

Part 3:

Factors influencing health

Part 2 of this report looked at current health status and outcomes of young Australians and, where possible, long-term health trends and the differences in population groups. Part 3 presents information on factors that contribute to young people's health and wellbeing.

As mentioned in Part 2, young Australians are generally healthy. However, there are some key areas of concern, including mental health, chronic diseases such as asthma and diabetes, abuse, neglect and injuries. To a large extent, these are the result of a combination of factors, such as human biology, living environment, and socioeconomic factors, modified by health interventions and other measures. These factors can either raise or lower the level of health in a population or individual and can help explain some of the health differentials that exist in populations. They also provide information required for forming policies and strategies on preventing disease, illness and injury.

Childhood and adolescence are periods of rapid development, and are influential ages for health, health behaviour and overall wellbeing. During this period, it is important to reduce the factors that adversely affect the health of young people and to promote factors that enhance health gains. Current research indicates that much of the disease burden results from a complex interplay of environmental, social, economic and cultural factors in childhood and adolescence, and that their effect is continued well into adult life (AIHW 2005j; CIHI 2005; Eckersley et al. 2006).

Health behaviours of young people, including levels of physical activity, eating habits, substance use (tobacco, alcohol and drugs) and sexual practices are, also important determinants of their current and future health status. Adolescence in particular is an important stage of life, when young people are establishing an identity, autonomy, intimacy and becoming comfortable with their own sexuality. Young people can be heavily influenced by their peers, and social pressures may play a part in their decision to experiment with smoking, alcohol and other drugs, as well as sexual activities. The consequences of young people's behaviour can affect their education, employment, as well as their overall health and wellbeing.

Environmental conditions can influence health both positively and negatively. For example, clean air, food and water and safe human-made environments are beneficial to health and wellbeing, while inadequate housing and exposure to unsafe water and environmental smoking can negatively affect health (AIHW 2006a).

A number of research articles have shown the effect of socioeconomic status on health (for example, Eckersley et al. 2001; Eckersley et al. 2006; Glover et al. 2004; Turrell & Mathers 2001). Current research suggests that as socioeconomic disadvantage increases, there is a parallel increase in mortality, from both avoidable and other causes, and morbidity, as well as changes in behaviours and risk factors that affect health outcomes, such as the level of smoking, exercise and type of diet.

Families and communities make an important contribution to young people's health. Family functioning is an important predictor of academic and behavioural outcomes (Sawyer et al. 2000; Zubrick et al. 1995). Coercive parenting styles, poorer family cohesion and family conflict are associated with increased risks of disruptive behaviour and depressive illness. Children and young people living in low-income families or with parents who have a disability or mental illness can experience poor family functioning. Poor family functioning is associated with increased risks of insecure attachment and worse health outcomes (Wise 2003).

This part of the report provides data on a number of indicators in the following areas that influence the health and wellbeing of young people:

- health behaviours (physical activity, food habits and eating behaviour, sun protection, substance use, sexual behaviour and reproductive health).
- environmental factors (passive smoking, household overcrowding)
- socioeconomic factors (education, employment and income)
- family and community factors (parental education, employment, income, health status, family cohesion, abuse and neglect, homelessness, violence, juvenile justice and imprisonment, volunteering).

3.1 Health behaviours

Young people's health behaviour is an important determinant of both their current and future health status. Health behaviours are modifiable actions taken by young people that affect their health either positively (for example physical activity) or negatively (smoking). Health-related behaviours can impact on health in the short term and/or long term. Youth is a critical time for the development of health behaviours, as the patterns that develop when people are young often continue into adulthood (Dimitrakaki & Tountas 2006; WHO 2004).

Health behaviours that accounted for the greatest burden of disease and injury in Australia in 2003 included tobacco smoking, physical inactivity, alcohol consumption, use of illicit drugs, lack of fruit and vegetables and unsafe sex (AIHW 2006a). Most of this burden is from the long-term effects of these health behaviours, which will affect young people later in life, apart from illicit drugs and alcohol, which are the risk factors accounting for the greatest amount of burden among young people aged 15–24 years (Begg et al. 2007). This section reports on major health-related behaviours, including overweight, physical activity, nutrition, sun protective behaviour, substance use, and sexual and reproductive health behaviour affecting young people today.

Lack of physical activity and poor food habits are frequently cited as being prime contributors to rising obesity levels in society. Sun protection is also an important health behaviour, having a strong link to later skin cancer occurrence.

