reported consuming one or two serves of vegetables. Approximately twice as many females as males (10.5 per cent compared with 4.9 per cent) reported consuming five or more serves of vegetables per day.

Table 2.4: Daily vegetable consumption, by sex, 2008

	Males			Females			Persons		
Serves[(a)]	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
None	**6.8**	6.1	7.6	**4.7**	4.3	5.3	**5.8**	5.3	6.2
One or two serves	**64.5**	63.2	65.7	**49.6**	48.5	50.6	**56.9**	56.0	57.7
Three or four serves	**22.2**	21.2	23.3	**33.9**	32.9	34.9	**28.2**	27.4	28.9
Five or more serves	**4.9**	4.4	5.4	**10.5**	9.9	11.1	**7.7**	7.4	8.2

(a) A serve is half a cup of cooked vegetables or a cup of salad vegetables.

95% CI = 95 per cent confidence interval.

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

Data are age standardised to the 2006 Victorian population.

The proportion of persons reporting that they consumed five or more serves of vegetables a day was higher for persons living in rural areas (9.8 per cent) of the state, compared with the metropolitan area (7.0 per cent) (table 2.5). The proportion of males in the Gippsland region (7.9 per cent) who reported consuming five or more serves of vegetables per day was significantly higher than the Victorian average (4.9 per cent) for males. The proportion of females who reported consuming five or more serves of vegetables per day was significantly higher than the Victorian average (10.5 per cent) in three rural regions: Gippsland (15.2 per cent), Barwon-South Western (14.1 per cent) and Loddon Mallee (13.5 per cent). The proportion of females who consumed five or more serves of vegetables per day was below the Victorian average for females in the North and West Metropolitan region (8.3 per cent).

Table 2.5: Daily vegetable consumption, by sex and Department of Health region, 2008

Region	Serves[(a)] per day											
	None			1–2 serves			3–4 serves			5 or more serves		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Males												
Barwon-South Western	**8.5**	5.4	13.2	**60.2**	54.7	65.4	**25.3**	21.4	29.7	**5.4**	3.6	7.9
Eastern Metropolitan	**6.5**	4.9	8.7	**66.0**	62.7	69.1	**21.2**	18.7	23.9	**5.1**	3.8	6.7
Gippsland	**4.5**	2.9	6.9	**63.8**	59.4	68.0	**22.8**	19.3	26.6	**7.9**	5.7	10.8
Grampians	**5.0**	3.8	6.6	**60.7**	56.3	65.0	**26.9**	22.9	31.3	**5.4**	4.0	7.1
Hume	**5.4**	3.8	7.6	**64.0**	60.6	67.2	**23.7**	21.0	26.6	**5.4**	4.2	6.9
Loddon Mallee	**6.0**	4.1	8.7	**63.9**	59.9	67.8	**22.2**	19.1	25.6	**6.1**	4.5	8.2
North and West Metropolitan	**7.8**	6.5	9.2	**64.3**	62.0	66.6	**21.1**	19.3	23.1	**4.8**	3.9	5.9
Southern Metropolitan	**6.5**	5.2	8.2	**65.5**	62.6	68.2	**22.8**	20.5	25.4	**3.6**	2.8	4.6
Metropolitan	**7.0**	**6.2**	**7.9**	**65.2**	**63.6**	**66.7**	**21.7**	**20.4**	**23.0**	**4.5**	**3.9**	**5.1**
Rural	**6.3**	**4.8**	**8.2**	**62.3**	**60.0**	**64.5**	**24.1**	**22.4**	**25.9**	**6.0**	**5.1**	**6.9**
Total	**6.8**	**6.1**	**7.6**	**64.5**	**63.2**	**65.7**	**22.2**	**21.2**	**23.3**	**4.9**	**4.4**	**5.4**
Females												
Barwon-South Western	**4.7**	3.0	7.4	**44.2**	39.5	49.1	**35.6**	31.1	40.3	**14.1**	11.4	17.3
Eastern Metropolitan	**3.7**	2.8	4.9	**49.5**	46.7	52.2	**35.1**	32.5	37.8	**10.6**	9.2	12.2
Gippsland	**3.3**	2.2	4.8	**44.5**	41.2	47.8	**36.1**	33.0	39.4	**15.2**	13.2	17.5
Grampians	**3.9**	2.5	5.9	**43.0**	39.3	46.8	**40.0**	36.2	43.9	**11.4**	9.8	13.3
Hume	**3.6**	2.5	5.1	**45.7**	43.1	48.4	**37.3**	34.7	40.0	**12.1**	10.6	13.7
Loddon Mallee	**4.2**	3.0	6.0	**46.8**	43.7	49.8	**35.0**	32.2	37.9	**13.5**	11.7	15.6
North and West Metropolitan	**5.7**	4.9	6.6	**53.7**	51.9	55.6	**30.4**	28.7	32.2	**8.3**	7.3	9.3
Southern Metropolitan	**5.4**	4.3	6.7	**49.5**	47.1	51.9	**34.5**	32.3	36.7	**9.5**	8.3	10.9
Metropolitan	**5.0**	**4.5**	**5.7**	**51.2**	**49.9**	**52.5**	**33.0**	**31.7**	**34.2**	**9.3**	**8.6**	**10.1**
Rural	**4.0**	**3.3**	**4.8**	**44.9**	**43.1**	**46.7**	**36.6**	**34.9**	**38.3**	**13.4**	**12.4**	**14.5**
Total	**4.7**	**4.3**	**5.3**	**49.6**	**48.5**	**50.6**	**33.9**	**32.9**	**34.9**	**10.5**	**9.9**	**11.1**
Persons												
Barwon-South Western	**6.7**	4.5	9.7	**52.0**	48.2	55.8	**30.6**	27.4	33.9	**9.8**	8.1	11.9
Eastern Metropolitan	**5.1**	4.1	6.4	**57.5**	55.4	59.7	**28.2**	26.4	30.2	**7.9**	6.9	9.0
Gippsland	**4.0**	2.9	5.3	**54.0**	51.2	56.7	**29.5**	27.1	32.0	**11.6**	10.0	13.4
Grampians	**4.4**	3.5	5.7	**51.6**	48.7	54.5	**33.6**	30.7	36.5	**8.5**	7.4	9.8
Hume	**4.5**	3.4	5.8	**54.7**	52.5	56.9	**30.7**	28.7	32.7	**8.8**	7.8	9.8
Loddon Mallee	**5.1**	3.9	6.7	**55.2**	52.6	57.8	**28.7**	26.5	30.9	**9.9**	8.6	11.3
North and West Metropolitan	**6.7**	5.9	7.5	**59.1**	57.6	60.6	**25.8**	24.5	27.1	**6.5**	5.9	7.3
Southern Metropolitan	**5.9**	5.1	6.9	**57.4**	55.5	59.2	**28.7**	27.0	30.4	**6.6**	5.8	7.5
Metropolitan	**6.0**	**5.5**	**6.5**	**58.1**	**57.1**	**59.1**	**27.4**	**26.5**	**28.3**	**7.0**	**6.5**	**7.4**
Rural	**5.1**	**4.3**	**6.2**	**53.4**	**52.0**	**54.8**	**30.5**	**29.2**	**31.7**	**9.8**	**9.1**	**10.5**
Total	**5.8**	**5.3**	**6.2**	**56.9**	**56.0**	**57.7**	**28.2**	**27.4**	**28.9**	**7.7**	**7.4**	**8.2**

(a) A serve is half a cup of cooked vegetables or a cup of salad vegetables.

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

95% CI = 95 per cent confidence interval.

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

Data are age standardised to the 2006 Victorian population.

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

Most Victorians (56.9 per cent) consumed one or two serves of vegetables per day. As shown in table 2.6 and figure 2.3, in two LGAs (Colac–Otway and Greater Dandenong), the proportion of persons who reported that they did not consume any serves of vegetables on a daily basis (9.6 per cent and 12.4 per cent respectively) was above the average for Victoria (5.8 per cent). Figure 2.4 shows that the proportion of persons who reported that they consumed five or more serves of vegetables a day was above the Victorian average (7.7 per cent) for several LGAs: Bass Coast (13.9 per cent), Queenscliffe (13.1 per cent), Wangaratta (12.6 per cent), Greater Bendigo (12.4 per cent), South Gippsland (11.9 per cent), Glenelg (11.7 per cent), Wellington (11.7 per cent) and Latrobe (11.5 per cent).

Table 2.6: Daily vegetable consumption, by LGA, 2008

LGA	Serves[(a)] per day											
	None			1–2 serves			3–4 serves			5 or more serves		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Alpine (S)	1.1*	0.5	2.3	54.8	48.2	61.2	34.7	28.6	41.4	7.8	5.5	10.8
Ararat (RC)	9.4*	5.0	16.8	50.7	43.1	58.2	30.3	25.1	36.1	6.5	4.5	9.2
Ballarat (C)	4.0*	2.3	6.6	48.4	42.9	53.9	37.4	32.1	43.0	7.6	5.5	10.5
Banyule (C)	6.0	3.7	9.4	54.8	48.8	60.7	30.5	25.4	36.2	6.2	4.1	9.4
Bass Coast (S)	5.3*	2.7	10.1	55.7	48.2	63.0	24.2	18.3	31.1	13.9	10.1	18.9
Baw Baw (S)	3.0*	1.6	5.4	53.0	46.9	58.9	34.2	28.6	40.2	9.2	6.8	12.5
Bayside (C)	4.6*	2.2	9.3	55.0	48.8	61.0	31.4	26.2	37.1	8.9	6.1	12.7
Benalla (RC)	2.9*	1.4	6.1	51.4	44.7	58.0	35.9	29.8	42.5	9.1	6.5	12.5
Boroondara (C)	5.1	3.0	8.6	56.5	50.8	62.0	28.8	24.0	34.1	8.3	5.8	11.9
Brimbank (C)	7.5	5.4	10.3	62.0	56.9	66.8	22.4	18.4	27.0	6.3	4.2	9.4
Buloke (S)	1.9*	1.1	3.2	55.9	49.7	61.9	33.4	27.7	39.6	8.0	5.5	11.6
Campaspe (S)	3.0*	1.8	5.0	60.8	55.1	66.2	25.1	20.7	30.2	10.6	7.6	14.6
Cardinia (S)	4.2*	2.6	6.9	53.7	47.6	59.7	30.6	25.7	36.0	8.7	5.6	13.4
Casey (C)	5.9	3.9	8.8	60.1	54.9	65.0	27.1	22.7	31.8	5.0	3.4	7.5
Central Goldfields (S)	5.1*	3.0	8.5	51.0	44.3	57.6	34.1	27.9	40.8	9.3	6.5	13.1
Colac-Otway (S)	9.6	6.3	14.4	48.3	41.9	54.7	31.7	26.6	37.4	8.8	6.5	11.9
Corangamite (S)	4.0*	2.1	7.3	50.7	43.6	57.7	32.9	26.2	40.3	10.4	7.7	13.8
Darebin (C)	5.6	3.7	8.5	60.2	54.7	65.4	27.2	22.6	32.3	4.9	3.1	7.6
East Gippsland (S)	1.2*	0.6	2.5	57.0	49.5	64.2	27.8	23.1	33.1	12.9	8.1	19.9
Frankston (C)	5.0*	2.8	8.8	61.6	56.2	66.7	26.8	22.5	31.6	6.3	4.4	8.8
Gannawarra (S)	7.9	5.7	10.9	55.3	49.8	60.5	27.4	22.9	32.4	8.8	6.4	12.0
Glen Eira (C)	4.0*	2.3	6.9	58.2	52.7	63.6	30.1	25.2	35.5	5.9	4.0	8.6
Glenelg (S)	4.8*	2.6	8.5	53.1	46.6	59.5	30.0	24.2	36.4	11.7	8.9	15.3
Golden Plains (S)	3.4	2.1	5.4	58.8	53.2	64.2	28.1	23.2	33.6	9.0	6.9	11.7
Greater Bendigo (C)	6.3	4.0	9.8	52.7	47.0	58.3	28.1	23.7	33.1	12.4	9.4	16.1
Greater Dandenong (C)	12.4	9.0	16.9	60.4	55.1	65.5	21.2	17.3	25.7	2.8*	1.7	4.7
Greater Geelong (C)	7.6*	4.5	12.4	52.7	46.6	58.6	28.7	23.8	34.1	10.0	7.4	13.6
Greater Shepparton (C)	5.9*	3.2	10.6	56.6	50.8	62.3	27.5	23.1	32.5	7.7	5.5	10.7
Hepburn (S)	4.0*	2.3	6.7	55.0	48.5	61.4	30.7	24.8	37.3	9.0	6.7	11.9
Hindmarsh (S)	7.4*	4.2	12.5	57.7	51.4	63.8	24.3	20.1	29.0	8.4	6.3	11.2
Hobsons Bay (C)	5.1*	3.1	8.4	65.0	59.9	69.7	22.7	18.6	27.3	6.5	4.5	9.2
Horsham (RC)	2.4*	1.1	4.9	58.3	52.7	63.7	29.5	24.9	34.5	9.0	6.0	13.1
Hume (C)	8.5	5.6	12.8	61.2	55.8	66.4	20.6	16.8	25.0	7.3	5.1	10.5
Indigo (S)	1.4*	0.6	3.1	53.0	46.2	59.7	34.3	28.3	40.8	11.0	7.3	16.3
Kingston (C)	5.4	3.4	8.4	54.7	48.4	60.8	32.2	26.5	38.4	7.0	4.7	10.3
Knox (C)	3.9*	2.2	6.7	60.4	55.2	65.5	26.7	22.5	31.4	7.8	5.6	10.9
Latrobe (C)	4.8*	2.8	8.2	56.1	50.8	61.3	26.7	22.2	31.6	11.5	8.7	15.0
Loddon (S)	4.9*	2.7	8.7	57.6	51.6	63.3	27.1	22.4	32.3	9.1	6.3	13.0
Macedon Ranges (S)	3.1	1.8	5.3	54.7	48.0	61.3	32.2	26.1	38.9	9.6	6.6	13.6
Manningham (C)	3.7	2.0	7.0	53.7	47.9	59.4	33.0	27.9	38.6	8.0	5.7	11.1

(a) A serve is half a cup of cooked vegetables or a cup of salad vegetables.

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

95% CI = 95 per cent confidence interval.

LGA = local government area.

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

Data are age standardised to the 2006 Victorian population.

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

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

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

Table 2.6: Daily vegetable consumption, by LGA, 2008 (continued)

LGA	Serves[(a)] per day											
	None			1–2 serves			3–4 serves			5 or more serves		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Mansfield (S)	**3.1**	1.2	8.1	**53.6**	46.6	60.5	**33.7**	26.6	41.8	**9.2**	6.1	13.7
Maribyrnong (C)	**8.9**	5.9	13.2	**59.5**	54.1	64.6	**23.2**	19.3	27.6	**6.5**	4.1	10.1
Maroondah (C)	**5.5***	3.3	9.2	**57.0**	51.3	62.6	**27.7**	22.9	33.0	**8.8**	6.3	12.1
Melbourne (C)	**4.6**	2.8	7.3	**57.6**	52.3	62.8	**30.3**	25.8	35.3	**5.5**	3.6	8.3
Melton (S)	**7.2**	4.9	10.5	**61.9**	56.5	67.0	**23.1**	19.1	27.8	**6.5**	4.3	9.7
Mildura (RC)	**5.2***	3.1	8.8	**57.9**	52.3	63.3	**28.0**	23.4	33.1	**7.2**	5.1	10.0
Mitchell (S)	**5.0**	3.0	8.0	**58.6**	53.0	63.9	**28.6**	24.1	33.6	**6.4**	4.3	9.4
Moira (S)	**			**51.8**	45.0	58.6	**36.5**	30.2	43.3	**8.0**	5.8	11.0
Monash (C)	**7.9**	5.0	12.2	**59.1**	53.4	64.6	**24.5**	20.4	29.0	**7.2**	4.8	10.7
Moonee Valley (C)	**5.5**	3.6	8.3	**55.8**	50.5	61.0	**29.3**	24.7	34.4	**7.5**	5.2	10.6
Moorabool (S)	**5.1**	3.3	7.8	**50.5**	44.4	56.5	**34.1**	28.4	40.3	**9.5**	6.9	12.9
Moreland (C)	**6.7**	4.5	9.9	**59.4**	54.3	64.3	**24.8**	20.6	29.6	**7.3**	5.2	10.2
Mornington Peninsula (S)	**5.9***	3.4	10.3	**60.9**	54.5	66.9	**24.5**	19.7	30.1	**8.0**	5.5	11.4
Mount Alexander (S)	**2.2***	1.1	4.3	**49.0**	42.4	55.5	**38.0**	31.7	44.6	**10.0**	7.7	13.0
Moyne (S)	**6.7***	3.7	11.8	**52.4**	45.6	59.0	**32.3**	26.7	38.4	**7.5**	4.9	11.5
Murrindindi (S)	**7.3***	3.1	16.1	**50.8**	43.8	57.7	**31.0**	25.4	37.3	**10.5**	7.7	14.3
Nillumbik (S)	**3.4***	1.7	5.9	**59.8**	54.8	51.5	**28.1**	24.1	30.5	**8.1**	5.6	11.2
Northern Grampians (S)	**5.9**	3.7	9.3	**51.5**	45.5	57.5	**30.5**	25.3	36.3	**11.2**	8.2	15.1
Port Phillip (C)	**6.3**	4.1	9.4	**54.6**	49.6	59.6	**31.7**	27.3	36.4	**6.9**	4.9	9.6
Pyrenees (S)	**2.7***	1.5	4.9	**53.2**	47.2	59.2	**32.1**	26.6	38.2	**9.7**	7.3	12.9
Queenscliffe (B)	**			**54.5**	46.4	62.4	**30.4**	24.0	37.7	**13.1**	8.6	19.7
Southern Grampians (S)	**5.0**	2.6	9.3	**48.0**	42.1	54.0	**36.0**	30.4	42.1	**10.5**	7.8	14.0
South Gippsland (S)	**			**55.6**	49.5	61.5	**30.2**	24.7	36.3	**11.9**	9.0	15.6
Stonnington (C)	**3.4**	2.0	5.7	**53.4**	48.2	58.5	**34.4**	29.6	39.5	**8.0**	5.7	11.2
Strathbogie (S)	**1.7***	0.8	3.3	**53.6**	46.5	60.6	**36.1**	29.5	43.2	**7.2**	5.1	10.1
Surf Coast (S)	**1.7***	0.9	3.5	**51.3**	44.5	58.0	**36.0**	29.6	42.9	**9.8**	7.4	12.8
Swan Hill (RC)	**6.0***	3.3	10.7	**57.2**	50.5	63.6	**23.6**	19.3	28.5	**8.4**	6.0	11.5
Towong (S)	**1.1***	0.4	2.9	**51.8**	45.0	58.6	**36.0**	29.6	42.9	**9.2**	6.7	12.5
Wangaratta (RC)	**3.3***	1.7	6.3	**50.5**	43.7	57.3	**33.0**	26.7	39.9	**12.6**	9.0	17.5
Warrnambool (C)	**5.5**	3.2	9.1	**49.0**	43.1	54.9	**36.2**	30.8	41.9	**8.5**	6.1	11.6
Wellington (S)	**5.6***	3.2	9.8	**49.4**	43.4	55.4	**32.2**	27.1	37.7	**11.7**	8.9	15.3
West Wimmera (S)	**1.7***	1.0	2.9	**57.5**	51.5	63.4	**31.0**	25.6	37.0	**8.2**	6.0	11.2
Whitehorse (C)	**4.0***	2.2	7.1	**58.7**	52.9	64.2	**28.4**	23.4	33.9	**7.6**	5.6	10.3
Whittlesea (C)	**8.1**	5.6	11.6	**59.8**	54.7	64.7	**21.9**	18.0	26.2	**7.5**	5.3	10.6
Wodonga (RC)	**7.6**	4.9	11.5	**57.5**	52.2	62.7	**24.4**	20.5	28.8	**9.1**	6.6	12.4
Wyndham (C)	**7.3**	5.1	10.3	**57.5**	52.5	62.4	**28.8**	24.5	33.5	**5.0**	3.3	7.4
Yarra (C)	**4.5**	2.7	7.2	**53.1**	47.6	58.6	**34.1**	28.9	39.8	**7.2**	5.0	10.3
Yarra Ranges (S)	**4.4**	2.8	6.9	**53.2**	47.9	58.4	**33.1**	28.3	38.2	**8.2**	5.8	11.3
Yarriambiack (S)	**4.8**	3.2	7.2	**53.5**	47.1	59.8	**32.6**	26.8	39.0	**8.6**	6.0	12.1
Total	**5.8**	**5.3**	**6.2**	**56.9**	**56.0**	**57.7**	**28.2**	**27.4**	**28.9**	**7.7**	7.4	8.2

Figure 2.3: No serves[(a)] of vegetables per day, by LGA, 2008

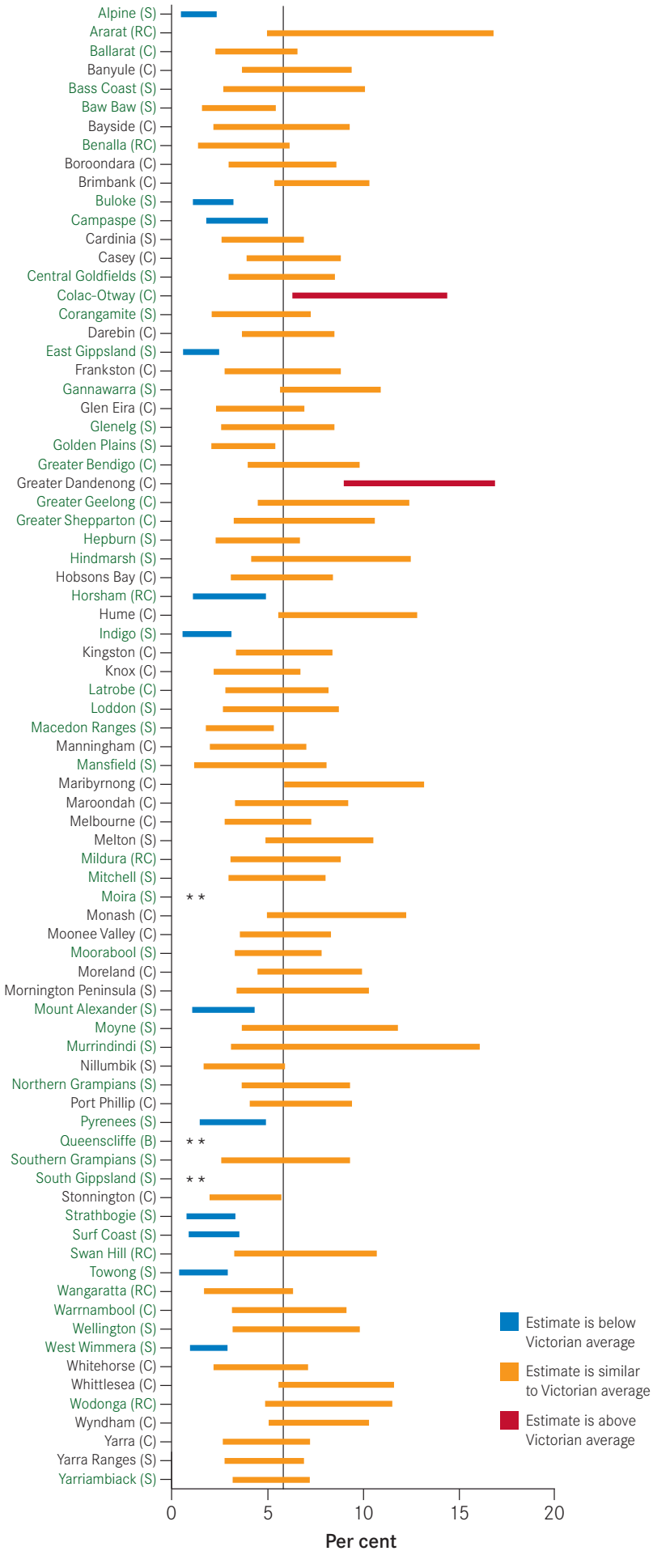
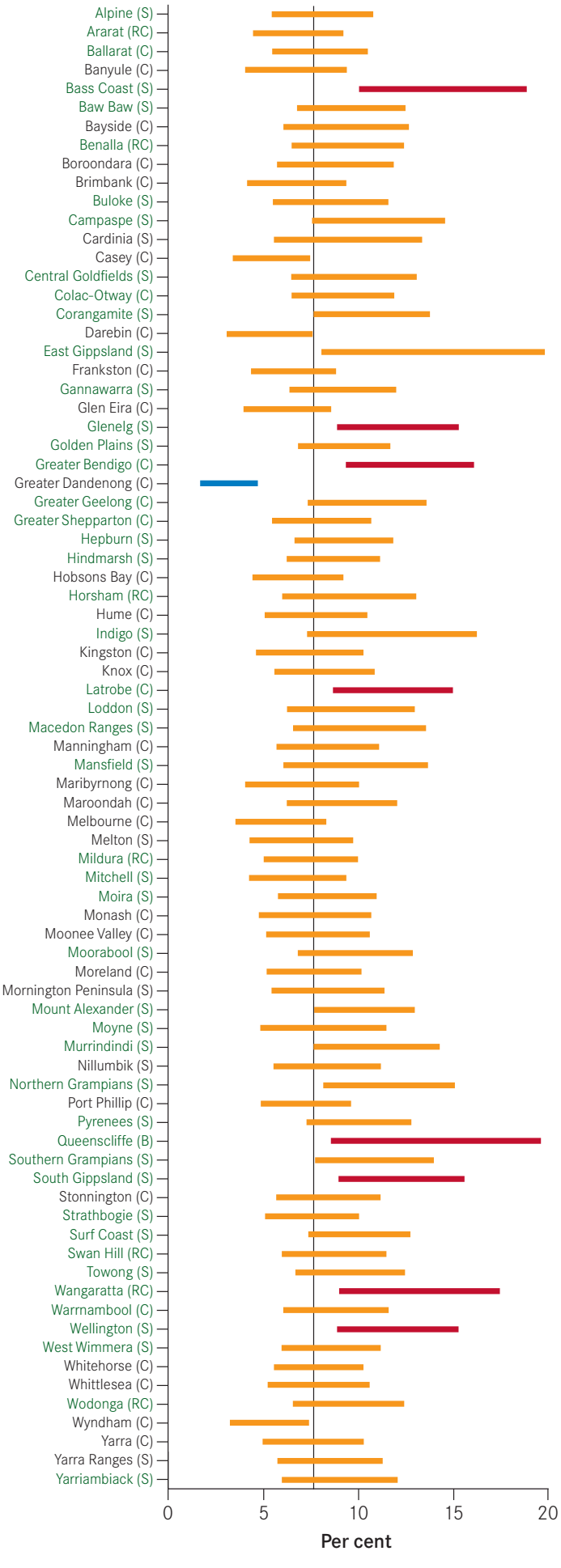


Figure 2.4: Five or more serves[(a)] of vegetables per day, by LGA, 2008



(a) A serve is half a cup of cooked vegetables or a cup of salad vegetables.

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

LGA = local government area.

Data are age standardised to the 2006 Victorian population.

The line on the graph is the Victorian estimate, it does not show the 95% CI. See relevant table for 95% CI for Victoria (Total).

** Estimate has a relative standard error of greater than 50 per cent and is not shown as it is unreliable for general use.

Table 2.7 and figure 2.5 show daily fruit consumption by age group for males. More than four in ten (42.3 per cent) males reported consumption of two or more serves of fruit a day. Males aged 65 years and over were less likely to report no daily intake of fruit (13.6 per cent) and more likely to report consuming two or more serves a day (47.0 per cent), compared with the averages for all males in Victoria (17.9 per cent and 42.3 per cent respectively).

Table 2.7: Daily fruit consumption[(a)], by age group, males, 2008

	Serves[(a)] per day								
	None			1 serve			2 or more serves		
Age group (years)	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
18–24	**16.2**	12.9	20.0	**40.9**	36.3	45.7	**42.4**	37.7	47.2
25–34	**21.1**	18.0	24.7	**40.4**	36.5	44.4	**37.5**	33.7	41.4
35–44	**17.5**	15.5	19.8	**37.0**	34.1	39.9	**44.0**	41.0	47.0
45–54	**20.9**	18.6	23.3	**37.8**	35.1	40.5	**40.8**	38.1	43.6
55–64	**17.3**	15.4	19.3	**38.1**	35.5	40.7	**44.0**	41.3	46.6
65+	13.6	12.1	15.2	**38.0**	35.8	40.2	47.0	44.7	49.3
Total	**17.9**	**16.8**	**18.9**	**38.8**	**37.4**	**40.1**	**42.3**	**41.0**	**43.7**

(a) A serve is one medium piece or two small pieces of fruit, or one cup of diced pieces.

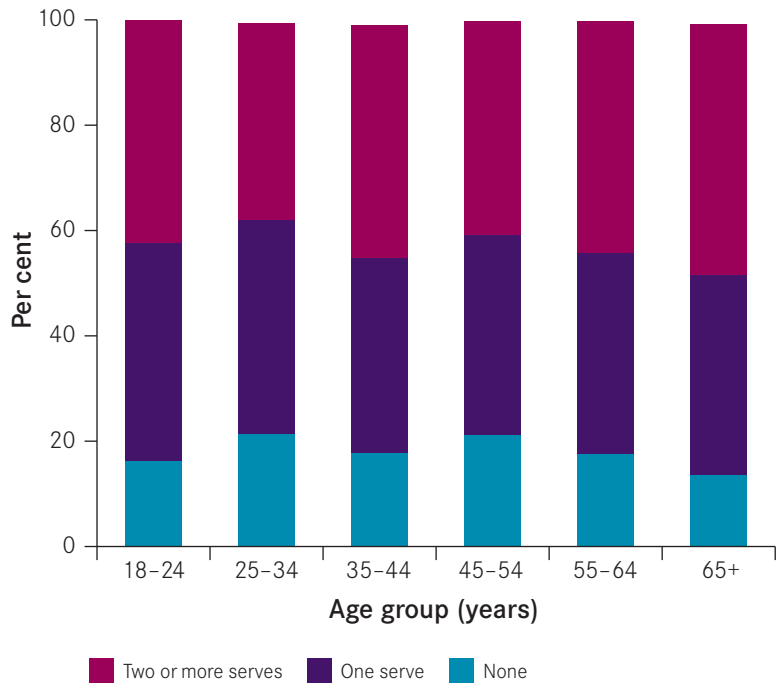
95% CI = 95 per cent confidence interval.

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

Data are crude estimates, except for the totals, which represent the estimates for Victoria and have been age standardised to the 2006 Victorian population.

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

Figure 2.5: Daily fruit consumption[(a)], by age group, males, 2008



(a) A serve is one medium piece or two small pieces of fruit, or one cup of diced pieces.

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

Data are crude estimates, they have not been age standardised.

Table 2.8 and figure 2.6 show daily fruit consumption by age group for females. The proportion of females reporting a daily intake of two or more serves of fruit was greater across all age groups, compared with males.

Table 2.8: Daily fruit consumption, by age group, females, 2008

	Serves[(a)] per day								
	None			1 serve			2 or more serves		
Age group (years)	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
18–24	**10.6**	8.2	13.5	**36.1**	32.0	40.4	**53.1**	48.7	57.5
25–34	**10.7**	9.1	12.4	37.6	34.9	40.5	**50.7**	47.8	53.6
35–44	**12.2**	10.9	13.7	**36.0**	34.0	38.0	51.0	48.9	53.1
45–54	**11.6**	10.3	13.0	**31.9**	29.8	34.1	**55.5**	53.2	57.7
55–64	**10.1**	8.9	11.5	29.1	27.2	31.1	60.1	58.0	62.2
65+	**9.2**	8.1	10.3	30.2	28.5	32.0	59.4	57.4	61.2
Total	**10.8**	**10.1**	**11.4**	**33.8**	**32.8**	**34.8**	**54.6**	**53.5**	**55.6**

(a) A serve is one medium piece or two small pieces of fruit, or one cup of diced pieces.

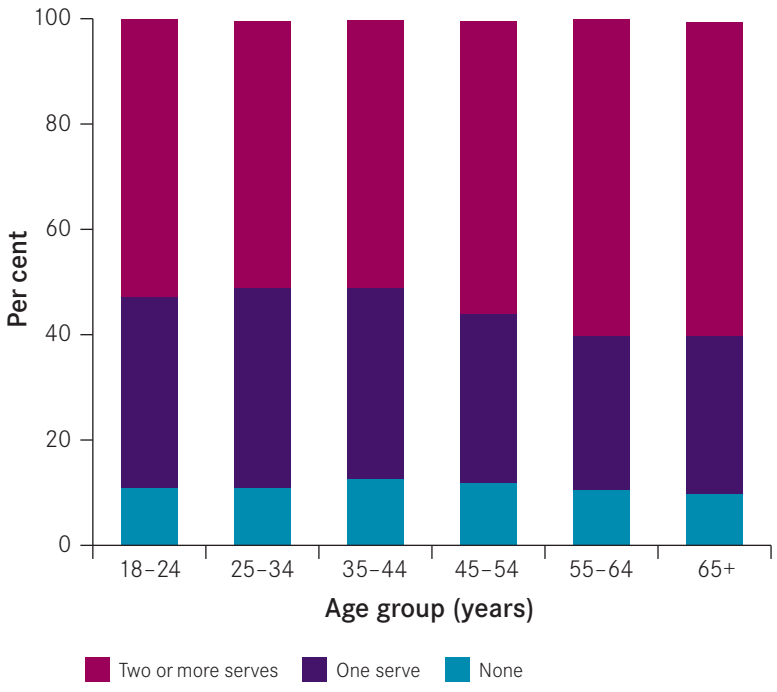
95% CI = 95 per cent confidence interval.

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

Data are crude estimates, except for the totals, which represent the estimates for Victoria and have been age standardised to the 2006 Victorian population.

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

Figure 2.6: Daily fruit consumption[(a)], by age group, females, 2008



(a) A serve is one medium piece or two small pieces of fruit, or one cup of diced pieces.

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

Data are crude estimates, they have not been age standardised.

Table 2.9 shows the proportion of males, females and persons who reported consuming a given number of serves of fruit each day. These data are age standardised to the 2006 population to adjust for any differences in the age structure of the populations being compared. In 2008, less than half (48.6 per cent) of all persons reported consuming two or more serves of fruit daily. More than one in 10 persons (14.3 per cent) reported that they consume no serves of fruit and 36.1 per cent reported consuming a single serve of fruit each day.

More than half of the female population (54.6 per cent) reported consuming two or more serves of fruit daily in 2008 (table 2.9), compared with 42.3 per cent of the male population. More than one in six males (17.9 per cent) reported no daily intake of fruit, compared with approximately one in ten (10.8 per cent) females.

Table 2.9: Daily fruit consumption, by sex, 2008

Serves[(a)]	Males			Females			Persons		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
None	**17.9**	16.8	18.9	**10.8**	10.1	11.4	**14.3**	13.7	14.9
One serve	**38.8**	37.4	40.1	**33.8**	32.8	34.8	**36.1**	35.3	37.0
Two or more serves	**42.3**	41.0	43.7	**54.6**	53.5	55.6	**48.6**	47.8	49.5

(a) A serve is one medium piece or two small pieces of fruit, or one cup of diced pieces.

