

6.7 Youth health: the prime of life?

Adolescence and young adulthood is a significant transition period in a person's lifetime. Its beginning is marked by the onset of puberty, and it is generally considered to end when social milestones are met such as completing schooling, entering employment or tertiary education, beginning a serious intimate relationship, and having children. With many young people taking on these social roles at older ages, the duration of adolescence and young adulthood is increasing.

Many of the physical, emotional and neural changes and development that occur during adolescence and young adulthood can impact on health and wellbeing. The brain continues to develop until the early 20s and improved self-control, judgement and decision-making appear late in adolescence (NIMH 2001). Many important modifiable risk factors for later life either emerge or accelerate during this period. These include smoking, drinking excessively, using illicit drugs, physical inactivity, poor nutrition and obesity. These risk factors can determine whether a person becomes a healthy adult or develops chronic illnesses or experiences the consequences of injury. Preconception health for young women also becomes an important issue during these years, as risky health behaviours can have intergenerational effects in terms of maternal and newborn child health (see also Chapter 6 'The health of mothers').

For these reasons, adolescence and young adulthood offer opportunities for health gains both through prevention and early intervention. This article examines what is known about issues that can have an impact on the health and wellbeing of Australia's youth, defined here as aged 15–24. An overview of the health of Australia's young adults is presented first, before exploring the risky health behaviours that young people may engage in. The article concludes by investigating the leading cause of death among youth—injury and poisoning. Relevant data are disaggregated for the age groups 15–19 and 20–24 where possible; in some cases, however, different age ranges are used due to the limitations of various data sets.

What do we know?

In 2012, there were more than 3 million young people aged 15–24 in Australia—1.6 million males and 1.5 million females, or about 14% of the population. Young people are commonly thought to be in the best of health with the majority (91%) of young adults assessing their own health as 'excellent', 'very good' or 'good' in the ABS 2011–12 Australian Health Survey (ABS 2013c). This has not changed significantly since the 2007–08 survey (93%) (ABS 2008).

A long-term Australian study also found that the majority of young people were 'very satisfied' with their lives in 2011 (79% of 15–19 year olds and 69% of 20–24 year olds), an improvement from 2001 (73% and 64% respectively) (FYA 2013).

However, this is not the same for everyone. During this stage of life, health inequalities are likely to become embedded and to continue throughout life. Indigenous young people, refugees and young people living in areas of lowest socioeconomic status often have poorer outcomes, a higher prevalence of risk factors and worse health than the general youth population (AIHW 2011b). Youth is also a time when mental disorders may arise, particularly anxiety and depression, and concerns about body image. Attention Deficit/Hyperactivity Disorder often persists into adolescence as well (Sawyer & Patton 2011).



In adolescence and early adulthood, young people, and males in particular, are most vulnerable to the influences of peer pressure and popular culture, and may be inclined to experiment, push boundaries and take risks that could result in accidents or injury (NPHP 2004). Rates of self-harm, suicide, injuries and sexually transmitted infections such as chlamydia are also high. Adolescence and young adulthood is also a critical period for establishing personal health behaviours that can protect against chronic diseases such as maintaining a healthy body weight, getting sufficient physical exercise and good nutrition.

How healthy are Australia's young adults?

Long-term health conditions

In 2011–12, the 2 most common chronic conditions reported among young people were hay fever and allergic rhinitis (18.8%) and short-sightedness (18.7%). The small increase in short-sightedness from about 17% in 2007–08 was not significant. Asthma was the third most commonly reported long-term condition, affecting about 11% (323,400) of young people. Mood problems and anxiety-related problems were reported by about 8% of the youths surveyed (ABS 2012a).

In 2011, there were an estimated 469 new cases of type 1 diabetes—a rate of about 15 per 100,000 young people. The rate decreases with age (around 18 per 100,000 those aged 15–19 compared with about 13 per 100,000 for those aged 20–24 respectively) (AIHW 2014a).

In 2011–12, there were an estimated 389 new cases of type 2 diabetes—a rate of around 13 per 100,000. The rate rose with age, from about 10 per 100,000 population for 15–19 year olds to around 15 per 100,000 for 20–24 year olds (AIHW 2014b).

Although cancer is uncommon in young people, it is a leading cause of death. The most common cancer types were melanoma of the skin and Hodgkin lymphoma (around 6 and 4 per 100,000 young people respectively) and cancer of the testis (about 4 per 100,000 males).

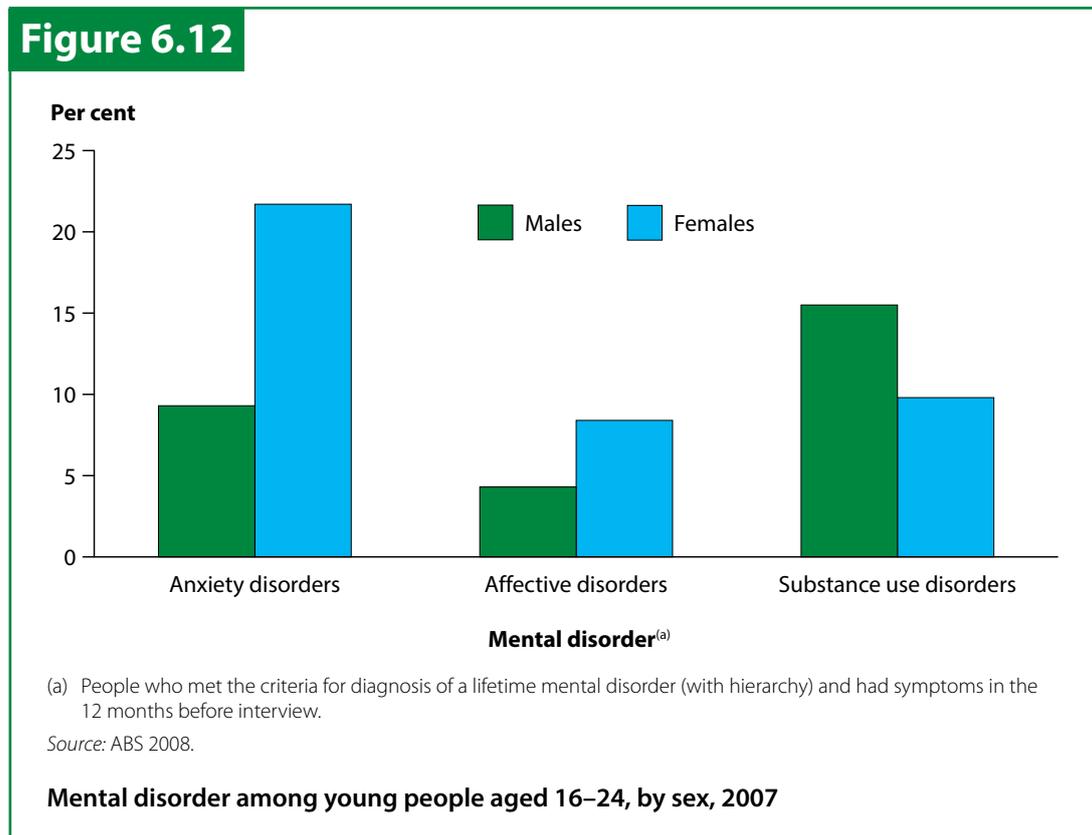
Mental health

Young people can experience difficulties coping with stress (see also Chapter 4 'Mental health in Australia'). In the ABS 2011–12 Australian Health Survey, an estimated 258,100 (12%) of young adults aged 18–24 reported 'high' or 'very high' levels of psychological distress (ABS 2012a). There was no statistically significant difference between young women and young men. There has been no change between 2007–08 (12%) and 2011–12 in the proportion of young adults reporting 'high' or 'very high' levels of psychological distress.

