

Health and wellbeing status of Victoria

Victorian public health and wellbeing plan 2015–2019
companion document



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Please note:

Where the term 'Aboriginal' is used it refers to both Aboriginal and Torres Strait Islander people. Indigenous is retained when it is part of the title of a report, program or quotation.

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Executive summary

The health and wellbeing of Victorians is high by national and international standards, however health status varies markedly between populations groups and areas of Victoria.

While the health of Victorians is generally improving, these gains are not shared across Victoria.

Through improved healthy living, Victorians would enjoy better health and wellbeing, and longer lives.

Improvements – but not for all

- Life expectancy continues to increase and the extra years of life are generally spent in good health, but there is a seven-year difference between the best-performing local government area and the worst, two to three years between advantaged and disadvantaged areas, four year difference between males and females and a 10 year difference between Aboriginal Australians and non-Aboriginal Australians.
- Wellbeing is higher for adults living in peri-urban and regional areas, and for those with a higher income or who are tertiary educated.
- More deaths are being avoided, but many remain avoidable. Six in 10 premature deaths are avoidable and about 800 avoidable deaths per year are due to socioeconomic disadvantage.
- Smoking rates are decreasing, with a slower decrease for low-income groups. Smoking rates are two to three times higher for Aboriginal Victorians and those experiencing psychological distress.

Risks to health – potentially losing some of the gains made

- Chronic diseases cause more than three-quarters of all premature deaths and ill health. Half of all Victorian adults report having at least one chronic disease and one in five have two or more chronic diseases. These chronic diseases are highly preventable, yet almost all adults have at least one risk factor and three in 10 have three or more risk factors.
- Anxiety and depression are major causes of ill health, and no gains have been made in reducing rates of psychological distress.
- Due to population ageing the prevalence of the diseases of ageing are increasing, particularly dementia and falls.
- Victoria is now becoming an obese society, with over 2.3 million adults and children overweight or obese. Rates of adult obesity vary almost five-fold across Victoria, with higher rates among low-income earners. The obesity rate is increasing for adults. This will increase the diabetes and heart disease burden and reduce the overall wellbeing of Victorians.
- One-third of all energy from foods and drinks comes from discretionary items – energy-dense items of little nutritional value such as biscuits, snack bars, alcohol and soft drinks.
- Excess alcohol consumption is associated with self-harm, interpersonal violence and unintentional injury.
- Smoking, excess alcohol consumption, physical inactivity, poor diet and stress are important risk factors of chronic disease.

Health is actively protected and most Victorians have social capital

- Immunisation rates for five year olds vary markedly between local government areas; 23 local government areas have rates 95 per cent or higher and 12 have rates less than 90 per cent.
- Notification rates for both campylobacteriosis and salmonellosis continue to pose a threat to food safety.
- The majority of adults report that they can definitely get help from friends, family and neighbours, yet up to one in 10 cannot. Older adults report that they feel less able to get help than younger people, and rural people feel more able to get help than metropolitan people.
- Half of adults report definitely feeling valued by society, but one in 10 do not. Four in 10 adults report feeling that most people can definitely be trusted, but two in 10 do not. People with a low income, psychological distress or lower self-reported health are less likely to report feeling valued by society and less likely to believe that most people can be trusted.

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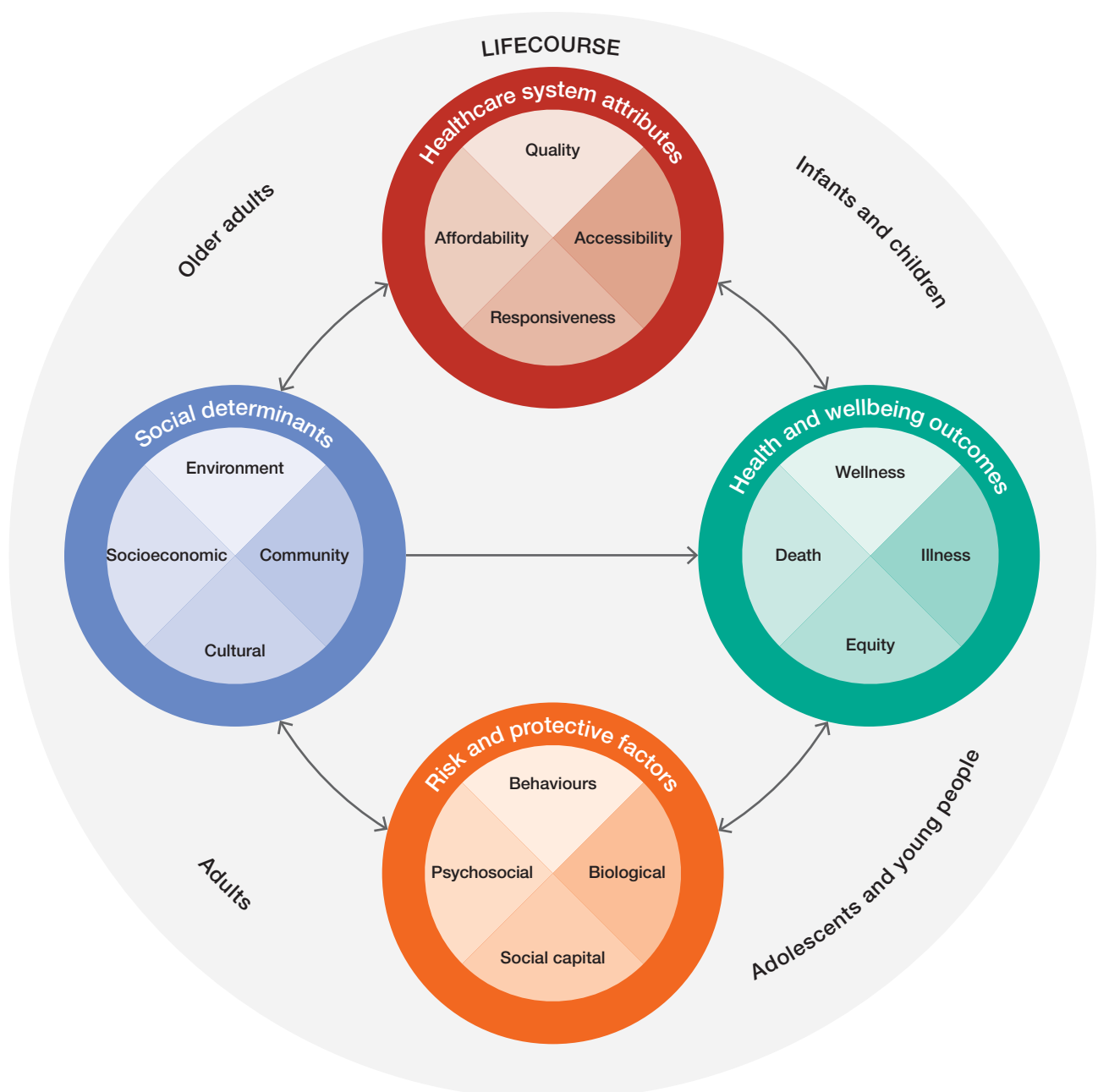
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Introduction

The health and wellbeing of Victorians is influenced by a vast array of different experiences and opportunities, as well as the environments in which people live, learn, work and play and their access to and use of health services. The interrelationships between these multiple determinants of health and wellbeing are illustrated below (Ansari et al. 2003; National Health Information Standards and Statistics Committee 2009).

Relationships between determinants of health and wellbeing across the lifecourse



Good health is not shared equally across the state, reflecting the social determinants of health. Health status and the determinants of health vary markedly between the life stages, from conception through to infancy, early childhood, youth, adulthood and older adulthood.

Analysis suggests that socioeconomic factors have the largest impact on health, accounting for up to 40 per cent of all influences compared with health behaviours (30 per cent), clinical care (20 per cent) and the physical environment (10 per cent) (The British Academy 2014).

The *Victorian public health and wellbeing plan 2015–2019* (Department of Health and Human Services 2015d) is the second four-year plan for Victoria, as required by the *Public Health and Wellbeing Act 2008*. A requirement of the Act is that the public health and wellbeing needs of the people of the state be identified, as described in this companion document to the *Victorian public health and wellbeing plan 2015–2019*.

The evidence of the health and wellbeing status of all Victorians, and for children, young people, adults and older adults, has been used to inform the strategic directions and priorities of the *Victorian public health and wellbeing plan 2015–2019*.

All of Victoria

Victorians enjoy a quality of life, health and wellbeing that is comparable to, or exceeds, that found almost anywhere else in the world. Life expectancy is increasing and death rates are falling. On average, Victorians report higher wellbeing than all Australians (VicHealth 2012). Detailed information on the health of Victoria's population is provided in *The Chief Health Officer's report* which is produced every two years.

Health status varies considerably between Victorian populations and geographic areas and within these populations and areas. There is a clear social gradient for most preventable conditions and risk factors. Some of these gradients are caused by variations in the prevalence of risk and protective behaviours, use of health services and treatment factors.

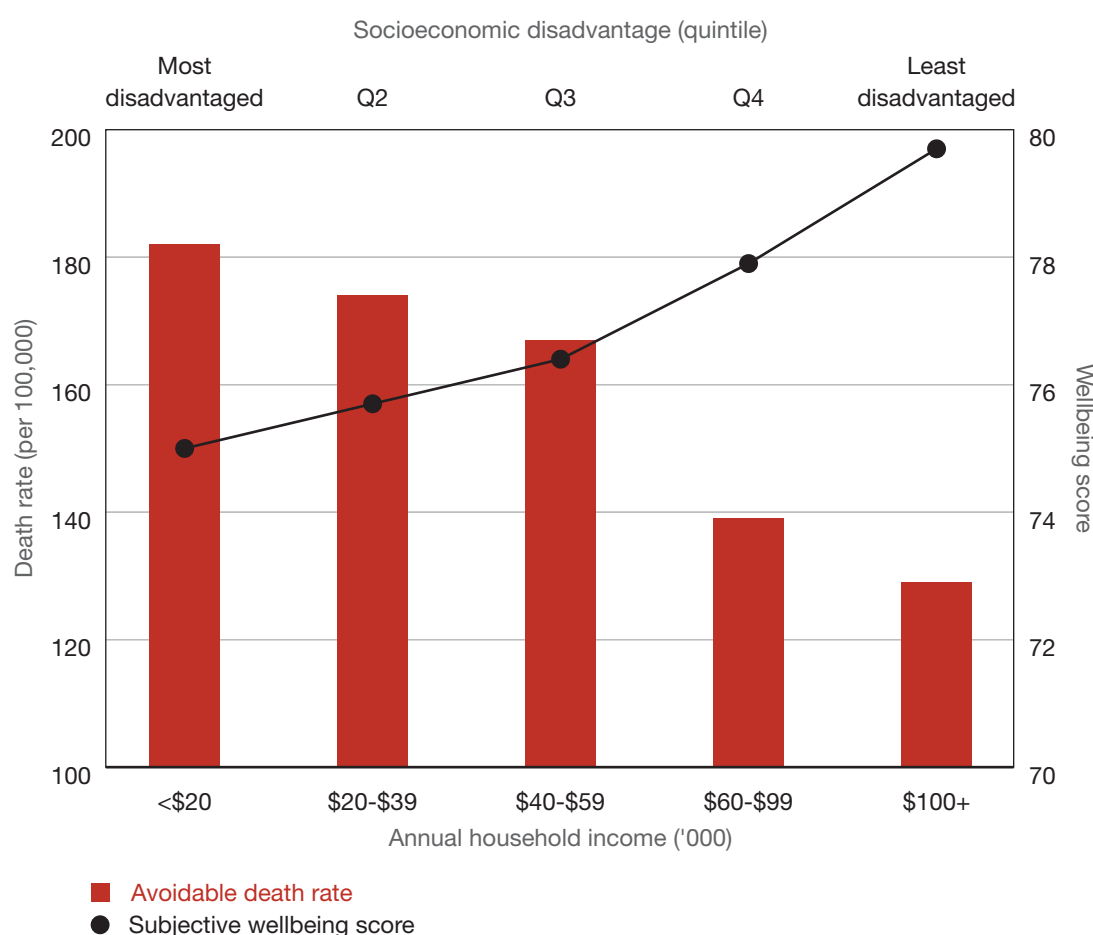
In order to improve health and wellbeing, inequalities must be reduced. If a subgroup of Victorians can achieve a high standard of health and wellbeing, why not the whole population? The health of populations across Victoria is therefore compared with those with the highest levels of health and wellbeing for that indicator in this document.