95% CI = 95 per cent confidence interval.

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

Data are age standardised to the 2006 Victorian population.

The proportion of persons reporting that they consumed two or more serves of fruit a day was similar to the average for Victoria (48.6 per cent) for persons living in the metropolitan and rural areas of Victoria (table 2.10). A higher proportion of males (24.2 per cent) in the Grampians region than the average for Victoria (17.9 per cent) reported no daily intake of fruit. The proportion of males who consumed two or more serves was similar across all regions. The proportion of females reporting that they consumed two or more serves of fruit each day was significantly below the Victorian average in two rural regions: Loddon Mallee (47.5 per cent) and Grampians (47.2 per cent). A higher proportion of persons (16.3 per cent) living in the rural areas of the state did not consume fruit, compared with the average for Victoria (14.3 per cent).

Table 2.10: Daily fruit consumption, by sex and Department of Health region, 2008

Region	Serves[(a)] per day								
	None			One serve			Two or more serves		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Males									
Barwon-South Western	**16.2**	12.3	21.1	**34.7**	29.8	40.0	**47.5**	41.4	53.6
Eastern Metropolitan	**16.9**	14.3	19.9	**38.4**	35.0	41.9	**44.0**	40.6	47.5
Gippsland	**22.2**	18.6	26.2	**34.9**	30.8	39.3	**42.8**	38.5	47.3
Grampians	**24.2**	20.8	28.0	**35.4**	31.5	39.4	**38.9**	34.7	43.3
Hume	**21.5**	18.5	24.8	**38.5**	35.2	41.9	**38.8**	35.4	42.2
Loddon Mallee	**20.5**	17.3	24.3	**40.4**	36.4	44.5	**38.0**	34.0	42.2
North and West Metropolitan	**17.7**	15.9	19.7	**38.0**	35.7	40.4	**43.3**	41.0	45.6
Southern Metropolitan	**16.7**	14.6	19.1	**39.7**	36.9	42.7	**42.2**	39.3	45.2
Metropolitan	**17.0**	**15.8**	**18.3**	**39.0**	**37.4**	**40.6**	**42.9**	**41.3**	**44.6**
Rural	**20.3**	**18.6**	**22.1**	**36.8**	**34.7**	**39.0**	**41.8**	**39.5**	**44.1**
Total	**17.9**	**16.8**	**18.9**	**38.8**	**37.4**	**40.1**	**42.3**	**41.0**	**43.7**
Females									
Barwon-South Western	**11.7**	9.1	14.9	**30.7**	26.5	35.3	**56.7**	51.8	61.4
Eastern Metropolitan	**8.6**	7.2	10.2	**34.5**	31.9	37.3	**55.9**	53.1	58.7
Gippsland	**10.4**	8.6	12.4	**37.6**	34.3	40.9	**51.3**	48.0	54.6
Grampians	**13.4**	10.9	16.3	**38.8**	35.1	42.7	**47.2**	43.5	51.0
Hume	**11.7**	10.0	13.6	**32.3**	29.8	34.8	**55.1**	52.3	57.7
Loddon Mallee	**14.7**	12.3	17.3	**37.1**	34.0	40.4	**47.5**	44.4	50.5
North and West Metropolitan	**11.0**	9.9	12.1	**33.0**	31.2	34.8	**55.0**	53.1	56.9
Southern Metropolitan	**11.0**	9.6	12.7	**32.9**	30.7	35.2	**55.5**	53.1	57.8
Metropolitan	**10.4**	**9.6**	**11.2**	**33.3**	**32.0**	**34.5**	**55.5**	**54.2**	**56.8**
Rural	**12.3**	**11.2**	**13.5**	**35.1**	**33.4**	**36.8**	**51.8**	**50.0**	**53.6**
Total	**10.8**	**10.1**	**11.4**	**33.8**	**32.8**	**34.8**	**54.6**	**53.5**	**55.6**
Persons									
Barwon-South Western	**13.9**	11.4	16.9	**32.7**	29.3	36.3	**52.1**	48.1	56.0
Eastern Metropolitan	**12.7**	11.2	14.5	**36.3**	34.1	38.5	**50.1**	47.9	52.3
Gippsland	**16.2**	14.1	18.5	**36.2**	33.6	39.0	**47.2**	44.4	49.9
Grampians	**18.6**	16.4	21.1	**37.1**	34.3	40.0	**43.3**	40.4	46.2
Hume	**16.6**	14.8	18.5	**35.3**	33.1	37.5	**47.1**	44.8	49.3
Loddon Mallee	**17.5**	15.4	19.7	**38.7**	36.1	41.3	**42.9**	40.4	45.6
North and West Metropolitan	**14.3**	13.3	15.4	**35.4**	34.0	36.9	**49.2**	47.7	50.7
Southern Metropolitan	**13.8**	12.5	15.3	**36.1**	34.3	38.0	**49.1**	47.2	51.0
Metropolitan	**13.7**	**12.9**	**14.4**	**36.0**	**35.0**	**37.0**	**49.4**	**48.3**	**50.4**
Rural	**16.3**	**15.2**	**17.3**	**35.8**	**34.5**	**37.2**	**46.9**	**45.5**	**48.4**
Total	**14.3**	**13.7**	**14.9**	**36.1**	**35.3**	**37.0**	**48.6**	**47.8**	**49.5**

(a) A serve is one medium piece or two small pieces of fruit, or one cup of diced pieces.

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

95% CI = 95 per cent confidence interval.

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

Data are age standardised to the 2006 Victorian population.

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

Table 2.11 shows the proportion of persons who reported consuming either no serves, one serve or two or more serves of fruit per day by local government area. The proportion of persons reporting that they consumed two or more serves of fruit each day was significantly higher than the Victorian average (48.6 per cent) for seven local government areas: Surf Coast (61.5 per cent), Queenscliffe (57.5 per cent), Bayside (56.9 per cent), Banyule (56.6 per cent), Kingston (56.1 per cent), Moonee Valley (55.4 per cent) and Melbourne (54.7 per cent). The proportion of persons reporting a daily intake of two or more serves of fruit was below the state average for Melton (41.9 per cent), Hindmarsh (41.5 per cent), Northern Grampians (40.8 per cent), Ballarat (40.7 per cent), Wyndham (39.4 per cent), Campaspe (39.3 per cent), Greater Bendigo (37.9 per cent), Ararat (37.8 per cent) and Ganawarra (34.6 per cent). The proportion of persons who did not consume any fruit was above the average for Victoria (14.3 per cent) in 12 LGAs (10 rural and two metropolitan),

Figures 2.7 and 2.8 summarise the data shown in table 2.11 for the proportion of persons reporting that they did not consume any serves of fruit and the proportion of persons who consumed two or more serves of fruit a day, by LGA.

Table 2.11: Daily fruit consumption, by LGA , 2008

LGA	Serves[(a)] per day								
	None			One serve			Two or more serves		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Alpine (S)	**15.6**	11.1	21.4	**34.7**	28.6	41.2	**48.3**	41.7	54.9
Ararat (RC)	**18.3**	12.3	26.3	**42.8**	35.7	50.3	**37.8**	32.5	43.4
Ballarat (C)	**19.9**	15.7	24.9	**38.3**	32.9	44.0	**40.7**	35.3	46.4
Banyule (C)	**11.6**	8.3	16.1	**31.6**	26.2	37.4	**56.6**	50.6	62.4
Bass Coast (S)	**17.4**	11.5	25.3	**32.9**	26.1	40.6	**49.3**	40.7	57.9
Baw Baw (S)	**14.4**	10.2	19.7	**37.1**	31.4	43.2	**48.2**	42.4	54.1
Bayside (C)	**9.7**	6.3	14.8	**33.3**	27.7	39.5	**56.9**	50.9	62.8
Benalla (RC)	**10.3**	7.1	14.8	**37.1**	31.1	43.5	**51.9**	45.5	58.3
Boroondara (C)	**12.9**	9.3	17.7	**33.2**	27.9	38.8	**51.8**	46.3	57.3
Brimbank (C)	**12.5**	9.6	16.3	**32.4**	27.9	37.3	**53.4**	48.5	58.2
Buloke (S)	**14.4**	10.4	19.4	**37.8**	31.8	44.3	**47.1**	40.9	53.5
Campaspe (S)	**17.3**	12.9	22.7	**43.0**	37.0	49.2	**39.3**	33.6	45.3
Cardinia (S)	**16.0**	12.2	20.7	**37.5**	32.1	43.3	**46.2**	40.2	52.2
Casey (C)	**17.5**	13.8	22.0	**35.8**	30.9	40.9	**43.7**	38.6	49.0
Central Goldfields (S)	**22.0**	16.8	28.3	**30.7**	24.8	37.4	**46.8**	40.0	53.7
Colac-Otway (S)	**18.2**	13.5	24.2	**37.3**	31.4	43.7	**43.5**	36.8	50.4
Corangamite (S)	**12.8**	9.7	16.8	**39.5**	33.8	45.6	**46.2**	40.2	52.3
Darebin (C)	**13.4**	10.3	17.2	**36.4**	31.2	42.1	**49.9**	44.4	55.4
East Gippsland (S)	**12.9**	9.1	18.1	**36.1**	29.3	43.6	**50.1**	42.4	57.9
Frankston (C)	**21.0**	16.5	26.5	**34.0**	28.8	39.6	**44.8**	39.2	50.5
Gannawarra (S)	**24.8**	19.5	30.9	**39.1**	33.2	45.3	**34.6**	29.6	39.9
Glen Eira (C)	**7.0**	4.7	10.4	**41.2**	35.8	46.9	**50.8**	45.2	56.4
Glenelg (S)	**16.2**	12.3	21.1	**36.0**	30.1	42.5	**46.8**	40.7	53.1
Golden Plains (S)	**16.1**	12.4	20.6	**38.0**	32.5	43.9	**45.1**	39.2	51.2
Greater Bendigo (C)	**17.1**	13.0	22.1	**44.1**	38.4	50.1	**37.9**	32.3	43.9
Greater Dandenong (C)	**15.8**	12.2	20.3	**38.4**	33.3	43.7	**43.8**	38.7	49.0
Greater Geelong (C)	**13.5**	9.6	18.6	**30.3**	25.1	36.0	**54.7**	48.4	60.8
Greater Shepparton (C)	**19.4**	14.4	25.7	**33.8**	28.4	39.6	**44.0**	38.7	49.4
Hepburn (S)	**20.8**	15.7	27.1	**28.2**	22.3	35.1	**50.3**	42.8	57.9
Hindmarsh (S)	**20.6**	15.6	26.7	**37.4**	31.3	43.8	**41.5**	35.5	47.7
Hobsons Bay (C)	**13.9**	10.8	17.8	**34.5**	29.2	40.2	**50.6**	44.9	56.4
Horsham (RC)	**16.6**	12.5	21.7	**36.1**	30.2	42.4	**46.5**	40.2	52.9
Hume (C)	**17.1**	13.0	22.1	**33.8**	28.9	38.9	**48.0**	42.5	53.6
Indigo (S)	**18.5**	13.0	25.5	**31.9**	26.0	38.5	**49.0**	42.0	56.1
Kingston (C)	**8.1**	5.7	11.5	**34.6**	29.3	40.4	**56.1**	50.2	61.8
Knox (C)	**13.9**	10.3	18.5	**38.8**	33.5	44.4	**47.0**	41.4	52.6
Latrobe (C)	**20.1**	15.8	25.2	**36.1**	30.9	41.6	**43.4**	38.0	49.0
Loddon (S)	**16.5**	12.3	21.8	**40.2**	34.0	46.7	**41.8**	35.6	48.2
Macedon Ranges (S)	**11.7**	7.9	17.0	**33.7**	28.1	39.9	**54.3**	47.6	60.9
Manningham (C)	**10.1**	7.0	14.3	**35.2**	29.8	41.0	**54.4**	48.4	60.2

(a) A serve is one medium piece or two small pieces of fruit, or one cup of diced pieces.

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

LGA = local government area.

95% CI = 95 per cent confidence interval.

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

Data are age standardised to the 2006 Victorian population.

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

Table 2.11: Daily fruit consumption, by LGA , 2008 (continued)

LGA	Serves[(a)] per day								
	None			One serve			Two or more serves		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Mansfield (S)	**16.0**	11.4	21.9	**36.9**	29.6	44.8	**46.5**	39.1	54.1
Maribyrnong (C)	**18.0**	13.9	23.1	**38.5**	33.4	43.9	**42.7**	37.5	48.1
Maroondah (C)	**12.3**	9.1	16.4	**36.6**	30.9	42.6	**50.6**	44.7	56.5
Melbourne (C)	**8.5**	6.1	11.8	**36.4**	31.6	41.5	**54.7**	49.6	59.7
Melton (S)	**17.9**	14.1	22.6	**39.9**	34.5	45.5	**41.9**	36.7	47.2
Mildura (RC)	**21.0**	16.4	26.5	**34.3**	29.1	40.0	**43.2**	37.9	48.7
Mitchell (S)	**16.5**	12.6	21.3	**33.5**	28.5	39.0	**49.7**	44.1	55.4
Moira (S)	**18.0**	13.4	23.8	**39.0**	32.3	46.3	**42.2**	35.4	49.3
Monash (C)	**15.3**	11.3	20.5	**38.4**	32.9	44.3	**45.7**	40.3	51.2
Moonee Valley (C)	**8.3**	5.7	11.8	**34.3**	29.2	39.9	**55.4**	49.9	60.8
Moorabool (S)	**13.3**	9.9	17.7	**40.7**	35.0	46.7	**45.5**	39.6	51.6
Moreland (C)	**14.8**	11.3	19.0	**33.4**	28.7	38.5	**50.6**	45.5	55.6
Mornington Peninsula (S)	**15.1**	11.1	20.1	**34.6**	28.9	40.9	**50.1**	44.3	56.0
Mount Alexander (S)	**11.9**	8.4	16.6	**31.9**	26.0	38.5	**55.6**	49.1	61.9
Moyne (S)	**13.4**	9.6	18.4	**38.8**	32.3	45.7	**45.7**	39.1	52.4
Murrindindi (S)	**19.4**	14.1	26.0	**34.5**	27.9	41.8	**46.0**	38.6	53.7
Nillumbik (S)	**13.0**	9.4	17.7	**34.3**	28.9	40.2	**52.4**	46.6	58.1
Northern Grampians (S)	**22.8**	18.0	28.5	**35.9**	30.0	42.1	**40.8**	34.5	47.4
Port Phillip (C)	**12.7**	9.5	16.6	**37.0**	31.7	42.6	**49.7**	44.2	55.3
Pyrenees (S)	**18.4**	14.0	23.9	**37.6**	30.8	44.8	**43.1**	36.3	50.1
Queenscliffe (B)	**10.6**	6.6	16.5	**31.8**	25.0	39.4	**57.5**	49.7	65.0
Southern Grampians (S)	**16.1**	11.4	22.2	**33.8**	28.2	39.8	**49.2**	42.7	55.8
South Gippsland (S)	**16.1**	12.0	21.2	**33.6**	28.1	39.6	**50.3**	44.3	56.4
Stonnington (C)	**14.4**	10.7	19.3	**31.4**	26.4	36.9	**53.8**	48.2	59.4
Strathbogie (S)	**12.7**	9.1	17.5	**41.3**	34.8	48.1	**45.8**	39.2	52.6
Surf Coast (S)	**5.8**	3.8	8.7	**32.1**	25.7	39.2	**61.5**	54.3	68.2
Swan Hill (RC)	**21.8**	16.5	28.2	**35.0**	29.0	41.5	**42.0**	36.2	48.1
Towong (S)	**12.4**	8.3	18.2	**35.0**	29.1	41.3	**51.7**	44.7	58.6
Wangaratta (RC)	**11.8**	8.4	16.4	**32.1**	26.1	38.7	**55.9**	49.0	62.6
Warrnambool (C)	**19.8**	14.9	25.8	**36.4**	30.8	42.3	**43.1**	37.5	48.9
Wellington (S)	**14.0**	9.9	19.2	**36.8**	30.6	43.4	**49.2**	43.3	55.1
West Wimmera (S)	**15.9**	11.9	20.9	**40.6**	34.6	46.8	**42.0**	36.1	48.1
Whitehorse (C)	**10.7**	7.5	15.0	**35.3**	29.9	41.0	**53.4**	47.5	59.3
Whittlesea (C)	**17.8**	14.1	22.3	**35.8**	30.9	41.1	**45.1**	40.0	50.3
Wodonga (RC)	**18.8**	14.9	23.5	**35.3**	30.0	40.9	**45.0**	39.7	50.5
Wyndham (C)	**19.6**	15.8	24.1	**39.7**	34.9	44.7	**39.4**	34.8	44.2
Yarra (C)	**13.1**	9.9	17.3	**32.8**	27.9	38.2	**52.1**	46.4	57.7
Yarra Ranges (S)	**11.7**	8.8	15.5	**35.3**	30.3	40.7	**51.5**	46.1	56.7
Yarriambiack (S)	**20.2**	15.0	26.7	**34.4**	28.3	41.0	**44.1**	37.7	50.8
Total	**14.3**	**13.7**	**14.9**	**36.1**	**35.3**	**37.0**	**48.6**	47.8	49.5

Figure 2.7: No serves[(a)] of fruit per day by LGA, 2008

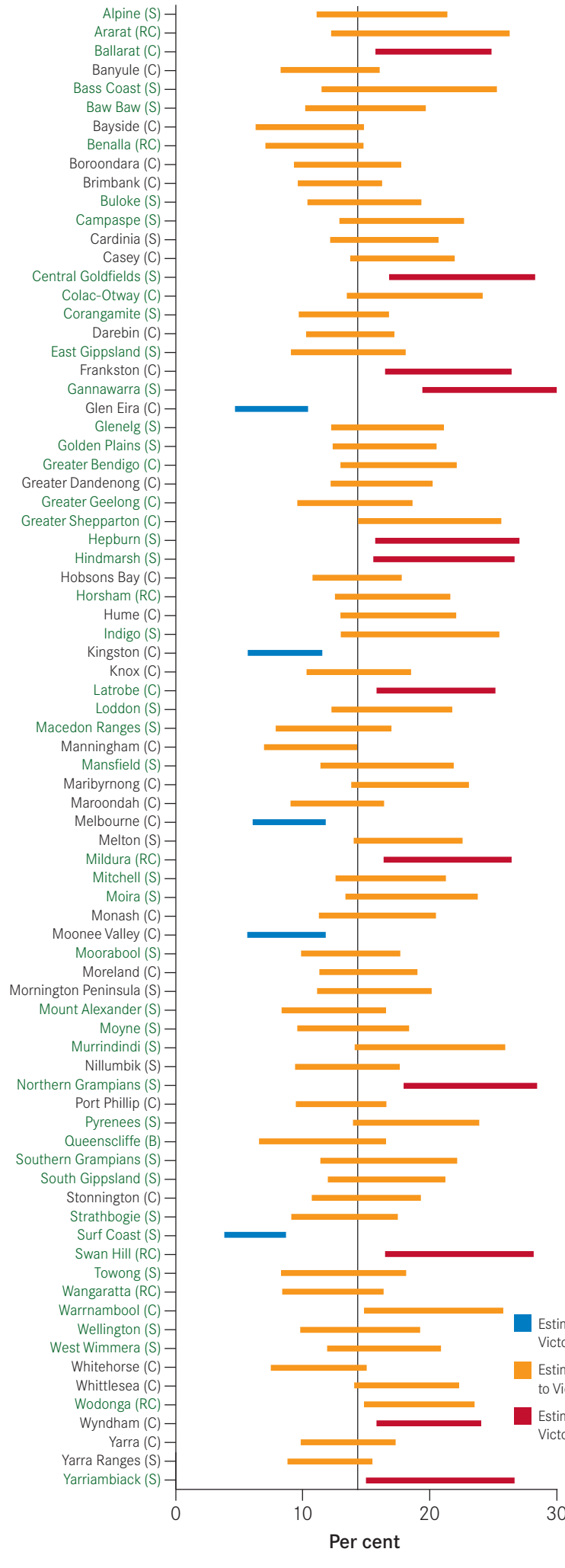
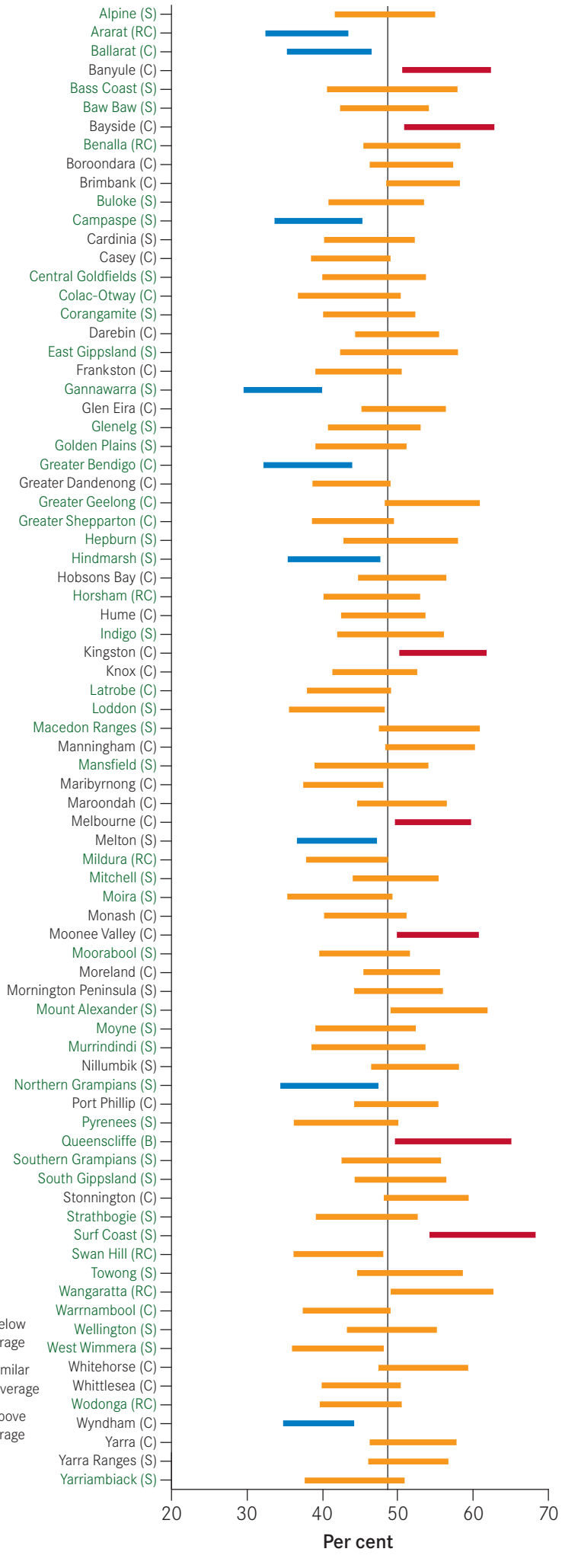


Figure 2.8: Two or more serves[(a)] of fruit per day, by LGA, 2008



(a) A serve is one medium piece or two small pieces of fruit, or one cup of diced pieces.

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

LGA = local government area.

Data are age standardised to the 2006 Victorian population.

The line on the graph is the Victorian estimate, it does not show the 95% CI. See relevant table for 95% CI for Victoria (Total).

Table 2.12 shows the proportion of persons who met the guidelines (summarised in table 2.1) for daily fruit and vegetable consumption. The table is divided into two parts. Part A shows the proportion of persons who met the guidelines for both daily fruit and vegetable consumption, the proportion who met only one guideline (fruit, but not vegetables; or, vegetables, but not fruit), and the proportion who met neither of the guidelines for fruit and vegetable consumption. Fewer than one in ten females (8.0 per cent) and 3.2 per cent of males aged 18 years and over met the guidelines for both fruit and vegetable daily intake in 2008. Older adults (7.1 per cent) aged 65 years and over were more likely to meet the recommended daily intake for fruit and vegetables than younger adults aged 18–24 years (3.7 per cent).

Part B shows the overall proportion of persons who met the fruit guidelines and the overall proportion who met the vegetable guidelines. A higher proportion of females (10.7 per cent) than males (5.0 per cent) met the vegetable guidelines. The proportion of females who met the fruit guidelines in 2008 was also higher than the proportion of males (53.5 per cent and 41.0 per cent respectively).

Table 2.12: Meeting guidelines[a] for consumption of fruit and vegetables, by age group and sex, 2008

Part A

Age group (years)	Both guidelines			Vegetable guidelines only[b]			Fruit guidelines only[c]			Neither fruit or vegetable guidelines		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Males												
18–24 years	**2.2***	1.3	3.8	**2.4***	1.2	4.4	**32.8**	28.5	37.5	**60.7**	56.0	65.3
25–34 years	**2.5**	1.6	4.0	**1.2***	0.7	2.2	**34.9**	31.2	38.8	**60.1**	56.1	63.9
35–44 years	**2.2**	1.6	3.2	**1.0***	0.6	1.9	**41.1**	38.2	44.1	**53.2**	50.2	56.2
45–54 years	**3.5**	2.6	4.8	**1.5**	0.9	2.3	**37.0**	34.3	39.8	**56.6**	53.8	59.4
55–64 years	**4.6**	3.6	5.8	**2.7**	1.9	3.7	**39.0**	36.4	41.6	**51.9**	49.2	54.5
65+	**4.3**	3.5	5.3	**3.3**	2.6	4.2	**40.9**	38.7	43.2	**47.3**	45.0	49.6
Total	**3.2**	**2.8**	**3.6**	**1.9**	**1.6**	**2.2**	**37.8**	**36.5**	**39.2**	**54.8**	**53.5**	**56.2**
Females												
18–24 years	**5.3**	3.6	7.7	**3.1***	1.8	5.2	**42.3**	38.0	46.8	**48.1**	43.7	52.6
25–34 years	**5.4**	4.2	6.9	**2.1**	1.4	3.1	**45.2**	42.3	48.1	**46.0**	43.1	48.9
35–44 years	**6.8**	5.8	8.0	**2.2**	1.7	3.0	**43.9**	41.9	46.1	**45.6**	43.5	47.7
45–54 years	**10.2**	8.9	11.6	**2.6**	2.0	3.4	**45.0**	42.8	47.3	**40.5**	38.3	42.8
55–64 years	**12.6**	11.2	14.0	**3.5**	2.8	4.3	**47.0**	44.8	49.1	**35.6**	33.5	37.7
65+	**9.3**	8.2	10.4	**3.2**	2.6	3.9	**48.5**	46.6	50.4	**34.9**	33.1	36.8
Total	**8.0**	**7.5**	**8.6**	**2.6**	**2.3**	**3.0**	**45.5**	**44.4**	**46.5**	**41.9**	**40.9**	**43.0**
Persons												
18–24 years	**3.7**	2.7	5.1	**2.7**	1.8	4.1	**37.5**	34.4	40.7	**54.5**	51.3	57.8
25–34 years	**4.0**	3.2	5.0	**1.6**	1.2	2.3	**40.0**	37.6	42.4	**53.1**	50.6	55.5
35–44 years	**4.5**	3.9	5.3	**1.6**	1.3	2.1	**42.6**	40.8	44.4	**49.3**	47.5	51.2
45–54 years	**6.9**	6.1	7.8	**2.0**	1.6	2.6	**41.1**	39.3	42.8	**48.5**	46.7	50.3
55–64 years	**8.6**	7.7	9.6	**3.1**	2.6	3.7	**43.0**	41.3	44.7	**43.6**	41.9	45.3
65+	**7.1**	6.4	7.8	**3.2**	2.7	3.8	**45.1**	43.6	46.6	**40.4**	39.0	41.9
Total	**5.7**	**5.3**	**6.0**	**2.2**	**2.0**	**2.5**	**41.8**	**40.9**	**42.6**	**48.2**	**47.3**	**49.1**

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

(b) Includes those who met the guidelines for vegetables but did not meet the guidelines for fruit.

(c) Includes those who met the guidelines for fruit but did not meet the guidelines for vegetables.

(d) Includes all those who met the guidelines for serves of vegetables per day.

(e) Includes all those who met the guidelines for serves of fruit per day.

95% CI = 95 per cent confidence interval.

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

Data are crude estimates, except for the totals, which represent the estimates for Victoria and have been age standardised to the 2006 Victorian population.

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

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

Table 2.12: Meeting guidelines[a] for consumption of fruit and vegetables, by age group and sex, 2008 (continued)

Part B

Age group (years)	Vegetable guidelines[d] %	Vegetable guidelines[d] Lower 95% CI	Vegetable guidelines[d] Upper 95% CI	Fruit guidelines[e] %	Fruit guidelines[e] Lower 95% CI	Fruit guidelines[e] Upper 95% CI
Males						
18–24 years	**4.6**	3.0	6.9	**35.0**	30.6	39.7
25–34 years	3.8	2.6	5.4	**37.4**	33.7	41.3
35–44 years	3.3	2.4	4.4	**43.4**	40.4	46.4
45–54 years	**5.0**	3.9	6.4	**40.5**	37.8	43.3
55–64 years	**7.3**	6.0	8.8	**43.6**	40.9	46.2
65+	**7.6**	6.5	8.9	**45.3**	43.0	47.6
Total	**5.0**	**4.5**	**5.6**	**41.0**	**39.7**	**42.4**
Females						
18–24 years	**8.4**	6.2	11.2	47.6	43.2	52.1
25–34 years	7.5	6.1	9.1	**50.6**	47.7	53.5
35–44 years	**9.0**	7.9	10.3	**50.8**	48.6	52.9
45–54 years	12.8	11.4	14.4	**55.2**	53.0	57.5
55–64 years	16.0	14.5	17.6	59.5	57.4	61.6
65+	**12.4**	11.3	13.7	57.7	55.8	59.6
Total	**10.7**	**10.1**	**11.3**	**53.5**	**52.4**	**54.6**
Persons						
18–24 years	**6.4**	5.0	8.2	41.2	38.0	44.5
25–34 years	5.6	4.7	6.7	44.0	41.6	46.4
35–44 years	6.2	5.4	7.0	**47.1**	45.3	48.9
45–54 years	**8.9**	8.0	10.0	**48.0**	46.2	49.8
55–64 years	11.7	10.7	12.8	51.6	49.9	53.3
65+	10.3	9.5	11.2	52.2	50.7	53.6
Total	**7.9**	**7.5**	**8.3**	**47.4**	**46.6**	**48.3**

Table 2.13 shows the proportion of persons who achieved the guidelines for fruit consumption, vegetable consumption and for both fruit and vegetable consumption between 2002 and 2008. The proportion of persons who met the guidelines for both fruit and vegetable consumption (summarised in table 2.12) decreased from 9.0 per cent in 2002 to 5.7 per cent in 2008. The proportion of persons who met the guidelines for fruit consumption decreased between 2002 and 2008, but the proportion of persons who met the guidelines for vegetable consumption remained constant over this period.

Table 2.13: Meeting guidelines[a] for consumption of fruit and vegetables, 2002–2008

	2002	2003	2004	2005	2006	2007	2008
	Per cent						
Fruit guidelines	54.5	49.8	51.4	49.9	46.3	45.2	47.4
Vegetable guidelines	12.3	11.5	7.0	9.6	10.1	7.8	7.9
Both fruit and vegetable guidelines	9.0	8.0	5.7	7.2	7.1	5.3	5.7

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

Data are age standardised to the 2006 Victorian population.

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

The proportion of persons who did not meet the guidelines for the number of serves of fruit per day was similar for persons residing in metropolitan and rural areas of the state (table 2.14). There were two regions, Loddon Mallee (55.8 per cent) and Grampians (55.2 per cent), where the proportion of persons who did not meet the fruit guidelines was higher than the average for Victoria (50.5 per cent). The proportion of persons living in rural areas who did not meet the vegetable guidelines (88.2 per cent) was less than the proportion for the metropolitan area (90.6 per cent). The proportion of persons who did not meet either the fruit or the vegetable guidelines was similar for metropolitan and rural areas (47.7 per cent and 49.3 per cent respectively).

Table 2.14: Not meeting guidelines[(a)] for consumption of fruit and/or vegetables, by sex and Department of Health region, 2008

Region	Did not meet …								
	Fruit guidelines			Vegetable guidelines			Either fruit or vegetable guidelines		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Males									
Barwon-South Western	**51.3**	45.2	57.3	**92.5**	89.6	94.6	**49.1**	43.0	55.2
Eastern Metropolitan	**55.2**	51.7	58.6	**92.9**	91.2	94.4	**53.0**	49.6	56.5
Gippsland	**57.5**	53.0	61.8	**90.8**	87.8	93.1	**55.1**	50.6	59.5
Grampians	**59.4**	55.2	63.6	**91.3**	88.2	93.7	**57.7**	53.4	61.9
Hume	**60.5**	57.0	63.9	**92.3**	90.5	93.8	**58.9**	55.4	62.3
Loddon Mallee	**60.2**	56.0	64.3	**91.1**	88.6	93.2	**57.9**	53.7	62.0
North and West Metropolitan	**56.0**	53.6	58.3	**92.5**	91.2	93.6	**54.3**	51.9	56.6
Southern Metropolitan	**56.8**	53.8	59.7	**94.0**	92.5	95.3	**55.3**	52.3	58.2
Metropolitan	**56.1**	**54.5**	**57.7**	**93.1**	**92.2**	**93.8**	**54.4**	**52.7**	**56.0**
Rural	**57.2**	**54.9**	**59.5**	**91.7**	**90.5**	**92.7**	**55.1**	**52.8**	**57.4**
Total	**56.7**	**55.4**	**58.0**	**92.7**	**92.0**	**93.3**	**54.8**	**53.5**	**56.2**
Females									
Barwon-South Western	**42.3**	37.7	47.1	**84.0**	80.7	86.8	**39.4**	34.8	44.2
Eastern Metropolitan	**43.1**	40.3	45.9	**87.2**	85.4	88.8	**40.5**	37.8	43.3
Gippsland	**48.4**	45.1	51.6	**83.1**	80.7	85.2	**43.8**	40.5	47.1
Grampians	**51.3**	47.5	55.1	**86.3**	84.1	88.2	**47.6**	43.9	51.5
Hume	**44.6**	41.9	47.3	**85.9**	84.2	87.5	**41.7**	39.0	44.4
Loddon Mallee	**51.9**	48.8	54.9	**85.4**	83.3	87.2	**47.6**	44.5	50.7
North and West Metropolitan	**43.7**	41.8	45.6	**88.6**	87.4	89.8	**41.3**	39.5	43.2
Southern Metropolitan	**44.1**	41.8	46.5	**89.0**	87.5	90.3	**42.3**	40.0	44.7
Metropolitan	**43.6**	**42.3**	**44.9**	**88.4**	**87.5**	**89.1**	**41.3**	**40.0**	**42.6**
Rural	**47.4**	**45.7**	**49.2**	**84.9**	**83.7**	**85.9**	**43.8**	**42.0**	**45.5**
Total	**44.5**	**43.5**	**45.6**	**87.4**	**86.7**	**88.0**	**41.9**	**40.9**	**43.0**
Persons									
Barwon-South Western	**46.8**	42.9	50.8	**88.2**	86.0	90.1	**44.2**	40.3	48.2
Eastern Metropolitan	**49.0**	46.7	51.2	**90.0**	88.8	91.1	**46.6**	44.4	48.9
Gippsland	**52.8**	50.0	55.6	**86.9**	85.0	88.6	**49.3**	46.5	52.0
Grampians	**55.2**	52.3	58.1	**88.7**	86.9	90.3	**52.5**	49.6	55.4
Hume	**52.4**	50.1	54.7	**89.1**	87.9	90.3	**50.2**	47.9	52.5
Loddon Mallee	**55.8**	53.2	58.4	**88.2**	86.5	89.6	**52.5**	49.9	55.1
North and West Metropolitan	**49.7**	48.2	51.2	**90.6**	89.7	91.4	**47.7**	46.2	49.2
Southern Metropolitan	**50.2**	48.3	52.1	**91.4**	90.4	92.4	**48.6**	46.7	50.5
Metropolitan	**49.7**	**48.6**	**50.7**	**90.6**	**90.1**	**91.2**	**47.7**	**46.6**	**48.7**
Rural	**52.2**	**50.7**	**53.6**	**88.2**	**87.4**	**89.0**	**49.3**	**47.8**	**50.8**
Total	**50.5**	**49.6**	**51.3**	**90.0**	**89.5**	**90.4**	**48.2**	**47.3**	**49.1**

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

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

95% CI = 95 per cent confidence interval.

