Adolescence (13-19 years)

This section focuses on adolescents (13—19 year olds). Teenagers are in transition between childhood and adulthood, and their increasing independence brings about new challenges and risks. This results in marked differences in patterns of morbidity and mortality for adolescents compared with younger children. They are more likely to engage in risky behaviours (such as substance use, dangerous driving and unsafe sexual practices), leading to high rates of violence and injury among young people. Long-term health conditions and associated risk factors (such as mental health disorders, chronic and communicable diseases, and overweight and obesity) also emerge during this period and may persist into adulthood.

Secondary and post-school education, a good transition from school to work, no or limited exposure to or participation in criminal activities, preparation for parenthood, and economic and social participation are key factors contributing to the wellbeing of young adults.

The following table presents national data for each of the measures of the four indicator topics relating to health and key health risk factors and for each of the three indicators related to wellbeing (including education). Where time series data has been referred to on an indicator page, the direction of the recent trend is shown in the table.

Indicator	Measure	Value	Trend
Injury and poisoning	Total hospitalisations due to injury and poisoning per 100,000 13–19 year olds	2,221	×
	Hospitalisations due to transport accidents, per 100,000 13–19 year olds	490	×
	Hospitalisations due to falls, per 100,000 13–19 year olds	386	~
	Hospitalisations due to intentional self-harm, per 100,000 13–19 year olds	197	×
	Hospitalisations due to assault, per 100,000 13–19 year olds	180	×
Mental health	Percentage of 13–19 year olds reporting mental or behavioural problems	10	
	Total hospital bed days, per 100,000 population for mental and behavioural problems	5,819	\checkmark
	Hospital bed days, per 100,000 population for schizophrenia and related disorders	1,224	\checkmark
	Hospital bed days, per 100,000 population for substance use-related disorders	515	\checkmark
	Hospital bed days, per 100,000 population for mood disorders	1,503	×
	Hospital bed days, per 100,000 population for behavioural syndromes	1,299	×
Overweight and obesity	Percentage of 15–19 year olds who were obese	5	×
	Percentage of 15–19 year olds who were overweight but not obese	18	×
Substance use	Percentage of 14–19 year olds who are current smokers	10	✓
	Percentage of 14–19 year olds at risk of long-term harm to their health from alcohol	9	✓
	Percentage of 14–19 year olds at risk of short-term harm to their health from alcohol	26	\checkmark
	Percentage of 14–19 year olds who had used illicit drugs in the past 12 months	17	✓
	Percentage of 14—19 year olds who had been the victim of alcohol-related verbal abuse in the past 12 months	28	
	Percentage of 14—19 year olds who had been the victim of alcohol-related physical abuse in the past 12 months	7	
	Percentage of 14–19 year olds who had been the victim of other drug-related verbal abuse in the past 12 months	10	
	Percentage of 14–19 year olds who had been the victim of other drug-related physical abuse in the past 12 months	3	
Year 12 retention & completion	Apparent retention rate to Year 12 (%)	74	~
	Percentage of 19 year olds who have completed Year 12	74	
Youth participation	Percentage of 15–19 year olds who are not engaged in education or employment	7	~
	Percentage of 15–19 year olds in the labour force who were unemployed	13	\checkmark
	Percentage of 15–19 year olds in the labour force who were underemployed	10	\checkmark
Crime	Persons aged 15—19 years who were victims of robbery, per 100,000 population	270	
	Persons aged 15—19 years who were victims of kidnapping or abduction, per 100,000 population	10	
	Percentage of young people aged 13—19 years under juvenile justice supervision	0.6	✓

Key: ✓ = favourable trend; 🗴 = unfavourable trend; ~ = no change or clear trend; . . = no trend data presented.