The 2007 National Survey of Mental Health and Wellbeing found that an estimated 671,100 or 26% of young people aged 16–24 were suffering from a mental disorder. More young women (30%) than young men (23%) reported a mental disorder. Of the 3 categories of disorders investigated in this survey, 15% of young people had anxiety disorders, 13% had substance use disorders and 6% had affective disorders (such as mania or depression) (ABS 2008) (Figure 6.12). Some survey respondents had more than 1 type of disorder.

A 1998 survey found that Attention Deficit/Hyperactivity Disorder (ADHD) continued to be prevalent in adolescents aged 13–17, and was more common among young males (10%) than females (4%) (Sawyer 2000). A 2013 study (Slade et al.) found that the average age of onset of first anxiety disorder was 20 for males and 19 for females.

Young people with a mental disorder are more likely to have lower educational attainment, experience joblessness, and to have poor physical health. It is not possible to decide whether these things cause mental problems or vice versa, but the experience of adverse situations during youth can contribute to the worsening of a mental disorder (AIHW 2008).



Eating disorders

Eating disorders are a group of mental illnesses that include anorexia nervosa, bulimia nervosa and binge eating disorder. Anorexia nervosa develops frequently in young women between the ages of 13 and 18, while bulimia nervosa usually occurs between 16 and 18 (Deloitte Access Economics 2012).

Prevalence data on eating disorders is not routinely collected in Australia. A recent study based on epidemiological studies, estimated that 75,150 young girls aged 15–19 and 105,622 aged 20–24, suffered from eating disorders in 2012. Young men also suffered: 29,543 aged 15–19 and 41,386 aged 20–24 (Deloitte Access Economics 2012).

Body weight, physical activity and nutrition

Maintaining a healthy body weight through adequate exercise and good nutrition is an important determinant of good adult health. Being overweight or obese is a significant risk for many chronic health conditions such as diabetes, heart disease and some cancers. It also influences the psychological wellbeing of young people. In 2011–12, 33% of young Australians aged 15–24 were overweight (20%) or obese (13%). Rates of overweight and obesity were similar to 2007–08 when 23% of 15–24 year olds were overweight and 13% were obese (AIHW analysis of ABS National Health Survey 2007–08).

In 2011–12, young people (15–24 years) had higher rates of overweight and obesity (33% total) than children aged 5–14 (26%), indicating that excess body weight increases with age (see also Chapter 6 'Childhood overweight and obesity'). Young people aged 20–24 were also more likely to be overweight or obese (38%) than those aged 15–19 (28%) (ABS 2013).

While 30% of children aged 5–14 consumed the recommended daily intake of fruit and vegetables, this drops dramatically to 4% of 15–24 year olds (ABS 2013).

Almost half (46%) of 15–24 year olds were either sedentary (9%) or reported low levels of exercise (37%) (ABS 2013). Young adults aged 18–24 spent an average of 4.6 hours on physical activity in the week prior to the survey, and an average of 38.5 hours per week on sedentary behaviour. An average of 9 hours was spent watching television, and an average of 9 hours was spent using the computer or internet (ABS 2013b).

Risky health behaviours

Young people who engage in risky health behaviours, such as smoking, excessive alcohol consumption and unsafe sex, place themselves at an increased risk of injury, acquiring a sexually transmissible infection, or developing a long-term illness such as coronary heart disease, liver disease or mental illness. As we will see in the following sections, the relationships among all of these risks and consequences are complex.

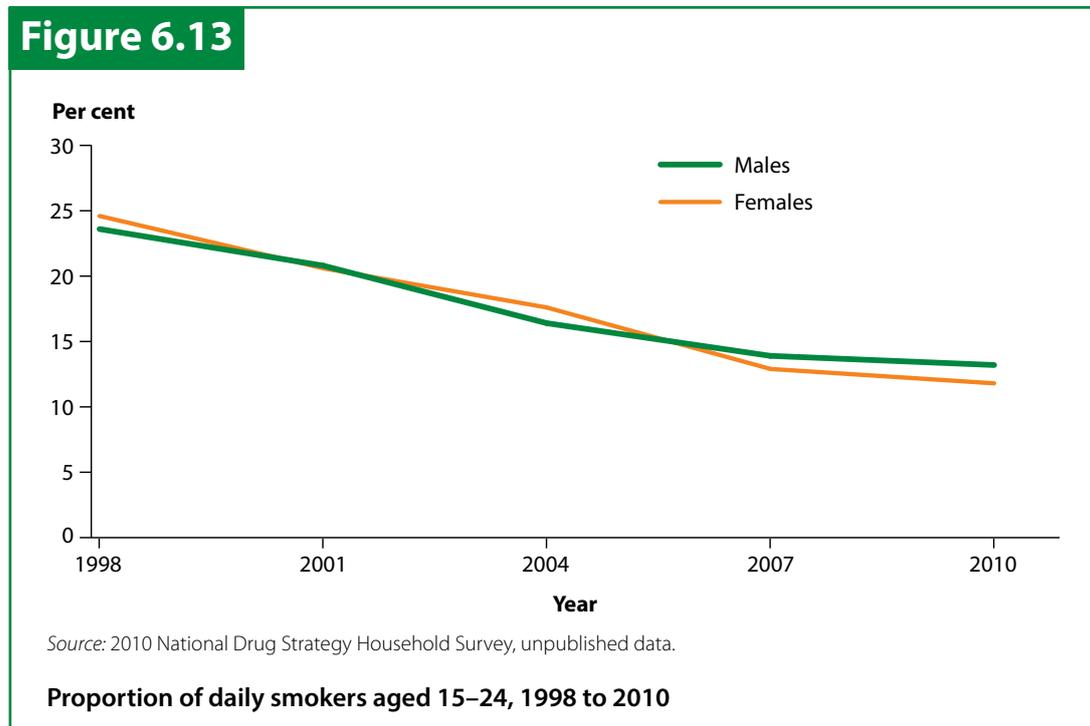
Substance use

Tobacco smoking

Tobacco smoking is a leading cause of preventable death and disease around the world. It is a major cause of coronary heart disease, chronic obstructive pulmonary disease, stroke, peripheral vascular disease and cancer (AIHW 2008, see also Chapter 5 'Tobacco smoking'). The nicotine in tobacco is highly addictive and, as a result, people who begin smoking tobacco at a young age have a high chance of becoming an adult smoker. In 2010, an estimated 398,463 Australians aged 15–24 (13%) were daily smokers (NDSHS 2010, unpublished data). An additional 4% smoked either weekly or less than weekly, 6% were ex-smokers and 77% had never smoked. In 2012–13, 42% of Indigenous Australians aged 18–24 were daily smokers compared with 16% of non-Indigenous Australians (ABS 2013a).

The number of young people who begin to smoke tobacco is gradually declining every year, with the proportion of young smokers in Australia halving between 1998 and 2010, from 24% to 13%. Rates for males dropped from around 25% in 1998 to around 13% in 2010, and for females from around 25% to 12% (Figure 6.13). Between 2007 and 2010, there was no change in the average age at which young people (aged 15–24) first started smoking tobacco (15 years).