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

Data are age standardised to the 2006 Victorian population.

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

Approximately one half (50.5 per cent) of Victorians did not consume the recommended number of serves of fruit per day (table 2.15). The proportion of persons who did not meet the fruit guidelines was above the Victorian average for a number of local government areas: Gannawarra (63.8 per cent), Greater Bendigo (61.3 per cent), Campaspe (60.3 per cent), Ararat (60.1 p er cent), Wyndham (59.5 per cent), Northern Grampians (59.0 per cent), Hindmarsh (57.8 per cent), Melton (57.6 per cent) and Ballarat (57.0 per cent). There were six LGAs where the proportion of persons not meeting the fruit guidelines was below the average for Victoria. Among these LGAs, one was located in rural Victoria – Surf Coast (39.0 per cent) – and the remaining five were distributed across the metropolitan area – Brimbank (44.6 per cent), Melbourne (44.3 per cent), Bayside (43.3 per cent), Kingston (43.3 per cent) and Moonee Valley (43.1 per cent).

Nine in 10 Victorians (90.0 per cent) did not consume the recommended number of serves of vegetables per day. There were two rural LGAs where the proportion of persons who did not meet the vegetable guidelines was below the average for Victoria: Greater Bendigo (86.2 per cent) and Bass Coast (84.9 per cent).

Figures 2.9, 2.10 and 2.11 show the proportion of persons aged 18 years and over from each LGA who did not meet the fruit guidelines, the vegetable guidelines and both guidelines, relative to the average for Victoria.

Table 2.15: Not meeting guidelines[(a)] for consumption of fruit and/or vegetables, by LGA, 2008

LGA	Did not meet …								
	Fruit guidelines			Vegetable guidelines			Either fruit or vegetable guidelines		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Alpine (S)	**50.0**	43.4	56.6	**90.0**	86.5	92.6	**48.5**	41.9	55.2
Ararat (RC)	**60.1**	54.0	65.8	**89.3**	84.6	92.8	**57.6**	51.6	63.4
Ballarat (C)	**57.0**	51.4	62.5	**88.6**	84.7	91.6	**55.0**	49.3	60.5
Banyule (C)	**44.5**	38.7	50.5	**89.3**	85.5	92.2	**41.6**	35.8	47.8
Bass Coast (S)	**51.5**	43.1	59.7	**84.9**	79.9	88.8	**47.9**	39.7	56.2
Baw Baw (S)	**51.4**	45.5	57.2	**89.8**	86.5	92.4	**49.0**	43.1	54.9
Bayside (C)	**43.3**	37.4	49.3	**90.9**	87.1	93.7	**42.6**	36.7	48.6
Benalla (RC)	**47.5**	41.2	54.0	**89.9**	86.4	92.6	**45.0**	38.6	51.5
Boroondara (C)	**46.2**	40.7	51.9	**89.1**	85.3	92.0	**42.4**	37.0	48.0
Brimbank (C)	**44.6**	39.8	49.5	**90.7**	87.2	93.3	**43.4**	38.7	48.3
Buloke (S)	**53.1**	46.7	59.3	**90.5**	86.9	93.2	**51.0**	44.6	57.4
Campaspe (S)	**60.3**	54.3	66.0	**88.8**	84.7	91.8	**57.2**	51.2	63.0
Cardinia (S)	**52.5**	46.5	58.4	**88.3**	83.4	91.9	**50.5**	44.6	56.4
Casey (C)	**53.6**	48.4	58.8	**91.6**	88.4	94.1	**51.9**	46.7	57.1
Central Goldfields (S)	**52.6**	45.7	59.4	**89.7**	85.8	92.6	**49.8**	42.9	56.6
Colac-Otway (S)	**54.5**	47.6	61.2	**89.1**	85.6	91.8	**52.1**	45.2	58.8
Corangamite (S)	**52.6**	46.6	58.5	**85.9**	81.3	89.5	**50.0**	43.9	56.0
Darebin (C)	**50.2**	44.4	55.9	**93.0**	89.9	95.1	**49.4**	43.7	55.1
East Gippsland (S)	**49.8**	42.2	57.5	**85.4**	78.3	90.4	**47.4**	39.8	55.1
Frankston (C)	**55.3**	49.6	60.9	**92.5**	89.6	94.7	**52.9**	47.2	58.5
Gannawarra (S)	**63.8**	58.2	69.2	**89.1**	85.1	92.1	**60.3**	54.5	65.8
Glen Eira (C)	**48.4**	42.9	54.0	**91.5**	88.5	93.8	**47.0**	41.5	52.5
Glenelg (S)	**52.0**	45.7	58.1	**86.9**	83.3	89.9	**49.6**	43.3	55.8
Golden Plains (S)	**54.0**	48.0	60.0	**89.5**	86.6	91.9	**51.0**	44.9	57.0
Greater Bendigo (C)	**61.3**	55.4	66.9	**86.2**	82.3	89.3	**56.1**	50.2	61.8
Greater Dandenong (C)	**54.4**	49.2	59.5	**93.0**	89.9	95.2	**53.1**	47.9	58.2
Greater Geelong (C)	**44.1**	38.0	50.4	**87.7**	83.9	90.7	**41.4**	35.2	47.8
Greater Shepparton (C)	**54.8**	49.3	60.2	**89.1**	85.8	91.7	**53.9**	48.4	59.4
Hepburn (S)	**48.8**	41.3	56.4	**89.2**	85.8	91.8	**46.1**	38.6	53.7
Hindmarsh (S)	**57.8**	51.6	63.8	**89.0**	85.4	91.8	**55.4**	49.2	61.4
Hobsons Bay (C)	**48.4**	42.7	54.2	**91.8**	88.8	94.1	**46.6**	40.9	52.4
Horsham (RC)	**52.9**	46.5	59.2	**89.5**	85.3	92.7	**50.2**	43.8	56.6
Hume (C)	**50.2**	44.7	55.7	**89.5**	86.0	92.2	**47.3**	41.9	52.8
Indigo (S)	**50.5**	43.4	57.6	**88.2**	82.9	92.0	**46.6**	39.7	53.6
Kingston (C)	**43.3**	37.5	49.2	**91.2**	87.6	93.9	**42.1**	36.4	48.1
Knox (C)	**52.4**	46.8	58.0	**90.9**	87.7	93.3	**51.0**	45.4	56.6
Latrobe (C)	**56.0**	50.4	61.4	**87.0**	83.3	90.0	**52.2**	46.6	57.7
Loddon (S)	**56.5**	50.1	62.8	**88.8**	84.8	91.8	**53.0**	46.4	59.4
Macedon Ranges (S)	**46.0**	39.4	52.6	**89.7**	85.7	92.7	**43.8**	37.3	50.5
Manningham (C)	**44.4**	38.6	50.4	**90.1**	86.9	92.6	**42.6**	36.9	48.6

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

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

LGA = local government area.

95% CI = 95 per cent confidence interval.

Data are age standardised to the 2006 Victorian population.

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

Table 2.15: Not meeting guidelines[(a)] for consumption of fruit and/or vegetables, by LGA, 2008 (continued)

LGA	Did not meet …								
	Fruit guidelines			Vegetable guidelines			Either fruit or vegetable guidelines		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Mansfield (S)	**54.2**	47.0	61.2	**89.8**	85.3	93.0	**51.4**	44.3	58.5
Maribyrnong (C)	**55.1**	49.7	60.3	**91.0**	87.3	93.6	**52.3**	46.9	57.7
Maroondah (C)	**48.5**	42.7	54.4	**89.2**	85.6	92.0	**45.3**	39.5	51.2
Melbourne (C)	**44.3**	39.3	49.5	**92.4**	89.3	94.6	**42.7**	37.7	47.8
Melton (S)	**57.6**	52.4	62.6	**91.7**	88.1	94.2	**54.9**	49.6	60.0
Mildura (RC)	**54.6**	48.9	60.1	**89.5**	85.9	92.2	**53.2**	47.5	58.7
Mitchell (S)	**50.5**	45.0	56.0	**91.0**	87.1	93.7	**48.4**	42.8	54.0
Moira (S)	**57.6**	50.4	64.4	**89.5**	85.9	92.2	**55.0**	47.9	62.0
Monash (C)	**53.8**	48.4	59.2	**91.3**	87.8	93.9	**52.4**	47.0	57.8
Moonee Valley (C)	**43.1**	37.6	48.7	**88.4**	84.5	91.4	**41.0**	35.6	46.6
Moorabool (S)	**53.8**	47.8	59.8	**89.6**	86.1	92.3	**50.6**	44.7	56.6
Moreland (C)	**47.8**	42.7	52.9	**90.0**	86.8	92.5	**46.5**	41.4	51.6
Mornington Peninsula (S)	**50.4**	44.2	56.5	**91.3**	87.9	93.9	**48.6**	42.7	54.6
Mount Alexander (S)	**43.5**	37.2	50.0	**88.8**	85.7	91.3	**40.9**	34.7	47.4
Moyne (S)	**52.1**	45.5	58.6	**89.9**	84.9	93.4	**50.8**	44.2	57.3
Murrindindi (S)	**53.7**	46.1	61.1	**89.1**	85.3	92.0	**49.6**	42.0	57.1
Nillumbik (S)	**48.4**	42.6	54.1	**91.0**	87.5	93.6	**46.8**	41.1	52.7
Northern Grampians (S)	**59.0**	52.5	65.1	**88.0**	84.0	91.0	**54.1**	47.5	60.5
Port Phillip (C)	**49.4**	43.9	55.0	**92.0**	89.1	94.2	**48.0**	42.5	53.6
Pyrenees (S)	**55.5**	48.5	62.3	**87.4**	83.8	90.3	**51.4**	44.5	58.3
Queenscliffe (B)	**43.1**	35.5	51.0	**85.2**	78.4	90.2	**39.6**	32.1	47.6
Southern Grampians (S)	**49.7**	43.1	56.2	**88.3**	84.7	91.1	**47.6**	41.1	54.2
South Gippsland (S)	**49.8**	43.7	55.9	**86.7**	82.8	89.9	**46.1**	40.2	52.2
Stonnington (C)	**46.1**	40.6	51.8	**90.9**	87.7	93.4	**43.6**	38.0	49.3
Strathbogie (S)	**53.2**	46.4	59.9	**91.3**	88.0	93.8	**50.7**	43.9	57.4
Surf Coast (S)	**39.0**	32.4	46.1	**88.5**	85.3	91.1	**37.1**	30.6	44.2
Swan Hill (RC)	**53.4**	46.5	60.1	**86.7**	80.2	91.3	**51.5**	44.6	58.3
Towong (S)	**46.9**	40.1	53.9	**88.1**	84.3	91.1	**44.9**	38.1	51.9
Wangaratta (RC)	**43.8**	37.2	50.8	**86.8**	82.0	90.5	**41.9**	35.2	48.8
Warrnambool (C)	**55.8**	50.0	61.4	**89.9**	86.6	92.5	**53.1**	47.3	58.7
Wellington (S)	**52.2**	46.3	58.1	**86.6**	82.8	89.7	**47.7**	41.7	53.8
West Wimmera (S)	**56.1**	50.0	62.0	**88.9**	85.4	91.7	**54.5**	48.5	60.4
Whitehorse (C)	**46.1**	40.3	52.0	**89.9**	86.7	92.5	**44.4**	38.6	50.3
Whittlesea (C)	**52.9**	47.7	58.0	**89.2**	85.7	91.8	**49.7**	44.6	54.9
Wodonga (RC)	**53.5**	48.0	58.9	**88.6**	85.1	91.4	**50.6**	45.2	56.1
Wyndham (C)	**59.5**	54.5	64.2	**92.3**	89.3	94.6	**57.1**	52.2	61.9
Yarra (C)	**46.0**	40.4	51.6	**90.9**	87.5	93.4	**44.7**	39.2	50.4
Yarra Ranges (S)	**47.6**	42.3	52.9	**88.2**	84.5	91.1	**43.6**	38.4	48.9
Yarriambiack (S)	**54.3**	47.7	60.8	**89.2**	85.2	92.2	**50.5**	43.9	57.0
Total	**50.5**	**49.6**	**51.3**	**90.0**	**89.5**	**90.4**	**48.2**	47.3	49.1

Figure 2.9: Not meeting fruit guidelines[(a)], by LGA, 2008

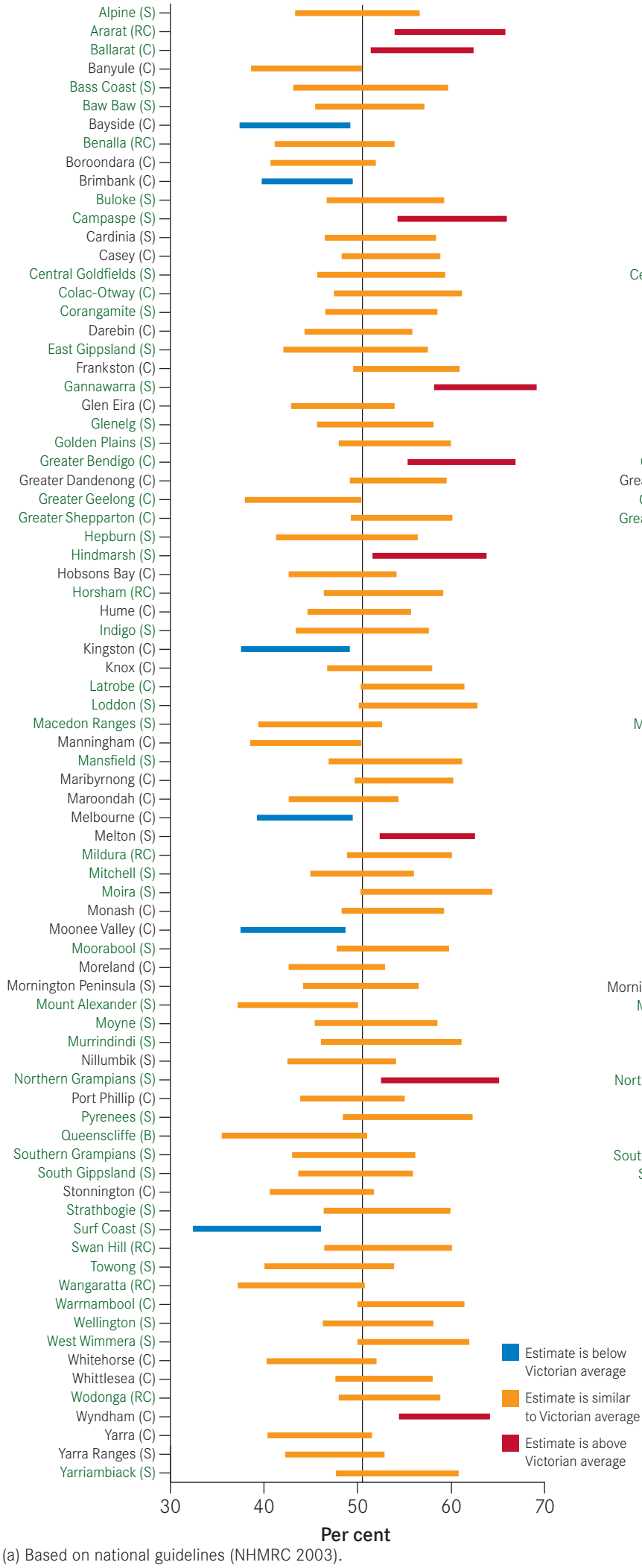


Figure 2.10: Not meeting vegetable guidelines[(a)], by LGA, 2008

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

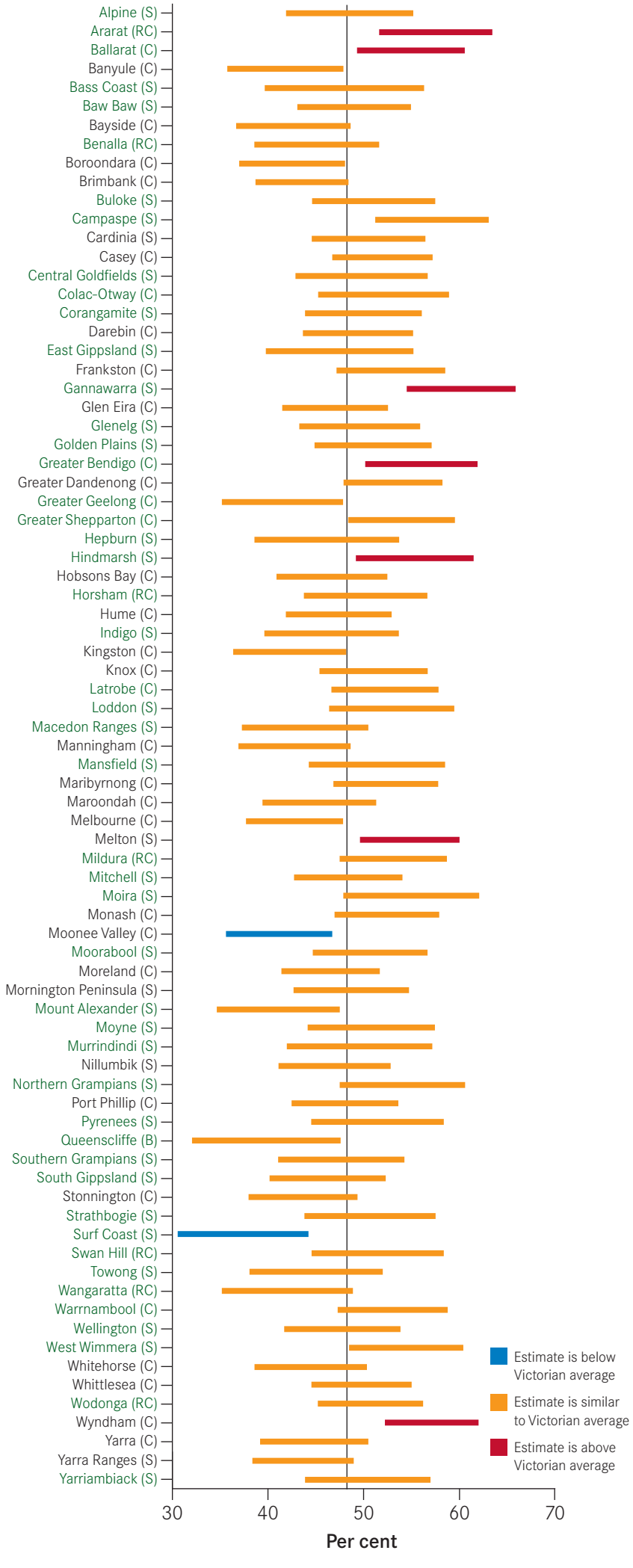
Metropolitan and rural LGAs are identified by colour as follows: metropolitan / rural.

LGA = local government area.

Data are age standardised to the 2006 Victorian population.

The line on the graph is the Victorian estimate, it does not show the 95% CI. See relevant table for 95% CI for Victoria (Total).

Figure 2.11 Not meeting either fruit or vegetable guidelines[(a)], by LGA, 2008



Consumption of recommended daily intake of fruit and vegetables, by selected health indicators

Table 2.16 shows the proportion of the population who reported meeting the dietary guidelines for fruit (three or more serves for those aged 18 years, and two or more serves for those aged 19 years and over), vegetables (three or more serves for those aged 18 years, and five or more serves for those aged 19 years and over) and both fruit and vegetables combined, by selected health indicators.

The data in the table show that there were differences in the proportion of persons meeting the guidelines for fruit and vegetable consumption across health indicators. For instance, persons who were current smokers were more likely than ex-smokers and non-smokers to meet neither of the dietary guidelines (60.5 per cent, 49.2 per cent and 43.9 per cent respectively). Compared to abstainers, those who consumed alcohol at levels regarded as risky or high risk in terms of the potential for short and long-term harm, were more likely to meet neither guideline. Persons who were sedentary were less likely than persons who participated in sufficient time and sessions in physical activity, to consume the recommended number of serves of fruit per day (39.6 per cent and 52.3 per cent respectively).

Table 2.16: Meeting guidelines[(a)] for consumption of fruit and vegetables, by selected health indicators, 2008

	Fruit guidelines			Vegetables guidelines			Both guidelines[(b)]			Neither fruit or vegetable guidelines[(c)]		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Smoking status												
Current smoker	33.6	31.6	35.7	6.0	5.2	7.0	3.4	2.8	4.1	60.5	58.4	62.6
Ex-smoker	46.5	44.3	48.7	7.8	7.0	8.8	5.6	5.0	6.3	49.2	47.0	51.5
Non-smoker	52.0	50.9	53.1	8.3	7.8	8.9	6.2	5.8	6.7	43.9	42.8	45.0
Alcohol consumption[(d)]												
At risk or high risk of long-term harm	35.0	31.0	39.3	9.2	7.1	11.8	4.9	3.5	6.8	59.0	54.7	63.3
At risk or high risk of short-term[(e)] harm	43.8	42.4	45.1	7.9	7.3	8.6	5.4	4.8	5.9	51.8	50.5	53.1
Abstainer from alcohol	48.3	46.1	50.4	7.8	6.8	8.9	5.9	5.1	6.8	45.9	43.8	48.1
Physical activity levels[(f)]												
Sufficient time and sessions	52.3	51.2	53.5	9.1	8.5	9.7	6.9	6.4	7.5	44.2	43.1	45.4
Insufficient time and/or sessions	41.3	39.6	43.0	5.0	4.5	5.6	3.3	2.8	3.7	55.0	53.2	56.7
Sedentary	39.6	35.2	44.2	8.9	5.8	13.4	6.2	3.7	10.2	53.6	48.7	58.3
Body weight status												
Underweight	47.9	42.5	53.4	10.0	7.3	13.5	8.2	5.8	11.6	47.7	42.3	53.3
Healthy weight	49.4	48.2	50.7	8.8	8.2	9.5	6.4	5.8	6.9	46.2	45.0	47.5
Overweight	47.7	46.1	49.4	7.4	6.7	8.2	5.4	4.8	6.1	48.6	47.0	50.3
Obese	44.6	42.2	46.9	6.7	5.8	7.7	4.6	3.9	5.4	50.8	48.5	53.2
Self-rated health												
Excellent/very good	53.9	52.6	55.2	10.0	9.3	10.7	7.4	6.8	8.0	42.1	40.9	43.4
Good	44.2	42.8	45.5	6.7	6.1	7.3	4.6	4.1	5.1	51.8	50.5	53.2
Fair/poor	38.5	36.5	40.5	5.6	4.8	6.5	3.7	3.0	4.4	55.7	53.7	57.8
Level of psychological distress[(g)]												
Low (10–15)	49.5	48.4	50.6	8.5	8.0	9.0	6.3	5.9	6.8	46.7	45.6	47.8
Moderate (16–21)	45.5	43.8	47.3	7.1	6.3	8.0	4.4	3.8	5.1	49.9	48.1	51.6
High (22–29)	43.1	40.4	45.9	7.2	6.0	8.6	4.9	3.9	6.2	52.6	49.8	55.4
Very high (30–50)	36.4	32.3	40.8	4.7	3.0	7.1	3.7	2.2	6.1	56.4	51.8	60.9
Total	47.4	47.0	48.8	7.9	7.3	8.1	5.7	5.3	6.0	48.2	47.3	49.1

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

(b) Includes those who met both guidelines i.e., recommended number of serves of fruit and recommended number of serves of vegetables per day.

(c) Includes those who did not meet either of the guidelines for fruit and vegetable consumption.

(d) Based on national guidelines (NHMRC 2001).

(e) Includes all those who consumed alcohol at levels defined as short-term risky/high risk of harm (weekly/monthly/yearly).

(f) Based on national guidelines (DoHA 1999) and excludes adults aged less than 19 years.

(g) Based on Kessler 10 Psychological Distress Scale (K10).

95% CI = 95 per cent confidence interval.

Data are age standardised to the 2006 Victorian population.

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

Alcohol consumption

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

The 2001 *Australian Alcohol Guidelines: Health Risks and Benefits* (NHMRC 2001), which were current when the VPHS 2008 was conducted, emphasise patterns of drinking as opposed to levels of consumption (the average amount consumed). The concept of drinking patterns refers to aspects of drinking behaviour other than the level of drinking, and includes when, where and with whom drinking behaviour occurs, the type of drinks consumed, the number of heavy drinking occasions undertaken and the norms associated with drinking behaviour. The 2001 guidelines identified two main patterns of drinking behaviour as creating a risk to an individual's health:

1. excessive alcohol intake on a particular occasion; and,
2. consistent high-level intake over months and years.

The 2001 guidelines specified the risks for various drinking levels for males and females of average, or larger than average body size (≥60 kilograms for males and ≥50 kilograms for females), over the short and long term. The guidelines categorised risk according to three levels:

1. low risk– a level of drinking at which the risk of harm is minimal and there are possible benefits for some of the population;
2. risky– a level of drinking at which the risk of harm outweighs any possible benefit; and,
3. high risk– a level of drinking at which there is substantial risk of serious harm and above which risk increases rapidly.

In March 2009, the NHMRC introduced a new set of guidelines for alcohol, based on the best current evidence available. The 2009 guidelines were based on a process that included a systematic search and analysis of the research on the health effects and risks of alcohol consumption published between 2001 and 2007.

The data reported in this section have been analysed relative to the 2001 guidelines which were current when interviews for the VPHS 2008 were conducted. Tables 2.17 and 2.18 summarise the 2001 Australian alcohol guidelines. For the purpose of determining the risk of alcohol-related harm, the 2001 guidelines define short-term risk in terms of the number of standard drinks consumed per drinking occasion. The guidelines for the whole population indicate that males who drink up to six standard drinks and females who drink up to four standard drinks are at *low risk* of alcohol related harm in the short-term. Males who drink 11 or more drinks and females who consume seven or more drinks are categorised as being at *high risk* of alcohol related harm. Between these levels, alcohol consumption behaviour is classified as risky in the short-term.

Table 2.17: 2001 Australian alcohol guidelines for risk to health in the short-term[(a)]

	Low risk	Risky	High risk
Males	Up to six on any one day; no more than three days per week	Seven to 10 on any one day	11 or more on any one day
Females	Up to four on any one day; no more than three days per week	Five to six on any one day	Seven or more on any one day

(a) Quantities in standard drinks.

Source: NHMRC 2001.

Based on the 2001 guidelines, long-term risk of harm due to alcohol consumption is associated with regular daily patterns of drinking alcohol, defined in terms of the amount typically consumed each week. The 2001 guidelines indicate that males are at high risk of long-term harm if they consume seven or more drinks on an average day, or more than 43 drinks per week (table 2.18). For females, high risk of long-term harm is associated with the consumption of five or more standard drinks on an average day, or more than 29 drinks per week. Alcohol consumption is considered risky in the long-term if males consume 5–6 drinks on an average day (29–42 per week) and if females consume more than 3–4 drinks daily (15–28 per week).

Table 2.18: 2001 Australian alcohol guidelines for risk to health in the long term[(a)]

		Low risk	Risky	High risk
Males	On an average day	Up to four per day	Five to six per day	Seven or more per day
	Overall weekly level	Up to 28 per week	29–42 per week	43 or more per week
Females	On an average day	Up to two per day	Three to four per day	Five or more per day
	Overall weekly level	Up to 14 per week	15–28 per week	29 or more per week

(a) Based on a standard drink containing 10 grams or 12.5 millilitres of alcohol.

Source: NHMRC 2001.

Abstainers from alcohol are those persons who reported that they did not drink, or who had a drink in the past 12 months, but reported that they no longer drink (recent abstainers). Females were more likely to be abstainers than males and older persons were more likely to be abstainers than younger persons (table 2.19). The proportion of males and females who were abstainers was similar for those aged 18–24 years. Among persons aged 65 years and over, females (36.5 per cent) were almost twice as likely to be abstainers as males (18.7 per cent).

Table 2.19: Abstainers[(a)] from alcohol consumption, by age group and sex, 2008

Age group (years)	Males			Females			Persons		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
18–24	**10.4**	7.8	13.7	**13.5**	10.7	17.0	**11.9**	9.9	14.2
25–34	**11.7**	9.1	14.8	**22.6**	20.3	25.2	**17.1**	15.4	19.1
35–44	**10.5**	8.6	12.6	**18.5**	16.8	20.2	**14.5**	13.3	15.8
45–54	**11.4**	9.7	13.2	**20.3**	18.5	22.3	**15.9**	14.6	17.2
55–64	**10.9**	9.4	12.6	**24.4**	22.5	26.3	**17.7**	16.5	19.0
65+	**18.7**	17.0	20.6	**36.5**	34.7	38.4	**28.5**	27.2	29.9
Total	**12.6**	**11.7**	**13.5**	**23.0**	**22.2**	**23.9**	**18.0**	**17.4**	**18.6**

(a) Includes both long-term and recent abstainers (i.e. those who had a drink in the past 12 months but reported they no longer drink).

95% CI = 95 per cent confidence interval.

Data are crude estimates, except for the totals, which represent the estimates for Victoria and have been age standardised to the 2006 Victorian population.

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

The frequency with which persons consume alcohol at above the recommended short term risk levels by sex and age group is shown in table 2.20. The prevalence of drinking alcohol at risky or high risk levels, at least weekly, was highest among males and females aged 18–24 years (21.0 per cent and 17.1 per cent respectively). Except for those aged 18–24 years, the proportion of males who consumed alcohol at risky or high risk levels at least once each week was higher than for females across all age groups. More than one-fifth of persons aged less than 55 years consumed alcohol at levels associated with some risk of short-term harm at least once a year.

Table 2.20: Frequency of drinking alcohol at above short-term risk[a] levels, by age group and sex, 2008

Age group (years)	Risky or high risk											
	Low risk[b]			At least yearly			At least monthly			At least weekly		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Males												
18–24 years	16.9	13.5	21.0	25.5	21.6	29.9	25.8	21.9	30.1	21.0	17.4	25.2
25–34 years	20.6	17.7	23.9	27.5	24.2	31.1	21.5	18.3	25.2	18.4	15.5	21.7
35–44 years	29.9	27.2	32.7	29.6	26.9	32.4	16.4	14.3	18.7	13.3	11.5	15.4
45–54 years	34.1	31.5	36.8	26.4	23.9	29.1	13.3	11.6	15.3	14.5	12.7	16.5
55–64 years	43.7	41.1	46.4	20.9	18.9	23.2	12.6	11.0	14.4	11.2	9.7	12.8
65+	53.8	51.5	56.1	14.4	12.9	16.0	7.2	6.0	8.5	4.9	4.0	6.0
Total	33.3	32.1	34.4	24.3	23.1	25.2	15.8	14.8	16.9	13.6	12.7	14.6
Females												
18–24 years	22.1	18.6	26.0	23.7	20.2	27.7	23.2	19.8	27.1	17.1	13.9	20.8
25–34 years	29.4	26.9	32.2	26.1	23.7	28.7	12.1	10.4	14.1	8.7	7.2	10.5
35–44 years	38.4	36.4	40.5	25.9	24.1	27.7	10.2	9.0	11.5	6.8	5.8	7.9
45–54 years	42.5	40.2	44.7	22.1	20.3	24.0	8.9	7.7	10.2	5.8	4.9	6.9
55–64 years	50.2	48.0	52.4	13.7	12.2	15.2	7.8	6.8	9.0	3.5	2.9	4.3
65+	52.2	50.3	54.1	6.9	6.0	7.8	2.6	2.0	3.3	1.1	0.8	1.6
Total	39.2	38.2	40.2	19.9	19.0	20.8	10.4	9.7	11.1	6.9	6.3	7.6
Persons												
18–24 years	19.5	17.0	22.2	24.7	21.9	27.6	24.5	21.9	27.4	19.1	16.6	21.8
25–34 years	25.0	23.0	27.1	26.8	24.7	29.0	16.8	14.9	18.9	13.6	11.9	15.4
35–44 years	34.2	32.5	35.9	27.7	26.1	29.4	13.2	12.0	14.5	10.0	8.9	11.1
45–54 years	38.3	36.6	40.1	24.2	22.7	25.9	11.1	10.0	12.2	10.1	9.1	11.2
55–64 years	47.0	45.3	48.7	17.3	16.0	18.6	10.2	9.2	11.2	7.3	6.5	8.2
65+	52.9	51.4	54.4	10.2	9.4	11.1	4.6	4.0	5.3	2.8	2.4	3.4
Total	36.2	35.5	37.0	22.0	21.3	22.7	13.0	12.4	13.7	10.2	9.7	10.8

(a) Based on national guidelines (NHMRC 2001).

(b) Drinkers who consumed alcohol at levels that did not expose them to risk of short-term of harm were classified as low risk.

95% CI = 95 per cent confidence interval.

Note that figures may not add to 100 per cent (excluding abstainers) due to a proportion of 'don't know' or 'refused' responses.

Data are crude estimates, except for the totals, which represent the estimates for Victoria and have been age standardised to the 2006 Victorian population.

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

Table 2.21 shows the frequency at which males and females consumed alcohol above the recommended short term risk levels between 2002 and 2008. Patterns of alcohol consumption that may lead to short-term harm did not change over this period. For both males and females, the proportion who consumed alcohol at risky or high risk levels at least yearly, monthly or weekly, remained constant between 2002 and 2008.

Table 2.21: Frequency of drinking alcohol at above short-term risk[a] levels, by sex, 2002–2008

	2002	2003	2004	2005	2006	2007	2008
	Per cent						
Males							
Low risk[b]	30.5	31.9	31.5	31.6	31.7	34.4	33.3
Risky or high risk							
At least yearly	25.1	23.9	23.9	23.7	25.4	22.9	24.3
At least monthly	17.1	17.2	14.7	15.8	15.8	14.6	15.8
At least weekly	14.2	14.2	16.0	13.1	14.4	13.6	13.6
Females							
Low risk[b]	38.7	40.1	37.2	39.5	40.0	39.4	39.2
Risky or high risk							
At least yearly	20.6	19.5	22.6	20.4	21.7	21.1	19.9
At least monthly	11.2	11.3	10.3	11.0	9.6	9.2	10.4
At least weekly	6.1	6.3	7.2	6.6	6.3	6.8	6.9

(a) Based on national guidelines (NHMRC 2001).