Illicit and licit drug use can cause both short- and long-term health problems. Those who initiate drug use early are more likely to continue into future illicit and problematic drug use (Loxley et al. 2004). Tobacco smoking is usually established during adolescence, is often a precursor to other drug use and is the leading cause of premature death and illness in the developed world (Tyas & Pederson 1998; WHO 2004). Alcohol use is common in most cultures and is an accepted part of adulthood. However, if misused, it is related to injuries and long-term health problems (WHO 2004). Indicators relating to alcohol and tobacco use among young people are presented, along with the prevalence of the use of a range of other legal and illegal substances that can also cause harmful effects to young people, including marijuana, ecstasy, amphetamines and petrol.

As young people enter into adolescence and experience the changes associated with puberty, sexual health behaviours become an important part of their lives. With the commencement of sexual activities, teen pregnancies and sexually transmitted infections become primary health concerns.

Weight

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 impacts on young people's psychological wellbeing, and increases the risk of developing cardiovascular conditions, asthma and Type 2 diabetes (Alberti et al. 2004; Reilly 2005; Wardle & Cooke 2005). Long-term health consequences include adult obesity, increased rates of coronary heart disease, diabetes, certain cancers, gall bladder disease, osteoarthritis, and endocrine disorders (Lobstein et al. 2004; Reilly 2005). Obesity in adolescence is also associated with social isolation, and lower educational and income attainment throughout life (Christoffel & Ariza 1998; Schwimmer et al. 2003).

Overweight and obesity are measured using the body mass index (BMI), which is the ratio of weight in kilograms to the square of height in metres (kg/m^2). The most recent national data on the prevalence of overweight and obesity in Australian young people based on measured weight and height were from the ABS 1995 National Nutrition Survey (NNS). According to the NNS, 20% of young people aged 12–24 years were overweight and a further 8% were obese.

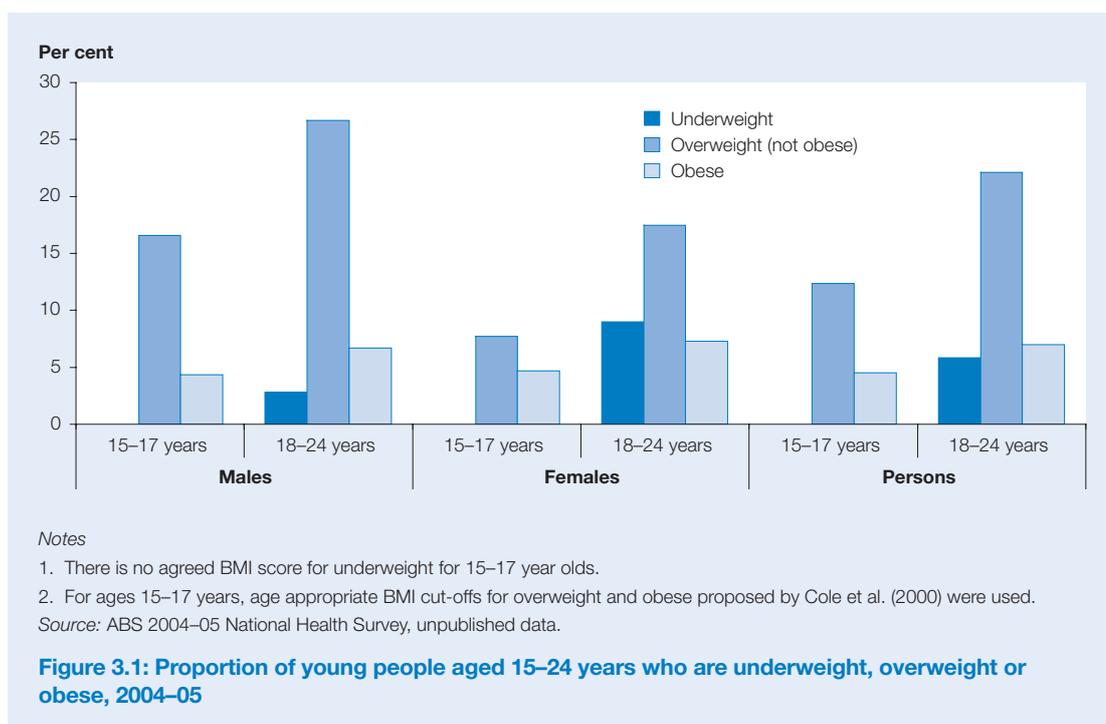
More recently, the NSW Schools Physical Activity and Nutrition Survey (SPANS) 2004 found that 18% of boys in Year 8 were overweight and a further 8% were obese. Of boys in Year 10, 20% were overweight and a further 7% were obese. Of girls in Year 8, 19% were overweight and a further 5% were obese. Significantly fewer girls than boys in Year 10 were overweight or obese, with 15% overweight and a further 4% obese (Booth et al. 2006).