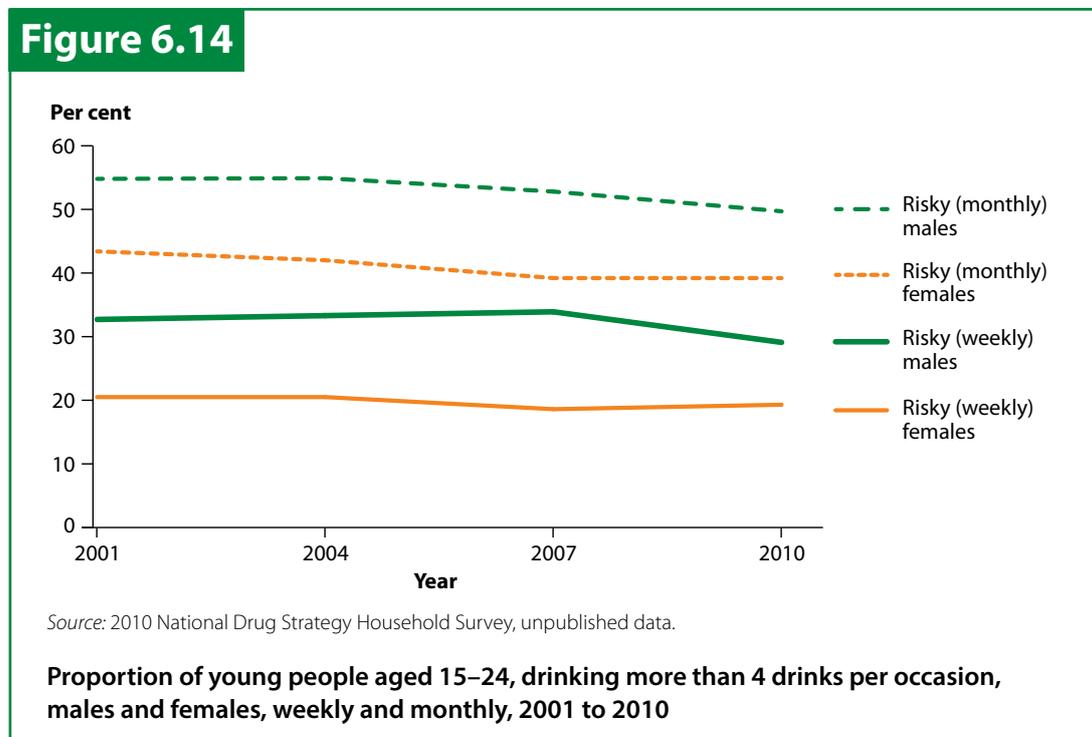
According to results from National Health Surveys conducted in 2001 and 2007–08, and the Australian Health survey conducted in 2011–12, the proportion of young people who had never smoked rose slightly between all 3 surveys. In 2001, less than 60% of people aged 18–24 had never smoked, compared with 64% in 2007–08 and 67% in 2011–12 (ABS 2002, 2010, 2012a).



Alcohol consumption

The risks of long-term damage to brain and body from drinking are higher for young people than for adults, as youths' brains are still developing. Already more vulnerable to risk-taking behaviour, intoxication with alcohol in young people further lowers inhibitions, impairs decision-making, increases the risk of accidental injury, and increases vulnerability to predators or unsafe situations. In addition, a lack of experience with alcohol, and a propensity to binge drink, makes young people more vulnerable to alcohol poisoning.

In 2010, 24% of young people reported that they were involved in drinking sessions that risked alcohol-related injury (more than 4 drinks on a single occasion) at least once a week. The proportion of people who drink at this level has not changed significantly since 2001 (27%). About 45% of young people reported drinking at levels that risked alcohol-related injury at least once a month (see Figure 6.14) (NDSHS, unpublished data).



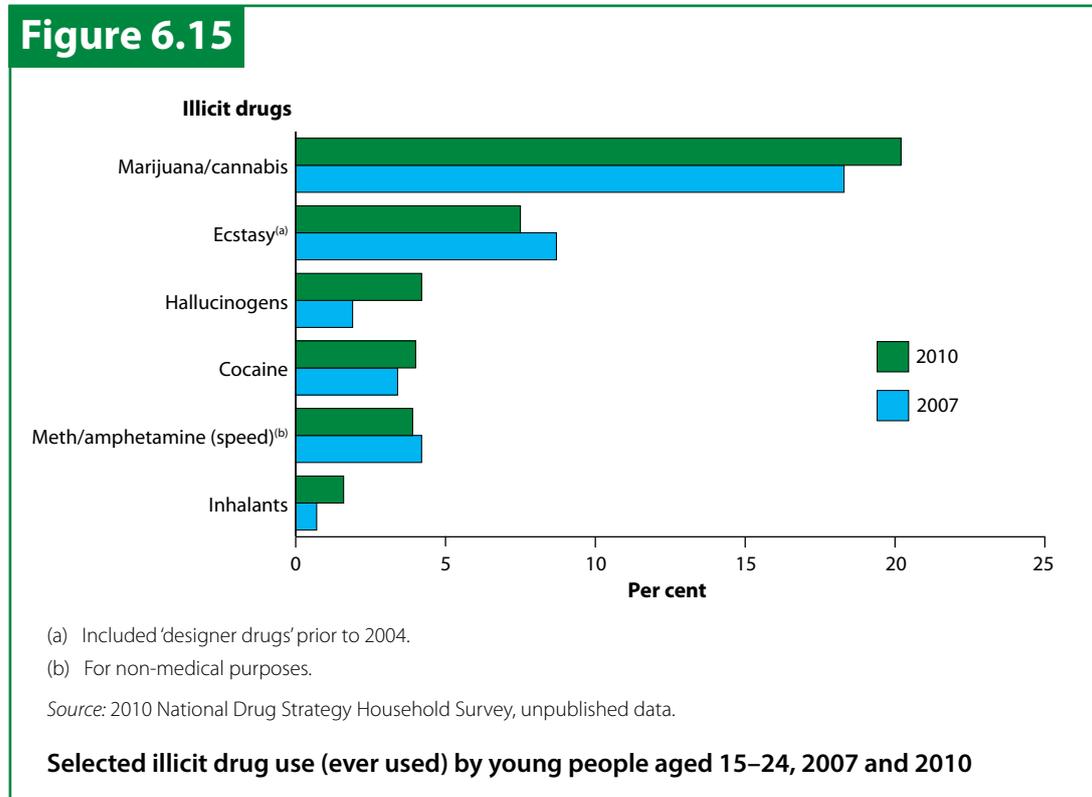
The risk of lifetime harm from alcohol-related disease or injury increases when people consume more than 2 standard drinks per day (NHMRC 2009). Young men were almost twice as likely as young women (30% compared with 17%) to have more than 2 drinks a day, on average.

There was little difference between the proportion of Indigenous youths aged 18–24 (in 2012–13) and non-Indigenous youths (2011–12) reporting drinking at risky levels on a single occasion (more than 4 standard drinks) in the week before being surveyed (68.4% compared with 66.6%).

Similarly, there was no significant difference between the proportion of Indigenous youths aged 18–24 (in 2012–13) and non-Indigenous youths (2011–12) reporting drinking at lifetime risky levels in the week before being surveyed (18% compared with 19%) (ABS 2013a).

Illicit drugs

Young people are more likely than adults to experiment with psychotropic drugs. Depending on the type of drug used, users expose themselves to increased risks of HIV infections and hepatitis C virus (if needles are used and shared), malnutrition, infective endocarditis (leading to damage to the heart valves), mental illness, suicide, self-inflicted injury and accidental overdoses (AIHW 2011b). Because illicit drugs are usually illegal (see also Chapter 5 ‘Illicit drug use—current and future issues’), users also expose themselves to the risks of police charges and a criminal record, which can influence employment opportunities and international travel as an adult.