(b) Drinkers who consumed alcohol at levels that did not expose them to risk of short-term of harm were classified as low risk.

Note that figures may not add to 100 per cent (excluding abstainers) due to a proportion of 'don't know' or 'refused' responses.

Data are age standardised to the 2006 Victorian population.

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

The quantity/frequency method was used to estimate the proportion of the population drinking at long-term risky or high risk levels. This method combined information on how often respondents usually had an alcoholic drink of any kind with information on the number of standard drinks that respondents usually had on a day when they consumed an alcoholic drink.

In 2008, the majority of males and females aged 18 years and over were at low risk of long-term harm, based on their frequency and volume of alcohol consumption (table 2.22). The proportion of persons who drank alcohol at levels that were risky or high risk was similar across age groups. However, younger persons were more likely to be at low risk than older persons. Among those aged 65 years and over, a higher proportion of males (76.6 per cent) than females (60.6 per cent) were at low risk of long-term harm.

Table 2.22: Long-term risk[a] of alcohol-related harm, by age group and sex, 2008

Age group (years)	Risky or high risk								
	Low risk[b]			Risky			High risk		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Males									
18–24 years	**84.1**	80.3	87.3	**2.7**	1.5	4.7	**1.4**	0.6	3.0
25–34 years	**83.2**	79.7	86.2	**2.7**	1.7	4.2	**1.4**	0.6	3.1
35–44 years	**84.5**	82.1	86.6	**2.9**	2.0	4.1	**1.2**	0.8	2.0
45–54 years	**82.9**	80.7	84.9	**3.6**	2.7	4.6	**1.5**	1.0	2.4
55–64 years	**83.5**	81.5	85.3	**3.5**	2.7	4.6	**1.2**	0.8	1.9
65+	**76.6**	74.7	78.5	**2.7**	2.1	3.6	**0.9**	0.5	1.5
Total	**82.2**	**81.1**	**83.2**	**3.0**	**2.6**	**3.4**	**1.3**	**1.0**	**1.7**
Females									
18–24 years	**82.6**	78.9	85.8	**1.8**	0.9	3.4	**0.8**	0.3	2.1
25–34 years	**73.0**	70.4	75.6	**2.2**	1.5	3.3	**1.1**	0.6	2.2
35–44 years	**78.3**	76.5	80.1	**2.0**	1.5	2.7	**0.8**	0.5	1.3
45–54 years	**75.1**	73.1	77.1	**3.2**	2.5	4.0	**0.8**	0.5	1.2
55–64 years	**71.3**	69.2	73.2	**3.4**	2.8	4.3	**0.3**	0.2	0.5
65+	**60.6**	58.7	62.5	**1.7**	1.2	2.3	**0.4**	0.2	0.8
Total	**73.2**	**72.2**	**74.1**	**2.3**	**2.0**	**2.7**	**0.7**	**0.5**	**1.0**
Persons									
18–24 years	**83.4**	80.8	85.7	**2.2**	1.4	3.4	**1.1**	0.6	2.0
25–34 years	**78.1**	76.0	80.1	**2.5**	1.8	3.3	**1.3**	0.8	2.2
35–44 years	**81.4**	79.9	82.8	**2.4**	1.9	3.1	**1.0**	0.7	1.4
45–54 years	**79.0**	77.5	80.4	**3.4**	2.8	4.0	**1.2**	0.8	1.6
55–64 years	**77.3**	75.9	78.7	**3.5**	2.9	4.1	**0.8**	0.5	1.1
65+	**67.8**	66.4	69.2	**2.1**	1.7	2.6	**0.6**	0.4	0.9
Total	**77.5**	**76.8**	**78.2**	**2.6**	**2.4**	**2.9**	**1.0**	**0.8**	**1.2**

(a) Based on national guidelines (NHMRC 2001).

(b) Drinkers who consumed alcohol at levels that did not expose them to risk of long-term of harm were classified as low risk.

95% CI = 95 per cent confidence interval.

Note that figures may not add to 100 per cent (excluding abstainers) due to a proportion of 'don't know' or 'refused' responses.

Data are crude estimates, except for the totals, which represent the estimates for Victoria and have been age standardised to the 2006 Victorian population.

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

Table 2.23 shows the proportion of persons who reported consuming alcohol at risky or high risk levels in the short and long-term, by sex and Department of Health region. As reflected in tables 2.20 and 2.21, the frequency with which individuals consumed alcohol at levels associated with exposure to the risks of short-term harm ranged from at least once a year to at least once a week. The proportion of persons who reported consuming alcohol at levels associated with short-term risk of harm was above the average for Victoria (45.2 per cent) for all rural regions. The proportion of males exposed to any (weekly, monthly or yearly) risk of short-term harm was greater for those living in rural areas of the state compared with the metropolitan area (61.2 per cent and 51.1 per cent respectively). In all rural regions (except Hume), the proportion of males who reported consuming more than the recommended number of standard drinks on at least one drinking occasion each year (short-term risk) was higher than the average for Victoria (53.7 per cent).

A similar pattern of results was observed for females. The proportion of females exposed to the (weekly, monthly or yearly) risk of short-term harm was greater for those living in rural areas of the state compared with the metropolitan area (42.7 per cent and 35.4 per cent respectively). In all rural regions (except Loddon Mallee), the proportion of females who reported consuming more than the recommended number of standard drinks on at least one drinking occasion each year (short-term risk) was higher than the average for Victoria (37.2 per cent).

The proportion of males (8.2 per cent) in the Barwon–South Western region reporting alcohol consumption at levels associated with risk of long-term harm was higher than the Victorian average (4.3 per cent). Among females, there was one rural region– Gippsland (19.1 per cent), and one metropolitan region– Southern Metropolitan (19.2 per cent), that had a lower proportion of abstainers than the Victorian average (23.0 per cent). Only the North and West Metropolitan region (29.8 per cent) had a higher than average proportion of abstainers in the female population. The proportion of males who were abstainers was similar across all regions.

Table 2.23: Risk[a] of alcohol-related harm, by sex and Department of Health region, 2008

Region	Risky or high risk pattern of alcohol consumption leading to …								
	Abstainer[b]			Short-term risk			Long-term risk		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Males									
Barwon-South Western	**10.9**	8.2	14.4	**66.1**	61.6	70.3	**8.2**	5.3	12.4
Eastern Metropolitan	**11.7**	9.5	14.3	**52.3**	48.9	55.7	**4.9**	3.6	6.7
Gippsland	**10.5**	8.1	13.4	**59.7**	55.6	63.7	**6.1**	4.4	8.4
Grampians	**12.5**	10.0	15.6	**59.6**	55.9	63.2	**3.5**	2.4	5.1
Hume	**12.7**	10.2	15.7	**58.5**	55.0	61.9	**5.0**	3.7	6.5
Loddon Mallee	**13.8**	11.2	17.0	**60.2**	56.4	63.8	**3.6**	2.6	4.9
North and West Metropolitan	**14.7**	13.1	16.4	**50.4**	48.1	52.7	**3.7**	2.9	4.6
Southern Metropolitan	**11.2**	9.4	13.3	**50.9**	48.1	53.8	**3.2**	2.4	4.4
Metropolitan	**12.7**	**11.6**	**13.8**	**51.1**	**49.6**	**52.7**	**3.8**	**3.2**	**4.4**
Rural	**12.1**	**10.8**	**13.6**	**61.2**	**59.2**	**63.0**	**5.5**	**4.5**	**6.8**
Total	**12.6**	**11.7**	**13.5**	**53.7**	**52.4**	**55.0**	**4.3**	**3.8**	**4.9**
Females									
Barwon-South Western	**19.2**	16.2	22.6	**43.4**	38.7	48.2	**4.3**	2.7	6.7
Eastern Metropolitan	**21.0**	18.8	23.3	**36.7**	34.1	39.3	**2.8**	2.0	3.9
Gippsland	**19.1**	16.9	21.5	**43.9**	40.8	47.0	**4.7**	3.1	6.9
Grampians	**20.0**	17.7	22.5	**42.4**	39.0	45.9	**2.8**	1.9	3.9
Hume	**20.5**	18.6	22.6	**43.7**	41.1	46.4	**2.4**	1.8	3.3
Loddon Mallee	**22.3**	19.8	25.1	**40.1**	37.0	43.3	**3.7**	2.7	4.9
North and West Metropolitan	**29.8**	28.2	31.5	**31.9**	30.3	33.6	**2.7**	2.1	3.4
Southern Metropolitan	**19.2**	17.5	21.1	**38.7**	36.5	41.0	**3.3**	2.6	4.1
Metropolitan	**23.9**	**22.8**	**25.0**	**35.4**	**34.2**	**36.6**	**2.9**	**2.5**	**3.3**
Rural	**20.3**	**19.1**	**21.6**	**42.7**	**40.9**	**44.4**	**3.6**	**2.9**	**4.3**
Total	**23.0**	**22.2**	**23.9**	**37.2**	**36.2**	**38.2**	**3.1**	**2.7**	**3.4**
Persons									
Barwon-South Western	**15.2**	13.1	17.7	**54.5**	51.0	58.0	**6.1**	4.4	8.4
Eastern Metropolitan	**16.6**	15.0	18.3	**44.2**	42.0	46.3	**3.9**	3.1	4.9
Gippsland	**15.0**	13.3	16.9	**51.4**	48.7	54.0	**5.3**	4.1	6.8
Grampians	**16.4**	14.6	18.3	**50.8**	48.3	53.4	**3.2**	2.4	4.2
Hume	**16.9**	15.2	18.7	**51.0**	48.8	53.2	**3.7**	3.0	4.5
Loddon Mallee	**18.2**	16.4	20.3	**50.0**	47.5	52.5	**3.6**	2.9	4.5
North and West Metropolitan	**22.5**	21.3	23.7	**41.0**	39.6	42.4	**3.2**	2.7	3.8
Southern Metropolitan	**15.4**	14.1	16.7	**44.7**	42.9	46.5	**3.2**	2.7	3.9
Metropolitan	**18.5**	**17.7**	**19.3**	**43.1**	**42.1**	**44.1**	**3.3**	**3.0**	**3.7**
Rural	**16.4**	**15.4**	**17.3**	**51.7**	**50.4**	**53.1**	**4.5**	**3.9**	**5.2**
Total	**18.0**	**17.4**	**18.6**	**45.2**	**44.4**	**46.1**	**3.7**	**3.3**	**4.0**

(a) Based on national guidelines (NHMRC 2001).

(b) Includes both long-term and recent abstainers (i.e. those who had a drink in the past 12 months but reported they no longer drink).

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

95% CI = 95 per cent confidence interval.

Note that figures may not add to 100 per cent (excluding abstainers) due to a proportion of 'don't know' or 'refused' responses.

Data are age standardised to the 2006 Victorian population.

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

Table 2.24 shows the proportion of persons who reported that they consumed alcohol at least yearly, monthly or weekly at levels regarded as risky or high risk in the short-term, by LGA. Figure 2.13 shows the proportion of persons who consumed alcohol on one or more occasion per year, at levels associated with short-term harm. On average, 45.2 per cent of the population drank alcohol at levels that were risky or high risk in the short-term on one or more occasion per year. There were 26 local government areas (four metropolitan LGAs and 22 rural LGAs) for which this summary indicator was significantly above the Victorian average (45.2 per cent). The rural LGAs with a higher than average proportion of persons exposed to some risk of short-term harm from alcohol consumption were: Alpine (59.7 per cent), Surf Coast (59.5 per cent)), Bass Coast (59.2 per cent), Queenscliffe (58.8 per cent), Indigo (57.6 per cent), Buloke (56.8 per cent), Mitchell (56.5 per cent), Mildura (56.3 per cent), Mansfield (56.1 per cent), East Gippsland (55.7 per cent), Colac–Otway (55.4 per cent), Murrindindi (55.4 per cent), Greater Geelong (55.1 per cent), Moyne (54.6 per cent), Pyrenees (54.6 per cent), Moira (54.0 per cent), Warrnambool (53.6 per cent), Southern Grampians (53.1 per cent), Ballarat (53.0 per cent), Strathbogie (52.7 per cent), Campaspe (52.5 per cent) and Hindmarsh (51.7 per cent). The four metropolitan local government areas with a higher than average proportion of persons who consumed alcohol at risky or high risk levels at least once per year were Yarra (55.4 per cent), Mornington Peninsula (53.9 per cent), Port Phillip (53.4 per cent) and Bayside (53.0 per cent).

Figure 2.12 shows the proportion of persons who consumed alcohol at least weekly, at levels associated with short-term harm. The proportion of persons who drank on at least one occasion per week and were at risk of short-term harm was higher than the average for Victoria (10.2 per cent) in 12 LGAs: Indigo (19.7 per cent), Strathbogie (18.1 per cent), Bass Coast (17.2 per cent), Moira (17.2 per cent), Mansfield (17.1 per cent), Mornington Peninsula (16.8 per cent), Corangamite (16.4 per cent), Southern Grampians (16.4 per cent), Surf Coast (16.3 per cent), Yarra (16.0 per cent), Mildura (15.4 per cent) and Port Phillip (14.9 per cent). With the exception of Yarra, Port Phillip and Mornington Peninsula, these LGAs are all located in rural areas.

Table 2.25 shows the proportion of persons who were not at risk of long term harm due to alcohol consumption based on the 2001 guidelines, by LGA. Figure 2.14 shows these data relative to the Victoria average (95.5 per cent). Among the 79 LGAs, there was only one LGA for which the proportion of persons not at risk of long-term harm was higher than the average for Victoria– Moorabool (98.1 per cent). There were three LGAs with a below average proportion of adults not at risk of long-term harm from alcohol– Greater Geelong (92.1 per cent), Pyrenees (91.8 per cent) and Yarra (91.4 per cent).

Table 2.24: Frequency of drinking alcohol at above short-term risk[a] levels, by LGA, 2008

LGA	Risky or high risk														
	Low risk[b]			At least yearly			At least monthly			At least weekly			Short-term risk[c]		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Alpine (S)	32.3	27.7	37.3	31.8	26.4	37.8	16.3	12.3	21.3	11.6	7.9	16.6	59.7	54.7	64.4
Ararat (RC)	29.2	24.8	34.0	26.9	21.0	33.7	15.1	10.0	22.3	10.0	6.9	14.3	52.0	45.8	58.2
Ballarat (C)	31.7	27.4	36.4	25.0	20.3	30.4	16.5	12.3	21.9	11.5	8.1	16.1	53.0	48.1	57.8
Banyule (C)	32.3	27.5	37.5	25.9	20.6	32.0	12.6	8.8	17.7	10.6	7.1	15.4	49.1	44.0	54.2
Bass Coast (S)	26.8	22.7	31.4	23.9	17.5	31.8	18.1	11.7	26.8	17.2	11.8	24.5	59.2	52.5	65.7
Baw Baw (S)	34.9	29.6	40.6	25.8	21.0	31.4	10.5	6.9	15.7	11.0	8.0	14.9	47.3	41.9	52.8
Bayside (C)	39.4	34.1	44.9	21.7	17.3	26.8	17.8	13.3	23.4	13.5	9.7	18.7	53.0	47.4	58.6
Benalla (RC)	35.3	29.7	41.4	26.2	20.7	32.5	13.5	9.5	18.8	9.3	6.1	14.1	49.0	43.1	54.9
Boroondara (C)	38.8	34.0	43.9	24.8	20.0	30.4	17.0	13.1	21.8	6.2	4.0	9.6	48.1	42.6	53.7
Brimbank (C)	34.8	30.2	39.7	21.3	17.3	25.9	8.0	5.6	11.3	4.7*	2.8	7.6	34.0*	29.4	38.8
Buloke (S)	28.1	23.4	33.2	26.3	20.7	32.8	21.0	16.0	26.9	9.5	5.9	15.1	56.8	51.2	62.2
Campaspe (S)	28.3	24.2	32.8	26.8	21.7	32.7	13.0	9.2	18.1	12.6	9.0	17.4	52.5	46.8	58.0
Cardinia (S)	35.9	31.2	40.8	25.9	21.0	31.5	11.4	7.5	17.0	10.4	6.9	15.5	47.7	42.2	53.3
Casey (C)	42.8	37.8	47.9	19.8	16.0	24.2	7.2	4.8	10.5	10.7	7.7	14.8	37.7	33.0	42.6
Central Goldfields (S)	30.1	25.2	35.6	22.6	16.9	29.5	13.5	9.3	19.3	13.1	8.9	18.8	49.2	42.9	55.6
Colac-Otway (S)	30.3	25.7	35.4	24.4	19.1	30.7	19.2	14.0	25.7	11.7	7.5	17.9	55.4	49.6	61.0
Corangamite (S)	31.6	26.3	37.4	17.4	13.3	22.5	14.3	10.2	19.8	16.4	11.8	22.3	48.2	42.5	53.9
Darebin (C)	40.1	34.8	45.7	21.9	17.5	27.0	7.7	5.3	11.1	11.2	7.8	15.8	40.7	35.3	46.4
East Gippsland (S)	31.2	26.0	36.9	20.9	14.8	28.8	20.0	14.1	27.4	14.9	10.0	21.4	55.7	49.0	62.3
Frankston (C)	37.6	32.4	43.0	21.2	17.0	26.1	13.4	9.7	18.3	12.2	8.6	16.8	46.8	41.5	52.2
Gannawarra (S)	31.7	27.4	36.3	18.4	14.3	23.3	17.3	12.9	22.8	13.9	9.7	19.4	49.5	44.3	54.7
Glen Eira (C)	43.6	38.3	49.0	19.2	15.4	23.8	11.9	8.5	16.4	6.9	4.5	10.5	38.1	32.9	43.5
Glenelg (S)	31.9	26.4	37.9	20.9	16.6	26.1	12.4	8.9	16.9	14.0	9.2	20.6	47.3	41.5	53.2
Golden Plains (S)	34.8	29.7	40.3	23.2	18.5	28.6	14.3	10.3	19.5	10.4	7.2	14.9	47.8	42.2	53.6
Greater Bendigo (C)	33.1	28.5	38.2	24.9	20.1	30.6	9.8	6.7	14.3	11.6	7.7	17.0	46.3	40.8	52.0
Greater Dandenong (C)	41.0	35.9	46.2	13.9	10.6	18.0	7.0	4.5	10.8	7.2	4.7	10.7	28.1	23.4	33.2
Greater Geelong (C)	30.2	25.5	35.3	23.9	18.8	29.9	19.3	14.0	26.0	11.9	8.5	16.6	55.1	49.4	60.8
Greater Shepparton (C)	33.6	28.5	39.1	19.1	15.1	23.8	11.9	8.2	17.0	12.1	8.3	17.5	43.2	37.3	49.3
Hepburn (S)	35.9	29.8	42.3	25.3	20.0	31.5	10.7	7.0	15.9	11.0	6.7	17.6	47.0	40.4	53.8
Hindmarsh (S)	28.7	24.0	33.9	26.3	20.9	32.5	16.7	12.2	22.3	8.8	5.4	13.9	51.7	46.6	56.8
Hobsons Bay (C)	34.2	29.6	39.2	22.3	18.4	26.7	10.8	7.3	15.7	11.3	7.8	15.9	44.4	39.0	49.9
Horsham (RC)	33.7	28.9	38.9	25.1	20.2	30.8	14.5	10.6	19.6	9.8	6.5	14.3	49.4	43.6	55.2
Hume (C)	34.9	29.9	40.3	16.3	12.8	20.6	11.0	7.6	15.6	5.9	3.8	9.1	33.2	28.0	38.8
Indigo (S)	28.8	24.1	34.0	24.7	19.0	31.5	13.2	8.8	19.2	19.7	14.1	26.8	57.6	52.2	62.8
Kingston (C)	38.3	32.8	44.1	22.0	17.7	27.0	14.5	10.2	20.1	9.4	6.2	14.0	45.8	40.2	51.6
Knox (C)	34.9	30.0	40.2	22.6	18.4	27.3	10.9	7.9	15.0	13.4	9.7	18.2	46.9	41.7	52.1
Latrobe (C)	32.7	27.9	37.8	22.9	18.5	28.1	16.8	12.8	21.7	9.7	6.6	13.9	49.3	44.1	54.6
Loddon (S)	31.5	26.6	36.9	22.2	17.3	27.9	12.4	8.3	18.2	12.1	8.4	17.1	46.7	41.0	52.5
Macedon Ranges (S)	34.7	29.6	40.1	25.7	19.9	32.5	12.8	8.9	17.9	10.0	6.4	15.1	48.4	42.0	54.9
Manningham (C)	41.1	36.0	46.5	21.7	17.1	27.2	9.2	6.4	13.1	5.2*	2.9	9.1	36.1	30.6	41.9

(a) Based on national guidelines (NHMRC 2001).

(b) Drinkers who consumed alcohol at levels that did not expose them to risk of short-term of harm were classified as low risk.

(c) Includes those who consumed alcohol at risky or high risk levels weekly, monthly or yearly.

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

95% CI = 95% confidence interval.

LGA = Local government area.

Note that figures (for low risk and risky or high risk) may not add to 100 per cent (excluding abstainers) due to a proportion of 'don't know' or 'refused' responses.

Data are age standardised to the 2006 Victorian population.

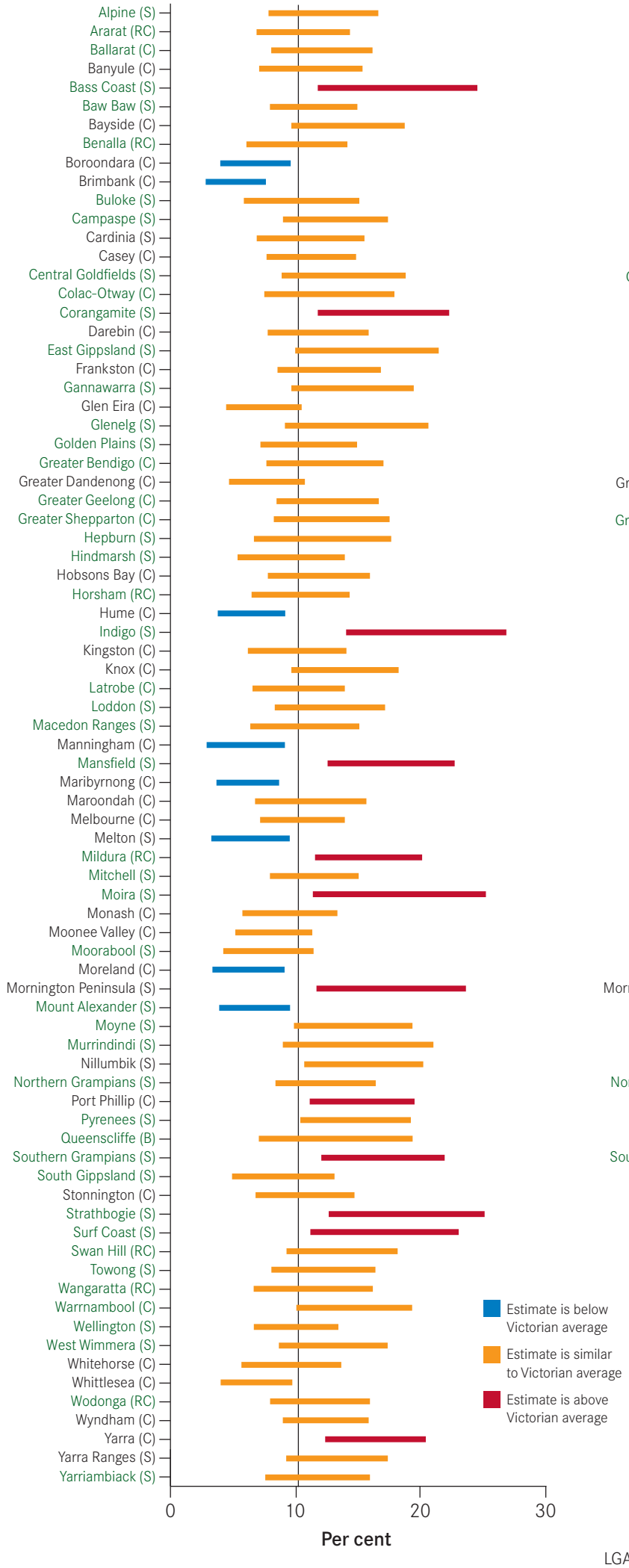
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above Victoria / below Victoria.

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

Table 2.24: Frequency of drinking alcohol at above short-term risk[a] levels, by LGA, 2008 (continued)

LGA	Risky or high risk														
	Low risk[b]			At least yearly			At least monthly			At least weekly			Short-term risk[c]		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Mansfield (S)	33.1	26.8	40.0	25.5	18.8	33.5	13.6	9.1	19.7	17.1	12.6	22.7	56.1	49.3	62.7
Maribyrnong (C)	38.0	33.0	43.2	17.4	13.8	21.8	10.5	7.7	14.1	5.6	3.7	8.6	33.5	28.8	38.6
Maroondah (C)	39.2	34.1	44.6	22.0	17.6	27.3	13.9	10.1	18.9	10.4	6.8	15.6	46.4	41.1	51.8
Melbourne (C)	39.3	34.6	44.3	20.4	16.5	24.8	12.8	9.8	16.5	10.1	7.2	13.9	43.2	38.6	48.0
Melton (S)	38.1	33.5	43.0	21.5	16.9	26.9	11.7	8.4	16.1	5.7	3.3	9.5	38.8	33.9	44.0
Mildura (RC)	27.3	23.0	32.0	22.3	17.7	27.6	18.7	14.1	24.3	15.4	11.6	20.1	56.3	51.3	61.2
Mitchell (S)	27.2	23.3	31.5	26.7	22.0	32.2	18.7	14.6	23.5	11.0	8.0	15.0	56.5	51.3	61.4
Moira (S)	30.9	25.7	36.7	24.1	18.9	30.1	12.7	8.3	19.0	17.2	11.4	25.2	54.0	48.2	59.7
Monash (C)	43.6	38.2	49.2	18.7	14.5	23.6	12.3	8.7	17.1	8.9	5.8	13.3	39.8	34.3	45.5
Moonee Valley (C)	35.6	30.9	40.6	24.4	19.7	29.9	13.1	9.6	17.6	7.7	5.2	11.3	45.2	40.0	50.4
Moorabool (S)	33.9	29.2	38.9	26.6	21.5	32.3	17.0	12.3	23.0	7.0*	4.2	11.4	50.6	45.7	55.5
Moreland (C)	36.1	31.4	41.0	21.2	17.6	25.4	13.6	10.3	17.7	5.6*	3.4	9.1	40.4	35.7	45.3
Mornington Peninsula (S)	35.5	30.1	41.3	19.9	15.9	24.6	17.1	12.6	23.0	16.8	11.7	23.6	53.9	47.7	60.0
Mount Alexander (S)	36.3	30.5	42.6	27.4	21.8	33.8	13.8	9.4	19.9	6.1	3.9	9.5	47.3	41.1	53.6
Moyne (S)	31.5	25.5	38.2	22.3	17.6	27.8	18.4	12.9	25.4	13.9	9.9	19.3	54.6	47.8	61.1
Murrindindi (S)	28.6	24.3	33.3	27.5	22.1	33.6	14.0	9.2	20.8	13.9	9.0	21.0	55.4	48.7	61.9
Nillumbik (S)	41.4	36.0	47.0	20.7	16.5	25.6	13.5	10.3	17.6	14.9	10.7	20.2	49.1	43.7	54.5
Northern Grampians (S)	37.7	31.6	44.3	16.4	12.3	21.6	14.1	10.4	18.7	11.8	8.4	16.4	42.3	36.8	48.0
Port Phillip (C)	36.8	32.1	41.7	22.8	18.3	27.9	15.7	12.3	19.8	14.9	11.2	19.5	53.4	48.5	58.2
Pyrenees (S)	28.5	23.7	33.7	26.5	21.2	32.6	13.8	9.9	19.0	14.3	10.4	19.2	54.6	49.6	59.6
Queenscliffe (B)	31.0	25.4	37.3	27.6	20.9	35.4	19.3	13.8	26.3	11.9*	7.1	19.3	58.8	52.4	64.9
Southern Grampians (S)	33.7	28.2	39.6	24.3	19.4	29.8	12.4	8.6	17.6	16.4	12.1	21.9	53.1	46.8	59.3
South Gippsland (S)	34.0	29.4	38.9	24.3	19.5	30.0	16.1	11.6	22.0	8.1	4.9	13.1	48.5	42.4	54.7
Stonnington (C)	38.8	33.7	44.3	22.2	18.0	27.1	18.4	14.3	23.3	10.1	6.8	14.7	50.7	45.4	56.0
Strathbogie (S)	27.5	23.1	32.4	20.3	14.9	27.1	14.3	9.4	21.1	18.1	12.7	25.1	52.7	46.9	58.4
Surf Coast (S)	30.8	26.1	35.9	24.3	18.6	31.0	19.0	14.3	24.6	16.3	11.2	23.0	59.5	54.6	64.3
Swan Hill (RC)	28.3	23.6	33.5	24.1	18.1	31.2	13.5	9.1	19.5	13.1	9.3	18.1	50.7	44.9	56.4
Towong (S)	30.9	25.6	36.8	25.5	19.4	32.7	13.7	9.7	18.8	11.6	8.1	16.4	50.8	43.9	57.6
Wangaratta (RC)	30.9	25.3	37.1	24.8	19.9	30.5	16.1	11.1	22.7	10.5	6.7	16.1	51.4	45.1	57.6
Warrnambool (C)	25.0	21.1	29.4	28.4	23.2	34.1	11.1	7.7	15.8	14.1	10.1	19.3	53.6	48.8	58.3
Wellington (S)	35.5	29.9	41.5	25.2	20.9	30.0	15.8	11.6	21.1	9.5	6.7	13.4	50.5	44.6	56.4
West Wimmera (S)	30.6	26.3	35.2	20.5	15.8	26.2	18.4	13.7	24.1	12.4	8.7	17.3	51.3	45.9	56.6
Whitehorse (C)	37.5	32.5	42.9	26.5	21.2	32.6	10.0	6.6	14.9	8.9	5.7	13.6	45.4	39.9	51.1
Whittlesea (C)	40.3	35.5	45.4	19.2	15.4	23.7	6.8	4.6	9.9	6.2	4.0	9.7	32.3	28.0	36.9
Wodonga (RC)	33.4	28.8	38.3	23.7	19.4	28.6	13.0	9.4	17.8	11.3	8.0	15.9	48.1	42.8	53.4
Wyndham (C)	33.0	28.7	37.7	21.2	17.3	25.8	10.9	8.1	14.6	12.0	9.0	15.8	44.1	39.4	49.0
Yarra (C)	26.6	22.3	31.3	19.3	15.6	23.7	20.1	16.0	24.8	16.0	12.4	20.4	55.4	50.3	60.4
Yarra Ranges (S)	34.6	30.1	39.3	20.1	15.9	24.9	12.8	9.3	17.5	12.8	9.3	17.3	45.7	41.0	50.5
Yarriambiack (S)	28.8	24.1	34.1	13.6	9.8	18.5	22.1	16.7	28.6	11.1	7.6	15.9	46.8	40.4	53.3
Total	**36.2**	**35.5**	**37.0**	**22.0**	**21.3**	**22.7**	**13.0**	**12.4**	**13.7**	**10.2**	9.7	10.8	**45.2**	**44.4**	**46.1**

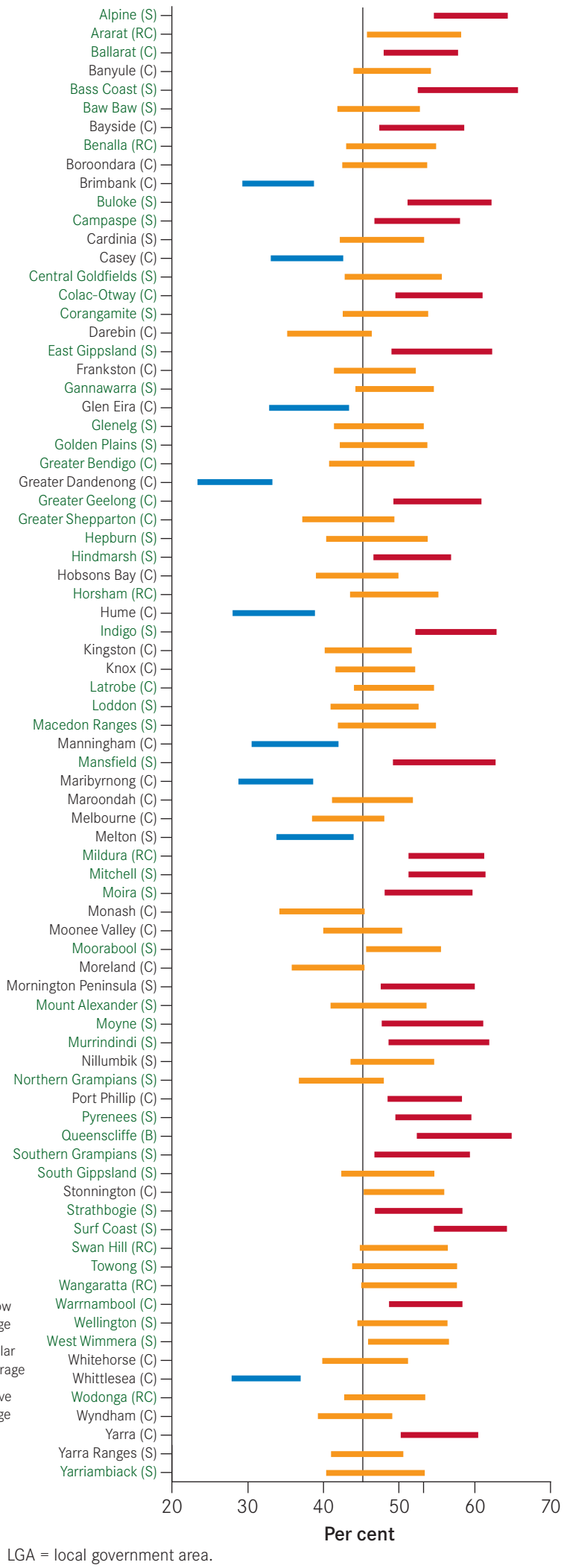
Figure 2.12: Risky or high risk levels of alcohol consumption (at least weekly) for short-term risk[(a)] of harm, by LGA, 2008



(a) Based on national guidelines (NHMRC 2001).

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

Figure 2.13: Risky or high risk levels of alcohol consumption (at least weekly, monthly or yearly) for short-term risk[(a)] of harm, by LGA, 2008



LGA = local government area.

Data are age standardised to the 2006 Victorian population.

The line on the graph is the Victorian estimate, it does not show the 95% CI. See relevant table for 95% CI for Victoria (Total).