Socioeconomic disadvantage is the greatest cause of health inequality in Victoria, while the greatest relative difference in health status for population groups is between Aboriginal Victorians and others. There are health inequalities between females and males and between Victorians living in metropolitan and rural areas. Differences in some health and wellbeing indicators also occur between other population groups. For example, some people from refugee backgrounds, including asylum seekers, have higher rates of viral hepatitis and tuberculosis than the general Victorian population (Australasian Society for Infectious Diseases 2009). Compared with others, lesbian, gay, bisexual and transgender people report higher rates of smoking and mental health disorders. Culturally and linguistically diverse peoples are a heterogeneous group and health status varies between ethnic groups.

Wellbeing varies markedly across Victoria. In 2011 Victorians who were employed or tertiary educated or had an annual income of \$100,000 or more had higher levels of self-reported wellbeing than comparison groups (Figure 1) (VicHealth 2012). Higher levels were also reported by those who were not from a culturally and linguistically diverse background or did not self-report a disability. Those living in peri-urban and regional areas had higher than average wellbeing. Self-reported health is a good predictor of actual health and life expectancy (Idler & Benyamini 1997). In 2011–12 about half of all Victorian adults reported excellent or very good health. Tertiary-educated adults and those with an annual household income greater than \$100,000 were nearly twice as likely to report good health than comparison groups. Self-reported health did not change between 2005 and 2011–12.

socioeconomic disadvantage is the greatest cause of health inequality

Figure 1: Subjective wellbeing score by annual household income, 2011–12, and avoidable mortality rate by socioeconomic quintile, 2002–2006



Source: Department of Health 2014f; VicHealth 2012

Note: Graph axes have been assigned to highlight differences between income and socioeconomic categories.

Death before the age of 75 is defined as premature death. About 60 per cent of the premature deaths in Victoria are potentially avoidable. Half the avoidable deaths are due to diseases that are fully or partially preventable from occurring at all, such as those due to road injury and lung cancer. About one-quarter are from conditions that early detection and treatment could have avoided, such as breast cancer and diabetes, and the remaining quarter are avoidable through existing medical or surgical treatments. The avoidable death rate decreased by 4.2 per cent per year between 1999 and 2006.

Males have almost twice the chance of an avoidable death than females. Avoidable death rates were about 40 per cent higher in the most disadvantaged areas of the state in 2002–2006 – that is, about 800 avoidable deaths per year were due to socioeconomic disadvantage or 11 per cent of all avoidable deaths (Figure 1). The rate in metropolitan Victoria was about three-quarters

that of the rest of the state. The avoidable death rate in Victoria was about 6 per cent lower than for Australia in 2011 and the lowest of all states (Steering Committee for the Review of Government Service Provision 2014). Compared with many Organization for Economic Co-operation and Development (OECD) countries, Australia had the third lowest rate behind France and Japan (Nolte & McKee 2003).

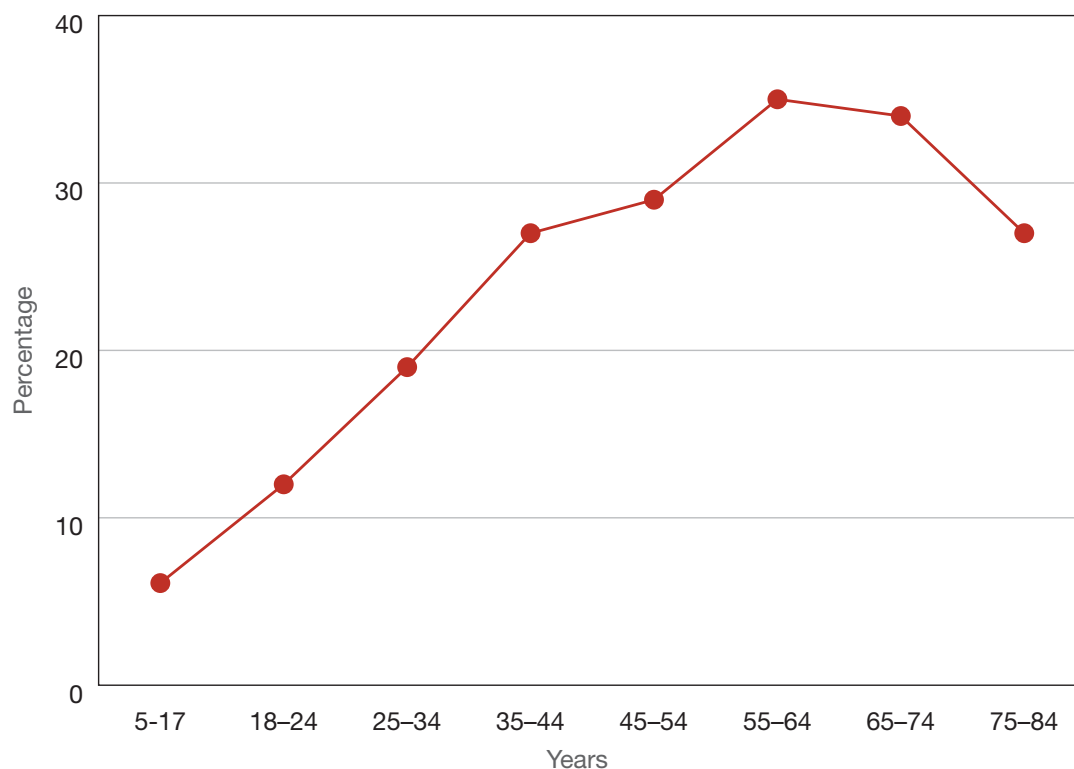
The implications of varied wellbeing, avoidable deaths and other factors means that people in some areas of Victoria can expect to live up to seven years longer than others. People in areas of least socioeconomic disadvantage had a two to three year higher life expectancy at birth than in the most disadvantaged areas. Across local government areas, the difference was seven years. Nationally, in 2010–2012, there was a 10.1 year difference in life expectancy between Aboriginal Australians and non-Aboriginal Australians, a decrease of 0.4 years since 2005–2007 (Steering Committee for the Review of Government Service Provision 2014). As well as increasing life expectancy, Australians now have more years living free of disability (Australian Institute of Health and Welfare 2014b). Australian males born in 2012 can expect to live an average 62.4 years without disability and another 17.5 years with some form of disability. For females, the healthy life expectancy is 64.5 years, with 19.8 years with some form of disability.

Noncommunicable (largely chronic) diseases accounted for about 85 per cent of the total burden of disease and injury in Australia in 2010 and injuries accounted for 10 per cent (Institute for Health Metrics and Evaluation 2013). Communicable, maternal, neonatal and nutritional disorders accounted for 5 per cent of the total burden of disease and injury. The low burden associated with communicable disease is largely the result of effective protection measures, including strict controls on water quality and sanitation, and the availability of universal immunisation. Cancer accounted for 16 per cent of the burden of disease, the largest broad cause, followed by musculoskeletal disorders (15 per cent) and mental and behavioural disorders (13 per cent). For the burden due to premature death, the fatal burden, cancer contributed 33 per cent and cardiovascular diseases 26 per cent. Musculoskeletal disorders (26 per cent) and mental and behavioural disorders (23 per cent) were the largest causes of the non-fatal (disability) burden.

Chronic diseases – such as cardiovascular disease, cancers and chronic respiratory disease – are the largest causes of poor health and avoidable death of Victorians and of the difference in health between population groups (Department of Health and Human Services 2015e). The four lifestyle behaviours of poor nutrition, physical inactivity, smoking, and excess alcohol consumption are important risk factors for many of these diseases, including type 2 diabetes. Nearly all Victorians report at least one of these unhealthy behaviours, and males have higher rates of all these other than physical inactivity. Poor nutrition and physical inactivity are the principal causes of overweight and obesity, a significant cause of poor health and wellbeing in Victoria. Obesity prevalence is 6 per cent for children aged 5–17 years, rapidly increasing to 35 per cent for 55–64 year olds (Figure 2) (Australian Bureau of Statistics 2013c).

on average, people live for up to seven years longer in some parts of the state

Figure 2: Proportion of obesity, by age, Victoria 2011–12



Source: Australia Bureau of Statistics 2013c

The major risks to the health of Australians have changed over 20 years. In 2010 dietary factors were the largest cause of disease burden in Australia, followed by excess weight (high body mass) and smoking. In 1990, while dietary factors were the largest cause of disease burden, high blood pressure and smoking were the second and third largest causes. The burden due to high body mass rose 40 per cent over two decades, and smoking fell 21 per cent. The top 10 risks for burden of disease in Australia are listed below in the key facts.

Dietary risk factors and physical inactivity accounted for the largest amount of global burden of disease in 2010, based on the joint effect of clusters of risk factors (Lim et al. 2012). A significant proportion of the joint effect is associated with the contribution of these factors to obesity, which is now ranked above smoking as a cause of disease burden. Joint effects data for 2010 is not available for Australia. However, 32 per cent of the total burden of disease in 2003 was due to the joint effect of 14 modifiable risk factors (Begg et al. 2007). That is, about one-third of the total burden of disease is associated with factors that can potentially be modified through changes in behaviour or environments.