Measure: Injury hospitalisations for 13–19 year olds due to selected causes, per 100,000 population

Increasing responsibility for decision making in adolescence creates more opportunities to engage in risky behaviours. This independence occurs simultaneously with exposure to alcohol and other drugs, and the development of new skills, such as driving and job skills, at a time when peer acceptance is important. Young people may experiment with illicit substances and alcohol, which can make them more prone to certain types of injuries, such as falls, transport accidents, accidental poisoning and assault.⁸⁸

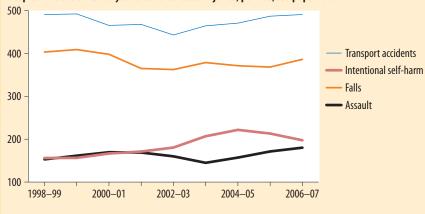
Injury (including poisoning) accounts for 18% of the burden of disease among 15–24 year olds—the second highest contributor after mental disorders⁸⁹. It is the leading cause of death (see also *Mortality*, p.7) and the third leading cause of hospitalisation in this age group⁸⁸ and can result in significant disability. In 2003, more than 120,000 Australians had a disability where their main disabling condition was caused by an injury that occurred before the age of 20.⁶³ Reducing the number and severity of injuries among adolescents and young adults is therefore key to preventive health initiatives.

Injuries may be caused by a diverse range of factors, including transport accidents, falls from heights or during sport, assault and intentional self-harm. Consequently, injury prevention strategies intersect with initiatives in the areas of community safety, violence reduction and mental health care.

Injury prevention and control has been a National Health Priority Area since 1986. A key priority of the National Injury Prevention and Safety Promotion Plan 2004–2014 is to create a positive safety culture and a safe environment, particularly for children and youth.⁹⁰

- 45,000 injury hospitalisations for teenagers in 2006–07 (2,221 per 100,000 population, 7% increase since 1998–99). Around one in five were caused by transport accidents (mostly motor vehicle accidents) and one in six by falls.
- ► Hospitalisation rates have increased for assault (by 18%) and intentional self-harm (27% increase—increase much greater for females (33%) than males (9%)) since 1998–99.
- ► Transport accident hospitalisation rate fell by 10% (1998–99 to 2002–03), but has since increased.

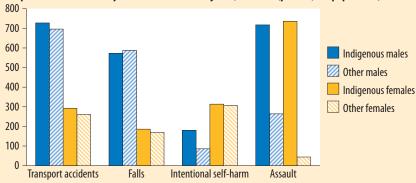
Hospitalisations of 13-19 year olds for selected injuries, per 100,000 population



Note: See Berry & Harrison 2007⁶⁴ for details of injury classifications from hospital morbidity data. Source: AIHW National Hospital Morbidity Database.

- ➤ Young males were 3—4 times as likely as young females to be hospitalised for transport accidents, falls and assault, while females were 3 times as likely to be hospitalised for intentional self-harm.
- Overall hospitalisation rate for Indigenous teenagers was 30% higher than for other teenagers, largely due to the assault hospitalisation rate being 5 times as high among Indigenous teenagers.

Hospitalisations of 13–19 year olds for selected injuries, 2006–07 (per 100,000 population)



Notes

Due to data quality issues with Indigenous data, this figure is based on hospitalisations in NSW, Vic, Qld, WA and SA, and public hospitals in NT.
 See Berry & Harrison 2007⁶⁴ for details of injury classifications from hospital morbidity data.
 Source: AIHW National Hospital Morbidity Database.

- Males had higher rates of hospitalisations than females due to transport accidents, falls and assault, while females had higher rates of hospitalisations due to intentional self-harm.
- ► Hospitalisation rates are increasing for assault and intentional self-harm.
- Injury hospitalisation rates are higher for Indigenous youth, young people living in remote or very remote areas and those living in areas of the greatest socioeconomic disadvantage, particularly for assault and intentional self-harm.⁸⁸



Mental health

Measure 1: Percentage of 15–19 year olds who report having a mental or behavioural problem

Measure 2: Hospital bed days per 100,000 population for mental and behavioural disorders among 13–19 year olds

Mental health disorders are the leading cause of disability among young Australians aged 15–24 years and account for almost 50% of the burden of disease in this age group. More specifically, anxiety and depression contribute 17% of the male disease burden and 32% of the female disease burden.⁸⁹

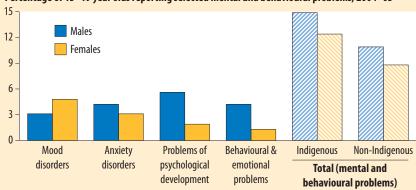
Young people with a mental health disorder are more likely to have lower educational attainment, experience joblessness and have poor physical health. It is not possible to determine causality from these associations, and experiencing adverse situations, especially during youth, may in fact contribute to the development of a mental disorder. The reasons why some people developmental disorders are complex, but a range of possible influences include individual attributes, family and social factors, school context, life events and situations, and community and cultural factors.