Health and Lifestyle

Table 2.25: Did not consume alcohol at above long-term risk[(a)] levels, by LGA, 2008

LGA	Not at long-term risk of harm		
	%	Lower 95% CI	Upper 95% CI
Alpine (S)	**96.8**	94.7	98.1
Ararat (RC)	**94.9**	90.8	97.2
Ballarat (C)	**95.0**	91.7	97.1
Banyule (C)	**94.0**	89.5	96.6
Bass Coast (S)	**92.9**	89.5	95.3
Baw Baw (S)	**95.2**	92.4	97.0
Bayside (C)	**95.6**	92.9	97.4
Benalla (RC)	**93.1**	88.2	96.0
Boroondara (C)	**96.7**	94.0	98.2
Brimbank (C)	**96.0**	93.1	97.7
Buloke (S)	**96.2**	93.4	97.8
Campaspe (S)	**95.9**	93.4	97.4
Cardinia (S)	**94.2**	90.0	96.7
Casey (C)	**97.5**	95.6	98.6
Central Goldfields (S)	**96.9**	94.4	98.3
Colac-Otway (S)	**96.2**	93.3	97.9
Corangamite (S)	**94.0**	90.0	96.4
Darebin (C)	**97.6**	95.5	98.7
East Gippsland (S)	**94.8**	91.9	96.8
Frankston (C)	**96.2**	93.3	97.9
Gannawarra (S)	**95.9**	93.2	97.5
Glen Eira (C)	**96.5**	94.2	97.9
Glenelg (S)	**97.4**	92.7	99.1
Golden Plains (S)	**95.2**	92.3	97.0
Greater Bendigo (C)	**96.2**	94.0	97.6
Greater Dandenong (C)	**97.5**	95.6	98.6
Greater Geelong (C)	**92.1**	88.1	94.8
Greater Shepparton (C)	**96.7**	94.2	98.1
Hepburn (S)	**94.7**	91.6	96.7
Hindmarsh (S)	**96.0**	93.4	97.6
Hobsons Bay (C)	**95.4**	92.9	97.0
Horsham (RC)	**97.2**	95.3	98.4
Hume (C)	**93.6**	88.9	96.4
Indigo (S)	**94.1**	88.0	97.2
Kingston (C)	**95.2**	91.9	97.2
Knox (C)	**92.9**	89.2	95.4
Latrobe (C)	**92.9**	88.9	95.6
Loddon (S)	**96.2**	93.4	97.9
Macedon Ranges (S)	**96.3**	93.5	97.9
Manningham (C)	**94.4**	90.2	96.9
Mansfield (S)	**93.7**	90.4	96.0
Maribyrnong (C)	**97.6**	95.6	98.6
Maroondah (C)	**95.6**	92.9	97.3
Melbourne (C)	**96.6**	94.1	98.1
Melton (S)	**96.0**	92.4	98.0
Mildura (RC)	**92.6**	88.4	95.3
Mitchell (S)	**95.4**	92.6	97.2
Moira (S)	**96.2**	93.3	97.9
Monash (C)	**95.5**	92.2	97.5
Moonee Valley (C)	**96.9**	94.3	98.3
Moorabool (S)	**98.1**	96.5	99.0
Moreland (C)	**96.1**	93.6	97.6
Mornington Peninsula (S)	**97.0**	94.8	98.3
Mount Alexander (S)	**96.6**	94.7	97.8
Moyne (S)	**91.9**	86.7	95.2
Murrindindi (S)	**93.0**	87.1	96.3
Nillumbik (S)	**95.7**	92.4	97.6
Northern Grampians (S)	**95.9**	93.1	97.6
Port Phillip (C)	**96.6**	94.6	98.0
Pyrenees (S)	**91.8**	88.0	94.5
Queenscliffe (B)	**92.9**	87.3	96.2
Southern Grampians (S)	**93.9**	90.7	96.0
South Gippsland (S)	**95.5**	92.9	97.1
Stonnington (C)	**92.9**	88.9	95.5
Strathbogie (S)	**95.7**	93.0	97.4
Surf Coast (S)	**95.8**	93.6	97.2
Swan Hill (RC)	**94.1**	91.1	96.2
Towong (S)	**94.9**	91.5	97.0
Wangaratta (RC)	**95.9**	92.6	97.7
Warrnambool (C)	**95.2**	92.4	97.0
Wellington (S)	**95.6**	93.0	97.3
West Wimmera (S)	**97.5**	95.2	98.8
Whitehorse (C)	**96.5**	94.1	98.0
Whittlesea (C)	**97.7**	95.0	99.0
Wodonga (RC)	**95.3**	92.2	97.2
Wyndham (C)	**96.0**	93.6	97.5
Yarra (C)	**91.4**	87.3	94.3
Yarra Ranges (S)	**96.0**	93.3	97.6
Yarriambiack (S)	**95.6**	92.1	97.5
Total	**95.5**	**95.1**	**95.9**

(a) Based on national guidelines (NHMRC 2001). Includes those who were abstainers (non-drinkers) and those at low risk of long-term harm.

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

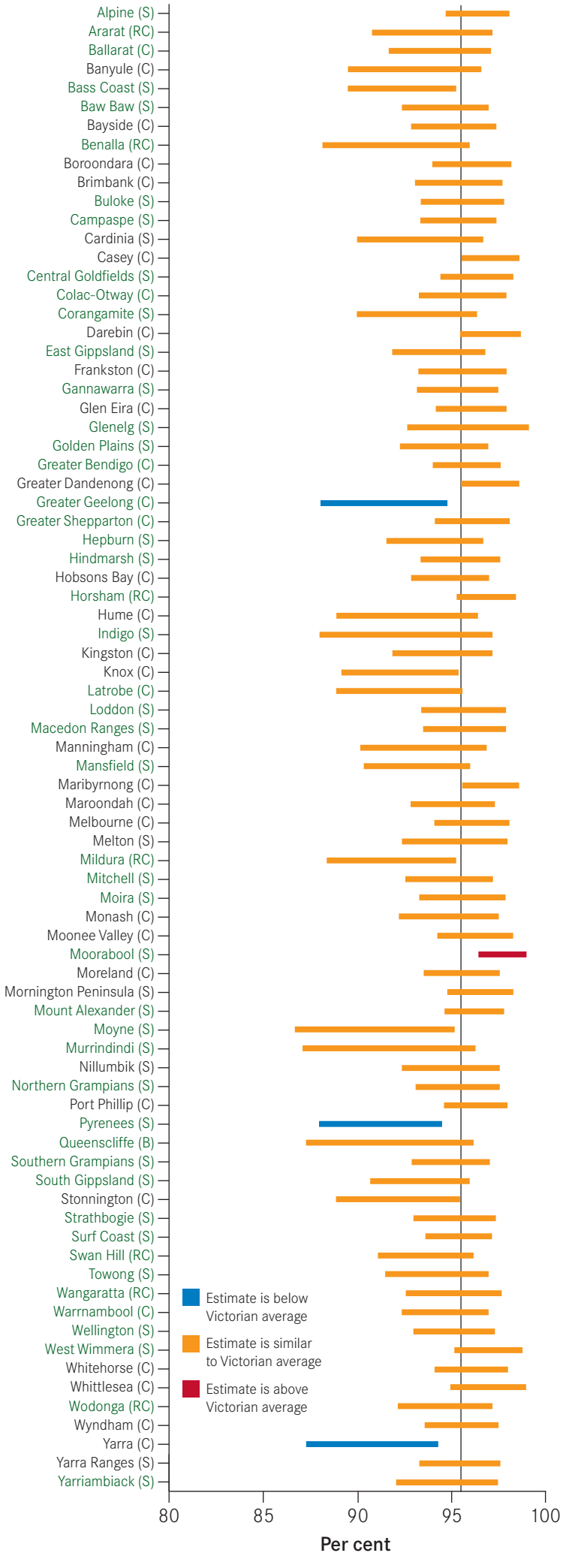
95% CI = 95% confidence interval.

LGA = Local government area.

Data are age standardised to the 2006 Victorian population.

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

Figure 2.14: Not at long-term risk[(a)] of harm from alcohol consumption, LGA, 2008



(a) Based on national guidelines (NHMRC 2001). Includes those who were abstainers (non-drinkers) and those at low risk of long-term harm.

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

LGA = local government area.

Data are age standardised to the 2006 Victorian population.

The line on the graph is the Victorian estimate, it does not show the 95% CI. See relevant table for 95% CI for Victoria (Total).

Risk of harm from risky or high risk alcohol consumption levels, by selected health indicators

The following table shows selected health indicators by the proportion of persons who reported alcohol consumption levels that entailed risk of short and long-term harm, based on the definitions of risky or high risk levels of drinking from the 2001 guidelines. Table 2.26 also includes results for abstainers (persons who reported that they do not drink, or who had a drink in the past 12 months, but reported they no longer drink).

Current smokers were more likely to be risky or high risk drinkers at short and long-term risk of harm than non-smokers. The table also shows that individuals who participated in sufficient physical activity to achieve the national guidelines were more likely to be at short-term risk of harm than those who did not do sufficient physical activity. Individuals with very high levels of psychological distress were less likely than those with low or moderate levels of psychological distress to drink alcohol at risky or high risk levels, with respect to short-term risk of harm.

Table 2.26: Risk[a] of alcohol-related harm, by selected health indicators, 2008

	Short-term risk[b]			Long-term risk			Abstainers[c]		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Smoking status									
Current smoker	58.5	56.6	60.3	8.8	7.7	10.1	14.1	12.6	15.6
Ex-smoker	54.4	52.3	56.5	**4.8**	3.9	6.0	11.9	10.5	13.4
Non-smoker	36.3	35.2	37.3	1.5	1.3	1.8	22.5	21.6	23.5
Nutrition[d]									
Met the guidelines for fruit consumption	42.4	41.2	43.6	2.7	2.3	3.1	**18.2**	17.3	19.1
Met the guidelines for vegetable consumption	**44.6**	41.7	47.6	**4.1**	3.1	5.6	**17.6**	15.5	20.0
Met the guidelines for fruit & vegetable consumption	**43.4**	40.0	46.7	**3.0**	2.1	4.2	**18.8**	16.3	21.7
Physical activity levels[e]									
Sufficient time and sessions	48.4	47.4	49.5	**4.0**	3.5	4.5	15.1	14.3	15.9
Insufficient time and/or sessions	40.8	39.1	42.5	**2.9**	2.4	3.4	20.5	19.1	22.0
Sedentary	38.1	33.8	42.5	**4.2**	2.9	6.0	24.8	21.5	28.5
Body weight status									
Underweight	37.1	32.3	42.3	**6.2**	3.9	9.6	23.7	19.5	28.5
Healthy weight	42.9	41.7	44.1	**3.5**	3.0	4.0	**17.8**	16.9	18.8
Overweight	50.3	48.8	51.8	**4.0**	3.4	4.7	14.7	13.7	15.8
Obese	**45.1**	42.9	47.3	**3.6**	2.7	4.6	**20.1**	18.5	21.8
Self-rated health									
Excellent/very good	**45.8**	44.6	47.1	2.7	2.4	3.2	**15.5**	14.6	16.5
Good	**46.5**	45.1	47.8	**4.1**	3.6	4.8	**17.9**	16.9	18.9
Fair/poor	41.5	39.5	43.5	5.1	4.2	6.1	23.3	21.7	25.1
Level of psychological distress[f]									
Low (10–15)	**46.3**	45.3	47.4	**3.2**	2.9	3.6	15.9	15.1	16.7
Moderate (16–21)	**45.1**	43.4	46.8	**4.1**	3.4	4.9	**18.4**	17.1	19.8
High (22–29)	**43.3**	40.9	45.9	**5.1**	3.8	6.7	23.7	21.5	26.0
Very high (30–50)	37.3	33.0	41.7	**5.7**	4.0	8.0	32.5	28.6	36.7
Total	**45.2**	**44.4**	**46.1**	**3.7**	**3.3**	**4.0**	**18.0**	**17.4**	**18.6**

(a) Based on national guidelines (NHMRC 2001).

(b) Includes those who consumed alcohol at risky or high risk levels weekly, monthly or yearly.

(c) Includes both long-term and recent abstainers (i.e. those who had a drink in the past 12 months but reported they no longer drink).

(d) Based on national guidelines (NHMRC 2003).

(e) Based on national guidelines (DoHA 1999) and excludes adults aged less than 19 years.

(f) Based on Kessler 10 Psychological Distress Scale (K10).

95% CI = 95 per cent confidence interval.

Data are age standardised to the 2006 Victorian population.

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

Smoking

Current smokers were defined as those persons who reported smoking daily or occasionally. Table 2.27 shows smoking status, by age group and sex. Males aged 25–34 years were found to have the highest prevalence of current smoking, at 31.7 per cent, followed by males aged 35–44 years, at 26.1 per cent. For females, the highest prevalence of current smoking was in the 18–24 years age group, at 22.2 per cent, closely followed by females aged 25–34 years, at 21.3 per cent. For both males and females, the highest prevalence of non-smokers was in the 18–24 years age group (71.6 per cent for males and 72.2 per cent for females).

Table 2.27: Smoking status[(a)], by age group and sex, 2008

	Current smoker			Ex–smoker			Non–smoker		
Age group (years)	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Males									
18–24 years	**22.4**	18.7	26.6	5.8	4.0	8.4	71.6	67.1	75.7
25–34 years	31.7	27.9	35.7	15.9	13.3	19.0	**52.3**	48.2	56.3
35–44 years	26.1	23.5	28.8	21.1	18.8	23.6	**52.7**	49.7	55.7
45–54 years	**21.4**	19.1	23.7	32.1	29.5	34.8	46.5	43.7	49.3
55–64 years	15.7	14.0	17.7	39.2	36.6	41.8	44.9	42.2	47.6
65+	8.7	7.5	10.1	49.9	47.6	52.2	40.7	38.5	43.0
Total	**21.4**	**20.2**	**22.6**	**27.6**	**26.6**	**28.7**	**50.7**	**49.4**	**52.0**
Females									
18–24 years	22.2	18.8	26.1	5.5	3.9	7.6	72.2	68.2	75.9
25–34 years	21.3	19.0	23.6	16.0	14.1	18.2	**62.6**	59.8	65.3
35–44 years	20.0	18.3	21.7	24.7	22.9	26.5	55.2	53.1	57.3
45–54 years	**18.5**	16.8	20.3	25.5	23.6	27.5	55.7	53.4	57.9
55–64 years	13.2	11.8	14.6	24.2	22.4	26.0	**62.4**	60.3	64.4
65+	6.6	5.7	7.6	23.7	22.1	25.4	69.0	67.2	70.7
Total	**16.9**	**16.1**	**17.8**	**20.4**	**19.6**	**21.1**	**62.4**	**61.4**	**63.4**
Persons									
18–24 years	**22.3**	19.7	25.1	5.6	4.4	7.2	71.9	68.9	74.7
25–34 years	26.5	24.3	28.8	16.0	14.3	17.8	**57.4**	55.0	59.9
35–44 years	23.0	21.5	24.6	**22.9**	21.4	24.4	54.0	52.1	55.8
45–54 years	**19.9**	18.5	21.4	28.8	27.2	30.5	51.1	49.3	52.9
55–64 years	14.4	13.3	15.6	31.6	30.0	33.2	53.8	52.0	55.5
65+	7.5	6.8	8.4	35.4	34.0	36.9	**56.3**	54.8	57.7
Total	**19.1**	**18.4**	**19.9**	**23.8**	**23.1**	**24.4**	**56.8**	**56.0**	**57.7**

(a) A person who smoked daily or occasionally was categorised as a current smoker.

95% CI = 95 per cent confidence interval.

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

Data are crude estimates, except for the totals, which represent the estimates for Victoria and have been age standardised to the 2006 Victorian population.

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

Table 2.28 shows the proportion of persons who smoked tobacco on a daily or occasional basis, by sex and age group. Most persons who were current smokers smoked on a daily basis, as opposed to smoking occasionally. For males aged 18–24 years the prevalence of occasional smoking (9.3 per cent) was similar to the prevalence of daily smoking (13.1 per cent). For females the prevalence of occasional smoking was highest for those aged 18–24 years (7.4 per cent). The proportion of females who smoked daily was greater than the proportion of females who smoked occasionally across all age groups.

Table 2.28: Frequency of current smoking behaviour[(a),(b)], 2008

	Daily			Occasional		
Age group (years)	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Males						
18–24 years	**13.1**	10.2	16.7	**9.3**	6.8	12.5
25–34 years	**23.2**	19.9	27.0	**8.4**	6.4	11.1
35–44 years	**20.2**	17.9	22.7	**5.9**	4.7	7.5
45–54 years	**17.2**	15.2	19.3	**4.2**	3.1	5.6
55–64 years	**13.1**	11.5	14.9	**2.6**	1.9	3.6
65+	**8.0**	6.8	9.3	**0.7***	0.4	1.2
Total	**16.2**	**15.2**	**17.2**	**5.2**	**4.6**	**5.9**
Females						
18–24 years	**14.8**	12.1	18.0	**7.4**	5.3	10.3
25–34 years	**16.7**	14.7	18.9	**4.5**	3.5	5.8
35–44 years	**16.6**	15.2	18.3	**3.3**	2.6	4.2
45–54 years	**15.8**	14.3	17.4	**2.7**	2.0	3.6
55–64 years	**11.7**	10.4	13.1	**1.5**	1.1	2.1
65+	**5.5**	4.7	6.4	**1.1**	0.8	1.6
Total	**13.6**	**12.9**	**14.4**	**3.3**	**2.9**	**3.8**
Persons						
18–24 years	**13.9**	11.9	16.3	**8.4**	6.7	10.4
25–34 years	**20.0**	18.0	22.1	**6.5**	5.3	7.9
35–44 years	**18.4**	17.0	19.9	**4.6**	3.9	5.5
45–54 years	**16.5**	15.2	17.8	**3.4**	2.8	4.2
55–64 years	**12.4**	11.4	13.5	**2.0**	1.6	2.6
65+	**6.6**	5.9	7.4	**0.9**	0.7	1.3
Total	**14.9**	**14.3**	**15.5**	**4.3**	**3.9**	**4.7**

(a) A person who smoked daily or occasionally was categorised as a current smoker.

(b) The term 'occasional' was defined by the respondent who chose the response option 'I smoke occasionally' when asked which of a number of alternative response options (including 'I smoke daily') best described their smoking status.

95% CI = 95 per cent confidence interval.

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

Data are crude estimates, except for the totals, which represent the estimates for Victoria and have been age standardised to the 2006 Victorian population.

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

Figures 2.15 and 2.16 show the proportion of males and females who had ever smoked (those who smoke currently and ex-smokers) by age group. The proportion of ex-smokers among those aged 65 years and over largely reflects the male–female differential with past patterns of smoking behaviour.

Figure 2.15: Smoking status[a],[b], by age group, males, 2008

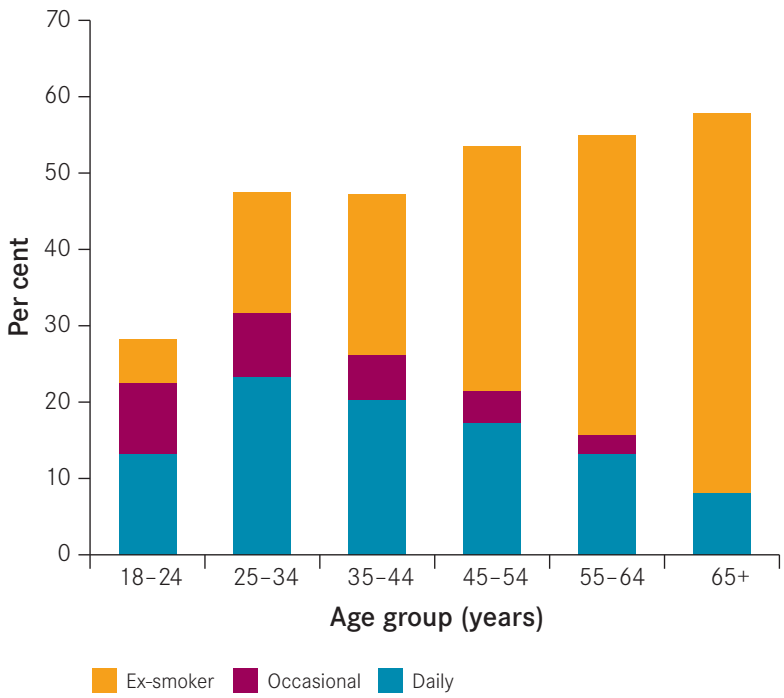
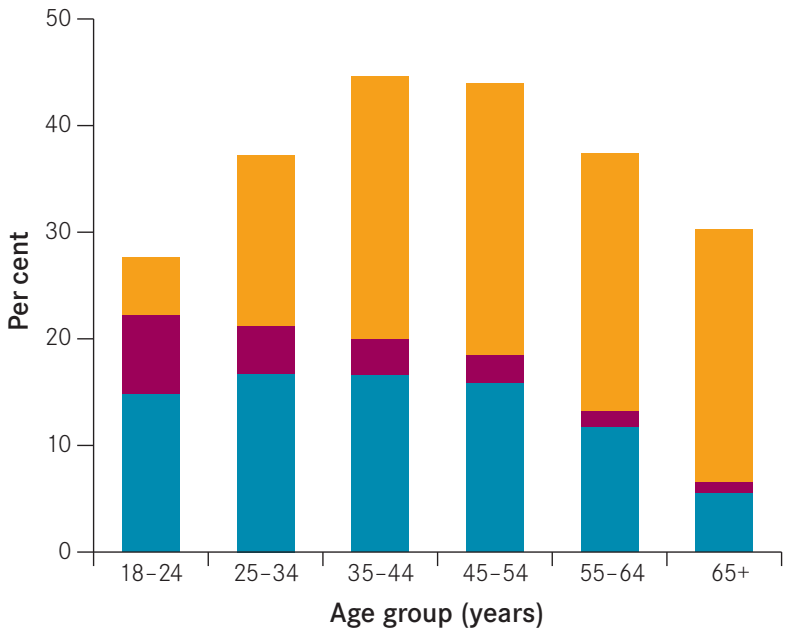


Figure 2.16: Smoking status[a],[b], by age group, females, 2008



(a) A person who smoked daily or occasionally was categorised as a current smoker.

(b) The term 'occasional' was defined by the respondent who chose the response option 'I smoke occasionally' when asked which of a number of alternative response options (including 'I smoke daily') best described their smoking status.

Data are crude estimates, they have not been age standardised.

Table 2.29 shows the smoking status of the Victorian population for the period 2001–2008, by sex. The proportion of males and females who were current smokers decreased over this period for Victoria.

Table 2.29: Smoking status[a], by sex, 2001–2008

	2001	2002	2003	2004	2005	2006	2007	2008
	Per cent							
Males								
Current smoker	27.4	25.7	24.0	24.1	21.8	22.3	21.7	21.4
Ex-smoker	31.8	27.8	28.1	29.1	29.1	28.5	26.2	27.6
Non-smoker	40.8	46.2	47.5	46.7	49.0	49.1	52.0	50.7
Females								
Current smoker	20.9	22.2	20.2	19.8	19.1	18.5	18.1	16.9
Ex-smoker	23.4	20.1	19.9	22.4	20.8	20.6	20.1	20.4
Non-smoker	55.8	57.6	59.6	57.7	59.9	60.6	61.6	62.4
Persons								
Current smoker	24.1	23.9	22.1	22.0	20.5	20.4	19.9	19.1
Ex-smoker	27.2	23.5	23.4	25.3	24.6	24.3	22.9	23.8
Non-smoker	48.7	52.5	54.1	52.6	54.8	55.1	57.0	56.8

(a) A person who smoked daily or occasionally was categorised as a current smoker.

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

Data are age standardised to the 2006 Victorian population.

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

Table 2.30 shows smoking status by sex and Department of Health region. Approximately one in five males (21.4 per cent) in Victoria reported that they smoked daily or occasionally in 2008. The proportion of males who were current smokers was similar for rural (22.0 per cent) and metropolitan (21.2 per cent) areas of Victoria. There was a higher than average proportion of males who were ex-smokers in the Southern Metropolitan region (31.2 per cent). On average, one in six females (16.9 per cent) in Victoria reported that they were current smokers in 2008. For females, the proportion of current smokers was higher in rural areas (19.1 per cent), compared with the metropolitan area (16.3 per cent). One rural region, Gippsland, had a higher proportion of current smokers among females (22.7 per cent) than the Victorian average (16.9 per cent). The proportion of females who identified as non-smokers was higher for the metropolitan area (63.7 per cent), compared with rural areas (58.3 per cent), with females from the Eastern Metropolitan region (67.5 per cent) reporting a higher proportion of non-smokers than average (62.4 per cent). There was a higher proportion of female ex-smokers in the Hume region (23.4 per cent) compared with the average for Victoria (20.4 per cent).

Table 2.30: Smoking status[(a)], by sex and Department of Health region, 2008

Region	Current smoker %	Current smoker Lower 95% CI	Current smoker Upper 95% CI	Ex-smoker %	Ex-smoker Lower 95% CI	Ex-smoker Upper 95% CI	Non-smoker %	Non-smoker Lower 95% CI	Non-smoker Upper 95% CI
Males									
Barwon-South Western	**21.3**	16.1	27.6	**24.7**	21.0	28.7	**53.3**	47.4	59.1
Eastern Metropolitan	**21.6**	18.7	24.9	**25.1**	22.5	27.8	**53.0**	49.5	56.5
Gippsland	**24.1**	20.5	28.2	**28.4**	25.2	31.9	**47.0**	42.8	51.3
Grampians	**21.7**	18.1	25.7	**25.4**	22.6	28.4	**52.8**	48.5	57.1
Hume	**23.0**	19.9	26.4	**27.7**	25.2	30.4	**49.1**	45.6	52.5
Loddon Mallee	**20.3**	17.0	24.0	**27.3**	24.3	30.6	**52.2**	48.0	56.3
North and West Metropolitan	**23.1**	21.1	25.1	**27.5**	25.6	29.4	**49.2**	46.9	51.5
Southern Metropolitan	**19.0**	16.7	21.5	**31.2**	28.8	33.7	**49.7**	46.8	52.6
Metropolitan	**21.2**	**19.8**	**22.6**	**28.0**	**26.7**	**29.3**	**50.6**	**49.0**	**52.2**
Rural	**22.0**	**19.9**	**24.1**	**26.6**	**25.0**	**28.2**	**51.1**	**48.8**	**53.3**
Total	**21.4**	**20.2**	**22.6**	**27.6**	**26.6**	**28.7**	**50.7**	**49.4**	**52.0**
Females									
Barwon-South Western	**15.8**	12.8	19.3	**23.6**	20.2	27.4	**60.5**	56.1	64.7
Eastern Metropolitan	**14.1**	12.2	16.2	**18.3**	16.5	20.2	**67.5**	64.9	70.0
Gippsland	**22.7**	19.9	25.8	**22.9**	20.5	25.5	**54.2**	50.9	57.4
Grampians	**20.1**	17.1	23.6	**21.5**	19.0	24.2	**58.1**	54.4	61.7
Hume	**19.1**	17.0	21.4	**23.4**	21.2	25.7	**57.1**	54.4	59.8
Loddon Mallee	**18.8**	16.5	21.5	**20.4**	18.4	22.5	**60.2**	57.2	63.1
North and West Metropolitan	**16.8**	15.5	18.3	**18.5**	17.2	19.9	**64.3**	62.5	66.1
Southern Metropolitan	**17.5**	15.8	19.4	**22.2**	20.6	24.0	**60.0**	57.7	62.2
Metropolitan	**16.3**	**15.3**	**17.3**	**19.7**	**18.8**	**20.7**	**63.7**	**62.5**	**65.0**
Rural	**19.1**	**17.7**	**20.5**	**22.3**	**21.1**	**23.7**	**58.3**	**56.6**	**59.9**
Total	**16.9**	**16.1**	**17.8**	**20.4**	**19.6**	**21.1**	**62.4**	**61.4**	**63.4**
Persons									
Barwon-South Western	**18.5**	15.3	22.2	**24.0**	21.4	26.8	**57.1**	53.3	60.8
Eastern Metropolitan	**17.8**	16.0	19.7	**21.5**	19.9	23.1	**60.5**	58.3	62.7
Gippsland	**23.2**	20.8	25.8	**25.4**	23.4	27.5	**51.1**	48.3	53.8
Grampians	**20.9**	18.5	23.6	**23.2**	21.3	25.2	**55.7**	52.8	58.5
Hume	**21.0**	19.1	23.1	**25.4**	23.7	27.1	**53.3**	51.0	55.5
Loddon Mallee	**19.5**	17.4	21.8	**23.7**	21.8	25.6	**56.4**	53.9	59.0
North and West Metropolitan	**20.0**	18.8	21.2	**22.6**	21.4	23.8	**57.2**	55.7	58.7
Southern Metropolitan	**18.3**	16.8	19.8	**26.5**	25.0	28.0	**55.1**	53.2	56.9
Metropolitan	**18.7**	**17.9**	**19.6**	**23.6**	**22.8**	**24.4**	**57.5**	**56.5**	**58.5**
Rural	**20.5**	**19.2**	**21.8**	**24.3**	**23.3**	**25.3**	**54.9**	**53.5**	**56.3**
Total	**19.1**	**18.4**	**19.9**	**23.8**	**23.1**	**24.4**	**56.8**	**56.0**	**57.7**

(a) A person who smoked daily or occasionally was categorised as a current smoker.

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

95% CI = 95 per cent confidence interval.

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

Data are age standardised to the 2006 Victorian population.

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

Table 2.31 and figure 2.17 show the prevalence of current smoking for persons aged 18 years and over, by LGA. Fewer than one in five persons (19.1 per cent) in Victoria were current smokers in 2008. The prevalence of current smoking was above the average for Victoria in six LGAs. Four of these LGAS were located in rural areas: Pyrenees (31.4 per cent), Latrobe (29.6 per cent), Moira (27.1 per cent) and Greater Shepparton (25.4 per cent). The remaining two LGAs, located in the metropolitan area, were Knox (26.7 per cent) and Hume (24.5 per cent). There were also seven LGAs for which the proportion of current smokers among persons aged 18 years and over was below the Victorian average. Four of the LGAs with a below average prevalence of current smokers were metropolitan: Port Phillip (13.3 per cent), Bayside (13.2 per cent), Stonnington (12.9 per cent) and Melbourne (12.3 per cent). The three rural LGAs for which the prevalence of current smoking was lower than the Victorian average were Surf Coast (14.0 per cent), Horsham (13.3 per cent) and Wangaratta (11.6 per cent).

Table 2.31: Smoking status[(a)], by LGA, 2008

LGA	Current smoker			Ex-smoker			Non-smoker		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Alpine (S)	**19.7**	15.0	25.4	**24.8**	20.4	29.7	**55.3**	49.1	61.3
Ararat (RC)	**20.9**	15.7	27.3	**21.1**	17.4	25.5	**57.7**	51.3	64.0
Ballarat (C)	**23.6**	19.1	28.9	**19.9**	16.3	24.2	**56.3**	50.7	61.8
Banyule (C)	**18.0**	13.3	24.0	**25.1**	20.7	30.1	**56.8**	50.7	62.7
Bass Coast (S)	**19.4**	14.8	25.1	**33.0**	26.6	40.1	**47.2**	40.2	54.4
Baw Baw (S)	**17.6**	13.2	23.0	**27.8**	22.5	33.8	**54.5**	48.1	60.7
Bayside (C)	**13.2**	9.3	18.3	**24.9**	20.6	29.7	**61.8**	55.8	67.5
Benalla (RC)	**17.4**	13.3	22.5	**24.5**	20.1	29.4	**58.0**	52.4	63.4
Boroondara (C)	**13.6**	9.9	18.5	**21.9**	17.9	26.6	**63.7**	58.0	69.1
Brimbank (C)	**22.0**	18.0	26.6	**19.6**	16.2	23.6	**58.0**	52.9	63.0
Buloke (S)	**23.2**	17.7	29.8	**21.6**	17.0	27.0	**54.4**	47.5	61.0
Campaspe (S)	**23.4**	18.6	29.1	**22.3**	18.5	26.7	**53.8**	47.9	59.6
Cardinia (S)	**19.0**	14.6	24.5	**30.0**	25.3	35.3	**50.8**	44.8	56.8
Casey (C)	**20.1**	16.3	24.5	**24.5**	20.6	28.8	**55.1**	50.1	60.0
Central Goldfields (S)	**21.6**	16.1	28.4	**24.7**	20.2	29.7	**53.5**	46.8	60.1
Colac-Otway (S)	**21.5**	16.3	27.8	**25.7**	21.0	31.0	**52.7**	45.7	59.5
Corangamite (S)	**14.3**	10.5	19.2	**22.4**	18.3	27.2	**63.2**	57.5	68.5
Darebin (C)	**23.5**	19.2	28.5	**21.5**	17.6	26.0	**54.5**	49.2	59.8
East Gippsland (S)	**22.1**	16.6	28.8	**28.4**	23.2	34.2	**49.4**	43.7	55.2
Frankston (C)	**24.1**	19.6	29.4	**29.3**	24.7	34.3	**46.6**	41.1	52.2
Gannawarra (S)	**23.2**	18.0	29.4	**20.0**	16.3	24.2	**56.5**	50.3	62.6
Glen Eira (C)	**14.9**	11.2	19.6	**24.6**	20.7	29.0	**60.5**	55.2	65.6
Glenelg (S)	**20.6**	15.9	26.3	**25.4**	21.0	30.3	**53.9**	47.6	60.0
Golden Plains (S)	**16.7**	13.0	21.3	**24.9**	20.3	30.2	**57.9**	52.5	63.2
Greater Bendigo (C)	**19.6**	15.2	24.9	**25.6**	21.4	30.3	**54.3**	48.5	60.0
Greater Dandenong (C)	**22.9**	18.3	28.2	**25.0**	20.6	29.9	**52.2**	46.8	57.5
Greater Geelong (C)	**18.0**	13.2	24.2	**23.1**	19.0	27.8	**58.2**	52.1	64.1
Greater Shepparton (C)	**25.4**	20.0	31.7	**23.6**	19.5	28.3	**51.0**	44.9	57.1
Hepburn (S)	**17.8**	14.1	22.4	**30.4**	24.1	37.6	**51.7**	44.4	58.8
Hindmarsh (S)	**22.5**	17.5	28.5	**20.7**	16.8	25.1	**56.6**	50.4	62.5
Hobsons Bay (C)	**18.0**	13.7	23.3	**25.1**	20.9	29.8	**56.8**	51.1	62.3
Horsham (RC)	**13.3**	9.5	18.3	**25.9**	21.7	30.7	**60.8**	54.8	66.4
Hume (C)	**24.5**	20.2	29.3	**25.2**	21.1	29.8	**49.6**	44.3	54.9
Indigo (S)	**19.8**	14.4	26.6	**25.3**	20.7	30.5	**54.9**	48.0	61.7
Kingston (C)	**15.3**	11.4	20.2	**22.4**	18.7	26.6	**62.0**	56.5	67.3
Knox (C)	**26.7**	22.0	32.0	**22.6**	18.6	27.2	**50.7**	45.2	56.1
Latrobe (C)	**29.6**	24.7	34.9	**22.1**	18.1	26.7	**47.9**	42.1	53.6
Loddon (S)	**20.4**	15.9	25.7	**21.7**	17.5	26.6	**57.6**	51.8	63.1
Macedon Ranges (S)	**17.1**	12.8	22.4	**21.4**	17.5	25.8	**61.4**	55.4	67.0
Manningham (C)	**14.6**	10.4	20.0	**15.2**	11.8	19.4	**70.1**	64.3	75.4

(a) A person who smoked daily or occasionally was categorised as a current smoker.

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

95% CI = 95% confidence interval.

LGA = Local government area.