Key facts – Victoria

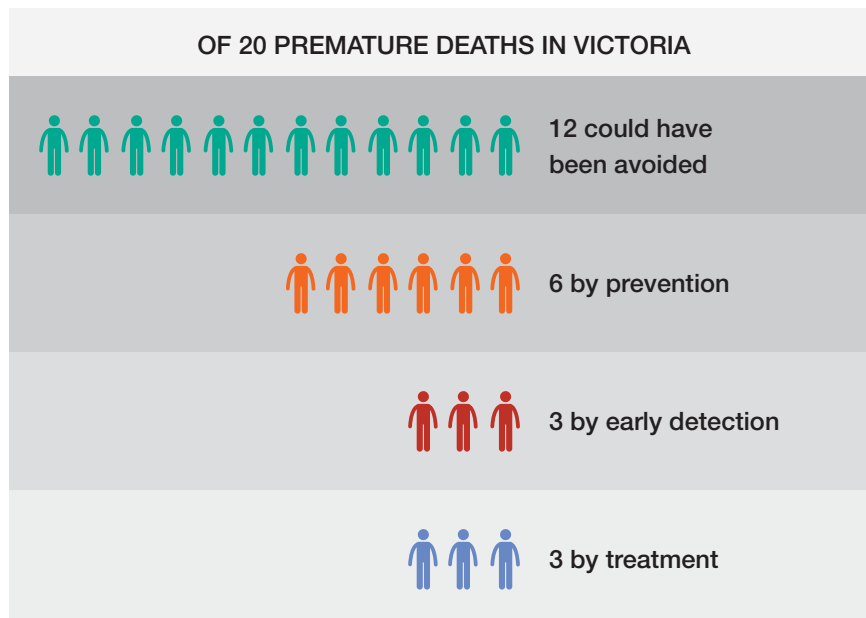
Self-reported health

- 47 per cent of all adults reported very good/excellent health in 2011–12.
This level of health was reported by:
 - 37 per cent of adults with primary education and 55 per cent of adults with tertiary education
 - 35 per cent of adults with an annual household income less than \$40,000 and 60 per cent with an annual household income greater than \$100,000
 - 50 per cent of employed adults and 35 per cent of unemployed adults (Department of Health 2014g)

Avoidable death rate

- 150 avoidable deaths per 100,000 people occurred in 2002–2006
 - 174 avoidable deaths per 100,000 in areas of most disadvantage, 123 per 100,000 in areas of least disadvantage
 - 147 avoidable deaths per 100,000 in highly accessible areas, 178 per 100,000 in accessible areas, and 182 per 100,000 in moderately accessible areas (Department of Health 2014f; 2008)

Premature deaths in Victoria



Life expectancy at birth

- 80.7 years for males, 84.7 years for females born in 2011–13 (Australian Bureau of Statistics 2014b)
- in 2007, life expectancy for males living in the most socioeconomically disadvantaged areas was 3.4 years lower than males living in the least disadvantaged areas; for females, the difference in life expectancy was 2.0 years
- in 2007, life expectancy for males living in metropolitan areas was 1.9 years higher than for males living in rural areas; for females, this difference was 0.9 years
- life expectancy varied up to 7 years between local government areas (Department of Health 2014b)

Burden of disease due to risk factors (Australia 2010)

- 10.5 per cent dietary risks
- 8.5 per cent high body mass (excess weight for height)
- 8.3 per cent smoking
- 7.0 per cent high blood pressure
- 4.6 per cent physical inactivity
- 4.0 per cent high fasting plasma glucose (diabetes and pre-diabetes)
- 2.9 per cent high total cholesterol
- 2.8 per cent alcohol use
- 2.6 per cent drug use
- 2.2 per cent occupational risks (Institute for Health Metrics and Evaluation 2013)

Infants and children

Most Victorian children are healthy and doing well. Their health status is high compared with other age groups and by national and international comparisons. This is largely due to the low and declining rates of infant mortality and childhood deaths, and declines in specific conditions such as vaccine-preventable diseases and other communicable diseases.

But not all Victorian children have a healthy start, nor healthy childhoods. Homelessness is one of the most potent examples of disadvantage in the community. Almost one in six Victorians counted as homeless on census night in 2011 was a child aged under 12 years – 3,638 children (Australian Bureau of Statistics 2012).

Low birthweight is an indicator of potential lifelong consequences to individuals, families and communities. In 2012, about one in 15 babies were born at low birthweight (less than 2,500 grams at birth). Low birthweight was more common for babies born to Aboriginal mothers and those in outer regional and disadvantaged areas (Australian Institute of Health and Welfare 2013).

In 2011 one in eight pregnant women smoked, with rates three times higher for Aboriginal Australian women. After 20 weeks' gestation one in 20 pregnant women smoked, with the rate four times higher for teenage pregnant women and more than double in rural areas compared with metropolitan areas (Consultative Council on Obstetric and Paediatric Mortality and Morbidity 2014). In 2013 about one in five Victorian children aged 5–12 years lived in a household with a smoker (Department of Education and Training 2015c). Children in areas of least disadvantage were about three times less likely to live in a smoker household than those in most disadvantaged areas. In 2008, two-thirds of Australian Aboriginal children lived in households with a daily smoker, more than twice that for non-Aboriginal children (Australian Institute of Health and Welfare 2011b).

one in eight pregnant women smoke

Education is fundamental to the health of Victorians. The majority of children in 2012 were developmentally on track as they started their first year of formal full-time education, as defined by the Australian Early Development Index (Department of Education and Early Childhood Development 2013b). However, one in five children was developmentally vulnerable on one or more of the five domains. Aboriginal children were two to three times more likely to be vulnerable than all children on each of the domains. Children with a language background other than English and who were not proficient in English, were three to seven times more likely to be vulnerable than all children on four of the domains, and 93 per cent were vulnerable on the communication domain. Between 2009 and 2012 there was a decrease in the proportion of vulnerable children at the state level and for some local government areas. In 2012 Victoria had the lowest proportion of vulnerable children of all Australian states and territories (Department of Education 2013).

The majority of children in Victoria have good emotional and behavioural wellbeing (Department of Education and Training 2015c). In 2013, 7 per cent of children aged 4–12 years had emotional and behavioural difficulties.

Children listed on a health care card and those from one-parent families were 2.7 times and 4.2 times more likely (respectively) to have behavioural and emotional difficulties than comparison children.

Victoria has high rates of immunisation. The majority of five year olds are age-appropriately immunised, although rates are lower than 90 per cent in 12 of the 79 Victorian local government areas. The immunisation rate in Victoria is higher than the national rate (Department of Health 2014e). Newly arrived refugee and asylum seeker children (and also adults) often originate from countries without adequate access to vaccines.

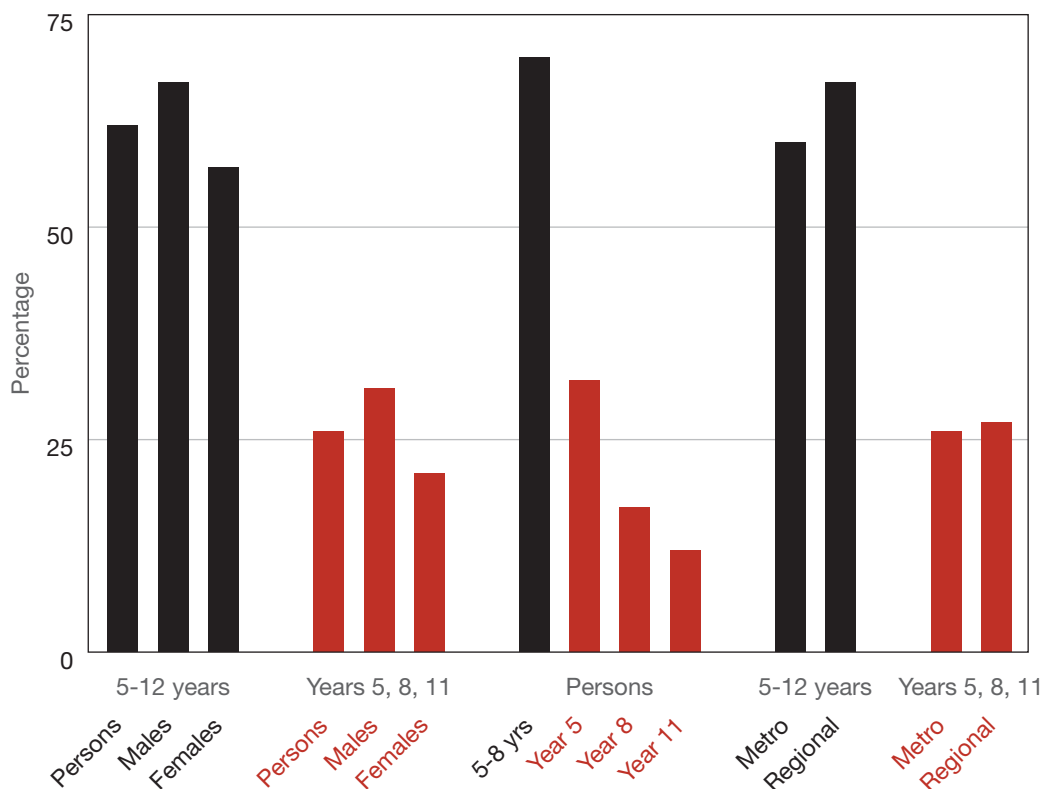
Dental disease and oral health issues affect almost everyone at some stage of life. However, about one in three hospitalisations for dental conditions in Victoria were for children up to nine years of age. Dental conditions were the highest cause of all preventable hospitalisations for Victorians under 25 years of age (Department of Health 2014f).

Unintentional injury caused 7 per cent of the burden of disease among Australian children aged up to 15 years in 2010, with transport injuries causing more than half of this burden (Institute for Health Metrics and Evaluation 2013). In Victoria about half of the injuries that resulted in the hospitalisation of children in 2013–14 occurred at home (Victorian Injury Surveillance Unit: Fernando & Clapperton 2015).

How active children are and what they eat and drink affects their current and future health. Access to transport, basic services and recreation are integral. In 2013 parents in rural and regional Victoria reported less access to basic services and recreational facilities than those in metropolitan areas (Department of Education and Training 2015c). Most Victorian communities are 'safe neighbourhoods', with 97 per cent of households with children reporting feeling safe walking in their local space during the day and 72 per cent at night (VicHealth 2012). Access to green spaces is important for children's physical activity, including play. About half of households with children visited a green space at least weekly (VicHealth 2012).

Children are walking to school less and being driven more (van der Ploeg et al. 2008). In 2013 about half of all Victorian children aged 5–12 years were always driven to school (Department of Education and Training 2015c). About one-third walked to school at least once a week and 17 per cent walked at least half the 10 trips. One in 20 children cycled to school at least once a week. In Victoria about two in three children aged 5–12 years and one in four children in school Years 5, 8 and 11 met the recommended amount of physical activity on all days of the week (Figure 3). Boys were more likely than girls to meet the national guidelines for physical activity (Department of Education and Training 2015b; 2015c). Younger children in rural areas were more likely to meet guidelines than children in metropolitan areas.

Figure 3: Proportion of children meeting physical activity guidelines by selected demographics, Victoria



Source: Department of Education and Training 2015b; 2015c

One-third of children's energy from food comes from discretionary food such as biscuits, snack bars and soft drink. In 2011–12 about one in three children aged 2–18 years had a sugar-sweetened drink such as a soft drink, cordial or energy drink on the day preceding the survey. Eating the recommended amount of fruits and vegetables is a cornerstone of healthy eating, yet only 12 per cent of children eat enough vegetables and 75 per cent enough fruit (Australian Bureau of Statistics 2015b).

Poor nutrition and inactivity are the principal causes of overweight and obesity. Three-quarters of Victorian children aged 5–17 years were of healthy weight in 2011–12. However, one-quarter were measured as overweight or obese. This equated to about 123,000 children who were overweight and 43,000 who were obese. The rate was similar for boys and girls, across age groups, metropolitan and regional areas, and socioeconomic areas, and to Australia (Steering Committee for the Review of Government Service Provision 2014). The proportion of Australian girls who were overweight or obese was 14 per cent higher than the OECD average; boys were 4 per cent lower (Organisation for Economic Co-operation and Development 2012).

The rates of overweight and obesity have not changed since 2007–08. Over the longer term there has been a steady increase in childhood obesity nationally; however, a plateau appears to have been reached in recent years. Childhood obesity has short and long-term effects on physical and mental health and wellbeing. Obese children are 50 per cent more likely to be absent from school due to illness and more than twice as likely to experience health-related limitations compared with children of healthy weight (Wijga et al. 2010). In the longer term, childhood overweight and obesity increases the risk of adult obesity (Ferraro, Thorpe Jr & Wilkinson 2003). One in five women were obese at the start of their pregnancy in 2011 (Hilder et al. 2014).