Many people living with mental health problems are undiagnosed or do not access specialist services; others manage their condition largely through primary health care. Measures of the extent to which people with mental disorders receive treatment as hospital inpatients and the duration of their hospital stay (bed days) therefore represent the acute care-treated prevalence of mental illness.

Mental health is a National Health Priority Area. The COAG National Action Plan on Mental Health 2006—2011 aims to reduce the prevalence and severity of mental illness and its risk factors.⁹²

- Mental and behavioural problems were reported by 11% of males (100,000 people) and 9% of females (80,000 people) aged 15–19 years in 2004–05.
- Mood disorders were the most common problem for females, while problems of psychological development were most common among males.
- ► The prevalence of mental and behavioural problems was 40% higher among Indigenous teenagers than non-Indigenous teenagers.

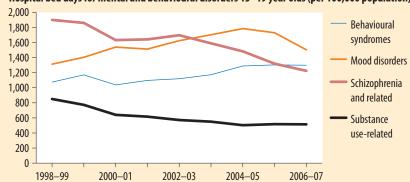
Percentage of 15–19 year olds reporting selected mental and behavioural problems, 2004–05



Source: AIHW analysis of ABS 2004–05 National Health Survey and National Aboriginal and Torres Strait Islander Health Survey, unpublished data.

- ► There were 19,400 hospitalisations for mental and behavioural disorders for 13–19 year olds in 2006–07 (973 per 100,000), with a bed day rate¹ of 5,800 per 100,000 population. The female bed day rate was twice the male rate.
- Female bed day rate was higher for mood disorders and behavioural syndromes such as eating disorders; male rate higher for schizophrenia-type disorders and disorders due to psychoactive substance use.
- ▶ Bed day rate for substance use-related and schizophrenic disorders fell by more than one-third, but rose by 20% for behavioural syndromes (1989–99 to 2006–07). Mood disorder bed day rate for females also increased over this period by 26%.

Hospital bed days for mental and behavioural disorders 13–19 year olds (per 100,000 population)



(a) The selected conditions account for more than three-quarters of bed days due to mental and behavioural disorders among 13–19 year olds. *Note:* Excludes 'long stay' patients (length of stay more than 84 days). *Source:* AIHW National Hospital Morbidity Database.

1 Bed day rate defined as number of days the patient was admitted to hospital for an episode of care, expressed per 100,000 population.

- 1 in 10 Australians aged 15—19 years reported a mental or behavioural problem.
- Reported prevalence and hospital bed day rate for mental and behavioural problems are each 40% higher among Indigenous than non-Indigenous teenagers.
- Male hospital bed day rate for mental and behavioural disorders fell by 28%, but female rate rose by 7% between 1998–99 and 2006–07.

Overweight and obesity

Measure: Percentage of adolescents aged 15-19 years who were overweight or obese

Overweight and obesity in young people are linked to a range of immediate and long-term health problems. In the short term, overweight and obesity affects young people's psychological wellbeing and increases their risk of developing cardiovascular conditions, asthma and Type 2 diabetes. Long-term consequences include adult obesity, increased risk of coronary heart disease, diabetes, some cancers, gall bladder disease, osteoarthritis and endocrine disorders. 1 Negative social consequences of teenage obesity include social isolation and lower educational and income attainment throughout life.93,94

Risk factors associated with obesity in childhood and adolescence include genetic makeup, ethnicity, television viewing, extent and types of physical activity, dietary intake and eating patterns, artificial feeding as infants, and presence of other health conditions.73

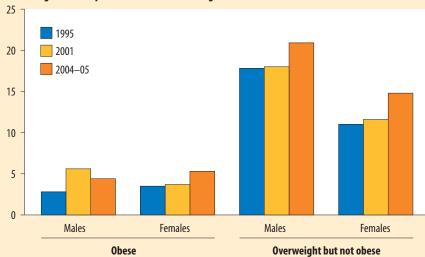
While overweight and obesity accounted for less than 1% of the burden of disease in youth, it contributed 7.5% to the total disease burden in 2003.89 Young people who are overweight or obese are more likely to be obese as adults, therefore reducing youth overweight and obesity is key to early intervention and prevention of chronic disease.