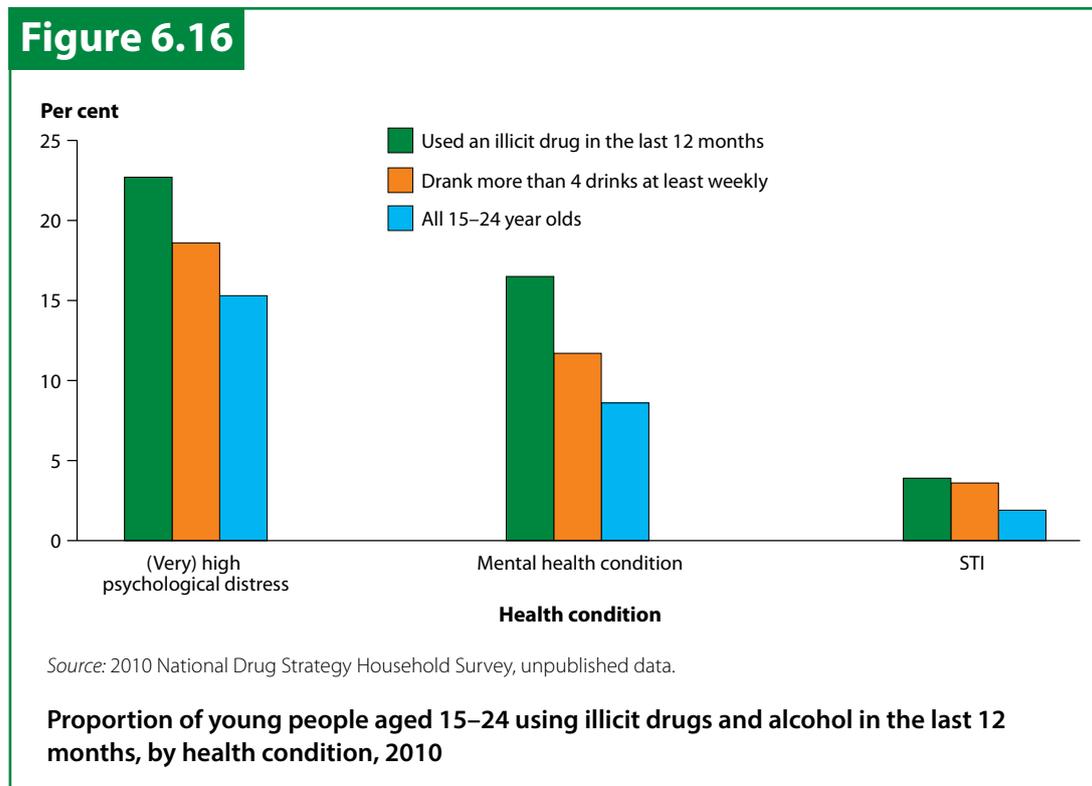


In 2010, more than 1 in 5 young people (23%) aged 15–24 reported they had used a non-pharmaceutical illicit drug at some time in their lives (ever used) (see Figure 6.15). Cannabis use (ever used) increased slightly among younger Australians (15–19 years), from 15% in 2007 to 18% in 2010, though this was still markedly less than in 2001 (27%). Ecstasy use among this younger age group halved between 2007 and 2010 (from 6% to 3%) (NDSHS, unpublished data).

In 2012–13, around 28% of Indigenous 15–24 year olds had used substance(s) in the past 12 months, and a further 15% at some other time in their lives (ABS 2013a). Comparable data for non-Indigenous youth are currently not readily available.

The consequences of alcohol and drug use for youth

In 2010, 23% of youths who had used an illicit drug in the last 12 months and 19% of those who had more than 4 standard alcoholic drinks on 1 occasion at least once a week, reported experiencing ‘high’ or ‘very high’ psychological distress in the previous month. This compares with 15% of 15–24 year olds who did not report alcohol or drug use (Figure 6.16).



Youths who had used an illicit drug in the last 12 months (17%) or who drank more than 4 standard alcoholic drinks on 1 occasion at least once a week (12%), were more likely to have been diagnosed or treated for a mental illness in the previous 12 months than the 15–24 year old population as a whole (9%). The association between mental health issues and the use of drugs and alcohol is complex. In some cases, alcohol and drug use can cause feelings of anxiety and depression, and in other cases people with mental illness may use alcohol and drugs to improve their mood or to deal with stress (Slade et al. 2013).



Alcohol consumption and drug use may also increase risky behaviours such as unsafe sex and needle sharing. Sexually transmissible infections (STIs) were twice as prevalent among those who had used an illicit drug in the last 12 months or who reported having consumed more than 4 standard drinks on 1 occasion at least once a week (4% respectively compared with 2% of all 15–24 year olds) (Figure 6.16).

Alcohol consumption and drug use may also affect young people's work and education activities. In 2010, over 1 in 10 15–24 year olds (11%) who consumed more than 4 drinks on 1 occasion at least once a month had missed attendance at work, university or school in the previous 3 months because of their alcohol use. Five per cent of those who used an illicit drug in last 12 months had similarly missed attendance at work, university or school because of their drug use in the previous 3 months.

Drinking exposes youths to increased risks of injury or death in a motor vehicle accident, or a drink-driving charge, with 18% of 20–24 year olds and 6% of 15–19 year olds reporting driving a motor vehicle while under the influence of alcohol in 2010. For the same age groups, 8% of 20–24 and 4% of 15–19 year olds had driven while under the influence of an illicit drug. Around 47% of 18–19 year olds were put in fear or were the victims of alcohol-related verbal and physical abuse (AIHW 2011a).