Key facts – Victoria

Low birthweight (less than 2,500 grams at birth) (2011)

- 6.3 per cent all babies were of low birthweight
 - 12.9 per cent babies of Aboriginal mothers were of low birthweight
 - 6.9 per cent of babies born in outer regional areas, 6.2 per cent of babies born in major cities were of low birthweight
 - 6.8 per cent of babies born in most disadvantaged areas, 5.7 per cent of babies born in most advantaged areas were of low birthweight (Australian Institute of Health and Welfare 2013)

Smoking in pregnancy (2011)

- 11.5 per cent all pregnant women smoked
- 5.2 per cent smoked after 20 weeks of pregnancy, 19.8 per cent of pregnant teenage women smoked after 20 weeks of pregnancy
 - 3.7 per cent of pregnant women in metropolitan areas smoked after 20 weeks, 9.6 per cent of pregnant women in rural areas smoked after 20 weeks (Consultative Council on Obstetric and Paediatric Mortality and Morbidity 2014)
- 50 per cent of pregnant Aboriginal women in Australia smoked (Li et al. 2013)

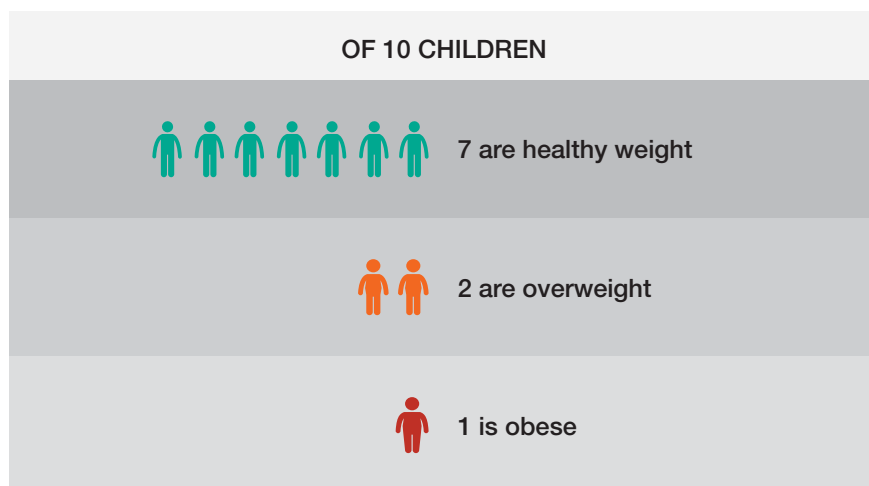
Fully immunised at 60 to less than 63 months

- 92.6 per cent of children were fully immunised at 30 September 2014 (Department of Health and Human Services 2015e)
 - 29 local government areas had 95 per cent or more of five year old children fully immunised, two local government areas had less than 85 per cent of five year old children fully immunised at 30 June 2014 (Department of Health 2014e)

Sufficient physical activity

- 62 per cent of 5–12 year olds met guidelines for sufficient physical activity in 2013
 - 70 per cent of children aged 5–8 years and 54 per cent of children aged 9–12 years met the guidelines
 - 67 per cent of males and 57 per cent of females met the guidelines
 - 60 per cent of children living in metropolitan areas and 67 per cent of children living in rural areas met the guidelines (Department of Education and Training 2015c)
- 26 per cent of children in Years 5, 8 and 11 at school met the guidelines in 2014
 - 32 per cent of children in Year 5, 17 per cent of children in Year 8 and 12 per cent of children in Year 11 met the guidelines
 - 31 per cent of males and 21 per cent of females met the guidelines
 - 26 per cent of children living in metropolitan areas and 27 per cent of children living in rural areas met the guidelines (Department of Education and Training 2015b)

Overweight and obese children in Victoria



Nutrition (2011–12)

- 39 per cent of children's total energy came from discretionary foods (aged 2–18 years)
 - children aged 2–3 years, 30 per cent of their total energy comes from discretionary foods; children aged 14–18 years, 41 per cent of their total energy comes from discretionary foods
- 39 per cent of children aged 2–18 years drank soft drink, cordial or energy drinks in the 24 hours preceding the survey
 - 10 per cent for children aged 2–3 years, 57 per cent of those aged 14–18 years
- 12 per cent of children consumed sufficient vegetables (2.5–5.5 serves depending on age); on average children eat two serves of vegetables
 - 49 per cent of children aged 2–3 years and 6 per cent aged 14–18 years consumed sufficient vegetables
- 75 per cent of children consumed sufficient fruit (1–2 serves depending on age); on average children consume two serves of fruit
 - 53 per cent of children aged 14–18 years consumed sufficient fruit (Australian Bureau of Statistics 2015b)

Overweight and obesity (2011–12)

- 76 per cent of children aged 5–17 years were of healthy weight
- 24 per cent of children aged 5–17 years were overweight or obese
 - 18 per cent are overweight, 6 per cent were obese (Australian Bureau of Statistics 2013c)

Young people

The majority of Victorian young people say they are in good health (Department of Education and Training 2015b; Department of Health 2014g). Furthermore most Australian young people were 'very satisfied' with their lives in 2011 (78 per cent of 15–19 year olds and 69 per cent of 20–24 year olds), which is a 5 per cent improvement on 2001 (Foundation for Young Australians 2013). While there is no consistent definition of young people, people aged 15–24 years are commonly considered to be 'young people' and this definition is used where possible in this plan.

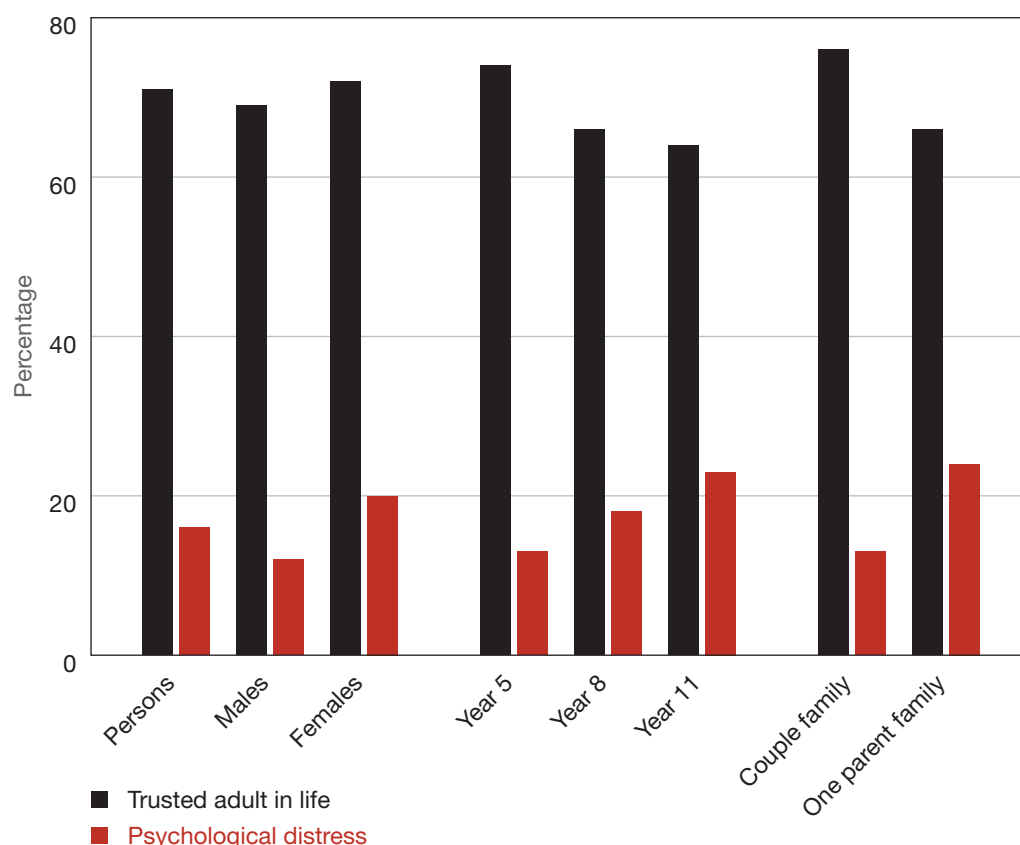
Having a home is fundamental to health and wellbeing. About 6,130 Victorians aged 12–25 years had nowhere to call home on census night in 2011, comprising about one-quarter of all homeless Victorians (Australian Bureau of Statistics 2012).

Wellbeing encompasses the capacity to cope with the normal stresses of life. For many, youth is a stressful time. In 2014, about one in six Victorian young people reported psychological distress, with higher rates in the upper years of high school (Figure 4). Access to someone to turn to for advice and access to a trusted adult are significant protective factors for adolescent health and wellbeing. Almost all children and adolescents reported having someone to turn to for advice and about three-quarters had a trusted adult in their lives (Department of Education and Training 2015b). Access to a trusted adult was lower for adolescents than children in Year 5.

The apparent retention rate from Year 7 to Year 12 for Victorian school students was 86 per cent in 2014 (Department of Education and Training 2015a). The rate for Aboriginal Victorian students was 30 per cent lower than for non-Aboriginal students and was 19 per cent lower for non-metropolitan students compared with metropolitan students. Apparent retention rates are an indicative measurement of student engagement and are influenced by factors not taken into account by this measure. In 2009 Aboriginal young Victorians were more likely to express a desire to complete Year 12 as their highest level of education and less likely to express a preference for university education, when compared with non-Aboriginal young people (Department of Education and Early Childhood Development 2013a). Youth unemployment is a significant issue in Victoria. In 2014 youth unemployment was 14.6 per cent (Australian Bureau of Statistics 2015c). Youth unemployment is highest in areas of concentrated disadvantage, including Melbourne's fringe and regional areas (Victorian Council of Social Services 2015).

**one in six young people
report psychological
distress**

Figure 4: Proportion of school students reporting psychological distress, and that they have a trusted adult in their life, by selected demographics, Victoria 2014



Source: Department of Education and Training 2015b

Injury is the major cause of death for Victorians aged 15–24 years. Suicide and road transport injury are the major specific causes, with males in this age group having rates of death 3.5 and 2 times those of females respectively (Australian Bureau of Statistics 2015a). Rates of hospitalisation due to intentional self-harm in Australia in 2010–11 were highest for females aged 15–19 years, followed by rates for females aged 20–24 years (Australian Institute of Health and Welfare: Harrison & Henley 2014). Hospitalisation rates for all ages were higher in regional areas than in major cities, and higher in disadvantaged than advantaged areas. In contrast, suicide rates were more than three times those of females overall, and highest for males aged 35–44 years and 80 years and older. Rates for all ages were higher in regional and remote areas than in major cities. The suicide rate in Victoria was 10 per cent lower than for Australia in 2007–2011, and second lowest of all states and territories (Steering Committee for the Review of Government Service Provision 2014).