The overweight and obesity data in this section is based on self-reported height and weight, which is less accurate than measured height and weight. For younger children, the overweight and obesity data presented in this report is based on measured height and weight (see p.26), and hence it is not accurate to compare the prevalence of overweight and obesity between these different age groups.

Australian Health Ministers made obesity a National Health Priority Area in 2008.95 The Australian Government has also established the Preventative Health Taskforce, aimed at reducing the burden of chronic disease caused by obesity, tobacco and the excessive consumption of alcohol.⁷⁸ This Taskforce is responsible for the development of a National Obesity Strategy.95

- > 5% of 15–19 year olds (almost 55,000 teenagers) were obese in 2004–05; 18% (200,000 teenagers) were overweight but not obese and the rate was higher among males than females.
- Rates of overweight and obesity have increased significantly since 1995.

Percentage of 15-19 yearolds who were overweight or obese

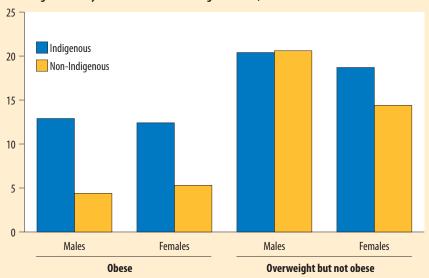


Notes

- 1. For BMI cut-offs for overweight and obese categories, see Cole et al. 2000% (15–17 year olds) and WHO 200097 (18–19 year olds).
- 2. Data based on self-reported height and weight.

 Source: ABS 1995, 2001 and 2004—05 National Health Surveys, unpublished data.
- Indigenous teenagers were 2.6 times as likely to be obese as non-Indigenous teenagers.
- Similar proportions of Indigenous and non-Indigenous teenagers were overweight but not obese.

Percentage of 15-19 year olds who were overweight or obese, 2004-05



- 1. For BMI cut-offs for overweight and obese categories, see Cole et al. 2000% (15–17 year olds) and WHO 200097 (18–19 year olds).
- 2. Data based on self-reported height and weight.

 Source: AlHW analysis of ABS 2004—05 National Health Survey and National Aboriginal and Torres Strait Islander Health Survey, unpublished data.

- ▶ 1 in 20 Australians aged 15–19 years were obese in 2004–05.
- ▶ 18% of 15—19 years olds were overweight but not obese, up from 15% in 1995.
- ▶ Indigenous teenagers were more than twice as likely to be obese as non-Indigenous teenagers in 2004—05.



$\, igtriangle \,$ Substance use

Measure 1: Percentage of 14-19 year olds who consume alcohol at risky or high risk levels for short and long term harm, who smoke tobacco, and who have used an illicit drug recently

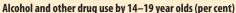
Measure 2: Percentage of 14-19 year olds who have been the victim of an alcohol or other drug-related incident

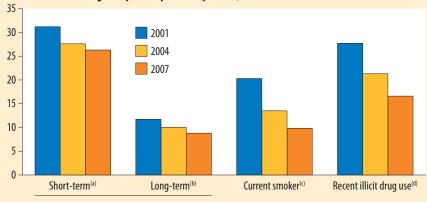
Misuse of alcohol and use of other drugs (including tobacco) by young people can cause immediate and long-term health and social problems. In the short term, it may result in hospitalisations due to acute intoxication and related injuries, dependence, withdrawal symptoms, psychotic disorders and amnesia. In the long term, alcohol and other drug use can lead to depression, infections with blood-borne diseases, damage to the liver, heart and brain, and increased risk of cancers and other serious health conditions.98,99 Drug abuse has also been associated with family and relationship conflict, and legal and financial problems. 100

Many factors can put young people at risk of problematic drug use. Some of these occur before they reach adolescence, such as maternal drug use during pregnancy, early behavioural and emotional problems and early exposure to drugs. 99,100 Other factors include peer antisocial behaviour, poor parental control and supervision, poor family bonding, drug use among family members, low self-esteem, academic failure, leaving school early and poor connection with family, school and community. 100

COAG has identified reducing alcohol and substance abuse and its impact on families, safety and community wellbeing as a priority area for the 2008 forward work-plan. COAG has also acknowledged the importance of tackling alcohol misuse and binge drinking among young people and commissioned the Ministerial Council on Drug Strategy to investigate options to reduce binge drinking.30

- ► Teenage smoking rates have halved (2001–2007) to around 1 in 10 persons for 14–19 year olds; risky alcohol intake and illicit drug use have also reduced.
- ▶ In 2007, one-quarter of teenagers risked short-term harm to their health from alcohol intake and one in ten were at risk of long-term harm. One in six had used an illicit drug recently.