Unsafe sex and sexually transmissible infections

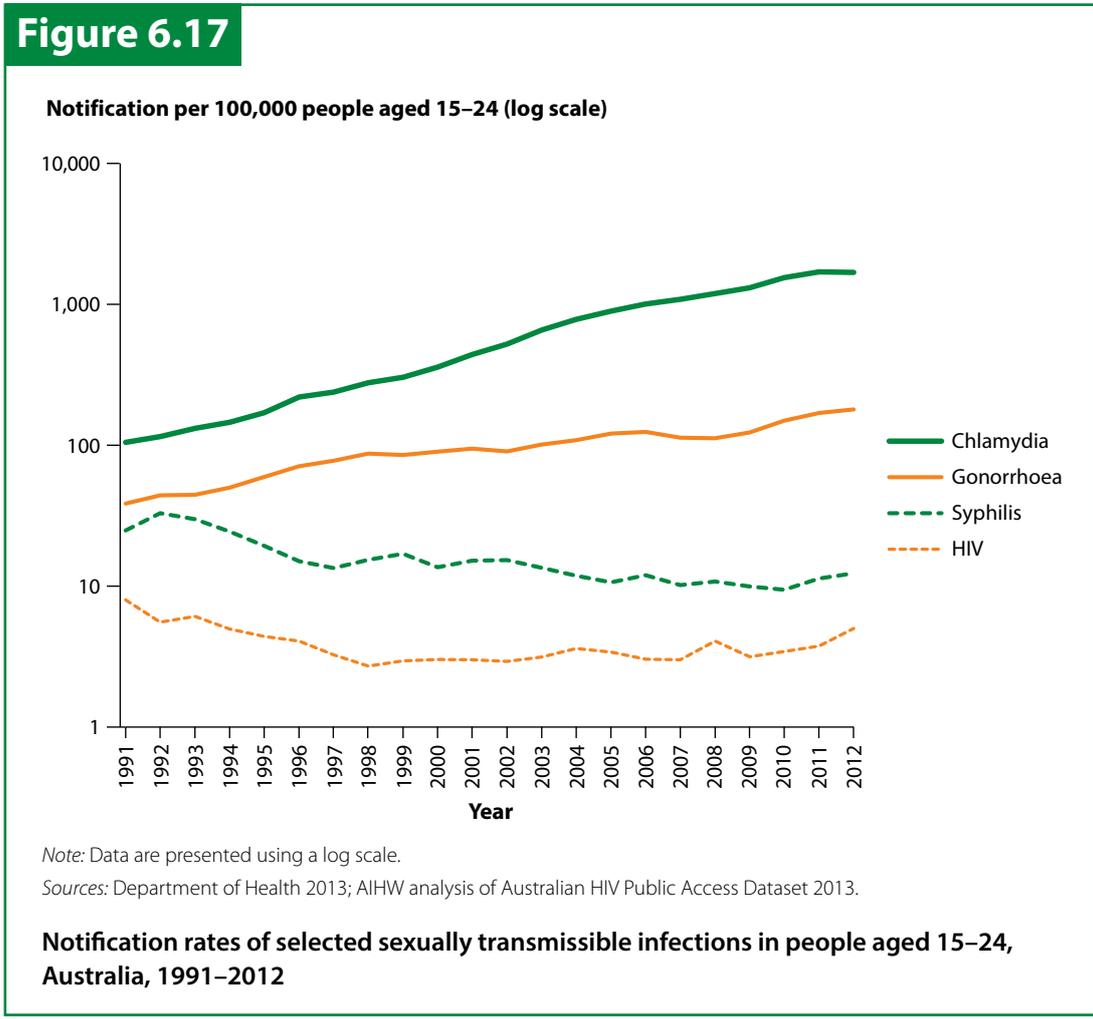
Sexual development is a normal part of young adulthood; however, not all young Australians practise safe sex (Smith et al. 2009). Sexually transmissible infections can cause significant long-term health problems and are a major public health concern (DoHA 2010).

In 2012, there were 57,119 notifications of chlamydia, gonorrhoea, syphilis and donovanosis among 15–24 year olds—a rate of 1,853 notifications per 100,000 young people (Department of Health 2013). More than half (around 57%) of all sexually transmissible infections notified in Australia were among 15–24 year olds. Chlamydia was the most commonly notified infection in this age group, accounting for about 90% of these notifications.

From 1991 to 2012, chlamydia notification rates increased over tenfold from 104 to 1,663 notifications per 100,000 young people. Increased testing may account for some of the increase (AIHW 2011b). Gonorrhoea notification rates also rose (from 38 to 178 per 100,000). In contrast, syphilis notification rates fell between 1991 and 2005 (from 25 to 11 per 100,000), and have remained relatively stable since (12 per 100,000 in 2012) (Figure 6.17).

In 2012, there were 154 HIV notifications for 15–24 year olds, a rate of 5 per 100,000 young people, higher than the 3 per 100,000 in 2001 (AIHW analysis of Australian HIV Public Access Dataset).

One way of avoiding sexually transmitted infections is the use of condoms, which is also effective in preventing unwanted pregnancies. But in 2008, a survey reporting on sexually active students found only an estimated two-thirds of students reported using condoms at their last sexual encounter. Half of students reported using the contraceptive pill, 10% used the withdrawal method to avoid pregnancies, and 8% the morning after pill (some students reporting using more than 1 form of contraceptive). In the same survey, only half (51%) of sexually active young people said they had always used a condom in the previous 12 months, and 43% said they sometimes used one (Smith et al. 2009).



Over the last 10 years rates of births to teenage girls have remained stable. In 2012, the rate of women aged 15–19 giving birth was 16 births per 1,000 women compared with 17 in 2002 (ABS 2013d). However, little is known nationally about the total number of pregnancies to teenage mothers as the number of pregnancy terminations is not known.

Injuries in youth

In adolescence and early adulthood, young people tend to engage in more risky behaviours, many of which can result in injury. These include risky driving and intentional injuries such as self-harm, suicide and assault (AIHW 2011b). Injuries are often preventable, and can have a major impact on the health of young people. Depending upon their severity, injuries can result in time off school or work, hospitalisation, a long-term condition, disability, or death. Information on the prevalence of injury that does not result in hospitalisation is not collected in Australia, so hospitalisations data must be used to present a picture of injury to Australia's youth.

Hospitalisation usually means an injury is serious; but because some injuries result in more than 1 stay in hospital, hospitalisations probably exceed the number of injuries.

In 2011–12, there were almost 604,000 hospitalisations due to injury within Australia, with 15–24 year olds accounting for 14% of these hospitalisations—equivalent to their proportion of the population (14% at 30 June 2011). Males in this age group were more than twice as likely to be hospitalised as females. Injury hospitalisations related to poisonings by pharmaceuticals and by alcohol, were also high among young people (AIHW: Pointer 2013).

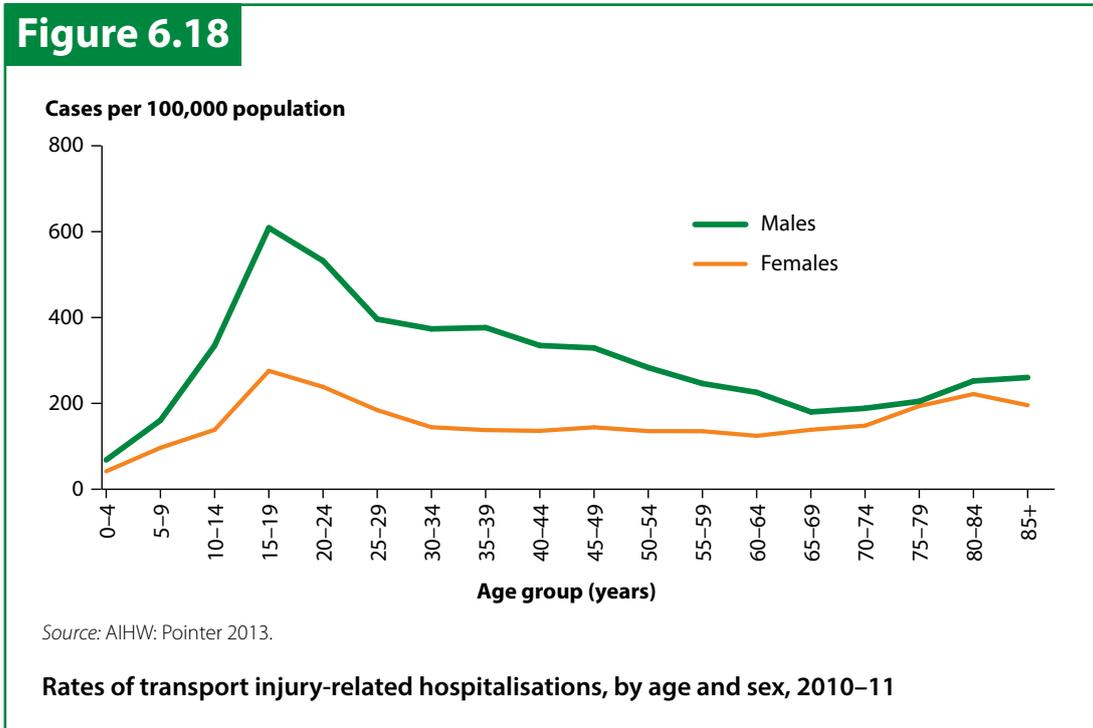
Accidental injury and death

Road traffic accidents

In 2010–11, hospitalised injuries from land transport accidents were more common for males, especially for teenagers and young adults (see Figure 6.18). Injuries for young males aged 15–19 (609 per 100,000) were more than double those for young females (276 per 100,000) and almost double those for 45–49 year old males (329 per 100,000) (AIHW: Pointer 2013). Transport injury rates for Aboriginal and Torres Strait Islander young males (15–19 years) were higher than for non-Indigenous young males (809 and 614 per 100,000 population respectively).