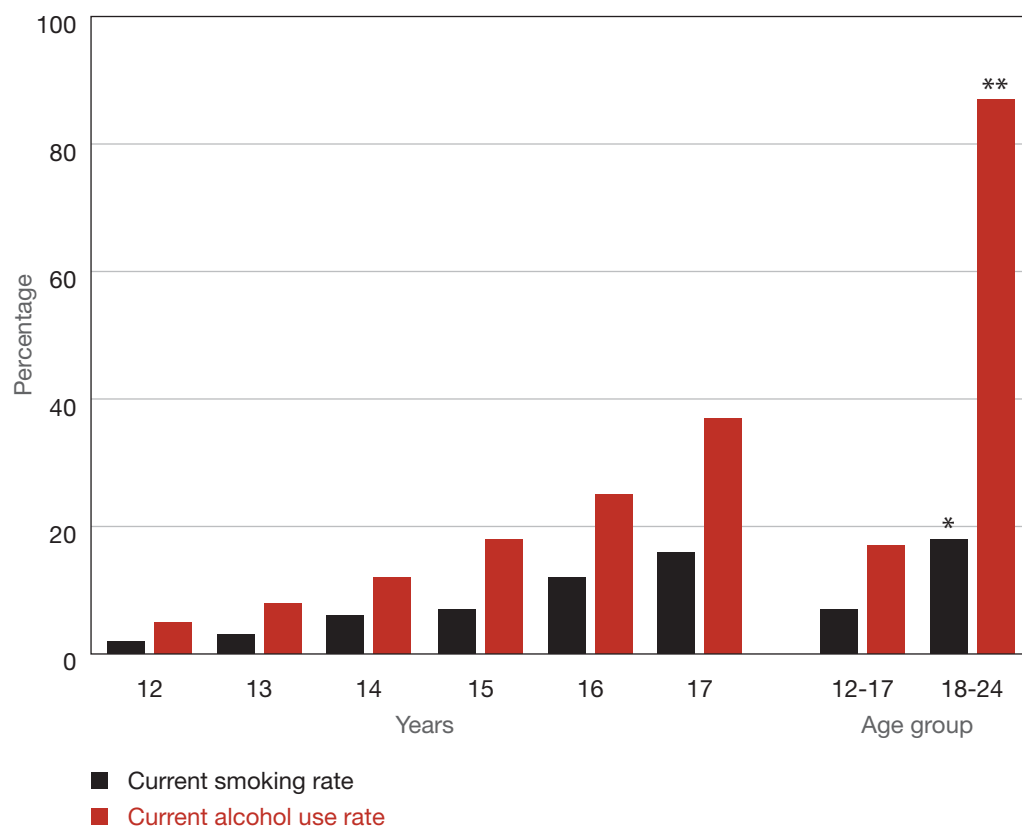
Not all Victorian young people practice safe sex. Sexually transmissible infections can cause significant long-term health problems. In 2014 there were 12,607 notifications for sexually transmissible infections for 15–24 year olds, of which 90 per cent were for chlamydia (Department of Health and Human Services 2015b). The notification rate of chlamydia in rural Victoria was about 50 per cent higher than in metropolitan Victoria. This difference more than doubled between 2005 and 2008 and has been constant since then. Unlike chlamydia, HIV notifications are not primarily for young people. In 2014 there were 306 notifications of diagnosis of HIV, with the highest rates for 25–29 year olds. The majority of HIV notifications in Victoria continue to be for men who have sex with men, consistent with national data. In Victoria over the past decade, the rate of HIV diagnoses has remained stable (ranging between four and five cases per 100,000); however, in 2013 and 2014 this increased to a rate of 5.3 per 100,000.

Alcohol and tobacco use by teenagers is decreasing (Department of Health 2013). In 2011 about one in seven 16–17 year olds smoked tobacco in the week preceding the survey (referred to as ‘current smokers’) (Figure 5).

The 2011 rate of current smoking for 12–17 year olds was about one-third that of 1984, a three-fold decrease over nearly 30 years. About one in three 17-year-old students and one in four 16 year olds drank alcohol in the preceding week – termed ‘current alcohol use’. Nearly two thirds of these 16–17 year olds drank alcohol on one day the week before, and about 5 per cent drank alcohol on four or more days a week. The 2011 rate of alcohol consumption for 16–17 year olds was about 25 per cent less than in 2008 and 40 per cent less than in 2005 (Department of Health 2013). For young adults aged 18–24 years, one in five self-reported current smoking and one in eight said they smoked daily (Department of Health 2014g). The majority of young adults drank alcohol. About one in five young males drank alcohol at risky or high-risk levels for short-term harm at least weekly, as did one in 10 females. Illicit drug use was most common for 20–29 year olds in 2013, with 27 per cent reporting use in the previous 12 months; 16 per cent of 14–19 years olds reported use and 17 per cent of 30–39 year olds. Males were about 50 per cent more likely to use illicit drugs. In Australia, people aged 50 years and older were the only age group reporting a statistically significant increase in use between 2001 and 2013 (Australian Institute of Health and Welfare 2014c).

smoking rate for high school students has decreased 3-fold in 30 years

Figure 5: Proportion of current smoking and alcohol use, by age, Victoria, 2011 and 2011–12



Source: Department of Health 2013; 2014g

* self-designated current smoking rate not based on frequency

** did not abstain from alcohol

Key facts – Victoria

Psychological distress

- 16 per cent of students in Years 5, 8 and 11 in 2014 reported psychological distress
 - 12 per cent of males, 20 per cent of females reported psychological distress
 - 13 per cent of Year 5 students, 18 per cent in Year 8 and 23 per cent in Year 11 reported psychological distress
 - 13 per cent of children from couple families and 24 per cent of children from one-parent families reported psychological distress (Department of Education and Training 2015b)
- 17 per cent of 18–24 year olds reported high or very high levels of psychological distress in 2011–12 (Department of Health 2014g)

Trusted adult

- 71 per cent of students in Years 5, 8 and 11 reported having a trusted adult in 2014
 - 74 per cent of Year 5 students, 66 per cent of Year 8 students, and 64 per cent of Year 11 students reported having a trusted adult
 - 76 per cent of students from couple families and 66 per cent of students from one-parent families reported having a trusted adult (Department of Education and Training 2015b)

Alcohol use

- 17 per cent of 12–17 year old school students drank alcohol in the past week in 2011
 - 25 per cent of 16 year olds, 37 per cent of 17 year olds drank alcohol in the past week (Department of Health 2013)
- 87 per cent of 18–24 year olds drank alcohol in 2011–12
- 15 per cent of 18–24 year olds drank alcohol at risky or high-risk levels for short-term harm at least weekly
 - 19 per cent of males and 11 per cent of females drank alcohol at risky or high-risk levels for short-term harm at least weekly (Department of Health 2014g)

Smoking

- 7 per cent of 12–17 year old school students smoked in the last week in 2011
 - 12 per cent of 16 year olds, 16 per cent of 17 year olds (Department of Health 2013)
- 18 per cent of 18–24 year olds were current smokers, and 12 per cent were daily smokers in 2011–12
 - 16 per cent of males, 7 per cent of females were daily smokers (Department of Health 2014g)

Chlamydia

- 11,394 notifications of chlamydia were reported for 15–24 year olds, representing 57 per cent of all notifications of chlamydia in Victoria in 2014
- 12.6 notifications of chlamydia per 1,000 people in metropolitan areas and 19.3 notifications of chlamydia per 1,000 people in rural areas (Department of Health and Human Services 2015b)

Adults

The health of Victorian adults is improving, with a 10 per cent decrease in the death rate between 2007 and 2012 (Steering Committee for the Review of Government Service Provision 2014) and a two to three year increase in life expectancy at birth between 2000 and 2010 (Department of Health and Human Services 2015e). The average age of death of males in 2012 was 79.9 years and 85.3 years for females. In this section adults refer to those aged 18 years and older, except if stated.

High social capital directly and indirectly raises wellbeing by promoting social support systems, generosity and volunteerism and increasing productivity (Helliwell, Layard & Sachs 2015). In 2011–12 the majority of adults reported feeling valued by society. However, one in eight adults did not feel valued by society. One in three Victorian adults felt most people could be trusted, with one in six reporting that people could not be trusted. Adults who did not feel valued by society or did not trust other people were more likely to experience psychological distress, have low income and poor or fair self-reported health. One in five adults did not feel safe walking alone down their street after dark (Department of Health and Human Services 2015c). Females were about three times more likely to not feel safe, metropolitan adults were about 50 per cent more likely to not feel safe than rural adults, and those with an annual household income less than \$40,000 were about three times as likely to not feel safe as those with an income greater than \$100,000.

Many Victorians adults are engaged in their local community. One-quarter definitely helped out a local group by volunteering, and a further one in 10 sometimes helped out. Adults aged 35 years and older were about 50 per cent more likely to help out than younger adults. Adults in rural areas were more likely to volunteer and attend local community events than adults in metropolitan areas (Department of Health and Human Services 2015c).

Chronic diseases are the major causes of burden in Victoria. About half of Victorian adults reported at least one chronic disease. Almost all had at least one risk factor and three-quarters had multiple risk factors (Department of Health 2014g). These chronic diseases share common causes – a set of behavioural risk factors, biomedical factors and social determinants that increase the likelihood of developing chronic diseases.

Good health is good business. Australian employers bear many of the indirect costs associated with chronic disease and ill health. People with chronic disease were less likely to participate in the labour force and be employed full time, than those without chronic disease (Australian Institute of Health and Welfare 2009). People with chronic disease also had more time off work due to their own illness. The estimated cost of absenteeism to the Australian economy was \$7 billion per year, while the cost of presenteeism (not fully functioning at work because of medical conditions) was nearly four times more, estimated at almost \$26 billion in 2005–06 (PricewaterhouseCoopers 2010).

**half of all adults
have at least one
chronic disease**

In addition to financial costs, the cost of disability, lost wellbeing and premature death due to chronic diseases is high in Victoria. For obesity alone, the cost of reduced wellbeing was about six times that of the financial costs (Access Economics 2008).

Cardiovascular disease (CVD) is the cause of the largest number of deaths in Victoria, although rates have fallen markedly over recent decades. However, there has been a slowing in the national downward trend of CVD death rates for males and females aged younger than 55 years (Australian Institute of Health and Welfare 2014d). Increasing prevalence of some key risk factors for CVD, including obesity and type 2 diabetes are thought to underlie this slowing of the decline of rates among younger age groups and in the most socioeconomically disadvantaged groups. Over 30 years, the gap in CVD mortality between advantaged and disadvantaged groups has narrowed for people under 70 years, but widened for those 70 years and older (Australian Institute of Health and Welfare 2014d).

About 70 per cent of the health loss due to CVD is due to modifiable risk factors (Begg et al. 2007). High blood pressure and high blood cholesterol are risk factors for CVD. In 2011–12, 82 per cent of Victorian adults had had their blood pressure checked in the past two years; 61 per cent had had their cholesterol checked (Department of Health 2014g). While females were more likely than males to have had a blood pressure check in the past two years, they were less likely than men to have had a cholesterol check in the past two years; and metropolitan adults were more likely than rural adults to have had their cholesterol checked. Despite these relatively high levels of health professional checks, the prevalence of untreated or ineffectively treated high blood pressure and high blood cholesterol are high. In Australia in 2011–12 one-third of adults were hypertensive (high blood pressure), with one-third of these effectively treated, another third ineffectively treated and a third untreated (Australian Bureau of Statistics 2013b). For high blood cholesterol, or dyslipidaemia, two-thirds of Australian adults were measured as having dyslipidaemia, and about two-thirds of these were untreated.