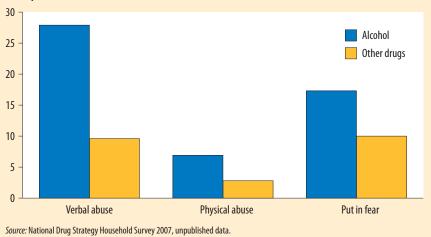




At risk of harm from alcohol

- (a) Persons who drink alcohol at risky or high-risk levels for short-term harm at least monthly.
- (b) Persons who drink alcohol in a pattern that is risky or high risk to their health in the long term.
- (c) Persons who smoke daily, weekly or less than weekly, but have not quit.
- (d) Persons who have used any illicit drug in the past 12 months. Source: National Drug Strategy Household Surveys, 2001, 2004 and 2007.
- ▶ More than one-guarter of 14—19 year olds had been the victim of alcohol-related verbal abuse in a 12-month period, and 7% had experienced alcohol-related physical abuse.
- Being the victim of alcohol-related incidents was more common than incidents related to other drugs.
- Males were more likely than females to have experienced alcohol and other drugrelated verbal or physical abuse, but females were more likely to have been put in fear from alcohol and drug use of others.

Percentage of 14–19 year olds who had been victims of alcohol or other drug-related incidents in the past 12 months, 2007



- Adolescent smoking rates have halved and risky alcohol intake and illicit drug use have also declined since 2001.
- One in four teenagers regularly risk short-term harm to their health from alcohol consumption; 1 in 10 are at risk of long-term harm.
- Almost 300,000 teenagers have felt or experienced threats to their safety through the alcohol use of others.

> Year 12 retention and completion

Measure 1: Number of full-time students who continued to Year 12 as a percentage of those who commenced secondary schooling (apparent retention rate)

Measure 2: Percentage of 19 year olds who have completed Year 12 (completion rate)

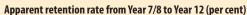
As the number of low-skilled jobs in the employment market decreases, the importance of educational qualifications increases. Early school leavers often have trouble finding stable, full-time employment and tend to work in a narrow range of jobs.¹⁰¹

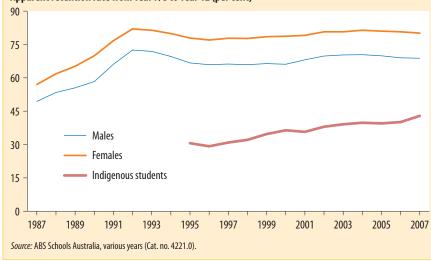
In Australia, individuals with higher levels of education report fewer illnesses and have better mental health than those with lower levels of education. 102 Educational attainment may directly affect health by providing young people with greater knowledge and understanding about health, particularly awareness of health risk and protective factors, or indirectly through its association with typically safe, secure and generally better paid and rewarding employment. These benefits positively influence health-related factors such as stress level, injury risk, diet and ability to acquire medical care.

While the apparent retention rate provides information about the proportion of young people who stay in school, it is not a measure of successful completion of Year 12. Young people who did not finish high school have fewer post-school education, training and employment options, and are more likely to experience unemployment than those who completed Year 12 (see also *Youth participation*, p.35).¹⁰³

COAG has requested Commonwealth and State implementation plans for lifting the Year 12 or the equivalent retention rate to 90 per cent by 2020.9 For Indigenous youth, COAG has committed to at least halve the gap for Year 12 attainment or equivalent attainment rates by 2020.60

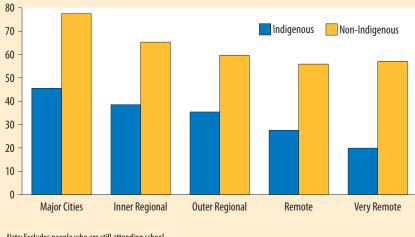
- Overall retention rate more than doubled throughout the 1980s, but has remained steady at 74–75% for the past 5 years.
- Retention to Year 12 is consistently higher for females than for males (80% compared with 69% in 2007).
- Indigenous students are almost half as likely to stay in school until Year 12 (43% retention rate), but the gap is closing.