Recent BMI data based on self-reported (rather than measured) height and weight are available from the ABS 2004–05 National Health Survey. Data from this survey were used to categorise young people into the following groups: underweight, acceptable weight, overweight but not obese, and obese. Age- and sex-appropriate BMI cut-offs as proposed by Cole et al. (2000) were used for 15–17 year olds. Note that there is no underweight category for young people less than 18 years of age. For young people aged 18 years and above, BMI cut-offs according to the International Classification of adult underweight, overweight and obesity were used (WHO 2000b).

INDICATOR:

The proportion of young people who are overweight or obese

According to the ABS 2004–05 NHS, 25% of young people aged 15–24 years were overweight or obese. This compares with a prevalence rate of 49% for the total population aged 15 years or over (ABS 2006m). An estimated 1 in 4 males (24%) and 1 in 7 females (15%) aged 15–24 years were overweight but not obese. A further 6% of males and 7% of females in the same age group were considered obese.



- In 2004–05, young people aged 18–24 years were more likely than those aged 15–17 years to be overweight but not obese (22% compared with 12%). The proportion of obese 18–24 year olds was also slightly higher than the proportion of obese 15–17 year olds (7.0% compared with 4.5%).
- Nearly 6% of young people aged 18–24 years were classified as underweight. Of these, three-quarters (76%) were females.

Prevalence trends

The proportion of overweight (excluding obese) young people aged 15–17 years was similar between 2001 and 2004–05 (12.6% and 12.4% respectively), while the prevalence of obesity increased slightly from 3.3% to 4.5%.

Among 18–24 year olds, the prevalence of overweight (excluding obese) increased from 17% in 1995 to 22% in 2004–05, and the prevalence of obesity increased from 5% to 7%. Over the same period, the proportion of 18–24 year olds who were underweight declined from 8% to 6%.

These results are consistent with studies that have shown that the prevalence of overweight and obesity has risen markedly in recent years (Booth et al. 2006).

Aboriginal and Torres Strait Islander young people

BMI data (based on self-reported height and weight) for Indigenous 15–24 year olds are available from the ABS 2004–05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS).

Table 3.1: Indigenous Australians aged 15–24 years by BMI category, 2004–05 (per cent)

	Males		Females		Persons
	15–17 years	18–24 years	15–17 years	18–24 years	15–24 years
Underweight	n.a.	4.3	n.a.	7.8	^(a) 6.1
Overweight (not obese)	12.2	26.6	13.9	15.5	17.8
Obese	7.5	15.2	6.4	14.7	11.9

(a) Underweight is for 18–24 year olds only.

n.a. Not available.

Notes

1. There is no agreed BMI score for underweight for 15–17 year olds.

2. For 15–17 year olds, age appropriate BMI cut-offs for overweight and obese proposed by Cole et al. (2000) were used.

Source: AIHW analysis of ABS 2004–05 National Aboriginal and Torres Strait Islander Health Survey confidentialised unit record file.

- According to the ABS 2004–05 NATSIHS, 18% of young Indigenous people aged 15–24 years were overweight but not obese (21% of males, 15% of females) and 12% were obese (12% of both males and females).
- Among Indigenous young people, overweight and obesity prevalence was higher among 18–24 year olds compared with 15–17 year olds. Obesity prevalence for 18–24 year olds was approximately twice that for 15–17 year olds (15% compared with 8% for males and 15% compared with 6% for females).
- Overweight and obesity rates were generally similar for males and females up until age 18; however, a much greater proportion of males aged 18–24 years were estimated to be overweight but not obese (27%) than females (16%).
- Approximately 6% of 18–24 year olds were estimated to be underweight, two-thirds of which were females.