Mental health and substance use disorders were the second largest cause of disability or non-fatal disease burden in Australia in 2010, causing 23 per cent of the disability burden (Institute for Health Metrics and Evaluation 2013). Major depressive disorders and anxiety disorders were significant specific causes of disability. In 2011–12 about one in eight Victorian adults reported high or very high levels of psychological distress, a major risk factor for depressive and anxiety disorders, unchanged since 2003 (Department of Health 2014g). The rate of this high level of distress was about two times greater for unemployed adults or those not in the labour force than employed adults. In 2008, 22 per cent of Aboriginal Victorians reported high or very high levels of psychological distress, about twice that of non-Aboriginal Victorians (Department of Health 2011a). Financial and family issues remain the leading causes of stress among Australians, with more than half identifying these issues as a cause of stress (Casey & Liang 2014). In 2007 lesbian, gay, bisexual

mental health and
substance use
disorders were the
second largest cause
of disability burden

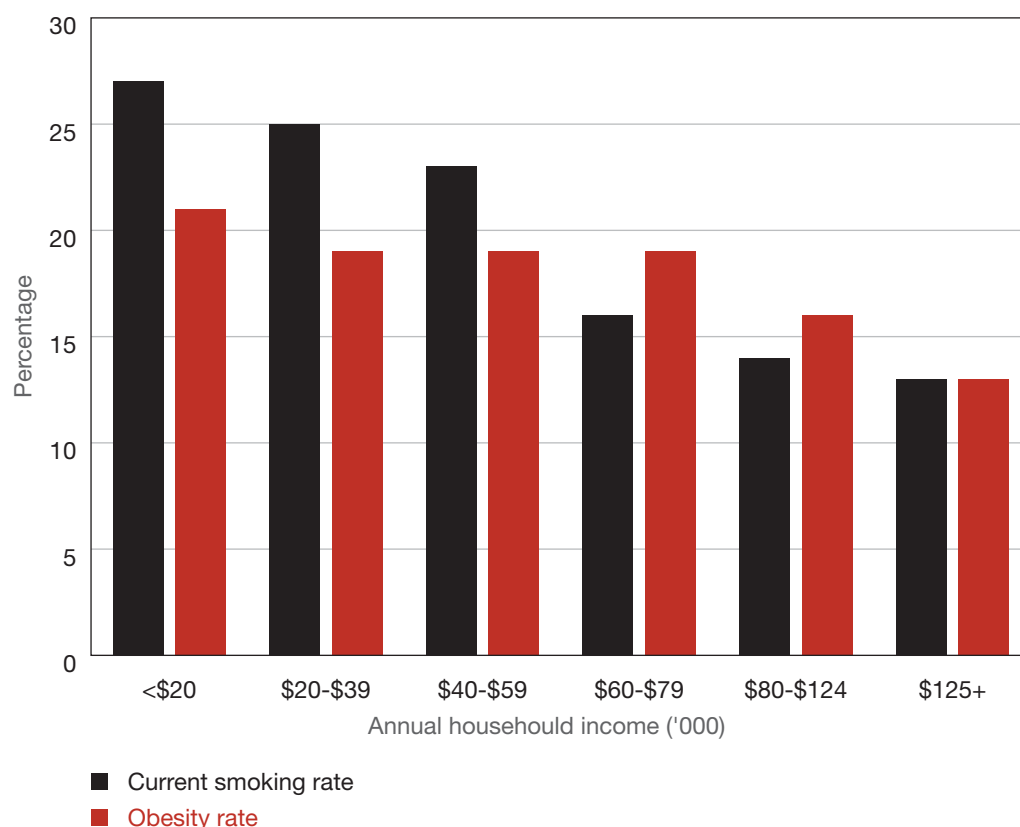
and transgender Australians were more than twice as likely to report anxiety disorders and suicidal thoughts, plans and attempts than other Australians (Australian Bureau of Statistics 2008). About three-quarters of Australians with mental illness are employed. However, the rate of employment of people with mental illness is still well below that of others. A third of unemployed women and a quarter of unemployed men had a mental disorder in the previous 12 months.

Being overweight has become a normal condition, and Victoria is now becoming an obese society. Nearly two-thirds of Victorian adults were measured as overweight or obese in 2011–12, with about half overweight and half obese (Australian Bureau of Statistics 2013c). More than 2.3 million adults are therefore overweight or obese. Rates of self-reported adult obesity vary almost five-fold across Victoria, with higher rates among low income earners (Department of Health 2014g). High income earners were about 40 per cent less likely to be obese than low income earners. Self-reported obesity prevalence for males and females ranged from 7 to 34 per cent in local government areas (Figure 6).

There are indications that the prevalence of obesity may have reached a plateau. There has been no significant change in the prevalence of measured obesity in Victoria between 2007–08 and 2011–12 (Australian Bureau of Statistics 2013c; 2013e). Longer term data is not available for Victoria. However across Australia, the proportion of people who are obese has increased in all age groups over time, up from 18.7 per cent in 1995 to 27.5 per cent in 2011–12, an increase of about 40 per cent. Obesity reduces life expectancy. International studies have shown that median survival of obese people was reduced by 2–4 years and 8–10 years for the severely obese (Prospective Studies Collaboration 2009).

One-third of Victorian adults' total energy comes from discretionary food and drinks such as biscuits, snack bars and soft drink (Australian Bureau of Statistics 2015b). National guidelines recommend zero or at most 10 per cent of energy from these sources (National Health and Medical Research Council 2013). Thus these foods and drinks contribute at least three times the recommended maximum contribution to daily energy intake for healthy weight, active people. Fast food is readily available, with the density of fast food outlets four times that of greengrocers/supermarkets in eight mapped Victorian local government areas (Department of Health and Human Services 2015a). Few Victorians consume enough vegetables and consumption of soft drink and take-away food is common. Two-thirds of adults did sufficient physical activity for health benefit in 2011–12, with no change since 2005. Those with high income are more likely to do enough activity than those with a low income (Department of Health 2014g).

Figure 6: Proportion of current smoking and self-reported obesity, by income, Victoria, 2011–12



Source: Department of Health 2014g

Food safety and the financial capacity to purchase sufficient nutritious food are fundamental to good health. In 2011–12 one in 20 Victorian adults ran out of food in the last 12 months and could not afford to buy more (Department of Health 2014g). Rural adults were 45 per cent more likely to have run out of food than metropolitan adults. About one in five Aboriginal Victorians ran out of food and could not afford to buy any more in the last 12 months – about four times higher than for other Victorians (Department of Health 2011a). While most Victorian food is safe, there were 39 foodborne or suspected foodborne outbreaks in 2014 (Department of Health and Human Services 2015b). These affected 842 people, of which 95 were hospitalised and four died. There were 3,695 notifications of salmonellosis in 2014, an increase of about 50 per cent from the annual average of the preceding five years. The notification rate in children aged up to four years was more than double the rate in the majority of other age groups.

There were 7,239 notifications related to campylobacteriosis in 2014, an increase of 16 per cent on the annual average of the proceeding five years (Department of Health and Human Services 2015b).

One in six Victorians aged 18 years and older were current smokers in 2011–12. Smoking rates varied by up to about 40 per cent higher across the state health regions and local government areas from the areas with the lowest rates in the state. Low income earners were about twice as likely to be current smokers as high income earners (Figure 6). Smoking rates were about double for those experiencing psychological distress (Department of Health 2014g). Smoking rates for Aboriginal Victorians were about three times those of all adults. Male smoking rates are around 40 per cent higher than those of females. Homosexual and bisexual Australians aged 14 years and older were twice as likely to be current smokers in 2010 (Australian Institute of Health and Welfare 2011a). The Victorian smoking rate decreased by 28 per cent between 2003 and 2012. However, the rate of decrease in smoking is not shared across the state – the rate of decrease for those with a household income greater than \$80,000 was higher than for those with an annual household income less than \$40,000 (Department of Health 2014g).

Violence and the fear of violence influence health and wellbeing. In Victoria in 2012, 7 per cent of adults reported having experienced violence in the preceding 12 months. More males (9 per cent) reported experiencing violence in the preceding 12 months than females (5 per cent) (Australian Bureau of Statistics 2013d). For Australian females aged 20–34 years in 2010, intimate partner violence was the second largest cause of burden of disease (Institute for Health Metrics and Evaluation 2013). For children aged 5–14 years, child sex abuse was the second largest cause of burden of disease. For all Australians, sexual abuse and violence were the cause of 18 per cent of the burden of disease due to self-harm, 17 per cent of that due to major depressive disorders and 14 per cent due to alcohol use disorders. In Australia in 2010, alcohol use caused 20 per cent of the burden of disease due to self-harm, 14 per cent of the burden due to interpersonal violence and 7.5 per cent of that due to unintentional injury (other than road transport). Victorian adult males were more likely than females to drink alcohol at risky or high-risk levels for short- and long-term harm. One in eight males drank harmful levels of alcohol at least weekly, as did one in 20 females. Females aged 18–24 years were about twice as likely to drink alcohol to excess weekly compared with older females. In contrast, consumption by males was similar to those aged 45–54 years, and declined in older years (Department of Health 2014g).

The built environment, including urban design, land use and land use planning mix, impacts on the health and wellbeing of individuals, families and communities. Higher levels of walking for transport are found in ‘walkable’ neighbourhoods (Giles-Corti et al. 2014). Public transport users in Melbourne achieve more than 40 minutes of incidental exercise a day, compared with less than 10 minutes for car users (Bus Association of Victoria 2010). Higher levels and greater variation of neighbourhood greenness are associated with about 25 per cent lower likelihood of overweight and obesity among adults (Pereira et al. 2013). Each 25 per cent increase in land use mix, such as residential, commercial and recreational uses, is associated with a more than 10 per cent reduced risk of residents being obese (Frank, Anderson & Schmidt 2004).

one-third of kilojoules comes from discretionary foods and drinks – those high in energy with little nutritional value

Key facts – Victoria

Social and civic trust (2011–12)

- 53 per cent of adults definitely felt valued by society, 31 per cent sometimes felt valued by society
 - 49 per cent of adults aged 18–34 years definitely felt valued, about 55 per cent of adults aged 45–64 years definitely felt valued by society
 - 12 per cent of adults did not feel valued by society
 - 14 per cent of males and 11 per cent of females
- 39 per cent of adults felt most people could definitely be trusted
 - 30 per cent of adults aged 18–34 years and about 45 per cent of adults aged 45 years and older felt most people could definitely be trusted (Department of Health and Human Services 2015c)

Volunteerism and community participation (2011–12)

- 24 per cent of adults definitely helped out with a local group, 11 per cent of adults sometimes helped out with a local group
 - about 16 per cent of adults aged 18–34 years and about 27 per cent of adults aged 35 years and older helped out with a local group
 - 21 per cent of adults in metropolitan areas and 32 per cent of adults in rural areas helped out with a local group
- 55 per cent of adults attended a local community event
 - 51 per cent of adults in metropolitan areas and 68 per cent of adults in rural areas attended a local community event (Department of Health and Human Services 2015c)

Chronic disease (2011–12)

- 53 per cent of adults have at least one disease, 21 per cent two or more diseases and 7 per cent three or more
- 96 per cent of adults have one risk factor, 70 per cent two or more, 32 per cent three or more (Department of Health 2014g)
- of Australian adults with chronic disease aged 24–64 years:
 - 60 per cent were more likely to not be in the labour force, 33 per cent were less likely to be employed full-time
 - 0.48 days off work were taken in the previous fortnight due to their own illness whilst those without chronic disease had 0.25 days off work in the previous fortnight (Australian Institute of Health and Welfare 2009; 2010)

Psychological distress (2011–12)