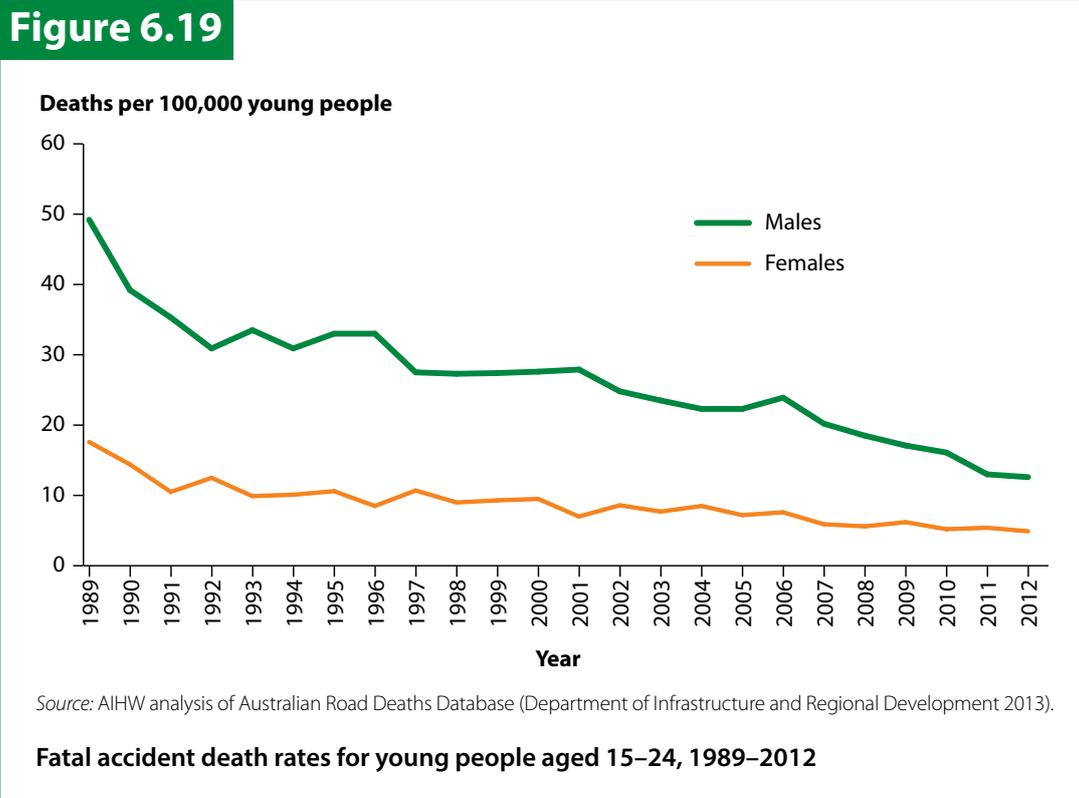
Young men are significantly more likely than the rest of the population, including young women, to be killed or injured in a motor vehicle accident. In 2012, young males accounted for three-quarters of road transport accident deaths involving young people, with death rates over twice as high among males as females (13 and 5 per 100,000 respectively) (Figure 6.19). In 2012, almost half (47%) of 15–24 year olds killed in a vehicle accident were the driver; around 28% were passengers. The rest were motorcycle riders (13%), pedestrians (9%) or cyclists (0.7%) (Department of Infrastructure and Regional Development 2013).

Young people differ from the general population in that their fatal vehicle accidents occur more often at weekends or at night. Age and inexperience separately or combined are associated with the higher death rate as well as risky driving behaviour, including speeding, driving when fatigued, and driving under the influence of alcohol or drugs (AIHW 2011b; BITRE 2013).



Overall (all ages) injury and death rates from road accidents are slowly falling and fewer deaths of young people are part of this decline. In 2012, there were 272 road deaths for the 15–24 age group, a rate of 9 per 100,000, which is a substantial fall from 34 per 100,000 rate of 1989 (when there were 928 deaths) (Australian Road Deaths Database). The decline is the collective result of a range of factors, including better roads, safer vehicles, a legal requirement to wear seat belts and random alcohol and drug testing of drivers.

For the period 2005–06 to 2009–10, fatal land transport injury rates for Indigenous young people tended to be higher than for other young people. The greatest disparity between Indigenous and non-Indigenous young people was among 15–19 year old males (35.2 compared with 16.6 per 100,000 population) (AIHW: Henley & Harrison 2013). This may be explained, in part, by the fact that more Indigenous people live in *Remote* and *Very remote* areas where local factors can include greater distances travelled, higher speed limits, lack of public transport, and poor roads (Thomson et al. 2009).



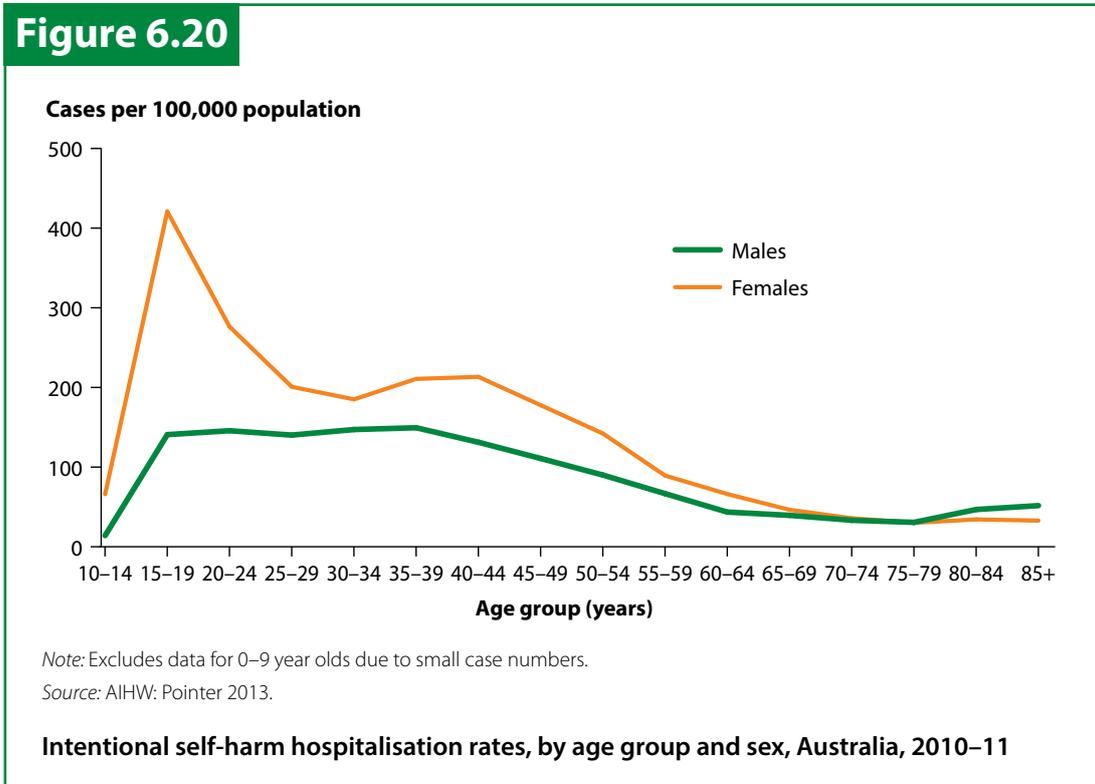
Intentional injuries and death

Self-harm

Intentional injury, including attempted suicide, is a substantial cause of hospitalisations in young people. In 2010–11, 26,000 people in Australia were hospitalised for intentional self-harm and, of these, 29% were aged 15–24. Young women aged 15–19 had hospitalisation rates for self-injury almost 3 times those for young men (421 and 141 cases per 100,000 respectively) (AIHW: Pointer 2013) (Figure 6.20).