Overweight and obesity prevalence estimates from the ABS 2004–05 NATSIHS can be compared with prevalence estimates for all 15–24 year olds from the ABS 2004–05 NHS. While the prevalence of overweight (but not obese) was slightly lower among young Indigenous males compared with all young males (21% compared with 24%), the prevalence of obesity was twice as high (12% compared with 6%). The prevalence of obesity was also higher among young Indigenous females compared with all young females (12% compared with 7%). There was no difference in the overweight (but not obese) prevalence rates for Indigenous females and all young females (both 15%).

Physical activity

Physical activity is important in maintaining good health. Regular physical activity reduces cardiovascular risk in its own right and also improves levels of cardiovascular risk factors such as overweight, high blood pressure, low levels of HDL (the ‘good’ cholesterol) and Type 2 diabetes. In the long-term, it helps protect against some forms of cancer, and strengthens the musculoskeletal system, helping to reduce the likelihood of osteoporosis (low bone-mineral density) and the risk of

falls and fractures (AIHW 2006a). Taking part in physical activity also improves mental wellbeing (in both the short term and longer term) by reducing feelings of stress, anxiety and depression (Dunn et al. 2001).

The National Physical Activity Guidelines for Australians (AIHW 2003; DHAC 1999; DoHA 2004a, 2004b) sets out the amount of physical activity that should be taken by children, adolescents and adults if they are to gain health benefits. Those who participate in lower-than-recommended levels of physical activity have an increased risk of mortality and morbidity from a range of diseases and conditions.

The National Physical Activity Guidelines recommend at least 60 minutes of moderate to vigorous physical activity every day for young people aged under 18 years, and at least 30 minutes of moderate-intensity physical activity on most, preferably all, days of the week for adults aged 18 years and over. Examples of moderate-intensity activity are brisk walking, swimming, doubles tennis and medium-paced cycling. More vigorous physical activity includes jogging and active sports like football and basketball (AIHW 2003d).

Self-reported physical activity data are available for young people aged 15–24 years from ABS National Health Surveys. Box 3.1 describes how activity levels are defined in ABS National Health Surveys.

Box 3.1: How exercise levels are defined in National Health Surveys

Exercise levels reported in ABS National Health Surveys are based on frequency, intensity (i.e. walking, moderate exercise and vigorous exercise) and duration of exercise (for recreation, sport or fitness) in the two weeks prior to the interview. From these components, an exercise score was derived using factors to represent the intensity of the exercise. Scores were grouped into the following four categories:

Sedentary Less than 100 mins (includes no exercise/ sitting in one place for extended periods of time)
Low 100 mins to less than 1600 mins
Moderate 1,600–3,200 mins, or more than 3,200 mins but less than 2 hours of vigorous exercise
High More than 3,200 mins and 2 hours or more vigorous exercise

Source: ABS 2006m.

INDICATOR:

The proportion of young people who are meeting recommended physical activity guidelines

Table 3.2: Level of physical activity based on self-reported activity type and duration by age and sex, 2004–05 (per cent)

Exercise level	15–17 years		18–19 years		20–24 years		15–24 years	
	Males	Females	Males	Females	Males	Females	Males	Females
Moderate to high	54.3	34.1	47.3	28.1	41.1	28.9	46.3	30.3
Low	26.7	36.1	25.1	37.4	35.0	39.6	30.6	38.1
Sedentary	18.9	29.8	27.5	34.5	24.0	31.5	23.1	31.6

Source: AIHW analysis of ABS 2004–05 National Health Survey confidentialised unit record file.

- In 2004–05, only 46% of males and 30% of females aged 15–24 years participated in levels of physical activity recommended in the national guidelines to obtain a health benefit. More young females (32%) than young males (23%) were sedentary (undertook no or very low levels of physical activity) or undertook low levels of physical activity (38% of females compared with 31% of males).
- Overall, young males were more likely than young females to undertake moderate to high levels of physical activity. However, even among males, the proportion undertaking physical activity at recommended levels declined at older ages.

- Only young males aged 15–17 years exceeded 50% participation in moderate to high levels of physical activity.

The NSW Schools Physical Activity and Nutrition Survey (SPANS) 2004 provides self-reported physical activity data for students in Years 6, 8 and 10 (with a mean age of 11.3, 13.3 and 15.3 years respectively).