- 11 per cent all adults reported experiencing high or very high levels of psychological distress in 2011–12
 - 10 per cent of employed adults and 20 per cent of unemployed adults reported high or very high levels of psychological distress
 - 17 per cent of adults with a primary education and 7 per cent of adults with a tertiary education reported high or very high psychological distress

- 20 per cent of people with an annual household income less than \$40,000 and 7 per cent of people with an income greater than \$100,000 reported high or very high levels of psychological distress (Department of Health 2014g)

Nutrition (2011–12)

- 35 per cent of energy came from discretionary foods for people aged 19 years and older in Victoria, similar to Australia
- adults consume on average 2.4 daily serves of vegetables and 1.5 daily serves of fruit
- 7 per cent of adults consume sufficient vegetables and 47 per cent of adults consume sufficient fruit (Australian Bureau of Statistics 2015b)
- 23 per cent of adults drink soft drink daily
 - 16 per cent drink sugar sweetened soft drink weekly
 - 21 per cent of males and 10 per cent of females (Department of Health 2014g)

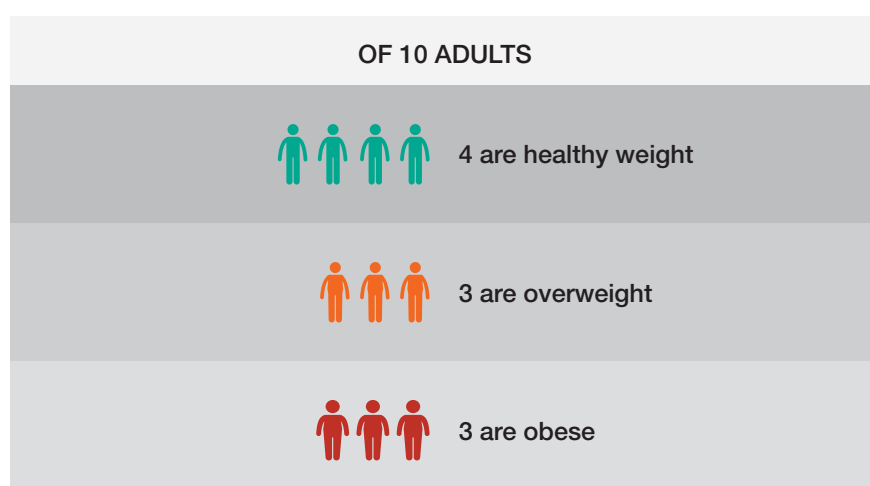
Physical activity (sufficient) (2011–12)

- 64 per cent of adults met guidelines for sufficient physical activity
 - 57 per cent of adults with an annual household income less than \$40,000 and 73 per cent of adults with an income greater than \$100,000 met guidelines for sufficient physical activity (Department of Health 2014g)

Overweight/obesity (2011–12)

- 61 per cent of adults were overweight or obese, similar to Australia
 - 68 per cent of males and 54 per cent of females were overweight or obese
 - 35 per cent of adults were overweight, 26 per cent were obese
 - 12 per cent of obese adults were aged 18–24 years, 35 per cent of obese adults were aged 55–64 years (Australian Bureau of Statistics 2013c)
- Australia had the third highest rate of adult obesity amongst selected OECD countries (Organisation for Economic Co-operation and Development 2013)

Overweight and obese adults in Victoria



Food insecurity (2011–12)

- 4.6 per cent of adults ran out of food in the last 12 months and could not afford to buy more
 - 7.8 per cent of adults aged 18–24 years, 2.7 per cent of adults aged 55–64 years and 1.4 per cent of adults aged 65 and older ran out of food in the last 12 months and could not afford to buy more (Department of Health 2014g)
- 18 per cent of Aboriginal Victorians and 5 per cent of non-Aboriginal Victorians ran out of food in the last 12 months and could not afford to buy more in 2008 (Department of Health 2011a)

Smoking (2011–12)

- 12 per cent of adults smoke daily, 16 per cent were current smokers
 - 27 per cent of adults reporting high or very high psychological distress and 13 per cent reporting low distress were current smokers (Department of Health 2014g)
- 41 per cent of Aboriginal people aged 15 years and older reported smoking on a daily basis (Australian Bureau of Statistics 2013a)

Alcohol use (2011–12)

- 9 per cent of adults drank at risky or high-risk levels for short-term harm at least weekly
 - 13 per cent of males and 6 per cent of females drank at risky or high-risk levels for short-term harm at least weekly
 - 11 per cent of females aged 18–24 years, about 5 per cent of females aged 25 years and older; 19 per cent of males aged 18–25 years, 12 per cent aged 55–64 years, 6 per cent aged 65 years and older drank at risky or high-risk levels for short-term harm at least weekly
- 3.4 per cent of adults drank at risky or high-risk levels for long term harm
 - 4.2 per cent of males and 2.5 per cent of females drank at risky or high-risk levels for long term harm (Department of Health 2014g)

Older adults

Older Victorians now account for an increasing share of the population. For population health status reporting, 'older' is conventionally defined as people aged 65 and older, based on the original qualifying age for the Age Pension. While this plan also uses this convention, it is important to stress that at an individual level a person does not necessarily become frail or 'dependent' at age 65 (or at any other particular age). Like the broader Victorian population, the group of 'older adults' is far from uniform. Where possible, data referring to the 65 years and older age group are split into subcategories because health and wellbeing, and the need for services and support, often varies with age.

People are living longer and where health is maintained, those years are more likely to be lived with greater satisfaction and enjoyment (World Health Organization 2012). At 65 years of age Victorian males can expect to live another 19.2 years and females 22.1 years. Across local government areas, the difference between those with the highest and those with the lowest life expectancy at 65 years is about six years (Department of Health 2014c). People in areas of most socioeconomic disadvantage have a one to two year lower life expectancy than in the least disadvantaged areas.

Ageing is associated with increased risk of many health conditions, disability and dependency. Despite the increasing prevalence of many conditions with age, most older adults consider themselves to be in good health. In Victoria in 2011–12, 41 per cent of those aged 65 years and older reported excellent or very good health, and 23 per cent reported fair or poor health (Department of Health 2014g). Lifetime prevalence of arthritis was 52 per cent, 18 per cent for osteoporosis, 18 per cent for cancer and 22 per cent for heart disease.

Not only are older Australians living longer, on average they have gained more years of life without severe or profound limitation than with it (Australian Institute of Health and Welfare 2014a). About 460,000 older Victorians needed assistance with at least one activity because of disability or age in 2012 (Australian Bureau of Statistics 2014a). As people age, the likelihood and severity of disability increases. Nearly one half of Victorians aged 65–70 years and three-quarters of those aged 80 years and older reported having a disability; this was similar for males and females. In 2012 there were 274,200 Victorians aged 65 years and older living in private homes who needed assistance with personal activities. Two-thirds of these people had their needs fully met (Australian Bureau of Statistics 2014a).

Falls often result in fractures or other serious injuries and are common among older adults. In Victoria there were about 45,000 hospitalisations, or about 900 per week, for injuries due to falls for older people in 2011–12 (Steering Committee for the Review of Government Service Provision 2014). Older women sustained about twice the number of hospitalised fall injuries than men, and the rate of fall injuries increased with age in both sexes. The falls hospitalisation rate has increased about 20 per cent since 2005–06, based on age-standardised rates. About one-quarter of the falls injury cases occurred in aged care facilities, and half at home (Australian Institute of Health and Welfare: Bradley 2013).

hospitalisation rate
due to falls increases
markedly with age

burden due to Alzheimer's disease has more than doubled in 20 years

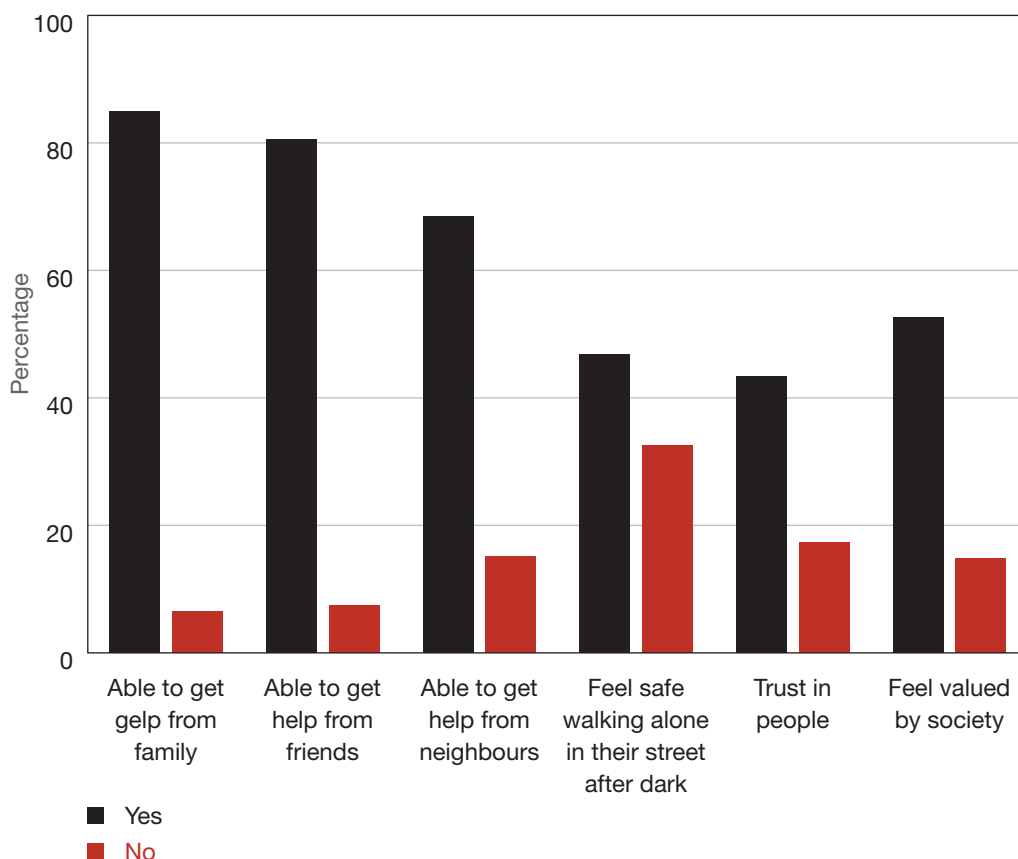
Between 1990 and 2010 the burden of disease due to Alzheimer's disease and other dementias has more than doubled in Australia, a substantially larger increase than any of the other top 25 conditions (Institute for Health Metrics and Evaluation 2013). In 2011 an estimated 1.3 per cent of Australians had dementia – about 72,000 Victorians of all ages (Australian Institute of Health and Welfare 2012a). The prevalence of dementia increases with age from 3 per cent of 65–74 year olds to 30 per cent of those aged 85 years and older. Females are more likely to develop dementia than males. Over 50 per cent of permanent residents in Australian Government-funded aged care facilities in 2010–11 had a diagnosis of dementia (Australian Institute of Health and Welfare 2012b). The number of people with dementia in Victoria is projected to almost quadruple by 2050 to about 250,000 people (Deloitte Access Economics 2011).

Older adults are more vulnerable to heatwaves, particularly those living alone in private residences. During the summers of 2006–2010, adults aged 65 years and older were about four times more likely to present to a Melbourne public hospital emergency department with a heat-related condition than people in other age groups (Department of Health 2011b). People of all ages living alone in private residences were about 50 per cent more likely to present to an emergency department with a heat-related condition than people living in other types of accommodation.