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

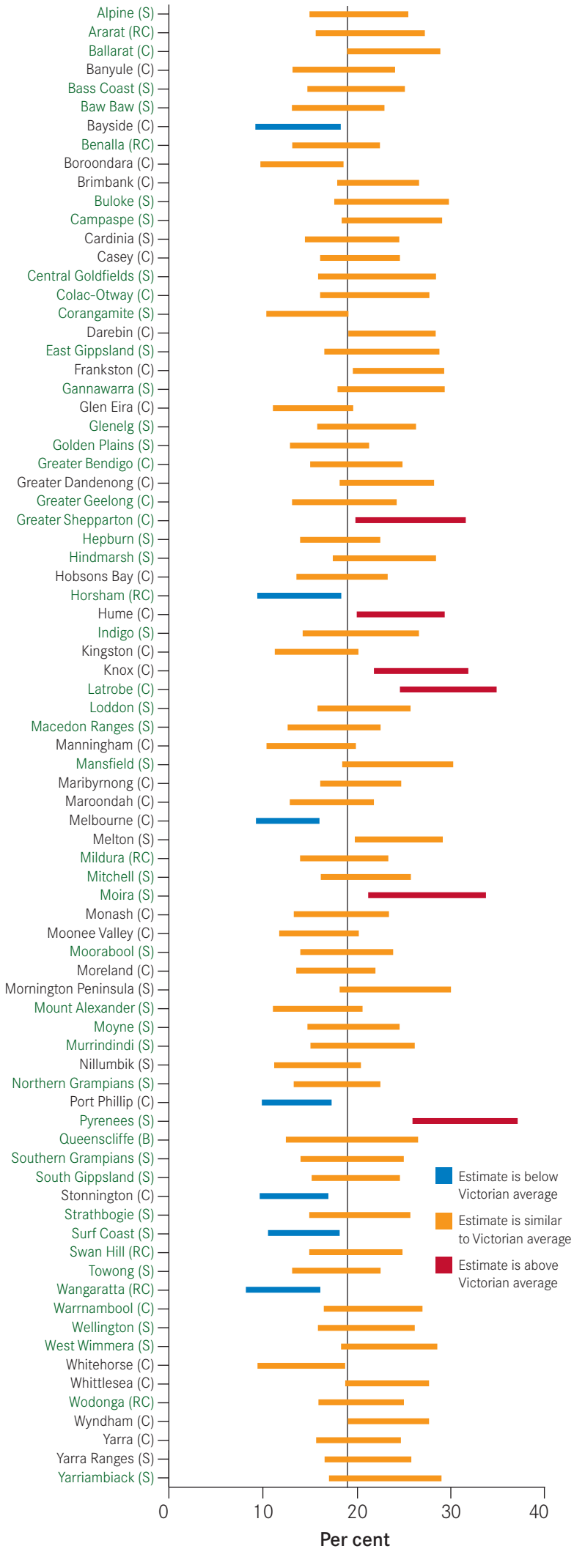
Data are age standardised to the 2006 Victorian population.

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

Table 2.31: Smoking status[a], by LGA, 2008 (continued)

LGA	Current smoker			Ex-smoker			Non-smoker		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Mansfield (S)	**24.0**	18.6	30.4	**29.7**	24.6	35.3	**46.0**	40.0	52.2
Maribyrnong (C)	**20.1**	16.2	24.7	**24.1**	19.9	28.9	**55.4**	50.1	60.6
Maroondah (C)	**17.1**	13.0	22.1	**23.1**	19.3	27.5	**59.6**	54.3	64.8
Melbourne (C)	**12.3**	9.4	16.0	**23.0**	19.4	27.0	**64.6**	59.7	69.1
Melton (S)	**24.2**	19.9	29.1	**22.1**	18.3	26.5	**53.7**	48.4	58.9
Mildura (RC)	**18.2**	14.1	23.3	**23.1**	19.3	27.3	**58.3**	52.6	63.7
Mitchell (S)	**20.6**	16.2	25.7	**31.8**	27.1	36.8	**47.3**	41.7	53.0
Moira (S)	**27.1**	21.3	33.7	**23.0**	18.0	29.0	**49.9**	43.1	56.6
Monash (C)	**17.9**	13.4	23.4	**20.6**	16.9	24.9	**61.3**	55.5	66.8
Moonee Valley (C)	**15.5**	11.8	20.1	**21.1**	17.1	25.7	**63.0**	57.6	68.0
Moorabool (S)	**18.4**	14.1	23.8	**28.3**	23.8	33.3	**52.9**	46.8	58.9
Moreland (C)	**17.5**	13.7	22.0	**22.6**	19.0	26.7	**59.8**	54.8	64.6
Mornington Peninsula (S)	**23.7**	18.3	30.1	**33.0**	27.2	39.4	**43.1**	37.2	49.2
Mount Alexander (S)	**15.3**	11.1	20.7	**25.3**	21.1	29.9	**59.0**	53.0	64.8
Moyne (S)	**19.2**	14.8	24.6	**23.8**	20.0	28.2	**56.9**	51.2	62.5
Murrindindi (S)	**20.2**	15.2	26.2	**26.2**	20.5	32.9	**53.2**	47.3	59.1
Nillumbik (S)	**15.3**	11.3	20.4	**26.0**	21.4	31.2	**57.7**	51.9	63.3
Northern Grampians (S)	**17.5**	13.5	22.4	**21.6**	17.9	25.9	**60.8**	55.3	66.0
Port Phillip (C)	**13.3**	10.1	17.3	**27.6**	23.5	32.2	**58.5**	53.4	63.4
Pyrenees (S)	**31.4**	26.2	37.2	**28.0**	23.3	33.2	**39.9**	34.6	45.4
Queenscliffe (B)	**18.6**	12.6	26.7	**20.4**	16.4	25.0	**59.4**	51.4	66.9
Southern Grampians (S)	**19.0**	14.1	25.1	**29.5**	24.1	35.6	**51.2**	44.9	57.5
South Gippsland (S)	**19.5**	15.3	24.5	**23.7**	19.9	27.9	**56.6**	51.2	61.8
Stonnington (C)	**12.9**	9.7	17.0	**28.2**	24.0	32.9	**58.5**	53.2	63.5
Strathbogie (S)	**19.8**	15.0	25.6	**27.6**	21.6	34.5	**51.9**	44.6	59.2
Surf Coast (S)	**14.0**	10.6	18.2	**26.8**	22.2	32.0	**59.1**	53.6	64.4
Swan Hill (RC)	**19.6**	15.1	24.9	**22.9**	18.8	27.7	**57.2**	51.3	62.9
Towong (S)	**17.4**	13.2	22.4	**23.8**	19.1	29.3	**58.4**	52.3	64.2
Wangaratta (RC)	**11.6**	8.3	16.0	**24.0**	19.9	28.7	**63.5**	58.0	68.7
Warrnambool (C)	**21.4**	16.6	27.1	**22.1**	18.5	26.3	**56.4**	50.5	62.1
Wellington (S)	**20.6**	15.9	26.2	**24.7**	20.5	29.4	**54.6**	48.5	60.4
West Wimmera (S)	**23.2**	18.5	28.6	**22.1**	17.9	27.1	**54.4**	48.7	60.1
Whitehorse (C)	**13.6**	9.6	18.8	**23.0**	19.1	27.3	**63.4**	57.7	68.8
Whittlesea (C)	**23.1**	18.9	27.8	**21.8**	18.1	26.2	**55.0**	49.8	60.0
Wodonga (RC)	**20.2**	16.1	24.9	**24.6**	20.5	29.2	**54.9**	49.4	60.3
Wyndham (C)	**23.1**	19.2	27.7	**21.6**	17.9	25.7	**55.2**	50.1	60.1
Yarra (C)	**19.9**	15.8	24.7	**22.8**	18.7	27.5	**56.8**	51.3	62.2
Yarra Ranges (S)	**21.0**	16.8	25.8	**23.5**	19.6	27.9	**55.5**	50.2	60.8
Yarriambiack (S)	**22.5**	17.2	29.0	**24.9**	20.5	29.9	**52.2**	45.6	58.7
Total	**19.1**	**18.4**	**19.9**	**23.8**	**23.1**	**24.4**	**56.8**	**56.0**	**57.7**

Figure 2.17: Current smokers[(a)], by LGA, 2008



(a) A person who smoked daily or occasionally was categorised as a current smoker.

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

LGA = local government area.

Data are age standardised to the 2006 Victorian population.

The line on the graph is the Victorian estimate, it does not show the 95% CI. See relevant table for 95% CI for Victoria (Total).

Smoking status, by selected health indicators

Table 2.32 shows smoking status by selected health indicators. Individuals at risk of harm from the consumption of alcohol in the short and long-term, those who were sedentary, underweight, those who reported good, fair or poor health and those with high or very high psychological distress levels were more likely to be current smokers, compared with the average for Victoria.

Table 2.32: Smoking status[a], by selected health indicators, 2008

	Current smoker			Ex-smoker			Non-smoker		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Nutrition[b]									
Met the guidelines for fruit consumption	13.9	13.0	14.9	**23.5**	22.6	24.5	62.3	61.1	63.5
Met the guidelines for vegetable consumption	**16.1**	13.6	19.0	**24.6**	22.6	26.7	**59.0**	55.9	62.1
Met the guidelines for fruit & vegetable consumption	13.0	10.4	16.2	**24.7**	22.4	27.2	62.1	58.5	65.5
Alcohol consumption[c]									
At risk or high risk of long-term harm	46.2	42.1	50.3	30.1	26.6	34.0	23.4	20.0	27.1
At risk or high risk of short-term harm	24.8	23.8	26.0	30.9	29.8	32.1	43.9	42.7	45.2
Abstainer from alcohol	13.0	11.7	14.5	15.5	14.2	17.0	71.2	69.4	73.0
Physical activity levels[d]									
Sufficient time and sessions	**18.2**	17.3	19.1	**24.8**	23.9	25.7	**56.8**	55.7	57.9
Insufficient time and/or sessions	**18.9**	17.5	20.3	**23.0**	21.8	24.4	**57.8**	56.1	59.5
Sedentary	26.8	23.3	30.6	**22.5**	19.6	25.7	50.4	46.4	54.3
Body weight status									
Underweight	28.6	24.0	33.7	17.4	13.8	21.7	**53.5**	48.0	58.9
Healthy weight	**18.6**	17.6	19.7	21.3	20.3	22.3	59.8	58.6	61.0
Overweight	**19.6**	18.2	21.1	26.7	25.5	28.0	53.5	51.9	55.1
Obese	**19.9**	18.0	22.0	**25.4**	23.7	27.2	**54.3**	52.0	56.5
Self-rated health									
Excellent/very good	14.0	13.1	15.0	**22.9**	21.9	23.8	62.9	61.6	64.1
Good	21.3	20.1	22.5	**24.0**	22.9	25.1	54.4	53.0	55.7
Fair/poor	27.2	25.3	29.1	**25.2**	23.6	26.9	47.5	45.4	49.6
Level of psychological distress[e]									
Low (10–15)	16.3	15.5	17.2	**24.0**	23.1	24.8	59.4	58.3	60.5
Moderate (16–21)	**21.0**	19.6	22.6	**24.4**	23.0	25.7	**54.3**	52.6	56.1
High (22–29)	28.2	25.7	30.8	**23.5**	21.4	25.7	48.1	45.3	50.9
Very high (30–50)	35.9	31.6	40.4	17.5	14.7	20.7	46.5	42.1	51.1
Total	**19.1**	**18.4**	**19.9**	**23.8**	**23.1**	**24.4**	**56.8**	**56.0**	**57.7**

(a) A person who smoked daily or occasionally was categorised as a current smoker.

(b) Based on national guidelines (NHMRC 2003).

(c) Based on national guidelines (NHMRC 2001).

(d) Based on national guidelines (DoHA 1999) and excludes adults aged less than 19 years.

(e) Based on Kessler 10 Psychological Distress Scale (K10).

95% CI = 95 per cent confidence interval.

Data are age standardised to the 2006 Victorian population.

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

Smoking during pregnancy

In 2008, 3.8 per cent of females aged 18 to 49 years reported that they were currently pregnant. As table 2.33 shows, the prevalence of current smoking among pregnant women (6.3 per cent) aged 18–49 years was lower than the prevalence of current smoking among women in this age group who were not pregnant (21.4 per cent). The proportion of non smokers was similar among women aged 18 to 49 years who were and were not pregnant (67.0 per cent and 60.7 per cent).

Table 2.33: Smoking and pregnancy, females aged 18–49 years, 2008

	Current smoker			Ex-smoker			Non-smoker		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Currently pregnant	6.3	3.5	11.1	**26.6**	18.1	37.3	**67.0**	56.6	76.0
Not currently pregnant	**21.4**	20.1	22.7	**17.8**	16.8	18.8	**60.7**	59.2	62.2
Total	**20.9**	**19.7**	**22.2**	**18.0**	**17.0**	**19.1**	**60.9**	**59.5**	**62.4**

(a) A person who smoked daily or occasionally was categorised as a current smoker.

95% CI = 95 per cent confidence interval.

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

Data are age standardised to the 2006 Victorian population.

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

Physical activity

Physical inactivity is a major modifiable risk factor for a range of conditions, including cardiovascular disease, diabetes, some cancers, obesity and falls among the elderly. The evidence suggests that health benefits accrue with increasing levels of physical activity and that this protective effect occurs even if adopted in middle and later life, which suggests physical activity is an obvious target for health promotion. Monitoring physical activity levels at the population level is relevant for investigating the outcomes of health promotion efforts.

Physical activity to achieve health benefits

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

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

(ii) time spent doing vigorous household chores (excluding gardening); and,

(iii) time spent doing vigorous activities other than household chores and gardening (for example, tennis, jogging, cycling or keep-fit exercises).

Data were collected on the number of sessions and the duration of each type of physical activity. Table 2.34 shows the proportion of persons who were sedentary and those who had undertaken different types of physical activity in the past week, by age group and sex. Younger males and females were more likely to engage in a combination of walking and vigorous activity. Among males and females aged 65 years and over the proportion who engaged in walking as their only form of physical activity was similar to the proportion who engaged in walking and some form of vigorous physical activity. Figures 2.18 and 2.19 show the differences in these types of physical activity with increasing age group for males and females.

Table 2.34: Types of physical activity undertaken during the past week, by age group[(a)] and sex, 2008

Age group (years)	Types of physical activity											
	No physical activity			Walking only			Vigorous activity only			Walking and vigorous activity		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Males												
18–24 years	1.4*	0.8	2.6	15.9	12.8	19.6	3.3	2.1	4.9	77.1	73.1	80.7
25–34 years	2.7	1.8	4.1	20.0	16.9	23.5	6.8	5.0	9.3	66.7	62.8	70.4
35–44 years	4.3	3.2	5.6	24.6	21.9	27.4	5.6	4.4	7.1	62.3	59.3	65.2
45–54 years	6.2	5.0	7.7	30.0	27.4	32.7	5.6	4.4	7.0	55.4	52.6	58.2
55–64 years	4.6	3.7	5.7	34.8	32.2	37.4	5.0	4.0	6.3	52.0	49.3	54.7
65+	9.4	8.2	10.8	41.7	39.5	44.0	4.5	3.7	5.5	38.7	36.5	41.0
Total	**5.1**	**4.6**	**5.6**	**27.9**	**26.7**	**29.0**	**5.3**	**4.7**	**5.9**	**58.1**	**56.8**	**59.4**
Females												
18–24 years	1.3*	0.6	2.9	20.1	16.7	24.0	3.7	2.4	5.8	72.7	68.6	76.5
25–34 years	3.3	2.4	4.5	19.0	16.8	21.3	4.3	3.4	5.6	70.5	67.8	73.0
35–44 years	3.9	3.1	4.8	20.3	18.6	22.1	5.6	4.7	6.6	67.6	65.6	69.6
45–54 years	4.6	3.7	5.6	23.4	21.5	25.4	4.9	4.1	6.0	63.0	60.8	65.1
55–64 years	5.4	4.5	6.5	31.1	29.1	33.1	5.5	4.6	6.7	54.1	51.9	56.3
65+	11.7	10.5	13.0	37.1	35.2	38.9	5.0	4.2	5.8	40.3	38.4	42.2
Total	**5.4**	**5.0**	**5.8**	**25.0**	**24.1**	**25.9**	**4.9**	**4.5**	**5.4**	**61.1**	**60.1**	**62.0**
Persons												
18–24 years	1.4	0.8	2.2	18.0	15.6	20.6	3.5	2.6	4.7	75.0	72.1	77.6
25–34 years	3.0	2.3	3.9	19.5	17.6	21.6	5.6	4.5	6.9	68.6	66.2	70.9
35–44 years	4.1	3.4	4.9	22.4	20.8	24.1	5.6	4.8	6.5	65.0	63.2	66.8
45–54 years	5.4	4.6	6.3	26.6	25.0	28.3	5.3	4.5	6.1	59.2	57.5	61.0
55–64 years	5.0	4.3	5.8	32.9	31.3	34.5	5.3	4.5	6.1	53.1	51.3	54.8
65+	10.7	9.8	11.6	39.1	37.7	40.6	4.8	4.2	5.4	39.6	38.2	41.1
Total	**5.3**	**4.9**	**5.6**	**26.4**	**25.6**	**27.1**	**5.1**	**4.8**	**5.5**	**59.6**	**58.8**	**60.4**

(a) Based on the population aged 18 years and over.

95% CI = 95 per cent confidence interval.

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

Data are crude estimates, except for the totals, which represent the estimates for Victoria and have been age standardised to the 2006 Victorian population.

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

* Estimate has a relative standard error of between 25 and 50 per cent and should be used with caution.

Figure 2.18: Types of physical activity undertaken during the past week, by age group[(a)], males, 2008

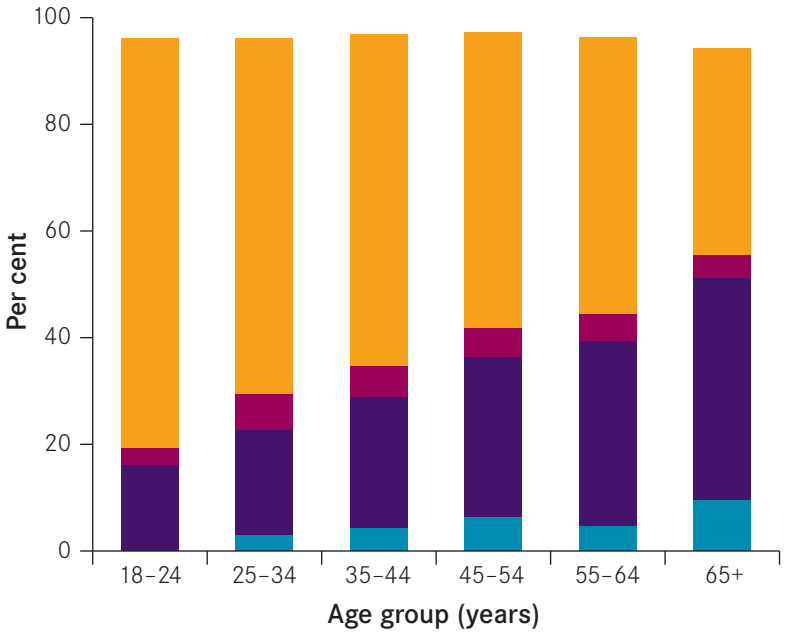
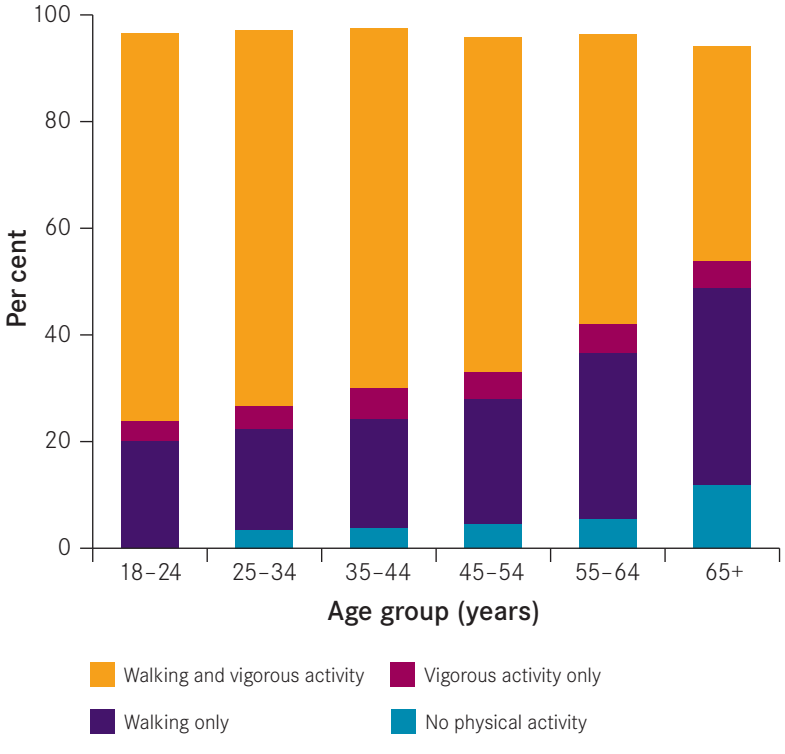


Figure 2.19: Types of physical activity undertaken during the past week, by age group[(a)], females, 2008



(a) Based on the population aged 18 years and over.

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

Data are crude estimates, they have not been age standardised.

The level of health benefit achieved from physical activity partly depends on the intensity of the activity. In general, to obtain a health benefit from physical activity requires participation in moderate intensity activities (at least). Accruing 150 or more minutes of moderate intensity physical activity (such as walking) on a regular basis over one week is believed to be 'sufficient' for health benefits and is the recommended threshold of physical activity according to the *National Physical Activity Guidelines for Australians* (DoHA 1999). For those who achieve an adequate baseline level of fitness,

extra health benefits may be gained by undertaking at least 30 minutes of regular vigorous exercise on three to four days per week.

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

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

A person who satisfied both criteria (time and number of sessions) was classified as doing 'sufficient' physical activity to achieve an added health benefit in the analysis that follows (table 2.35).

The number of minutes spent on physical activity was calculated by adding the minutes of moderate intensity activity to two times the minutes of vigorous activity (that is, the minutes of vigorous intensity activity are weighted by a factor of two).

Individuals were classified as doing 'insufficient' physical activity if they reported undertaking physical activity during the week before the survey, but did not accrue 150 minutes and/or did fewer than five sessions. Individuals were considered to be 'sedentary' if they reported no physical activity for the relevant time period. Individuals classified as 'sedentary' or 'insufficient' have been referred to as doing an 'insufficient' amount of physical activity to achieve health benefits.

The *National Physical Activity Guidelines For Adults* (DoHA 1999) have been applied to all respondents (persons aged 18 years and over) in previous VPHS reports to provide information about the prevalence of different levels of physical activity, including sufficient physical activity to achieve a health benefit. Subsequently, the Australian government has established physical activity recommendations for children aged 12–18 years (DoHA 2004) and devised recommendations on physical activity for health for older adults (persons aged 65 years and over, and Aboriginal and Torres Strait Islanders aged over 55 years) (DoHA 2006). Whereas the latter set of recommendations were developed to complement the existing guidelines, the recommendations for children pertain to both undertaking physical activity and limiting time spent on non-educational activities that involve sitting still for a long period of time (e.g. watching TV, videos or DVDs, internet use and playing computer games).

Table 2.35: Definition of sufficient physical activity time and sessions per week

Physical activity category	Time and sessions per week
Sedentary	0 minutes
Insufficient time and/or sessions	Less than 150 minutes or 150 or more minutes, but fewer than 5 sessions.
Sufficient time & sessions	150 minutes and five or more sessions

Table 2.36 shows the prevalence of physical activity for persons aged 19 years and over, by physical activity level, sex and age group. The proportion of males and females who participated in sufficient physical activity each week was similar for males and females across all age groups, except those aged 65 years and over, where a higher proportion of males than females (50.1 per cent and 42.1 per cent respectively) engaged in sufficient physical activity. Figures 2.20 and 2.21 show the distribution of sedentary, insufficient and sufficient physical activity by age group and sex.

Table 2.36: Physical activity levels[(a)], by age group and sex, 2008

	Sedentary			Insufficient time and/or session			Sufficient time and sessions		
Age group (years)	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Males									
19–24 years	1.6*	0.8	3.0	**22.0**	17.9	26.7	70.5	65.4	75.0
25–34 years	2.7	1.8	4.1	**25.2**	21.9	28.8	**65.5**	61.6	69.2
35–44 years	**4.3**	3.2	5.6	**26.4**	23.7	29.2	**63.9**	61.0	66.8
45–54 years	**6.2**	5.0	7.7	**28.6**	26.1	31.2	**60.3**	57.5	63.1
55–64 years	**4.6**	3.7	5.7	**29.7**	27.2	32.2	**58.8**	56.1	61.4
65+	9.4	8.2	10.8	31.5	29.4	33.7	50.1	47.8	52.4
Total	**5.1**	**4.6**	**5.6**	**27.5**	**26.3**	**28.7**	**61.0**	**59.7**	**62.3**
Females									
19–24 years	1.6*	0.7	3.5	**23.4**	19.5	27.8	69.6	64.9	73.8
25–34 years	3.3	2.4	4.5	**24.9**	22.5	27.5	66.0	63.3	68.7
35–44 years	**3.9**	3.1	4.8	**26.8**	25.0	28.7	**64.1**	62.0	66.1
45–54 years	**4.6**	3.7	5.6	**25.9**	23.9	27.9	**62.5**	60.3	64.7
55–64 years	**5.4**	4.5	6.5	**28.8**	26.8	30.8	**57.7**	55.5	59.8
65+	11.7	10.5	13.0	33.0	31.2	34.8	42.1	40.2	44.0
Total	**5.4**	**5.0**	**5.9**	**27.2**	**26.3**	**28.2**	**59.7**	**58.7**	**60.7**
Persons									
19–24 years	1.6*	0.9	2.6	22.7	19.8	25.9	70.0	66.6	73.2
25–34 years	3.0	2.3	3.9	**25.1**	23.0	27.3	65.8	63.4	68.1
35–44 years	**4.1**	3.4	4.9	**26.6**	25.0	28.3	**64.0**	62.2	65.8
45–54 years	**5.4**	4.6	6.3	**27.2**	25.6	28.9	**61.4**	59.7	63.2
55–64 years	**5.0**	4.3	5.8	**29.2**	27.6	30.8	**58.2**	56.5	59.9
65+	10.7	9.8	11.6	32.3	31.0	33.7	45.7	44.2	47.2
Total	**5.3**	**4.9**	**5.6**	**27.4**	**26.6**	**28.2**	**60.3**	**59.4**	**61.1**

(a) Based on national guidelines (DoHA 1999) and excludes adults aged less than 19 years.

95% CI = 95 per cent confidence interval.

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

Data are crude estimates, except for the totals, which represent the estimates for Victoria and have been age standardised to the 2006 Victorian population.

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

* Estimate has a relative standard error of between 25 and 50 per cent and should be used with caution.

Figure 2.20: Physical activity levels[(a)], by age group, males, 2008

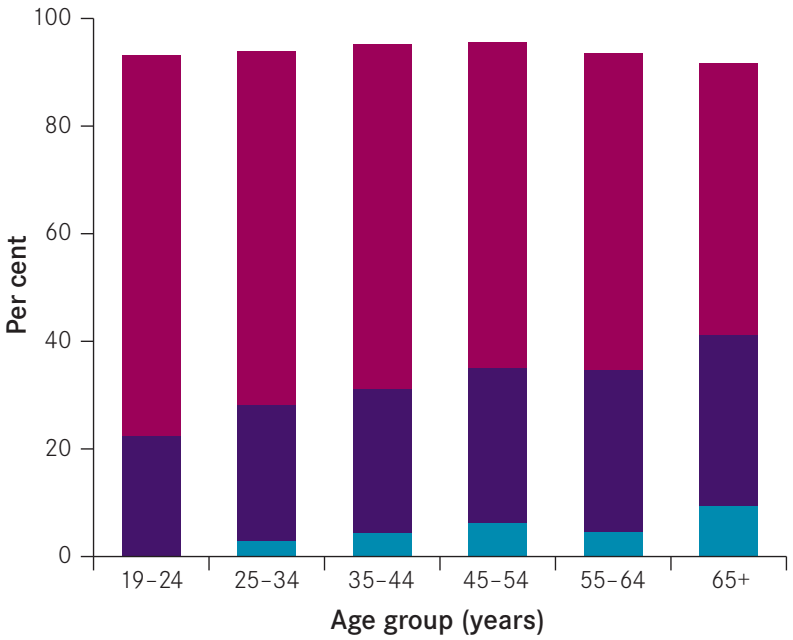
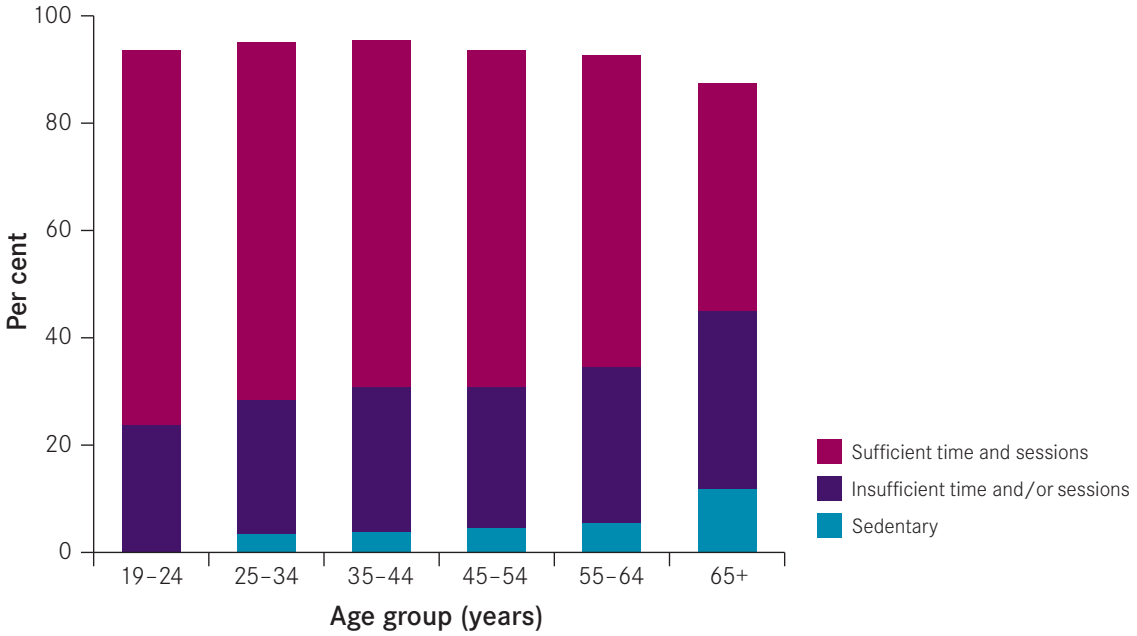


Figure 2.21: Physical activity levels[(a)], by age group, females, 2008



(a) Based on national guidelines (DoHA 1999) and excludes adults aged less than 19 years.

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

Data are crude estimates, they have not been age standardised.

Six in ten persons (60.3 per cent) aged 19 years and over engaged in sufficient physical activity during the week before the survey to meet the national guidelines (table 2.36). Almost one third (27.4 per cent insufficient time and/or sessions and 5.3 per cent sedentary) of persons aged 19 years and over engaged in insufficient levels of activity to confer a health benefit or were sedentary. The proportion of persons reporting sufficient time and sessions was similar for males (61.0 per cent) and females (59.7 per cent).

Table 2.37: Physical activity levels[(a)], by sex, 2008

	Males			Females			Persons		
Serves	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Sedentary	**5.1**	4.6	5.6	**5.4**	5.0	5.9	**5.3**	4.9	5.6
Insufficient	**27.5**	26.3	28.7	**27.2**	26.3	28.2	**27.4**	26.6	28.2
Sufficient	**61.0**	59.7	62.3	**59.7**	58.7	60.7	**60.3**	59.4	61.1

(a) Based on national guidelines (DoHA 1999) and excludes adults aged less than 19 years.

95% CI = 95 per cent confidence interval.

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

Data are age standardised to the 2006 Victorian population.

Table 2.38 shows physical activity levels for the period 2005–2008. The proportion of males and females reporting sufficient time and sessions of physical activity to meet the guidelines remained constant between 2005 and 2008. However, the proportion of males and females reporting sedentary behaviour decreased over this time period.

Table 2.38: Physical activity levels[(a)], by sex, 2005–2008

	2005	2006	2007	2008
	Per cent			
Males				
Sedentary	6.5	5.0	4.8	5.1
Insufficient time and/or sessions	28.0	27.7	28.1	27.5
Sufficient time and sessions	63.5	63.5	63.8	61.0
Females				
Sedentary	5.4	5.6	4.9	5.4
Insufficient time and/or sessions	28.8	28.0	29.7	27.2
Sufficient time and sessions	63.5	63.7	61.3	59.7
Persons				
Sedentary	5.9	5.4	4.8	5.3
Insufficient time and/or sessions	28.4	27.8	28.9	27.4
Sufficient time and sessions	63.6	63.5	62.5	60.3

(a) Based on national guidelines (DoHA 1999) and excludes adults aged less than 19 years.

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

Data are age standardised to the 2006 Victorian population.

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

Table 2.39 and figure 2.22 show levels of physical activity by sex and self-reported health status. Persons with higher levels of self–reported health status were more likely to report higher levels of physical activity than those with lower levels of self-reported health. The data in table 2.39 show similar results for males and females. More than seven in 10 (72.8 per cent) persons aged 19 years and over who reported their health as excellent also reported undertaking sufficient levels of physical activity, compared with 38.5 per cent of those who reported their health as poor. Similarly, 2.7 per cent of those who reported their health as excellent were categorised as sedentary, whilst 14.7 per cent of those who reported their health as poor reported sedentary behaviour.