- Year 12 completion rates among 19 year olds were half as high for Indigenous than non-Indigenous youth (37% compared with 74%) in 2006.
- Indigenous 19 year olds were less likely than non-Indigenous youth to have completed Year 12, regardless of whether they lived in remote, regional or metropolitan Australia.
- Year 12 completion rates were also lower for non-Indigenous 19 year olds in regional and remote areas than in major cities.

Percentage of 19 year olds who had completed Year 12



Note: Excludes people who are still attending school.

- Australia ranked 18th out of 29 OECD countries in high school completion rates for 25–34 year olds in 2006.¹⁰⁵
- Retention rate to Year 12 is much lower for Indigenous students, but the gap has narrowed over the past decade.
- Year 12 completion rates are lower for 19 year olds in regional and remote areas, and Indigenous young people throughout Australia.



> Youth participation

Measure 1: Percentage of 15-19 year olds not engaged in education or employment

Measure 2: Unemployment and underemployment rates for 15-19 year olds

Young people not involved in school or employment may have decreased opportunities to fully participate in society and are considered at risk of social exclusion. Youth inactivity is linked to dependency on parents or social welfare, family problems, substance abuse, physical and sexual abuse, violence and crime. 106,107

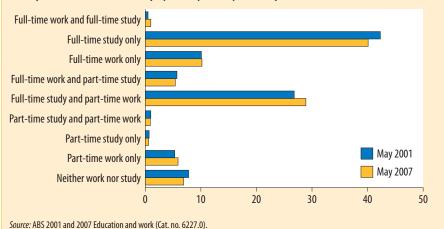
Secure and satisfactory employment offers young people not only financial independence but also a sense of self-control, self-confidence and social contact. In contrast, unemployment, insecure employment and unfavourable working conditions have all been associated with low self-esteem and poor physical and mental health. 108,109 Young people in the labour force are often also participating in education, and while students who are unemployed are not considered to be inactive, many rely on work as a source of income and so face significant financial pressures as a result of unemployment or underemployment.

Underemployed workers, or those with inadequate wages or insufficient number of working hours, may also be at risk of low self-esteem, alcohol abuse and depression.¹¹⁰ Underemployment is also a concern from social and economic perspectives, as it can have a significant detrimental effect on the financial, personal and social lives of young people.

COAG has requested Commonwealth and State implementation plans for improving and expanding vocational and technical education, creating an additional 450,000 training places over the next four years.9 A further 50,000 vocational education and training places for national priority health occupations will be available through the COAG Productivity Places Program. 10 COAG has also committed to lifting the Year 12 or equivalent retention rates (see Year 12 retention and completion, p.34) and halving the gap in employment outcomes between Indigenous and non-Indigenous Australians within a decade.60

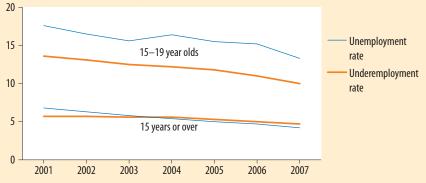
- ▶ 7% of 15–19 year olds were neither working nor studying (96,500 adolescents) in 2007. This proportion has not changed significantly since 2001.
- One in three had more than a full-time load, either full-time study with additional work or full-time work with additional study.

Participation in education and employment by 15-19 year olds (per cent)



- ▶ In September 2007, the unemployment rate of 15–19 year olds was 13.3%—3 times that of all people aged 15 years and over (4.2%).
- ► The youth underemployment rate (10.0%) was more than twice that for the overall labour force (4.7%).
- Youth unemployment and underemployment rates have fallen by a quarter since 2001.

Unemployment and underemployment rates (per cent of the labour force)



- 1. Data are original series (unadjusted) at September each year.
- 2. The underemployment rate is the number of employed persons who want, and are available for, more hours of work than they currently have, as a percentage of the labour force.