Table 3.3: Proportion of boys and girls in Years 6, 8 and 10 participating in recommended daily levels of physical activity by school term, NSW, 2004 (per cent)

School Year	Summer term		Winter term	
	Boys	Girls	Boys	Girls
Year 6	88.8	80.0	83.8	72.4
Year 8	87.3	76.8	79.9	66.2
Year 10	77.9	59.8	76.7	54.5

Source: Booth et al. 2006.

- Self-reported data from the NSW SPANS 2004 indicate that, in summer, almost 90% of boys and 80% of girls in Years 6 and 8 and around 80% of boys and 60% of girls in Year 10 met the recommended level of at least one hour of moderate-to-vigorous-intensity physical activity per day.
- Participation in the required level of physical activity by students was somewhat lower during winter. Around 80% of boys in all Years, 70% of girls in Years 6 and 8 and 55% of girls in Year 10 met the recommended levels in winter.
- Consistent with results from the 2004–05 National Health Survey, physical activity rates participation rates decrease with age, particularly for girls.

The same survey also found that between 1985 and 2004, there has been a significant increase in the participation of physical activity at recommended levels by boys and girls in Years 8 and 10. The increase for boys in Year 8 was just over 15% and around 20% for boys in Year 10. The increase for Year 8 girls was just under 25%, and for Year 10 girls, it was about 20%. In all cases these increases were highly statistically significant (Booth et al. 2006).

In addition to increasing their physical activity, it is important for young people to reduce the time they spend in sedentary activities. Even when recommended levels of moderate to vigorous physical activity are met, sitting or being sedentary for long periods of time can lead to health problems. Research shows that television viewing time is positively associated with obesity, even among physically active people (Cameron et al. 2003). In fact, the link between television viewing time and obesity may be stronger than the link between physical activity and obesity (Cameron et al. 2003). This is consistent with research that suggests reducing sedentary behaviour in obese children is as effective for weight management as increased activity (Batch & Baur 2005).

A large proportion of young people spend time in sedentary activities such as prolonged periods of small-screen recreation (for example, computer games, Internet, TV). The National Physical Activity Guidelines advise that children and young people should not spend more than 2 hours a day using electronic media for entertainment, particularly during daylight hours (ABS 2004b). However, according to the 2004 NSW SPANS findings, 61% of boys and 45% of girls in Year 6, 76% of boys and 66% of girls in Year 8 and 78% of boys and 67% of girls in Year 10 engaged in more than 2 hours of small-screen recreation activities (Booth et al. 2006).

Similar findings come from the 2003 Survey of Children's Participation in Cultural and Leisure Activities (ABS 2004b). This survey found that 62% of boys and 59% of girls aged 12–14 years watched greater than 20 hours of television in the two weeks prior to the survey. In addition, 19% of boys and 5% of girls aged 12–14 years played with electronic or computer games for more than 20 hours in the two weeks prior to the survey.

Nutrition

Adequate consumption of fruit and vegetables is a protective factor against many diseases including coronary heart disease, hypertension, stroke, Type 2 diabetes and many forms of cancer (NPHP 2001). Good eating habits are important during adolescence as this is a period of rapid growth in weight and height. During this period of growth, boys gain an average of 20 centimetres in height and 20 kilograms in weight and girls around 16 centimetres and 16 kilograms. Adolescence is an important period for calcium absorption and the optimum period for gaining bone density, in particular for girls. For young people who are still growing, sufficient nutritious food is needed to support growth and normal development (NHMRC 2003c).

Adolescents and young people can make choices about the types of food they eat and social trends can influence their food preferences and intakes. Children and adolescents buy and consume foods from a wide variety of sources outside the home, including school canteens. There are many foods and beverages available in ready-to-eat or convenience form and relatively cheaply. Such conveniences are a great attraction for many young people and families with busy lifestyles. This can lead to decreased consumption of fresh fruit and vegetables and an increased consumption of packaged meals, processed snack foods and soft drinks.

The National Health and Medical Research Council (NHMRC) has developed a set of dietary guidelines for children and adolescents, and adults to maintain optimal health and reduce the risk of chronic disease (NHMRC 2003b). The guidelines recommend daily consumption of a wide variety of nutritious foods in the right amounts to meet the body's nutrient needs. For young people aged 12–18 years, the guidelines recommend 3 serves each of vegetables and fruit per day (NHMRC 2003b). For people aged 19 years and over, the NHMRC recommends 2 servings of fruit and 5 servings of vegetables per day.