Table 2.39: Physical activity levels[(a)], by self-reported health and sex, 2008

	Excellent			Very good			Good			Fair			Poor		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Males															
Sedentary	**2.8**	1.8	4.3	**3.2**	2.5	4.0	**5.1**	4.3	6.0	**7.3**	5.9	8.9	**16.6**	12.1	22.5
Insufficient time and/or sessions	**16.8**	14.0	20.0	**24.0**	21.9	26.2	**29.7**	27.8	31.7	**34.6**	31.2	38.2	**38.6**	31.0	46.9
Sufficient time and sessions	**74.1**	70.5	77.4	**67.1**	64.7	69.4	**59.1**	57.0	61.1	**50.1**	46.4	53.7	**37.1**	30.1	44.7
Females															
Sedentary	**2.7**	2.0	3.6	**4.1**	3.5	4.9	**5.1**	4.5	5.8	**8.5**	7.1	10.1	**15.1**	11.3	19.9
Insufficient time and/or sessions	**18.6**	16.2	21.4	**25.1**	23.6	26.8	**30.4**	28.7	32.0	**31.5**	28.8	34.3	**30.8**	25.1	37.2
Sufficient time and sessions	**72.2**	69.4	74.9	**64.2**	62.5	66.0	**57.2**	55.4	58.9	**50.4**	47.4	53.3	**38.1**	32.3	44.2
Persons															
Sedentary	**2.7**	2.1	3.5	**3.7**	3.2	4.3	**5.1**	4.6	5.7	**8.0**	7.0	9.2	**14.7**	11.8	18.3
Insufficient time and/or sessions	**17.8**	15.9	19.8	**24.7**	23.4	26.0	**30.0**	28.8	31.3	**32.9**	30.7	35.2	**34.7**	29.8	40.0
Sufficient time and sessions	**72.8**	70.5	75.0	**65.5**	64.1	66.9	**58.1**	56.7	59.4	**50.2**	47.8	52.6	**38.5**	33.7	43.5

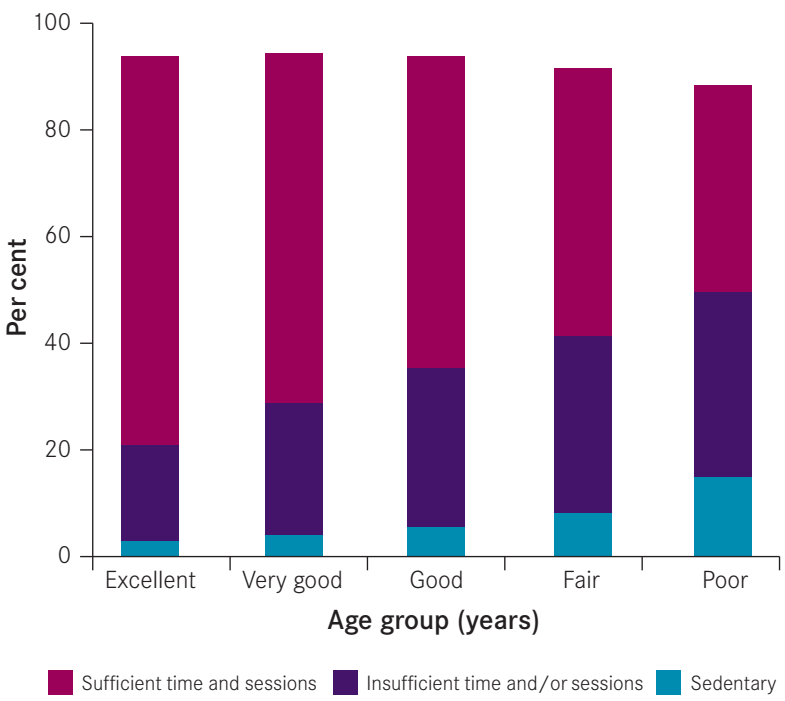
(a) Based on national guidelines (DoHA 1999) and excludes adults aged less than 19 years.

95% CI = 95 per cent confidence interval.

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

Data are age standardised to the 2006 Victorian population.

Figure 2.22: Physical activity levels[(a)], by self-reported health, 2008



(a) Based on national guidelines (DoHA 1999) and excludes adults aged less than 19 years.

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

Data are age standardised to the 2006 Victorian population.

Table 2.40 shows levels of physical activity for the population aged 19 years and over, by sex and Department of Health region. The proportion of males who participated in sufficient physical activity was similar for rural (60.7 per cent) and metropolitan (61.2 per cent) areas of Victoria. There were no differences by region in the proportion of males who did sufficient physical activity compared with the average for Victoria (61.0 per cent). For the female population, the proportion who did sufficient physical activity was similar in rural areas (60.4 per cent) and the metropolitan area (59.5 per cent). The proportion of females aged 19 years and over who reported a sufficient level of activity was below the average for Victoria (59.7 per cent) for the North and West Metropolitan region (56.3 per cent). There were no differences across regions in the proportion of males or females who were classified as sedentary, compared with the Victorian averages (5.1 per cent and 5.4 per cent respectively).

Table 2.40: Physical activity levels[(a)], Department of Health region and sex, 2008

Region	Sedentary			Insufficient time and/or sessions			Sufficient time and sessions		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Males									
Barwon-South Western	**4.1**	2.6	6.5	**24.6**	20.9	28.6	**62.2**	56.9	67.2
Eastern Metropolitan	**4.5**	3.4	5.8	**26.3**	23.4	29.5	**64.6**	61.3	67.8
Gippsland	**5.5**	4.0	7.4	**25.4**	21.5	29.8	**60.1**	55.4	64.7
Grampians	**6.7**	5.1	8.8	**24.3**	21.1	27.7	**60.8**	56.8	64.6
Hume	**4.6**	3.4	6.1	**25.4**	22.5	28.6	**60.7**	57.3	64.1
Loddon Mallee	**5.7**	4.3	7.5	**26.8**	23.0	31.0	**60.4**	56.1	64.6
North and West Metropolitan	**6.1**	5.1	7.3	**29.0**	26.8	31.3	**59.1**	56.7	61.4
Southern Metropolitan	**4.2**	3.3	5.3	**28.0**	25.5	30.7	**61.3**	58.5	64.1
Metropolitan	**5.0**	**4.4**	**5.7**	**28.1**	**26.6**	**29.6**	**61.2**	**59.6**	**62.8**
Rural	**5.2**	**4.5**	**6.1**	**25.5**	**23.7**	**27.3**	**60.7**	**58.5**	**62.9**
Total	**5.1**	**4.6**	**5.6**	**27.5**	**26.3**	**28.7**	**61.0**	**59.7**	**62.3**
Females									
Barwon-South Western	**5.0**	2.9	8.5	**24.4**	20.6	28.6	**62.7**	57.9	67.2
Eastern Metropolitan	**4.9**	4.0	6.0	**27.3**	24.9	29.9	**61.5**	58.8	64.1
Gippsland	**4.6**	3.5	6.0	**25.9**	23.0	29.0	**61.9**	58.6	65.1
Grampians	**5.4**	4.4	6.6	**27.0**	23.9	30.4	**58.6**	55.1	62.0
Hume	**5.0**	4.2	6.1	**25.2**	22.9	27.5	**61.9**	59.4	64.5
Loddon Mallee	**4.5**	3.7	5.6	**29.1**	26.2	32.3	**56.5**	53.2	59.6
North and West Metropolitan	**6.8**	5.9	7.7	**28.3**	26.6	30.1	**56.3**	54.4	58.1
Southern Metropolitan	**5.0**	4.1	6.0	**26.9**	24.7	29.1	**61.5**	59.1	63.8
Metropolitan	**5.6**	**5.1**	**6.2**	**27.5**	**26.3**	**28.7**	**59.5**	**58.2**	**60.8**
Rural	**4.9**	**4.1**	**5.8**	**26.3**	**24.7**	**27.9**	**60.4**	**58.6**	**62.1**
Total	**5.4**	**5.0**	**5.9**	**27.2**	**26.3**	**28.2**	**59.7**	**58.7**	**60.7**
Persons									
Barwon-South Western	**4.6**	3.2	6.7	**24.5**	21.8	27.5	**62.4**	58.8	65.8
Eastern Metropolitan	**4.7**	4.0	5.5	**26.9**	24.9	28.9	**62.9**	60.8	65.0
Gippsland	**5.1**	4.1	6.2	**25.9**	23.3	28.5	**60.7**	57.8	63.5
Grampians	**6.0**	5.0	7.1	**25.7**	23.3	28.1	**59.7**	57.0	62.3
Hume	**4.8**	4.1	5.7	**25.4**	23.5	27.4	**61.3**	59.1	63.4
Loddon Mallee	**5.1**	4.3	6.1	**28.0**	25.5	30.6	**58.3**	55.5	61.0
North and West Metropolitan	**6.5**	5.8	7.3	**28.6**	27.2	30.1	**57.5**	56.0	59.0
Southern Metropolitan	**4.6**	3.9	5.3	**27.5**	25.8	29.2	**61.3**	59.5	63.2
Metropolitan	**5.4**	**5.0**	**5.8**	**27.8**	**26.9**	**28.8**	**60.2**	**59.2**	**61.2**
Rural	**5.0**	**4.5**	**5.7**	**25.9**	**24.7**	**27.1**	**60.5**	**59.1**	**61.9**
Total	**5.3**	**4.9**	**5.6**	**27.4**	**26.6**	**28.2**	**60.3**	**59.4**	**61.1**

(a) Based on national guidelines (DoHA 1999) and excludes adults aged less than 19 years.

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

95% CI = 95 per cent confidence interval.

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

Data are age standardised to the 2006 Victorian population.

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

Table 2.41 and figure 2.23 show levels of physical activity by LGA. On average, six in 10 (60.3 percent) persons in Victoria reported that they had undertaken sufficient physical activity in the past week. There were 10 LGAs with sufficient physical activity levels above the average for Victoria. Five of these LGAs were located in rural areas of the state: Queenscliffe (73.7 per cent), Surf Coast (69.9 per cent), Murrindindi (69.6 per cent), Mount Alexander (68.2 per cent) and Southern Grampians (67.2 per cent). The remaining five metropolitan LGAs where the proportion of persons undertaking sufficient physical activity was above the average for Victoria were: Bayside (73.4 per cent), Port Phillip (69.7 per cent), Melbourne (69.3 per cent), Stonnington (67.8 per cent) and Boroondara (67.3 per cent). There were seven LGAs where the proportion of persons participating in sufficient physical activity was below the average for Victoria: Casey (53.5 per cent), Mitchell (53.5 per cent), Hume (52.3 per cent), Gannawarra (52.3 per cent), Greater Dandenong (48.9 per cent), Brimbank (48.3 per cent) and Hindmarsh (45.7 per cent).

Table 2.41: Physical activity levels[(a)], by LGA, 2008

LGA	Sedentary			Insufficient time and/or sessions			Sufficient time and sessions		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Alpine (S)	**3.2***	2.0	5.2	**26.1**	20.5	32.6	**63.7**	57.1	69.8
Ararat (RC)	**5.3**	3.4	8.1	**28.2**	23.6	33.3	**55.0**	49.6	60.2
Ballarat (C)	**5.5**	3.7	7.9	**24.4**	20.1	29.3	**62.3**	57.2	67.1
Banyule (C)	**4.3***	2.6	7.1	**27.0**	22.2	32.6	**62.1**	56.2	67.7
Bass Coast (S)	**7.2***	4.3	11.9	**20.3**	14.1	28.4	**64.8**	56.9	72.0
Baw Baw (S)	**3.1***	1.8	5.3	**29.7**	23.8	36.3	**61.8**	55.3	68.0
Bayside (C)	**2.7***	1.5	4.8	**20.1**	15.5	25.7	**73.4**	67.6	78.5
Benalla (RC)	**5.0***	3.0	8.3	**28.2**	22.5	34.7	**58.0**	51.3	64.4
Boroondara (C)	**2.1***	1.2	3.5	**27.7**	22.9	33.0	**67.3**	61.9	72.3
Brimbank (C)	**11.4**	8.9	14.4	**31.3**	26.7	36.2	**48.3**	43.3	53.3
Buloke (S)	**5.8***	3.4	9.8	**26.0**	20.7	32.2	**61.2**	54.9	67.2
Campaspe (S)	**5.5**	3.4	8.7	**30.1**	24.8	36.0	**55.7**	49.8	61.5
Cardinia (S)	**4.5**	3.0	6.9	**30.4**	24.9	36.5	**56.7**	50.6	62.5
Casey (C)	**5.5**	3.7	8.1	**31.2**	26.6	36.3	**53.5**	48.3	58.6
Central Goldfields (S)	**6.6***	3.4	12.6	**21.7**	17.2	27.2	**61.8**	55.3	67.9
Colac-Otway (S)	**4.5***	2.4	8.2	**26.1**	20.3	32.9	**60.2**	53.6	66.5
Corangamite (S)	**10.7***	6.5	17.2	**20.5**	16.5	25.1	**56.8**	50.2	63.3
Darebin (C)	**7.5**	5.3	10.5	**26.3**	21.7	31.4	**58.0**	52.7	63.1
East Gippsland (S)	**4.8**	3.1	7.5	**29.4**	22.8	37.1	**60.0**	52.5	67.2
Frankston (C)	**4.2**	2.7	6.5	**28.8**	23.9	34.2	**59.2**	53.5	64.6
Gannawarra (S)	**6.9**	4.7	10.0	**26.1**	21.6	31.2	**52.3**	46.1	58.4
Glen Eira (C)	**2.8***	1.7	4.6	**27.7**	23.1	32.9	**63.7**	58.5	68.6
Glenelg (S)	**4.7**	3.1	7.1	**31.6**	25.5	38.6	**54.5**	47.9	60.9
Golden Plains (S)	**5.1***	3.0	8.7	**21.6**	17.7	26.1	**63.2**	57.1	68.9
Greater Bendigo (C)	**5.2**	3.5	7.5	**31.1**	25.8	37.0	**56.6**	50.8	62.3
Greater Dandenong (C)	**7.5**	5.2	10.7	**34.7**	29.8	40.0	**48.9**	43.5	54.2
Greater Geelong (C)	**4.4***	2.3	8.2	**23.9**	19.8	28.4	**63.6**	58.1	68.8
Greater Shepparton (C)	**4.3**	2.7	6.8	**24.4**	19.8	29.7	**61.9**	56.3	67.2
Hepburn (S)	**6.9***	4.0	11.6	**23.8**	19.5	28.6	**64.1**	58.1	69.6
Hindmarsh (S)	**9.1**	6.2	13.3	**32.7**	27.1	38.9	**45.7**	39.3	52.1
Hobsons Bay (C)	**5.2**	3.7	7.4	**30.8**	25.7	36.5	**57.3**	51.6	62.8
Horsham (RC)	**5.7**	3.9	8.1	**29.6**	24.5	35.3	**53.6**	47.5	59.6
Hume (C)	**6.1**	4.1	9.1	**32.2**	27.5	37.3	**52.3**	47.2	57.4
Indigo (S)	**2.8***	1.7	4.7	**24.1**	18.7	30.4	**63.3**	56.9	69.2
Kingston (C)	**6.0**	4.1	8.7	**24.3**	19.9	29.2	**64.2**	59.2	68.9
Knox (C)	**5.3**	3.6	7.5	**25.5**	21.1	30.5	**64.4**	59.3	69.2
Latrobe (C)	**5.4**	3.4	8.4	**26.9**	22.1	32.3	**60.7**	55.0	66.1
Loddon (S)	**5.9**	4.0	8.8	**23.5**	18.4	29.4	**60.6**	54.3	66.6
Macedon Ranges (S)	**3.6***	2.1	5.9	**22.9**	18.4	28.2	**64.4**	58.2	70.2
Manningham (C)	**4.7**	3.1	7.1	**28.5**	23.5	34.0	**62.1**	56.4	67.5

(a) Based on national guidelines (DoHA 1999) and excludes adults aged less than 19 years.

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

95% CI = 95 per cent confidence interval.

LGA = local government area.

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

Data are age standardised to the 2006 Victorian population.

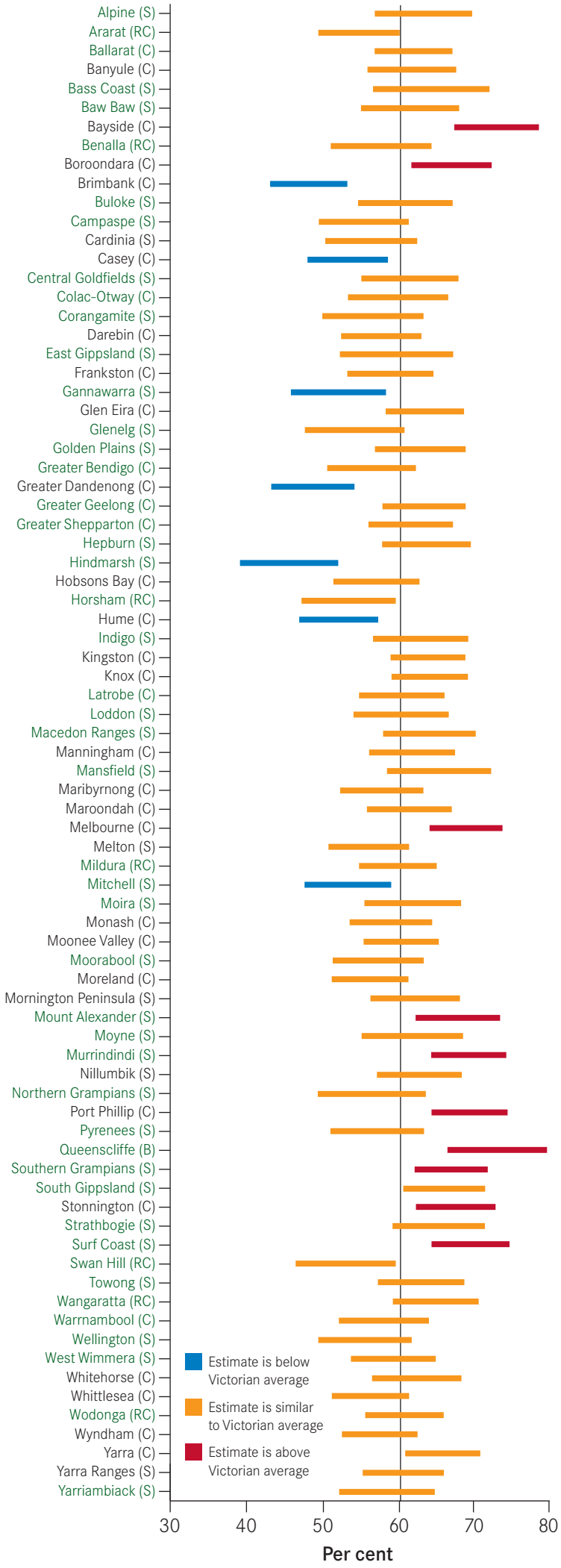
Estimates that are (statistically) significantly different to the corresponding estimate for Victoria are identified by colour as follows: above Victoria / below Victoria.

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

Table 2.41: Physical activity levels[(a)], by LGA, 2008 (continued)

LGA	Sedentary			Insufficient time and/or sessions			Sufficient time and sessions		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Mansfield (S)	**3.8***	2.2	6.4	**21.0**	15.5	27.7	**65.8**	58.7	72.2
Maribyrnong (C)	**9.9**	7.0	13.8	**25.9**	21.5	30.9	**58.1**	52.6	63.3
Maroondah (C)	**4.6**	2.8	7.4	**26.7**	22.0	32.1	**61.7**	56.1	67.0
Melbourne (C)	**3.5***	2.0	5.9	**20.4**	16.6	24.9	**69.3**	64.4	73.7
Melton (S)	**7.0**	4.7	10.2	**29.2**	24.4	34.6	**56.3**	51.1	61.4
Mildura (RC)	**5.4**	3.5	8.3	**27.9**	23.6	32.8	**60.1**	55.0	65.0
Mitchell (S)	**2.9***	1.7	4.9	**35.3**	30.0	40.9	**53.5**	47.9	59.1
Moira (S)	**5.1**	3.5	7.3	**25.1**	19.7	31.4	**62.2**	55.8	68.2
Monash (C)	**3.8**	2.5	5.9	**28.5**	23.8	33.7	**59.3**	53.8	64.5
Moonee Valley (C)	**5.6**	3.7	8.3	**27.3**	22.6	32.5	**60.5**	55.6	65.3
Moorabool (S)	**4.6***	2.5	8.1	**28.7**	23.3	34.7	**57.6**	51.6	63.3
Moreland (C)	**5.5**	3.5	8.6	**29.9**	25.4	34.8	**56.4**	51.4	61.3
Mornington Peninsula (S)	**4.8**	3.1	7.3	**28.2**	22.9	34.2	**62.5**	56.5	68.1
Mount Alexander (S)	**3.9**	2.4	6.4	**19.6**	15.5	24.4	**68.2**	62.5	73.4
Moyne (S)	**2.9**	1.9	4.6	**24.2**	18.7	30.8	**62.1**	55.4	68.5
Murrindindi (S)	**3.9**	2.5	5.8	**18.4**	14.5	23.1	**69.6**	64.5	74.2
Nillumbik (S)	**5.8***	3.2	10.4	**26.4**	21.6	31.9	**63.1**	57.5	68.4
Northern Grampians (S)	**8.6**	6.1	12.1	**28.8**	22.6	36.0	**56.7**	49.6	63.6
Port Phillip (C)	**3.2***	1.8	5.6	**21.5**	17.3	26.4	**69.7**	64.6	74.4
Pyrenees (S)	**4.4**	3.0	6.6	**27.9**	22.4	34.2	**57.5**	51.3	63.4
Queenscliffe (B)	**2.0**	1.2	3.3	**18.1**	12.8	24.9	**73.7**	66.7	79.7
Southern Grampians (S)	**4.0**	2.6	6.2	**20.9**	17.1	25.4	**67.2**	62.4	71.8
South Gippsland (S)	**4.4**	2.9	6.6	**18.5**	14.5	23.3	**66.4**	60.9	71.5
Stonnington (C)	**1.9***	1.0	3.7	**25.6**	21.0	30.9	**67.8**	62.5	72.8
Strathbogie (S)	**6.0**	4.0	8.8	**21.7**	16.7	27.7	**65.7**	59.5	71.4
Surf Coast (S)	**3.4***	2.1	5.6	**18.1**	14.1	22.9	**69.9**	64.6	74.7
Swan Hill (RC)	**5.8**	3.9	8.6	**28.9**	23.9	34.5	**53.3**	46.7	59.7
Towong (S)	**6.1**	3.9	9.6	**21.3**	16.9	26.6	**63.3**	57.5	68.7
Wangaratta (RC)	**6.5**	4.2	9.9	**21.6**	17.1	26.9	**65.3**	59.5	70.6
Warrnambool (C)	**5.3**	3.6	7.6	**29.9**	24.6	35.8	**58.3**	52.4	64.0
Wellington (S)	**5.4**	3.5	8.1	**24.0**	19.5	29.1	**55.9**	49.8	61.8
West Wimmera (S)	**7.0**	5.2	9.5	**21.4**	17.1	26.5	**59.5**	53.9	64.9
Whitehorse (C)	**6.5**	4.4	9.6	**25.9**	20.9	31.6	**62.8**	56.8	68.3
Whittlesea (C)	**7.9**	5.8	10.8	**29.9**	25.4	34.7	**56.5**	51.5	61.4
Wodonga (RC)	**6.2**	4.0	9.6	**25.4**	21.0	30.3	**60.9**	55.8	65.9
Wyndham (C)	**5.7**	3.8	8.6	**28.7**	24.4	33.4	**57.7**	52.8	62.5
Yarra (C)	**4.2***	2.5	7.0	**24.9**	20.4	30.0	**66.1**	61.1	70.8
Yarra Ranges (S)	**5.9**	4.0	8.9	**26.3**	21.8	31.4	**60.9**	55.5	66.0
Yarriambiack (S)	**8.0***	4.8	12.9	**21.5**	17.2	26.4	**58.8**	52.4	64.8
Total	**5.3**	**4.9**	**5.6**	**27.4**	**26.6**	**28.1**	**60.3**	**59.5**	**61.1**

Figure 2.23: Sufficient time and sessions of physical activity[(a)], by LGA, 2008



(a) Based on national guidelines (DoHA 1999) and excludes adults aged less than 19 years.

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

LGA = local government area.

Data are age standardised to the 2006 Victorian population.

The line on the graph is the Victorian estimate, it does not show the 95% CI. See relevant table for 95% CI for Victoria (Total).

Table 2.42 presents levels of physical activity by selected health indicators. The data show that persons who reported low or moderate levels of psychological distress were more likely than people who reported very high levels of psychological distress to meet the national physical activity guidelines. Similarly, persons who reported excellent, very good or good health were more likely than persons with fair or poor health to report undertaking sufficient physical activity to meet the guidelines. Individuals who were classified as risky or high risk drinkers at risk of short and long-term harm were more likely to undertake sufficient physical activity than abstainers.

Those who met the guidelines for fruit and vegetable consumption were more likely to undertake sufficient physical activity, compared with the average for Victoria. Conversely, current smokers, abstainers, those with high or very high levels of psychological distress and persons who rated their health as fair or poor were more likely to be sedentary, compared with the average for Victoria.

Table 2.42: Physical activity levels[a], by selected health indicators, 2008

	Sedentary			Insufficient time and/or sessions			Sufficient time and sessions		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Smoking status									
Current smoker	7.8	6.7	9.0	**27.6**	25.7	29.6	56.4	54.3	58.4
Ex-smoker	**4.9**	4.2	5.6	**26.3**	24.2	28.5	**62.7**	60.3	64.9
Non-smoker	**4.8**	4.4	5.2	**27.8**	26.8	28.9	**60.3**	59.2	61.4
Nutrition[b]									
Met the guidelines for fruit consumption	4.3	3.9	4.8	23.7	22.6	24.8	65.7	64.5	66.9
Met the guidelines for vegetable consumption	**5.3**	3.6	7.6	16.9	15.0	19.0	71.1	68.2	73.8
Met the guidelines for fruit & vegetable consumption	**5.3**	3.3	8.3	14.9	13.0	17.0	73.6	70.2	76.8
Alcohol consumption[c]									
At risk or high risk of long-term harm	3.9	3.4	4.4	25.1	23.9	26.3	64.8	63.6	66.1
At risk or high risk of short-term harm	**6.1**	4.5	8.3	21.3	18.0	24.9	65.7	61.5	69.6
Abstainer from alcohol	7.3	6.4	8.2	31.7	29.6	34.0	50.5	48.2	52.8
Body weight status									
Underweight	**3.8**	2.5	5.8	**24.8**	20.5	29.7	**65.3**	60.2	70.2
Healthy weight	**4.5**	4.1	5.1	**25.5**	24.4	26.6	62.8	61.6	64.0
Overweight	**5.1**	4.6	5.8	**27.1**	25.6	28.6	**61.7**	60.1	63.3
Obese	**6.2**	5.4	7.1	31.0	28.8	33.3	55.7	53.3	58.0
Self-rated health									
Excellent/very good	3.5	3.1	3.9	22.9	21.8	24.0	67.4	66.2	68.6
Good	**5.1**	4.6	5.7	30.0	28.8	31.3	**58.1**	56.7	59.4
Fair/poor	9.2	8.3	10.3	33.0	31.0	35.1	48.2	46.0	50.3
Level of psychological distress[d]									
Low (10–15)	**4.5**	4.1	4.9	**27.1**	26.1	28.2	62.4	61.4	63.5
Moderate (16–21)	**5.0**	4.4	5.7	**28.2**	26.6	29.8	**59.5**	57.8	61.2
High (22–29)	8.4	7.1	10.1	**28.1**	25.5	30.8	54.8	52.0	57.6
Very high (30–50)	11.3	8.9	14.4	**29.0**	24.9	33.5	50.2	45.7	54.7
Total	**5.3**	**4.9**	**5.6**	**27.4**	**26.6**	**28.2**	**60.3**	**59.4**	**61.1**

(a) Based on national guidelines (DoHA 1999) and excludes adults aged less than 19 years.

(b) Based on national guidelines (NHMRC 2003).

(c) Based on national guidelines (NHMRC 2001).

(d) Based on Kessler 10 Psychological Distress Scale (K10).

95% CI = 95 per cent confidence interval.

Data are age standardised to the 2006 Victorian population.

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

Incidental physical activity

Modern lifestyles allow us to sit to get everywhere we want to go, and once we get there, we may end up sitting again. Walking or cycling for transport, especially for short trips, provides an opportunity to reduce or break up sitting time. Walking, in particular, is regarded as a form of physical activity that most people can do, no matter what their age, weight, health problems or abilities, as part of everyday life. To explore the extent to which the Victorian population includes physical activity in their everyday activities to get from place to place (for example, to school, work, the shops or the train station), the VPHS 2008 asked respondents about the number of days on which they walked or cycled for transport for trips taking longer than 10 minutes. Table 2.43 and figures 2.24 and 2.25 show the proportion of the population involved in incidental physical activity by sex and age group.

In 2008, 6.3 per cent of persons reported undertaking at least 10 minutes of incidental physical activity on each day of the week. The results were similar for males and females, however, the proportion of persons who did not engage in any incidental activity was highest for those aged 45 years and over, compared with those aged 18–24 years.

Table 2.43: Incidental physical activity (days), by age group and sex, 2008

	None			One			Two			Three		
Age group (years)	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Males												
18–24 years	47.1	42.3	51.9	7.7	5.6	10.6	9.0	6.6	12.3	9.3	6.8	12.6
25–34 years	54.9	50.8	58.8	7.1	5.3	9.5	7.9	6.0	10.3	6.3	4.3	9.3
35–44 years	59.1	56.0	62.0	7.2	5.8	9.0	8.3	6.7	10.3	5.7	4.5	7.2
45–54 years	66.8	64.2	69.4	5.4	4.3	6.8	6.6	5.3	8.1	5.6	4.4	7.2
55–64 years	67.3	64.8	69.8	5.2	4.2	6.5	6.7	5.6	8.1	5.9	4.8	7.3
65+	65.8	63.6	67.9	4.6	3.7	5.6	7.5	6.3	8.8	6.0	5.0	7.3
Total	**60.7**	**59.4**	**62.1**	**6.1**	**5.5**	**6.8**	**7.6**	**6.9**	**8.4**	**6.3**	**5.6**	**7.1**
Females												
18–24 years	48.7	44.3	53.2	9.6	7.3	12.6	9.4	6.9	12.7	7.1	5.2	9.7
25–34 years	56.5	53.6	59.3	7.8	6.4	9.4	9.4	7.7	11.3	6.8	5.4	8.4
35–44 years	64.2	62.2	66.2	6.9	5.9	8.0	8.5	7.4	9.8	6.2	5.3	7.3
45–54 years	68.2	66.0	70.2	5.2	4.3	6.3	6.4	5.4	7.6	5.6	4.6	6.8
55–64 years	67.9	65.8	69.9	6.0	5.1	7.2	7.6	6.5	8.9	5.7	4.8	6.8
65+	66.5	64.7	68.3	6.9	6.0	8.1	7.7	6.7	8.8	6.7	5.8	7.7
Total	**62.7**	**61.6**	**63.7**	**6.9**	**6.3**	**7.5**	**8.1**	**7.5**	**8.7**	**8.1**	**7.5**	**8.7**
Persons												
18–24 years	47.9	44.6	51.2	8.7	7.0	10.7	9.2	7.4	11.4	8.2	6.6	10.2
25–34 years	55.7	53.2	58.1	7.4	6.2	8.8	8.6	7.3	10.1	6.5	5.2	8.1
35–44 years	61.7	59.9	63.5	7.0	6.2	8.1	8.4	7.4	9.5	6.0	5.2	6.9
45–54 years	67.5	65.8	69.2	5.3	4.6	6.2	6.5	5.7	7.4	5.6	4.8	6.6
55–64 years	67.6	66.0	69.2	5.6	4.9	6.5	7.2	6.4	8.1	5.8	5.1	6.7
65+	66.2	64.8	67.6	5.9	5.2	6.6	7.6	6.8	8.4	6.4	5.7	7.2
Total	**61.7**	**60.9**	**62.6**	**6.5**	**6.1**	**7.0**	**7.8**	**7.4**	**8.3**	**6.3**	**5.9**	**6.8**

95% CI = 95 per cent confidence interval.

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

Data are crude estimates, except for the totals, which represent the estimates for Victoria and have been age standardised to the 2006 Victorian population.

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

* Estimate has a relative standard error of between 25 and 50 per cent and should be used with caution.

Table 2.43: Incidental physical activity (days), by age group and sex, 2008 (continued)

Age group (years)	Four			Five			Six			Seven		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Males												
18–24 years	**4.4**	2.9	6.6	**9.8**	7.2	13.2	**2.6***	1.5	4.5	**9.6**	7.2	12.6
25–34 years	**3.1**	2.1	4.5	**11.6**	9.2	14.5	**1.4***	0.8	2.5	**7.4**	5.6	9.6
35–44 years	**4.5**	3.4	6.1	**8.1**	6.6	9.9	**1.7**	1.1	2.8	**5.1**	3.9	6.6
45–54 years	**2.6**	1.9	3.6	**6.5**	5.2	8.1	**1.0**	0.6	1.6	**5.1**	4.1	6.3
55–64 years	**3.0**	2.2	3.9	**4.1**	3.2	5.3	**1.2***	0.8	2.0	**6.2**	5.1	7.5
65+	**3.4**	2.7	4.3	**3.1**	2.3	4.1	**1.2***	0.8	1.8	**8.0**	6.8	9.3
Total	**3.5**	**3.0**	**4.0**	**7.2**	**6.4**	**8.0**	**1.5**	**1.2**	**1.9**	**6.7**	**6.1**	**7.4**
Females												
18–24 years	**5.0**	3.4	7.4	**7.6**	5.6	10.1	**2.1***	1.2	3.9	**10.0**	7.6	13.2
25–34 years	**3.5**	2.6	4.6	**6.7**	5.4	8.2	**1.1***	0.6	2.0	**8.4**	6.8	10.2
35–44 years	**3.3**	2.6	4.0	**5.5**	4.6	6.5	**0.5**	0.3	0.9	**4.4**	3.6	5.4
45–54 years	**3.7**	3.0	4.7	**5.0**	4.1	6.0	**1.1**	0.7	1.7	**4.5**	3.6	5.5
55–64 years	**3.7**	2.9	4.6	**3.2**	2.5	4.1	**0.8***	0.5	1.4	**4.6**	3.8	5.5
65+	**3.0**	2.4	3.7	**2.6**	2.1	3.3	**1.1**	0.8	1.7	**4.3**	3.7	5.1
Total	**3.6**	**3.2**	**4.0**	**5.1**	**4.6**	**5.6**	**1.1**	**0.9**	**1.4**	**5.9**	**5.4**	**6.5**
Persons												
18–24 years	**4.7**	3.5	6.2	**8.7**	7.0	10.8	**2.4**	1.6	3.6	**9.8**	8.0	11.9
25–34 years	**3.3**	2.6	4.1	**9.2**	7.8	10.8	**1.2***	0.8	1.9	**7.9**	6.7	9.3
35–44 years	**3.9**	3.2	4.7	**6.8**	5.9	7.8	**1.1**	0.8	1.6	**4.8**	4.0	5.6
45–54 years	**3.2**	2.6	3.9	**5.7**	4.9	6.6	**1.0**	0.7	1.4	**4.8**	4.1	5.5
55–64 years	**3.3**	2.8	4.0	**3.7**	3.1	4.4	**1.0**	0.7	1.5	**5.4**	4.7	6.2
65+	**3.2**	2.7	3.7	**2.8**	2.3	3.4	**1.2**	0.9	1.6	**6.0**	5.3	6.7
Total	**3.5**	**3.2**	**3.9**	**6.1**	**5.7**	**6.6**	**1.3**	**1.1**	**1.5**	**6.3**	**5.8**	**6.7**

Figure 2.24: Incidental physical activity (days)[(a)], by age group, males, 2008

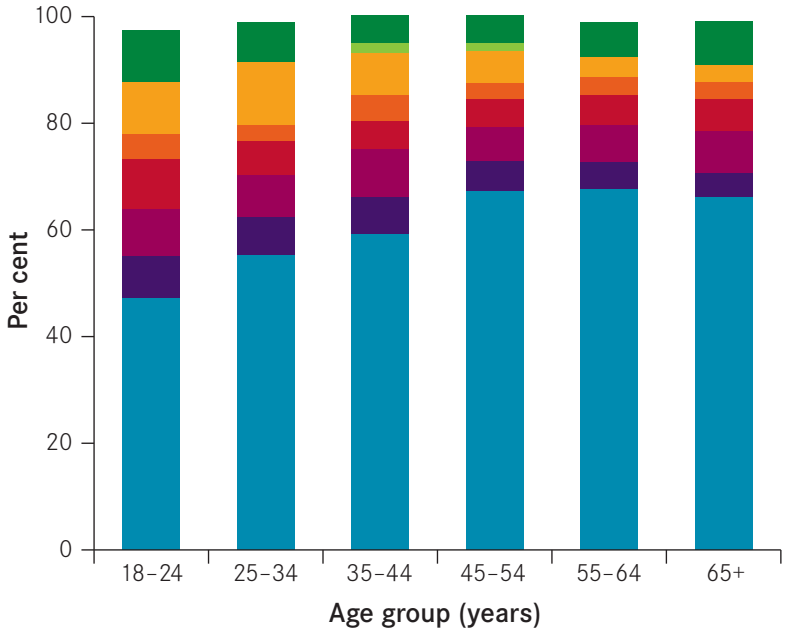
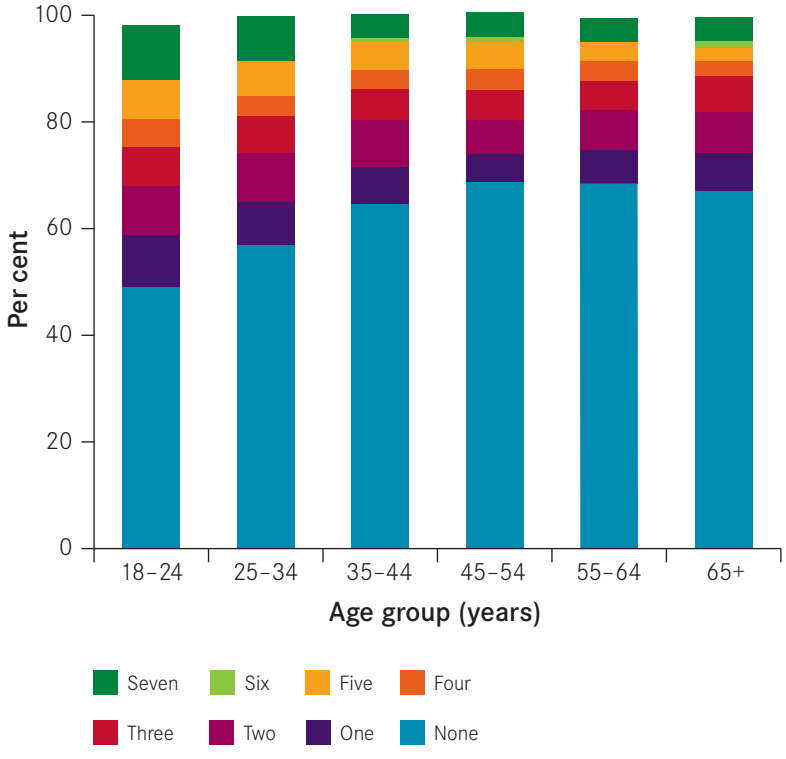


Figure 2.25: Incidental physical activity (days)[(a)], by age group, females, 2008



(a) Number of days per week on which individuals walked or cycled for transport for trips longer than 10 minutes.