Older Victorians are at greater risk of social isolation than younger adults. One-third of older Victorians had spoken to 10 or more people on the previous day in 2011–12 (Department of Health and Human Services 2015c). Older adults were half as likely to speak to this number of people as 18–24 year olds. Compared with those aged 55–64 years, older adults were about one-third less likely to speak to 10 or more people in a day. Rates for males and females were similar. While the majority of older Victorians were definitely able to get help from family, friends and neighbours in 2011–12, about one in 10 could not, nor could they get help with care in an emergency (Figure 7). Furthermore, the ability of older adults to get help was generally less than that of 18–24 year olds. Adults 45 years and older were less likely to be able to get help with care in an emergency than adults aged 18–34 years. Rural adults of all ages were more likely to be able to get help in an emergency than metropolitan adults. One-third of older Victorians volunteered, the highest proportion of all age groups, and one in 10 received help from a volunteer organisation. Almost half of older women and one in five men did not feel safe walking alone down their street after dark, which was higher than all other age groups (Department of Health and Human Services 2015c).

The OECD reported that one-third of older Australians in 2012 were relatively poor, based on the relative poverty rate of people living with less than half of the equivalised disposable income (Organisation for Economic Co-operation and Development 2015). In 2012, 65 per cent of older Victorians received a government pension or allowance as their main source of personal income and 6 per cent received wages or a salary (Australian Bureau of Statistics 2014a).

Figure 7: Proportion of support and social capital indicators, 65 years and older, Victoria 2011–12



Source: Department of Health and Human Services 2015c

As Victorians live longer, many want to continue working. Over a quarter of Australians aged 50 years and older in 2014 indicated that they had experienced some form of age discrimination on at least one occasion in the workplace in the preceding two years (Australian Human Rights Commission 2015). Three in five reported that the most recent episode of discrimination affected their self-esteem or mental health or caused them stress.

Given their high level of absolute risk for mortality and a range of health problems, sedentary older adults have the potential to benefit greatly from physical activity uptake and maintenance. In 2011–12, 49 per cent of Victorians aged 65 years and older did sufficient physical activity for health benefit, with males 21 per cent more likely to meet the guideline (Department of Health 2014g). One in 10 older adults was completely sedentary.

Key facts – Victoria

Life expectancy at 65 years of age (2007)

- 19.2 additional years of life at 65 years for males, 22.1 years for females
 - 2.0 fewer additional years of life at 65 years for older males living in the most disadvantaged areas compared to males living in the least disadvantaged areas; the gap for females was 1.3 years.
 - 0.9 year gap between metropolitan and rural areas (males), 0.5 year gap (females) (Department of Health 2014b)

Support and social capital (2011–12)

- 85 per cent of older adults reported being definitely able to get help from family, 81 per cent from friends, 69 per cent from neighbours
- 85 per cent of older adults reported being definitely able to get help with care in an emergency, 90 per cent for all adults
- 47 per cent of older adults reported definitely feeling safe walking alone in their street after dark
- 43 per cent of older adults definitely agree that most people can be trusted
- 53 per cent of older adults reported definitely feeling they are valued by the society (Department of Health and Human Services 2015c)

Dementia (2011)

- 1.3 per cent of all Australians of all ages are estimated to have dementia
 - 1.0 per cent of males, 1.6 per cent of females
 - 3 per cent of people aged 65–74 years, 10 per cent of people aged 75–84 years, and 30 per cent of people aged 85 years and older are estimated to have dementia (Australian Institute of Health and Welfare 2012a)

Falls (2011–12)

- 45,475 hospitalisations due to falls of adults 65 years and older, a rate of 56/1000 adults (Steering Committee for the Review of Government Service Provision 2014)
 - 21/1000 adults aged 65–74 years, 66/1000 75–84 years, 187/1000 85 years and older.

Glossary

Australian Early Development Index (AEDI), now known as the Australian Early Development Census (AEDC): The AEDI/AEDC is a population measure of children's development as they enter school that helps communities to know how their children are faring. The results provide communities around Australia with information about local children across five domains of early childhood development covering physical health and wellbeing, social competence, emotional maturity, language and cognitive skills (school-based), communication skills and general knowledge.

Teachers complete the AEDI/AEDC checklist, which is made up of approximately 100 questions, for each child in their class based on their observations and knowledge of each child. Scores ranked in the lowest 10 per cent are classified as developmentally 'vulnerable'. Scores ranked between 10 per cent and 25 per cent are classified as developmentally 'at risk'. Scores ranked in the highest 75 per cent are classified as developmentally 'on track'.

The AEDI/AEDC is undertaken every three years, starting in 2009.

Body mass index (BMI): A measure of body weight in relation to height that can be used to estimate levels of unhealthy weight in a population, calculated as weight in kilograms divided by height in metres squared. WHO classifies adult body weight status based on the following BMI scores.

BMI score	Weight category
< 18.5	Underweight
18.5–24.9	Normal
25.0–29.9	Overweight
30.0–34.9	Obese class I
35.0–39.9	Obese class II
> 40.0	Obese class III

Burden of disease: Burden of disease studies measure and rank the contributions of diseases, health conditions and risk factors to premature deaths (years of life lost or 'YLL') and years lived with disability (YLD) and also calculate a combined measure, disability adjusted life years (DALYs). Together these provide an estimate of a society's total health loss and disease burden and provide an important basis for planning, policy development and priority setting.

Cultural and linguistic diversity: Refers to the range of different cultures and language groups represented in the population who identify as having particular cultural or linguistic affiliations by virtue of their place of birth, ancestry or ethnic origin, religion, preferred language or language spoken at home.

Food security: The World Food Summit of 1996 defined food security as existing when 'all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life'. Commonly, the concept of food security is defined as including both physical and economic access to food that meets people's dietary needs as well as their food preferences. Food security is built on three pillars:

- food availability: sufficient quantities of food available on a consistent basis
- food access: having sufficient resources to obtain appropriate foods for a nutritious diet
- food use: appropriate use based on knowledge of basic nutrition and care, as well as adequate water and sanitation (World Health Organization 2015b).

Homelessness: Homelessness occurs with a person does not have suitable accommodation alternatives. A person is considered homeless if their current living arrangement: is in a dwelling that is inadequate; has no tenure or if their initial tenure is short and not extendable; or does not allow them to have control of, and access to, space for social relations (Australian Bureau of Statistics 2012).

Household: A household is defined as one or more persons, at least one of whom is at least 15 years of age, usually resident in the same private dwelling. Therefore, the total number of households is equal to the total number of occupied dwellings.

Life expectancy: The average number of additional years a person of a given age and sex might expect to live if the age-specific death rates of the given period continued throughout his/her lifetime.

Low birthweight: Weighing less than 2,500 grams at birth.

Mean equivalised disposable incomes: Equivalised household income is an indicator of the economic resources available to each member of a household. It can be used for comparing the situation of individuals as well as comparing the situation of households (Australian Bureau of Statistics 2007).

National physical activity guidelines for Australians: For health development in infants (birth to one year) physical activity, particularly supervised floor-based play in safe environments, should be encouraged from birth. Toddlers (aged one to three years) and pre-schoolers (three to five years) should be physically active every day for at least three hours, spread throughout the day.

Children aged five to 12 years should accumulate at least 60 minutes of moderate to vigorous intensity physical activity every day. Children's physical activity should include a variety of aerobic activities, including some vigorous intensity activity. On at least three days per week children should engage in activities that strengthen muscle and bone. To achieve additional health benefits, children should engage in more activity, up to several hours per day.

Young people aged 13–17 years should accumulate at least 60 minutes of moderate to vigorous intensity physical activity every day. Young peoples' physical activity should include a variety of aerobic activities, including some

vigorous-intensity activity. On at least three days per week young people should engage in activities that strengthen muscle and bone. To achieve additional health benefits, young people should engage in more activity, up to several hours per day.

Adults aged 18–64 years should be active on most, preferably all, days every week and accumulate 150–300 minutes of moderate-intensity physical activity or 75–150 minutes of vigorous-intensity physical activity, or an equivalent combination of both moderate and vigorous activities, each week. Adults should do muscle-strengthening activities at least two days each week.

Adults aged 65 years and over should be physically active for 30 minutes every day. Even a slight increase in activity can make a difference to a person's health and wellbeing (Department of Health 2014a).

Chronic and complex conditions: A condition is considered chronic when it lasts for more than six months, has a significant impact on a person's life, and requires ongoing supervision by a health professional. Examples include asthma, cancer, cardiovascular disease, diabetes mellitus, mental health conditions, arthritis and musculoskeletal conditions. People with complex care needs have multiple health, functional and/or social issues and are at risk of functional decline and/or hospital admission.

Health inequality and inequity: Health inequalities can be defined as differences in health status or in the distribution of health determinants between different population groups – for example, differences in mobility between elderly people and younger populations or differences in mortality rates between people from different social classes. Some health inequalities are attributable to biological variations or free choice and others are attributable to the external environment and conditions mainly outside the control of the individuals concerned. In the first case it may be impossible or ethically or ideologically unacceptable to change the health determinants and so the health inequalities are unavoidable. In the second, the uneven distribution may be unnecessary and avoidable as well as unjust and unfair, so that the resulting health inequalities also lead to inequity in health (World Health Organization 2015a).

Heatwave: A heatwave is a period of unusual and uncomfortable hot weather that could impact on human health, community infrastructure (such as the power supply and public transport) and services (Department of Health 2014d).

Metropolitan and rural areas: For deaths and hospitalisations, area data is classified using the Accessibility/Remoteness Index of Australia (ARIA+), which is a six-category remoteness area classification: major cities, inner regional, outer regional, remote, very remote and migratory. ARIA scores are based on how far the population must travel to access services. Areas in Victoria are classified as major cities and the two regional categories. For self-reported health status, data is classified based on residence in the three metropolitan Department of Health and Human Services regions and the five rural regions.

Mortality rate: Age-specific death rates are the number of deaths (registered) during the calendar year, at a specified age, per 1,000 of the estimated resident population of the same age at the mid-point of the year (30 June). Pro rata adjustment is made in respect of deaths for which the age of the deceased is not given.

Social capital: Social capital refers to quality relationships, social and community networks and bonds, shared norms, values and understandings that facilitate cooperation, mutual support and trust within or among groups.

Social determinants of health: The social determinants of health are the conditions in which people are born, grow, live, work and age. These circumstances are shaped by the distribution of money, power and resources at the global, national and local levels. The social determinants of health are mostly responsible for health inequities – the unfair and avoidable differences in health status seen within and between countries.

Social gradient of health: Within countries, evidence shows that, in general, the lower an individual's socioeconomic position, the worse their health. There is a social gradient of health that runs from top to bottom of the socioeconomic spectrum. This is a global phenomenon seen in low, middle and high income countries.

Socioeconomic disadvantage: Refers to populations profiled using the ABS Index of Relative Socioeconomic Disadvantage. This index summarises information about the economic and social conditions of people and households within an area, with areas categorised into quintiles.

Wellbeing: There are two dimensions of wellbeing: subjective (or personal) wellbeing which includes considerations such as life satisfaction, resilience, feeling one's life has meaning; and objective wellbeing which includes more objective measures such as having adequate housing, physical health, education, sufficient resources, adequate food, appropriate care, and a healthy and safe environment (Department of Health England 2013). Wellbeing is therefore the outcome of many factors, both internal to an individual and of their wider social experience and conditions of living.

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