Daily fruit consumption

INDICATOR:

The proportion of young people who are meeting daily fruit consumption guidelines

Table 3.4: Usual daily consumption of fruit among young people aged 12–24 years, 2004–05 (per cent)

Number of daily serves of fruit	12–18 years	19–24 years
1 or less serves	43.1	45.7
2 serves	24.7	23.6
3 serves	16.6	12.5
4 serves	4.7	3.6
5 serves	2.4	2.0
6 or more serves	2.0	1.7
Don't eat fruit	6.7	11.0
Total	100.0	100.0

Source: AIHW analysis of ABS 2004–05 National Health Survey confidentialised unit record file.

- In 2004–05, 26% of young people aged 12–18 years met the daily fruit consumption guidelines of 3 or more serves of fruit per day.
- Two-thirds (68%) of young people aged 12–18 years reported that they consumed less than 3 serves of fruit each day and 7% said they did not eat fruit.
- Of 19–24 year olds, 43% met the daily fruit consumption guidelines of 2 or more serves of fruit daily, while 46% ate less than 2 serves of fruit each day, and 11% did not eat any fruit.

Daily vegetable consumption

Table 3.5: Usual daily consumption of vegetables among young people aged 12–24 years, 2004–05 (per cent)

Number of daily serves of vegetables	12–18 years	19–24 years
1 or less serves	27.6	28.5
2 serves	24.7	25.4
3 serves	18.9	23.1
4 serves	18.6	12.8
5 serves	4.0	6.2
6 or more serves	5.7	2.2
Don't eat vegetables	0.5	1.9
Total	100.0	100.0

Source: AIHW analysis of ABS 2004–05 National Health Survey confidentialised unit record file.

- The recommended daily consumption of vegetables for those aged 12–18 years is 3 serves and 47% met this guideline in 2004–05. Approximately one-quarter of young people in this age group ate 2 serves of vegetables, 28% ate one or less serves and less than 1% said that they didn't eat any vegetables.
- Only 8% of young adults aged 19–24 years ate the recommended number of serves (5 or more serves) of vegetables each day. The majority ate 3 or less serves of vegetables a day (77%), and 2% said they did not eat any vegetables.

Other food behaviours

An observed link between skipping meals and the development of overweight in young people suggests that a consistent meal pattern, including regular consumption of breakfast, lunch and dinner, is important for healthy weight maintenance (Booth et al. 2006). Skipping meals may also make it difficult for young people to meet daily fruit and vegetable consumption guidelines.

Breakfast is a particularly important meal, providing many benefits beyond physical health. Regular consumption of breakfast improves cognitive function at school, attentiveness, social interaction and helps to maintain a health body weight (Booth et al. 2006).

Results from the 2004 NSW SPANS indicate that boys were more likely to eat breakfast than girls, and Year 8 students were more likely to eat breakfast than Year 10 students—breakfast was regularly consumed by 74% of boys and 66% of girls in Year 8, and 67% of boys and 59% of girls in Year 10 (Booth et al. 2006).

Population groups

Aboriginal and Torres Strait Islander young people

In 2004–05, less than one-quarter (22%) of young Indigenous people aged 12–18 years reported eating the recommended number of serves of fruit each day. Around 27% reported having 2 serves of fruit a day and 42% reported eating 1 serve or less. While these proportions were similar for all 12–18 year olds, Indigenous young people were slightly more likely to not eat any fruit (10% compared with 7%). Approximately 35% of Indigenous 19–24 year olds consumed the daily recommended number of serves or more of fruit, compared with 43% of all 19–24 year olds. A further 50% consumed 1 serve or less and 15% did not eat any fruit.

While only 7% of Indigenous 19–24 year olds ate the recommended number of serves of vegetables (similar to 8% for all 19–24 year olds), approximately 60% of Indigenous 12–18 year olds consumed the recommended daily serves of vegetables (compared with 47% for all 12–18 year olds). Around 50% of Indigenous 19–24 year olds had 2 serves of vegetables or less each day and a further 39% had 3 to 4 serves.

INDICATOR:

The proportion of young people who are meeting daily vegetable consumption guidelines

INDICATOR:

The proportion of young people in Year 8 and Year 10 eating breakfast

Regional status

Limited availability and high costs of fresh produce in remote locations is a barrier to the consumption of healthy foods (Northern Territory Department of Health and Community Services 2003).