Source: Australian Labour Market Statistics July 2008 (ABS Cat. no. 6105.0).

- ► Australia ranked 16th (out of 25 OECD countries) in the percentage of 15—19 year olds not engaged in education or employment in 2006, and 12th (out of 30 OECD countries) in the unemployment rate for 15–19 year olds in 2007. 105,111
- ▶ 7% of 15–19 year olds are neither working nor studying, while a third have more than a full-time load.
- ► 15–19 year olds in the labour force are 3 times as likely to be unemployed and twice as likely to be underemployed as the overall labour force population.
- ► The unemployment rate for Indigenous youth aged 15—24 years was more than twice as high as for other young people in 2006 (22.4% compared to 9.9%).

Measure 1: Number of persons aged 15–19 years who were victims of selected crimes, per 100,000 persons aged 15–19 years

Measure 2: Percentage of persons aged 13–19 years who were under juvenile justice supervision

Young people are vulnerable to becoming victims of crime and becoming involved in criminal activities, and adolescence is the peak period for both being victimised and offending (see also *Crime* in the Childhood section, p.28). Of major concern is that children and young people who are victimised are at greater risk of later victimising others. ¹¹⁴ Being victimised can lead to diminished educational attainment and have wide-ranging effects on socioeconomic attainment in early adulthood, suicidal ideation and behaviour, and depression. ⁴

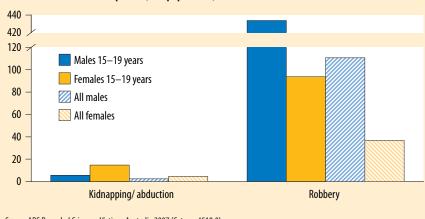
International approaches to crime prevention are increasingly recognising the strong links between youth victimisation and offending. Young people in the criminal justice system represent a particularly disadvantaged population, characterised by high levels of socioeconomic stress, significant physical and mental health needs, and a history of physical abuse and childhood neglect. 115,116,117 Childhood neglect is considered one of the strongest predictors of later youth offending.

Early intervention for young people at risk and effective rehabilitation of those in the juvenile justice system has significant benefits for community safety at large. Research indicates that serious and persistent adult offenders are likely to have been in juvenile detention. 118

The Australian Government has committed to developing a National Child Protection Framework which will focus on preventing abuse through early intervention and better integration of family services. ⁸⁷ COAG has also committed to identify joint reforms and implementation timetables for basic protective security from violence for Indigenous parents and children. ³⁰

- 3,900 15–19 year olds were victims of robbery in 2007, representing one-quarter of all robbery victims.
- The rate for teenage males being robbery victims was 4 times as high as males generally; for teenage females it was 3 times as high.
- The rate of kidnapping/abduction was 3 times as high for young females (15 per 100,000) as young males (6 per 100,000).

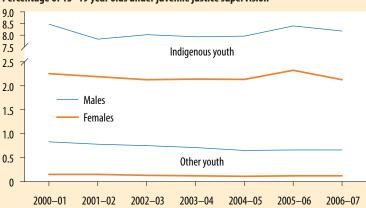
Victims of selected crimes per 100,000 population, 2007



Source: ABS Recorded Crime—Victims, Australia 2007 (Cat. no. 4510.0).

- ▶ 11,900 teenagers (13-19 years) were under juvenile justice supervision in 2006-07 (0.6% of all teenagers).
- ▶ The supervision rate for Indigenous teenagers was 13 times that of other teenagers.
- No change in the Indigenous supervision rate in 6 years, but the rate for other Australian youth fell by 20%.

Percentage of 13–19 year olds under juvenile justice supervision



Notes

1. No data were available for the ACT from 2000—01 to 2002—03, therefore national rates across all years exclude the ACT.

2. Legislation governing the age of persons under the jurisdiction of the juvenile justice system varies between states and territories. Source: AIHW Juvenile Justice National Minimum Data Set.

- ► Teenagers, particularly males, experience high rates of being victims of robbery.
- No national data are available on rates of physical or sexual assault for young people.
- Indigenous teenagers are over-represented in juvenile justice supervision, and there has been no change in the Indigenous supervision rate as observed for other Australian teenagers in recent years.