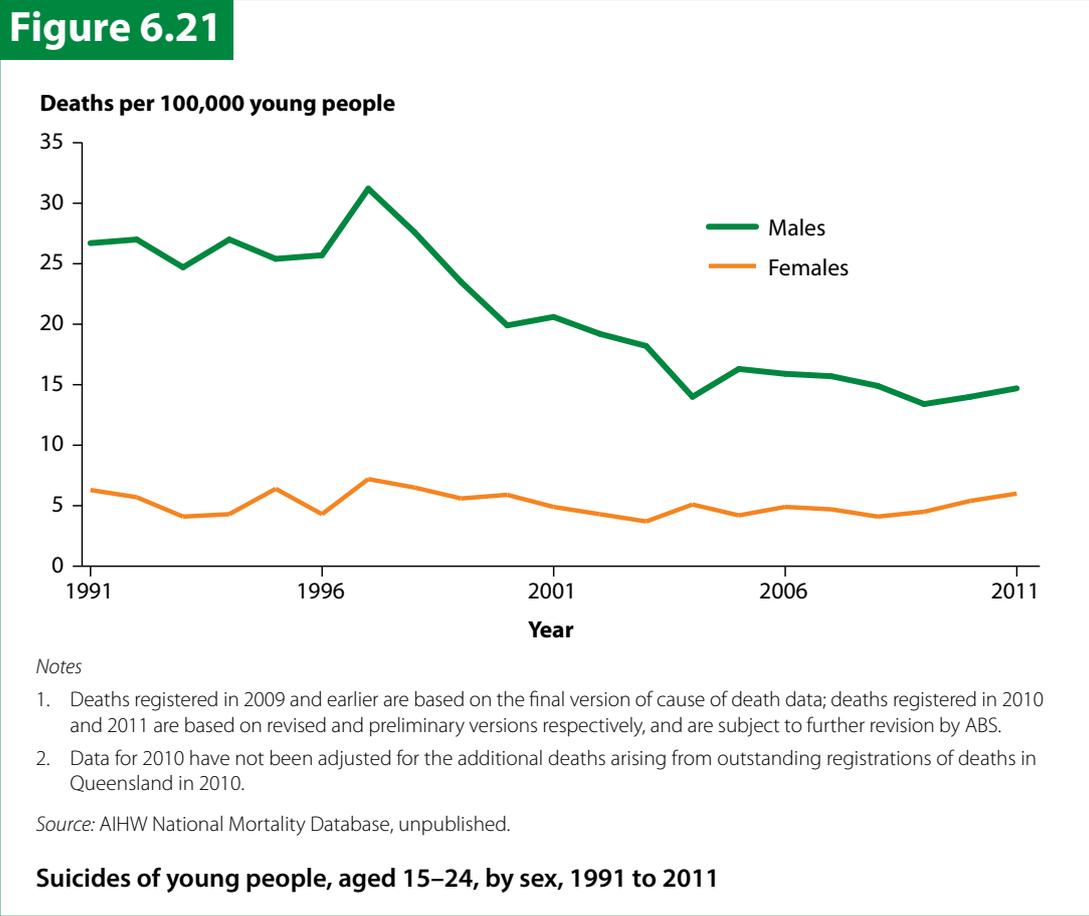
Suicides

In 2011, suicide was the most common cause of death among young people aged 15–24—there were 321 deaths in that year (26% of deaths in this age group), at a rate of 11 per 100,000 population. Young men committed suicide 2.5 times as often as young women. Suicide rates rose from 1991 to 1997 (from 16.7 to 19.4 per 100,000), then fell to 2004 (9.6 per 100,000) and have remained relatively stable since (Figure 6.21).



Between 2001 and 2010, suicide rates for Indigenous young people were higher than for non-Indigenous young people, particularly in the 15-19 age group. Rates for Indigenous females in this age group were 5.9 times those of non-Indigenous females, while for males the corresponding rate ratio was 4.4 (ABS 2012b).

Helpline services available to assist young people at risk of suicide include: Lifeline Australia: 13 11 14; Kids Helpline: 1800 55 1800; Suicide Call Back Service: 1300 659 467.



Box 6.4**Intentional self-harm and suicide deaths—data issues****Determining intentional self-harm**

According to inclusion notes in the International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM), cases should be assigned codes in the range X60–X84 if they were purposely self-inflicted poisoning or injury, suicide, or attempted suicide (NCCH 2010). Determining whether an injury is due to intentional self-harm is not always straightforward. Cases may appear to be intentional self-harm, but inconclusiveness of available information may preclude them being coded as such. In this situation, the case can be coded to an ‘undetermined intent’ category (for example, ‘Y30 Falling, jumping or pushed from a high place, undetermined intent’ or ‘Y32 Crashing of motor vehicle, undetermined intent’).

Some patients may choose not to disclose that their injuries resulted from intentional self-harm, or may be unable to do so due to the nature of the injuries, or because their motives were ambiguous. In very young children, ascertaining whether an injury was due to intentional self-harm can be difficult and may involve a parent or caregiver’s perception of the intent. Ability to form an intention to inflict self-harm and to understand the implications of doing so requires a degree of maturation that is absent in infancy and early childhood. The age at which self-inflicted acts can be interpreted as intentional self-harm is not well-defined and is the subject of debate. Such sources of uncertainty about the assignment of intent limit the certainty of any estimates of intentional self-harm based on routine hospital data.

Mortality data and suicide deaths

Since 2006, cause of death mortality data are revised for coroner-certified deaths 12 and 24 months after the initial release of data to include more complete cause of death information. This process results in 3 versions of data for each reference year: a preliminary version (the first release of data), a revised version (with open or recently closed coroner-certified cases revised 12 months after the preliminary release) and a final version (with the remaining open or recently closed coroner-certified cases revised 24 months after the preliminary data release). The revisions process mainly affects deaths due to external causes, and deaths from suicide in particular. The data reported here includes revised data for 2010 and preliminary data for 2011.

Another factor to consider with suicide statistics is how they can be affected by aspects of the coroner system (AIHW 2009). In some instances, it may take a long time for a coroner to decide that a case was suicide, and in the meantime the case is not recorded as such. The revisions process described above was implemented by the ABS to enable cases which took a long time to finalise to be coded using the coroner’s final decision. Also, the way that coroners decide a case is suicide, and the way they record it, may also mean that some suicides are not recorded as such in official statistics. For example, if no suicide note was found, one coroner might find that a self-inflicted hanging was of undetermined intent, whereas another coroner might find it to be suicide regardless of the presence of a note. Coroners may also be reluctant to determine that a child or young person intended to commit suicide due to the difficulty in establishing the intent of the action in young people (ABS 2011).