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

Data are crude estimates, they have not been age standardised.

Table 2.44 shows the proportion of the population who walked or cycled for transport for at least 10 minutes in the past week, by sex and Department of Health region. More than six in 10 Victorians (61.7 per cent) reported that they did not walk or cycle for transport for trips taking longer than 10 minutes on any day during the past week. The proportion of persons reporting that they did not undertake any incidental physical activity during the past week was higher for persons living in the rural areas of the state (66.4 per cent), compared with the metropolitan area (60.1 per cent). In the North and West Metropolitan region, the proportion of females who walked or cycled for transport on 4–5 days in the past week (10.8 per cent) was higher than the average for Victoria (8.6 per cent).

Table 2.44: Incidental physical activity (days), by Department of Health region and sex, 2008

Region	Number of days on which individuals walked or cycled for transport for trips longer than 10 minutes														
	None			1–2 days			3 days			4–5 days			6–7 days		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Males															
Barwon-South Western	**59.1**	52.7	65.2	**18.7**	13.8	24.8	**7.7***	4.4	13.1	**6.3**	4.2	9.3	**8.1**	5.7	11.4
Eastern Metropolitan	**61.2**	57.7	64.5	**14.4**	12.0	17.1	**5.7**	4.4	7.5	**10.9**	8.9	13.4	**7.5**	5.8	9.6
Gippsland	**67.7**	63.6	71.6	**15.4**	12.1	19.4	**3.2**	2.3	4.5	**6.6**	4.8	9.1	**5.9**	4.5	7.9
Grampians	**66.5**	62.3	70.5	**12.2**	9.6	15.3	**5.9**	4.2	8.4	**9.0**	6.3	12.8	**6.2**	4.6	8.2
Hume	**65.4**	61.9	68.7	**12.7**	10.2	15.7	**5.5**	3.9	7.9	**7.0**	5.2	9.2	**9.0**	6.9	11.8
Loddon Mallee	**68.2**	64.5	71.8	**13.6**	10.9	16.7	**3.9**	2.7	5.5	**7.4**	5.2	10.5	**6.6**	5.1	8.4
North and West Metropolitan	**57.4**	55.1	59.7	**13.5**	12.0	15.1	**6.3**	5.2	7.6	**13.0**	11.4	14.8	**9.3**	8.1	10.7
Southern Metropolitan	**60.2**	57.4	63.0	**13.2**	11.3	15.3	**7.6**	6.1	9.4	**10.9**	9.2	12.9	**7.8**	6.4	9.5
Metropolitan	**59.2**	**57.6**	**60.8**	**13.6**	**12.5**	**14.8**	**6.6**	**5.8**	**7.5**	**11.8**	**10.8**	**13.0**	**8.4**	**7.6**	**9.3**
Rural	**65.1**	**62.7**	**67.4**	**14.7**	**13.0**	**16.7**	**5.4**	**4.1**	**7.2**	**7.1**	**6.0**	**8.4**	**7.2**	**6.3**	**8.4**
Total	**60.7**	**59.4**	**62.1**	**13.7**	**12.8**	**14.7**	**6.3**	**5.6**	**7.1**	**10.6**	**9.8**	**11.6**	**8.2**	**7.5**	**8.9**
Females															
Barwon-South Western	**63.7**	58.9	68.3	**20.1**	16.1	24.9	**4.8**	3.1	7.4	**5.2**	3.9	6.7	**5.9***	3.6	9.7
Eastern Metropolitan	**65.7**	63.0	68.3	**14.5**	12.5	16.7	**6.5**	5.2	8.0	**7.2**	5.9	8.7	**5.6**	4.4	7.1
Gippsland	**69.1**	65.9	72.1	**14.9**	12.5	17.5	**4.3**	3.3	5.5	**6.3**	4.7	8.4	**5.1**	3.9	6.8
Grampians	**67.8**	64.0	71.5	**15.3**	12.3	18.8	**5.8**	4.6	7.4	**5.7**	4.5	7.2	**4.9**	3.6	6.5
Hume	**68.1**	65.4	70.6	**12.6**	10.7	14.7	**6.6**	5.4	8.2	**7.5**	6.1	9.2	**5.0**	3.9	6.5
Loddon Mallee	**70.4**	67.4	73.2	**13.3**	11.2	15.7	**4.8**	3.6	6.3	**6.0**	4.8	7.4	**5.1**	4.0	6.6
North and West Metropolitan	**58.5**	56.7	60.3	**15.1**	13.8	16.5	**6.5**	5.6	7.4	**10.8**	9.7	12.1	**8.4**	7.4	9.6
Southern Metropolitan	**60.4**	58.1	62.6	**15.1**	13.5	16.8	**7.3**	6.1	8.7	**9.5**	8.2	11.0	**7.5**	6.3	8.9
Metropolitan	**60.9**	**59.6**	**62.1**	**14.9**	**14.0**	**15.9**	**6.7**	**6.1**	**7.4**	**9.5**	**8.8**	**10.3**	**7.5**	**6.8**	**8.3**
Rural	**67.7**	**65.9**	**69.4**	**15.5**	**14.0**	**17.1**	**5.2**	**4.5**	**6.0**	**6.1**	**5.4**	**6.8**	**5.2**	**4.4**	**6.2**
Total	**62.7**	**61.6**	**63.7**	**14.9**	**14.2**	**15.8**	**6.3**	**5.8**	**6.8**	**8.6**	**8.1**	**9.3**	**7.0**	**6.4**	**7.6**
Persons															
Barwon-South Western	**61.5**	57.4	65.4	**19.3**	16.0	23.2	**6.2**	4.1	9.3	**5.7**	4.4	7.4	**7.0**	5.2	9.5
Eastern Metropolitan	**63.6**	61.4	65.7	**14.4**	12.9	16.1	**6.1**	5.1	7.2	**8.9**	7.7	10.4	**6.4**	5.4	7.7
Gippsland	**68.7**	66.1	71.2	**14.9**	12.9	17.3	**3.7**	3.0	4.6	**6.4**	5.1	7.9	**5.5**	4.5	6.8
Grampians	**67.2**	64.3	69.9	**13.8**	11.8	16.2	**5.8**	4.7	7.2	**7.3**	5.7	9.4	**5.5**	4.4	6.7
Hume	**66.7**	64.4	68.8	**12.7**	11.1	14.5	**6.1**	5.0	7.4	**7.2**	6.1	8.6	**7.0**	5.7	8.6
Loddon Mallee	**69.4**	66.9	71.7	**13.4**	11.7	15.4	**4.4**	3.5	5.5	**6.6**	5.3	8.3	**5.8**	4.9	7.0
North and West Metropolitan	**57.9**	56.5	59.3	**14.3**	13.3	15.4	**6.4**	5.7	7.2	**11.9**	10.9	13.0	**8.8**	8.0	9.8
Southern Metropolitan	**60.2**	58.4	62.0	**14.2**	12.9	15.5	**7.4**	6.5	8.6	**10.3**	9.1	11.5	**7.6**	6.7	8.7
Metropolitan	**60.1**	**59.0**	**61.1**	**14.3**	**13.6**	**15.0**	**6.7**	**6.2**	**7.2**	**10.6**	**10.0**	**11.3**	**7.9**	**7.4**	**8.5**
Rural	**66.4**	**64.9**	**67.8**	**15.2**	**14.0**	**16.4**	**5.3**	**4.5**	**6.2**	**6.6**	**5.9**	**7.3**	**6.2**	**5.5**	**6.9**
Total	**61.7**	**60.9**	**62.6**	**14.4**	**13.7**	**15.0**	**6.3**	**5.9**	**6.8**	**9.6**	**9.1**	**10.2**	**7.5**	**7.1**	**8.0**

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

95% CI = 95% confidence interval.

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

Data are age standardised to the 2006 Victorian population.

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

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

Table 2.45 and figure 2.26 show the proportion of persons who did not walk or cycle for at least 10 minutes on any days during the past week, by local government area. There were 28 LGAs where the proportion of persons who reported doing no incidental physical activity for transport was higher than the average for Victoria. In 2008, the proportion of persons who did not walk or cycle for transport on any day during the past week was highest for Golden Plains (79.3 per cent), followed by Moyne (75.9 per cent) and Murrindindi (75.7 per cent), where three out of every four persons aged 18 years and over reported doing no incidental physical activity in the past week.

There were 12 LGAs where the proportion of persons who reported doing no incidental physical activity was lower than the average for Victoria (61.7 per cent). One of these 12 LGAs was in rural Victoria (Queenscliffe) and the remaining 11 were in the metropolitan area (Bayside, Boroondara, Darebin, Glen Eira, Maribyrnong, Melbourne, Moonee Valley, Moreland, Port Phillip, Stonnington and Yarra). The proportion of persons who did not walk or cycle for transport was lowest in the LGA of Yarra (29.2 per cent), followed by Melbourne (31.9 per cent).

Table 2.45: No days of incidental physical activity, by LGA, 2008

LGA	%	Lower 95% CI	Upper 95% CI
Alpine (S)	**64.6**	58.3	70.4
Ararat (RC)	**63.0**	56.2	69.4
Ballarat (C)	**68.4**	63.0	73.3
Banyule (C)	**58.2**	52.2	63.9
Bass Coast (S)	**69.5**	62.2	76.0
Baw Baw (S)	**67.0**	61.3	72.3
Bayside (C)	**54.7**	48.8	60.4
Benalla (RC)	**63.2**	56.5	69.4
Boroondara (C)	**52.5**	46.8	58.0
Brimbank (C)	**62.2**	57.2	66.9
Buloke (S)	**65.1**	58.4	71.3
Campaspe (S)	**70.4**	64.6	75.7
Cardinia (S)	**76.3**	70.8	81.1
Casey (C)	**69.8**	64.8	74.4
Central Goldfields (S)	**65.6**	58.2	72.3
Colac-Otway (S)	**62.5**	55.5	69.0
Corangamite (S)	**69.7**	62.2	76.3
Darebin (C)	**50.0**	44.8	55.2
East Gippsland (S)	**68.6**	61.2	75.2
Frankston (C)	**68.6**	62.9	73.7
Gannawarra (S)	**71.1**	64.9	76.6
Glen Eira (C)	**48.8**	43.5	54.0
Glenelg (S)	**70.1**	64.0	75.6
Golden Plains (S)	**79.3**	74.4	83.4
Greater Bendigo (C)	**71.7**	66.4	76.5
Greater Dandenong (C)	**64.6**	59.3	69.6
Greater Geelong (C)	**58.1**	51.6	64.3
Greater Shepparton (C)	**63.9**	58.2	69.2
Hepburn (S)	**67.4**	60.5	73.7
Hindmarsh (S)	**65.0**	58.5	70.9
Hobsons Bay (C)	**55.7**	49.8	61.4
Horsham (RC)	**62.4**	56.3	68.1
Hume (C)	**72.6**	67.7	77.1
Indigo (S)	**68.1**	61.1	74.4
Kingston (C)	**62.9**	57.0	68.4
Knox (C)	**67.7**	62.2	72.8
Latrobe (C)	**70.7**	65.2	75.6
Loddon (S)	**72.0**	65.7	77.5
Macedon Ranges (S)	**70.1**	63.9	75.6
Manningham (C)	**67.2**	61.6	72.5

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

95% CI = confidence interval.

LGA = local government area.

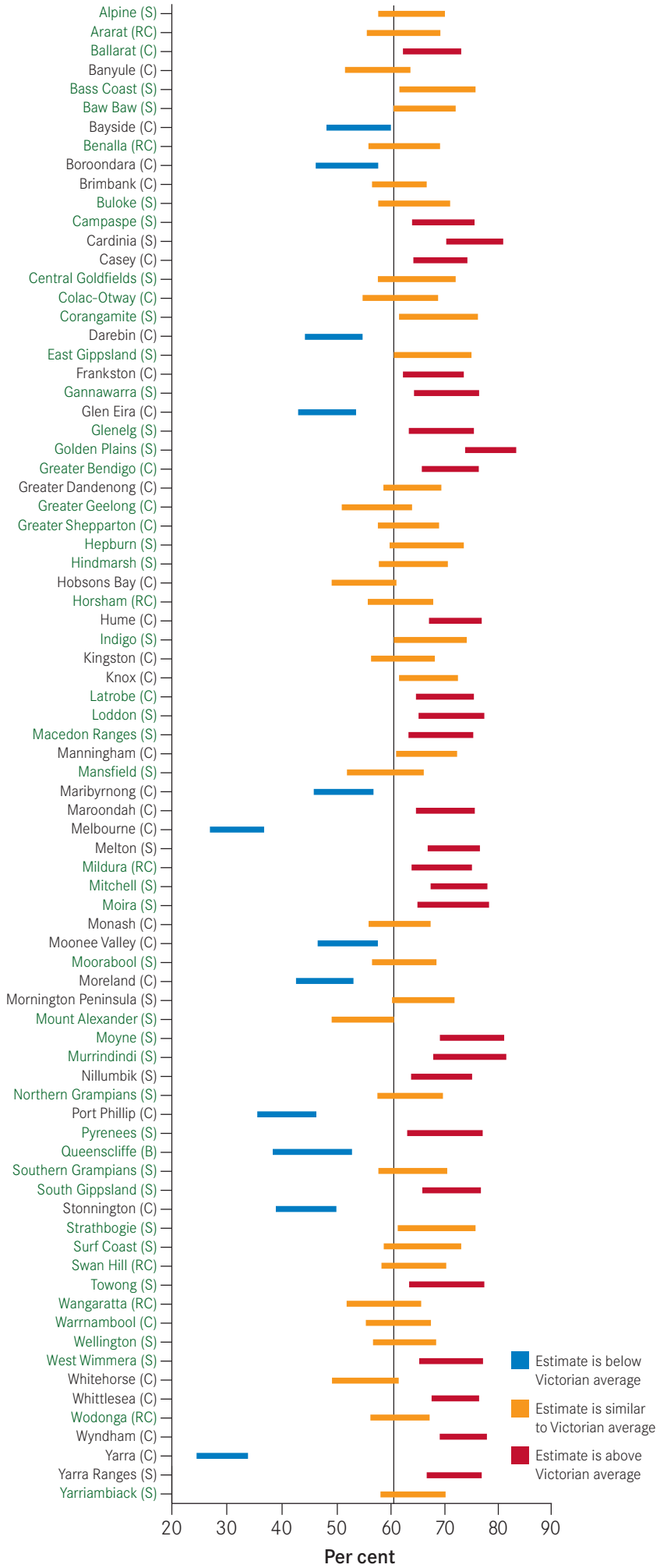
Table 2.45: No days of incidental physical activity, by LGA, 2008 (continued)

LGA	%	Lower 95% CI	Upper 95% CI
Mansfield (S)	**59.6**	52.5	66.4
Maribyrnong (C)	**51.8**	46.5	57.1
Maroondah (C)	**70.8**	65.3	75.8
Melbourne (C)	**31.9**	27.3	36.9
Melton (S)	**72.4**	67.4	76.8
Mildura (RC)	**70.1**	64.4	75.3
Mitchell (S)	**73.3**	67.9	78.1
Moira (S)	**72.4**	65.5	78.3
Monash (C)	**62.3**	56.5	67.8
Moonee Valley (C)	**52.6**	47.0	58.1
Moorabool (S)	**63.2**	57.2	68.8
Moreland (C)	**48.4**	43.2	53.5
Mornington Peninsula (S)	**66.8**	61.0	72.1
Mount Alexander (S)	**55.5**	49.8	61.0
Moyne (S)	**75.9**	69.6	81.2
Murrindindi (S)	**75.7**	68.6	81.7
Nillumbik (S)	**70.2**	64.5	75.3
Northern Grampians (S)	**64.3**	58.2	70.0
Port Phillip (C)	**41.2**	36.0	46.6
Pyrenees (S)	**70.9**	63.7	77.2
Queenscliffe (B)	**45.9**	38.8	53.2
Southern Grampians (S)	**64.9**	58.4	70.8
South Gippsland (S)	**71.9**	66.4	76.9
Stonnington (C)	**44.8**	39.4	50.3
Strathbogie (S)	**69.4**	61.9	76.0
Surf Coast (S)	**66.7**	59.3	73.3
Swan Hill (RC)	**64.9**	58.9	70.5
Towong (S)	**71.2**	64.0	77.5
Wangaratta (RC)	**59.3**	52.5	65.8
Warrnambool (C)	**62.0**	56.0	67.7
Wellington (S)	**63.1**	57.4	68.6
West Wimmera (S)	**71.9**	65.8	77.3
Whitehorse (C)	**55.9**	49.8	61.8
Whittlesea (C)	**72.5**	68.1	76.5
Wodonga (RC)	**62.4**	56.9	67.5
Wyndham (C)	**74.0**	69.6	78.0
Yarra (C)	**29.2**	24.8	33.9
Yarra Ranges (S)	**72.5**	67.3	77.1
Yarriambiack (S)	**64.8**	58.7	70.5
Total	**61.7**	**60.9**	**62.6**

Data are age standardised to the 2006 Victorian population.

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

Figure 2.26: No days of incidental physical activity, by LGA, 2008



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

LGA = local government area.

Data are age standardised to the 2006 Victorian population.

The line on the graph is the Victorian estimate, it does not show the 95% CI. See relevant table for 95% CI for Victoria (Total).

Active transport to school

A more specific question about incidental physical activity was asked of respondents with children at primary or secondary school in 2008. These respondents were asked how many days, if any, in a typical week they walked or cycled with their child/children all or part of the way to and/or from school. Almost one quarter (25.4 per cent) of all respondents had children attending school. Table 2.46 shows the proportion of this population who reported walking or cycling with their children to and/or from school, by selected health and demographic indicators. On average, more than three quarters (75.4 per cent) of persons with a child/children at school did not walk or cycle with them all or part of the way to school. The proportion of parents who did not engage in active transport to school on any weekday was higher than average for parents who did a sufficient level of physical activity. The proportion of parents who reported walking or cycling with their children to school on 3 days and 4–5 days per week was higher than average for those who were unemployed.

Table 2.46: Walking or cycling with children to school, by selected health and demographic indicators, 2008

	Number of days walk or cycle with children to/from school											
	None			1-2 days			3 days			4-5 days		
Indicator	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Sex												
Males	**77.1**	69.4	83.3	**9.4**	7.5	11.9	**2.4**	1.5	3.8	**10.4**	5.5	19.0
Females	**71.8**	68.2	75.1	**7.4**	6.4	8.7	**3.1**	2.3	4.4	**16.1**	13.3	19.3
Country of birth												
Aystralia	**69.1**	62.2	75.2	**8.3**	6.4	10.8	**3.6**	2.3	5.5	**16.8**	11.8	23.3
Overseas	**75.9**	72.3	79.1	**9.1**	7.6	10.9	**2.7**	1.9	3.7	**11.7**	8.7	15.6
Speaks language other than English at home												
Yes	**69.4**	62.2	75.8	**9.7**	7.4	12.6	**4.0**	2.5	6.2	**14.8**	9.9	21.6
No	**75.6**	72.0	78.8	**9.4**	7.6	11.5	**2.7**	1.9	3.9	**11.6**	8.7	15.4
Employment status												
Employed	**79.8**	75.0	83.9	**10.7**	8.3	13.6	**2.6**	1.8	3.8	**6.2**	3.5	10.9
Unemployed	**61.8**	55.7	67.6	**4.0**	2.4	6.6	**10.6**	7.1	15.7	**22.7**	18.4	27.8
Not in the labour force	**70.5**	65.8	74.7	**7.5**	5.9	9.3	**3.0**	2.1	4.2	**17.6**	14.0	21.9
Household income per year												
Less than $20,000	**60.6**	55.0	66.0	**10.5**	7.2	15.2	**7.5**	3.0	17.5	**20.9**	13.8	30.2
$20,001–$40,000	**78.5**	73.1	83.1	**8.4**	6.1	11.4	**1.3**	0.5	2.9	**10.6**	7.1	15.5
$40,001–$60,000	**74.3**	68.2	79.5	**9.5**	7.5	11.9	**5.0**	2.9	8.7	**10.3**	6.4	16.1
$60,001–$80,000	**79.7**	75.3	83.4	**8.1**	6.6	10.0	**3.3**	2.2	5.0	**8.3**	5.4	12.4
$80,001–$100,000	**70.6**	66.3	74.5	**11.3**	7.9	15.8	**2.1**	1.3	3.3	**14.6**	13.6	15.6
More than $100,000	**81.0**	77.1	84.4	**10.5**	7.4	14.7	**2.9**	1.8	4.6	**4.9**	3.4	7.0
Area of state												
Metropolitan	**80.1**	75.7	83.9	**8.3**	6.7	10.4	**2.1**	1.5	2.9	**9.1**	6.1	13.3
Rural	**73.1**	68.6	77.2	**9.1**	7.5	11.0	**3.4**	2.4	4.7	**12.9**	9.6	17.1
Physical activity[(a)]												
Sufficient time and sessions	**86.1**	79.9	90.7	**5.3**	3.6	7.9	**0.4**	0.1	0.9	**3.4**	1.9	6.0
Insufficient time and/or sessions	**80.5**	75.3	84.8	**8.4**	6.2	11.4	**4.3**	2.1	8.7	**5.3**	4.0	7.0
Sedentary	**73.4**	69.5	77.0	**9.9**	8.4	11.8	**2.6**	1.9	3.3	**13.4**	10.4	17.3
Self-rated health												
Excellent/very good	**68.6**	65.0	72.0	**11.6**	8.7	15.3	**3.3**	2.2	4.8	**15.9**	12.1	20.6
Good	**76.6**	72.1	80.6	**8.4**	6.9	10.0	**2.9**	1.8	4.6	**9.4**	6.8	12.9
Fair/poor	**81.2**	75.8	85.7	**6.5**	4.6	9.2	**2.6**	1.3	5.2	**9.3**	6.0	14.3
Total	**75.4**	**71.8**	**78.6**	**8.9**	**7.6**	**10.3**	**3.0**	**2.3**	**4.0**	**11.6**	**8.9**	**14.9**

(a) Based on national guidelines (DoHA 1999) and excludes adults aged less than 19 years.

95% CI = 95 per cent confidence interval.

Data are age standardised to the 2006 Victorian population.

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

Physical activity at work

Respondents to the VPHS 2008 who were employed were asked whether their work activities were best described as mostly sitting or standing, mostly walking, or mostly heavy labour or physically demanding work. In 2008, 60.5 per cent of respondents reported that they were employed, 35.5 per cent were classified as not participating in the labour force and 3.6 per cent were unemployed. Table 2.47 shows the proportion of individuals who reported being employed and did work that involved different levels of physical activity, by age group and sex. The table shows that almost two thirds (64.2 per cent) of respondents employed reported mostly sitting or standing at work, about one in five (20.5 per cent) reported mostly walking and more than one in ten (13.3 per cent) reported doing mostly heavy labour or physically demanding work. Males (18.4 per cent) were more likely to do mostly heavy labour or physically demanding work than females (6.4 per cent), and a higher proportion of males aged 18–24 years (32.6 per cent) did mostly heavy labour or physically demanding work, compared to males in other age groups.

Table 2.47: Occupational physical activity[(a)], by age group and sex, 2008

	Mostly sitting or standing			Mostly walking			Mostly heavy labour or physically demanding work		
Age group (years)	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Males									
18–24 years	42.4	36.3	48.7	**22.2**	17.3	27.9	32.6	27.1	38.6
25–34 years	**59.0**	54.6	63.2	**17.8**	14.8	21.4	**21.8**	18.2	25.8
35–44 years	**67.6**	64.6	70.4	**15.9**	13.7	18.3	**15.6**	13.5	17.9
45–54 years	**65.0**	62.1	67.8	**18.2**	15.9	20.8	**15.3**	13.3	17.5
55–64 years	**64.8**	61.6	67.9	**18.8**	16.3	21.5	**13.6**	11.6	16.0
65+	**59.3**	53.2	65.0	**20.3**	16.0	25.3	**17.8**	13.4	23.1
Total	**60.3**	**58.1**	**62.5**	**19.0**	**17.3**	**20.9**	**18.4**	**17.0**	**19.8**
Females									
18–24 years	**60.6**	54.3	66.5	**28.5**	23.3	34.4	**9.9**	6.8	14.4
25–34 years	**71.9**	68.5	75.0	**21.1**	18.2	24.2	**5.3**	3.9	7.0
35–44 years	**73.0**	70.6	75.2	**19.4**	17.5	21.5	**6.3**	5.2	7.7
45–54 years	**67.4**	64.9	69.8	**23.6**	21.4	25.9	**7.1**	5.9	8.5
55–64 years	**70.5**	67.6	73.3	**20.3**	17.9	23.0	**6.9**	5.6	8.6
65+	**66.6**	59.4	73.1	**26.8**	20.9	33.8	**4.8**	2.6	8.5
Total	**69.5**	**67.6**	**71.4**	**22.3**	**20.6**	**24.0**	**6.4**	**5.6**	**7.3**
Persons									
18–24 years	50.4	45.9	54.9	**25.0**	21.3	29.0	22.6	19.1	26.6
25–34 years	**64.4**	61.5	67.2	**19.2**	17.0	21.6	**14.8**	12.6	17.3
35–44 years	69.9	67.9	71.8	**17.4**	15.9	19.0	**11.6**	10.3	13.0
45–54 years	**66.1**	64.2	68.0	**20.7**	19.1	22.4	**11.5**	10.3	12.8
55–64 years	**67.3**	65.1	69.4	**19.5**	17.7	21.4	**10.8**	9.4	12.3
65+	**61.8**	57.1	66.2	**22.5**	19.0	26.5	**13.3**	10.3	17.1
Total	**64.2**	**62.6**	**65.7**	**20.5**	**19.2**	**21.8**	**13.3**	**12.4**	**14.2**

(a) Includes only those persons who reported that they were currently employed.

95% CI = 95 per cent confidence interval.

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

Data are crude estimates, except for the totals, which represent the estimates for Victoria and have been age standardised to the 2006 Victorian population.

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

Table 2.48 shows differences between the metropolitan and rural areas of Victoria, particularly in the proportion of persons who reported that their work activities involved mostly sitting or standing or mostly heavy labour or physically demanding work. Among working males, 26.7 per cent of those living in rural areas of the state were involved in physically demanding work, compared with 15.0 per cent of those living in the metropolitan area. The work activities of almost two-thirds of working males (66.2 per cent) from the metropolitan area involved mostly sitting or standing, compared with almost one half (49.2 per cent) for rural dwelling males. The work activities of almost seven in 10 (68.2 per cent) working males from the Eastern Metropolitan region involved mostly sitting or standing. For females in rural areas, 57.8 per cent did work that involved mostly sitting or standing, compared with 73.6 per cent of those living in the metropolitan area. The occupational physical activity of 9.1 per cent of females from rural areas was reported to be mostly heavy labour or physically demanding work, compared with 5.4 per cent of those from the metropolitan area.

Table 2.48: Occupational physical activity[(a)], by Department of Health region and sex, 2008

Region	Mostly sitting or standing			Mostly walking			Mostly heavy labour or physically demanding work		
	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI	%	Lower 95% CI	Upper 95% CI
Males									
Barwon-South Western	**54.2**	48.1	60.3	**16.3**	13.0	20.3	**27.0**	21.5	33.2
Eastern Metropolitan	**68.2**	64.4	71.9	**15.7**	12.9	19.0	**14.9**	12.2	17.9
Gippsland	**45.5**	40.5	50.7	**20.9**	17.0	25.4	**29.6**	25.3	34.2
Grampians	**47.4**	42.7	52.1	**21.0**	16.8	25.9	**29.5**	25.1	34.3
Hume	**47.8**	43.6	52.0	**21.5**	18.5	24.8	**27.5**	23.8	31.6
Loddon Mallee	**51.4**	46.5	56.3	**23.4**	19.5	27.7	**21.5**	17.9	25.6
North and West Metropolitan	**65.3**	62.4	68.1	**19.1**	16.5	21.9	**14.0**	11.7	16.7
Southern Metropolitan	**60.6**	57.0	64.1	**18.0**	14.9	21.5	**18.3**	15.6	21.4
Metropolitan	**66.2**	**63.9**	**68.3**	**16.9**	**15.2**	**18.7**	**15.0**	**13.6**	**16.6**
Rural	**49.2**	**46.2**	**52.1**	**21.2**	**19.0**	**23.4**	**26.7**	**24.2**	**29.4**
Total	**60.3**	**58.1**	**62.5**	**19.0**	**17.3**	**20.9**	**18.4**	**17.0**	**19.8**
Females									
Barwon-South Western	**60.6**	54.1	66.8	**29.7**	24.1	36.1	**8.5**	6.4	11.2
Eastern Metropolitan	**73.7**	70.0	77.1	**18.9**	16.0	22.2	**5.5**	3.8	7.9
Gippsland	**57.3**	53.0	61.5	**31.8**	28.1	35.7	**10.2**	7.5	13.7
Grampians	**64.0**	58.6	69.1	**24.8**	20.4	29.8	**9.2**	6.7	12.7
Hume	**59.4**	55.3	63.4	**29.5**	25.8	33.5	**9.9**	8.0	12.1
Loddon Mallee	**56.5**	51.9	61.0	**30.4**	26.2	35.0	**9.0**	6.8	11.7
North and West Metropolitan	**73.1**	70.3	75.8	**20.8**	18.3	23.5	**4.6**	3.5	6.1
Southern Metropolitan	**72.6**	68.8	76.0	**19.5**	16.5	22.9	**6.4**	4.7	8.7
Metropolitan	**73.6**	**71.6**	**75.5**	**19.3**	**17.6**	**21.0**	**5.4**	**4.5**	**6.6**
Rural	**57.8**	**55.1**	**60.5**	**29.4**	**26.8**	**32.1**	**9.1**	**7.9**	**10.4**
Total	**69.5**	**67.6**	**71.4**	**22.3**	**20.6**	**24.0**	**6.4**	**5.6**	**7.3**
Persons									
Barwon-South Western	**57.5**	52.8	62.0	**21.7**	18.3	25.5	**18.9**	15.3	23.3
Eastern Metropolitan	**70.5**	67.8	73.1	**17.2**	15.1	19.5	**10.7**	9.0	12.8
Gippsland	**50.4**	46.1	54.8	**25.9**	22.6	29.5	**20.9**	18.0	24.2
Grampians	**54.0**	50.3	57.7	**22.1**	18.9	25.6	**21.9**	18.9	25.2
Hume	**52.6**	49.6	55.6	**25.1**	22.6	27.8	**19.8**	17.4	22.5
Loddon Mallee	**53.2**	49.2	57.1	**26.0**	22.7	29.5	**16.9**	14.3	19.8
North and West Metropolitan	**69.6**	67.5	71.6	**19.3**	17.5	21.3	**9.5**	8.2	11.1
Southern Metropolitan	**65.9**	63.2	68.6	**18.3**	16.1	20.8	**13.4**	11.5	15.6
Metropolitan	**69.3**	**67.7**	**70.8**	**17.9**	**16.7**	**19.2**	**11.0**	**10.0**	**12.1**
Rural	**53.0**	**50.9**	**55.1**	**25.2**	**23.4**	**27.1**	**19.2**	**17.6**	**21.0**
Total	**64.2**	**62.6**	**65.7**	**20.5**	**19.2**	**21.8**	**13.3**	**12.4**	**14.2**

(a) Includes only those persons who reported that they were currently employed.

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

95% CI = 95 per cent confidence interval.

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

Data are age standardised to the 2006 Victorian population.

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

Table 2.49, figure 2.27 and figure 2.28 present occupational physical activity data by LGA. Consistent with Table 2.48, there were metropolitan-rural differences in the proportion of workers aged 18 years and over who described their work-based activity as involving mainly sitting or standing, mainly walking or mostly heavy labour or physically demanding work. The proportion of persons who reported mainly sitting or standing when at work was highest in Yarra (84.7 per cent) and lowest in Moyne (36.5 per cent), where 29.9 per cent of employed persons also reported that their work involved mostly heavy labour or physically demanding activity. The proportion of employed persons who did mainly physically demanding labour when at work was highest in the Northern Grampians (30.8 per cent).