What is missing from the picture?

Adolescence is the stage in life when risk behaviours begin and may continue into adulthood and later life. This period offers opportunities for health gains through prevention and early intervention. However, little is known, for example, about young women's preconception health behaviours. Also, the changing shape of adolescence and early adulthood as a result of influences such as social networking and the digital media is not known.

More comprehensive data on suicides and attempted suicides would enable better planning of support, prevention and early intervention services. The number of suicide-related contacts by ambulance services, mental health crisis teams and the police is not known, nor what services they provided.

The limited data available on eating disorders also highlights the need for regular data monitoring at a national level for these conditions. A recent report sponsored by the Butterfly Foundation recommended that this could be done by including eating disorder questions in the Australian Health Survey, including binge eating disorder as a category in non-hospital treatment data, and including eating disorders as a possible cause for seeking financial support in welfare data (Deloitte Access Economics 2012).

Where do I go for more information?

More information on youth health is available at www.aihw.gov.au/youth-health-and-wellbeing. The reports *Young Australians: their health and wellbeing*, *2010 National Drug Strategy Household Survey* and other recent publications are available for free download.

References

- ABS (Australian Bureau of Statistics) 2002. National Health Survey: persons aged 18 years and over: selected risk status by ASGC remoteness area 2001. ABS cat. no. 4364.0. Canberra: ABS.
- ABS 2008. National Survey of Mental Health and Wellbeing: summary of results, 2007. ABS cat. no. 4326.0. Canberra: ABS.
- ABS 2010. National Health Survey: summary of results, 2007–08 (Reissue). ABS cat. no. 4364.0. Canberra: ABS.
- ABS 2011. Causes of death, Australia, 2011. ABS cat. no. 3303.0. Canberra: ABS.
- ABS 2012a. Australian Health Survey: first results, 2011–12. ABS cat. no. 4364.0.55.001. Canberra: ABS.
- ABS 2012b. Suicides, Australia 2010. ABS cat. no. 3309.0. Canberra: ABS.
- ABS 2013. Australian Health Survey: 2011–12. Canberra: ABS.
- ABS 2013a. Australian Aboriginal and Torres Strait Islander Health Survey: first results, Australia, 2012–13. ABS cat. no. 4727.0.55.001. Canberra: ABS.
- ABS 2013b. Australian Health Survey: physical activity, 2011–12, Australia. ABS cat. no. 4364.0.55.004. Canberra: ABS.
- ABS 2013c. Australian Health Survey: updated results, 2011–12. ABS cat. no. 4364.0.55.003. Canberra: ABS.
- ABS 2013d. Births, Australia, 2012. ABS cat. no. 3301.0. Canberra: ABS.
- AIHW (Australian Institute of Health and Welfare) 2008. Making progress: the health, development and wellbeing of Australia's children and young people. Cat. no. PHE 104. Canberra: AIHW.

- AIHW 2011a. 2010 National Drug Strategy Household Survey report. Drug statistics series no. 25. Cat. no. PHE 145. Canberra: AIHW.
- AIHW 2011b. Young Australians: their health and wellbeing 2011. Cat. no. PHE 140. Canberra: AIHW.
- AIHW 2012a. Australia's food & nutrition. Cat. no. PHE 163. Canberra: AIHW.
- AIHW 2012b. Trends in serious injury due to land transport accidents, Australia 2000–01 to 2008–09. Injury research and statistics series no. 66. Cat. no. INJCAT 142. Canberra: AIHW.
- AIHW 2013a. Australian hospital statistics 2011–12. Health services series no. 50. Cat. no. HSE 134. Canberra: AIHW.
- AIHW 2013b. The health of Australia's males: from birth to young adulthood (0–24 years). Cat. no. PHE 168. Canberra: AIHW.
- AIHW 2014a. Incidence of insulin-treated diabetes in Australia, 2000–2011. Cat. no. 66. Canberra: AIHW.
- AIHW 2014b. Type 2 diabetes in Australia's children and young people: a working paper. Diabetes series no. 21. Cat. no. CVD 64. Canberra: AIHW.
- AIHW: Henley G & Harrison JE 2013. Injury of Aboriginal and Torres Strait Islander people due to transport, 2005–06 to 2009–10. Injury research and statistics series no. 85. Cat. no. INJCAT 161. Canberra: AIHW.
- AIHW: Pointer S 2013. Trends in hospitalised injury, Australia: 1999–00 to 2010–11. Injury research and statistics series no. 86. Cat. no. INJCAT162. Canberra: AIHW.
- BITRE (Bureau of Infrastructure, Transport and Regional Economics) 2013. Young adult road safety: a statistical picture. Information sheet 51. Canberra: BITRE.
- Deloitte Access Economics 2012. Paying the price: the economic and social impact of eating disorders in Australia. Sydney: The Butterfly Foundation.
- Department of Health (2013). National Notifiable Diseases Surveillance System, customised report. Canberra: Department of Health.
- Department of Infrastructure and Regional Development 2013. Australian Road Deaths Database. Viewed 10 November 2013, <http://www.bitre.gov.au/statistics/safety/fatal_road_crash_database.aspx>.
- FYA (Foundation for Young Australians) 2013. How young people are faring 2013: the national report on the learning and earning of young Australians. Melbourne: FYA.
- Kirby Institute 2014. 2013 Australian HIV public access dataset. Darlinghurst: Kirby Institute, Viewed 25 November 2013, <<http://www.kirby.unsw.edu.au/surveillance/2013-australian-hiv-public-access-dataset>>.
- NCCH (National Centre for Classification in Health) 2010. The international statistical classification of diseases and related health problems, 10th revision, Australian modification (ICD-10-AM), Australian Classification of Health Interventions (ACHI) and Australian Coding Standards (ACS), 7th edn. Sydney: University of Sydney.
- NHMRC (National Health and Medical Research Council) 2009. Australian guidelines to reduce health risks from drinking alcohol. Canberra: NHMRC. Viewed 11 March 2014, <<https://www.nhmrc.gov.au/guidelines/publications/ds10>>.
- NIMH (National Institute of Mental Health) 2001. Teenage brain: a work in progress. NIH publication no. 01–4929. NIMH.
- NPHP (National Public Health Partnership) 2004. The National Injury Prevention and Safety Promotion Plan: 2004–2014. Canberra: NPHP.
- Sawyer MG, Arney FM, Baghurst PA, Clark JJ, Graetz BW, Kosky RJ et al. 2000. Mental health of young people in Australia. Canberra: Commonwealth Department of Health and Aged Care.

- 
- Sawyer S, Patton G 2011. Why adolescent health matters. Health 2011. Albert Park: Future Leaders. Viewed 12 March 2014, <<http://www.futureleaders.com.au/publications/index.php>>.
- Slade T, McEvoy PM, Chapman C, Grove R & Teesson M 2013. Onset and temporal sequencing of lifetime anxiety, mood and substance use disorders in the general population. *Epidemiology and Psychiatric Sciences*. Available on CJO 2013 doi:10.1017/S2045796013000577.
- Smith A, Agius P, Mitchell A, Barrett C, Pitts M 2009. Secondary students and sexual health 2008. Melbourne: Australian Research Centre in Sex, Health & Society.
- Thomson N, Krom I, Ride K 2009. Summary of road safety among Indigenous peoples. Mount Lawley, WA: Australian Indigenous HealthInfoNet 2013. Viewed 20 February 2013, <<http://www.healthinfonet.ecu.edu.au/related-issues/road-safety/reviews/our-review>>.