Table 3.6: Usual daily consumption of fruit among young people aged 12–24 years by remoteness, 2004–05 (per cent)

Number of serves fruit	Major Cities	Inner Regional	Other areas ^(a)
12–18 years			
1 or less	39.3	39.5	48.0
2	28.1	26.7	23.3
3+	26.7	26.5	22.5
Don't eat fruit	6.0	7.3	6.2
19–24 years			
1 or less	44.7	43.6	56.3
2+	47.0	35.5	28.9
Don't eat fruit	8.3	20.8	14.8

(a) 'Other areas' includes Outer Regional, Remote and Very Remote areas.

Source: AIHW analysis of ABS 2004–05 National Health Survey confidentialised unit record file.

- In 2004–05, young people living in Major Cities were more likely than those in other areas to consume the recommended daily serves of fruit—27% and 47% of young people aged 12–18 years and 19–24 years in Major Cities compared with 23% and 29% respectively in 'Other areas' (Outer Regional, Remote and Very Remote areas).
- Young people living in Inner Regional areas were 3 times as likely as young people living in Major Cities not to eat fruit.

Table 3.7: Usual daily consumption of vegetables among young people aged 12–24 years by remoteness, 2004–05 (per cent)

Number of serves of vegetable	Major Cities	Inner Regional	Other areas ^(a)
12–18 years			
1 or less	27.7	16.6	18.2
2	24.0	15.7	16.1
3+	47.3	67.1	64.1
Don't eat vegetables	1.0	0.6	1.6
19–24 years			
1 or less	30.1	25.4	21.7
2	27.5	20.6	17.6
5+	7.2	10.7	13.8
Don't eat vegetables	1.9	1.5	2.1

(a) 'Other areas' includes Outer Regional, Remote and Very Remote areas.

Source: AIHW analysis of ABS 2004–05 National Health Survey confidentialised unit record file.

- In 2004–05, young people aged 12–18 years in Major Cities were less likely than those in Inner Regional and 'Other areas' to consume vegetables at recommended daily levels (47% compared with 67% and 64% respectively). This pattern was reversed for fruit consumption (see Table 3.6).
- Among young people aged 19–24 years, the consumption of recommended levels of vegetables was low in all areas, but increases with remoteness (7% in Major Cities, 11% in Inner Regional and 14% in Other Areas).

Sun protection

Australia has the highest rate of skin cancer in the world; skin cancers account for 80% of all new cancers diagnosed in Australia each year (AIHW & AACR 2004). Non-melanoma skin cancer (NMSC) is the most frequently occurring cancer in Australia (over 374,000 new cases each year), but it is the least life-threatening (Cancer Council Australia 2004a). Melanoma is the most serious type of skin cancer.

The strongest determinant of melanoma risk is ultraviolet (UV) radiation from sun exposure during childhood and adolescence (Armstrong 2004; Cancer Council Victoria 2006; Harrison et al. 2005). The risk of melanoma is also strongly affected by a person's sensitivity to sunlight: those with fair skin, who burn easily or tan poorly have the greatest risk of melanoma resulting from sun exposure (Cancer Council Australia 2004b). These factors not only increase the likelihood of developing melanoma later in life, but may also place young people at immediate risk. While the risk of melanoma increases with age, melanoma remains the most common cancer diagnosed among young people aged 12–24 years. Despite this, the incidence rate of melanoma among young Australians has been declining (see 'Cancer' in the *Chronic diseases* section of Part 2 of this report).

The declining incidence of melanoma among young people may be due to public education campaigns raising awareness of skin cancer prevention and the need for sun protection (Cancer Council Australia 2004a), as well as the adoption of policy, guidelines and legislation relating to skin cancer protection measures, such as shade provision and 'no hat, no play' policies in schools.

Sunburn

The level of sun exposure needed to develop skin cancer is not known, but it is likely that both episodic and cumulative exposures are important, particularly if they cause sunburn (Cancer Council Australia 2004b). The 2003–04 National Sun Survey of Australians found that 25% of teenagers aged 12–17 years, and 22% of young adults aged 18–24 years, were sunburnt on a typical weekend (Bowles et al. 2005; Dobbins et al. 2005). The most common body parts sunburnt were head and face, arms and hands, and shoulders. Sunburn occurred most frequently during water activities (32% of 12–17 year olds, and 25% of 18–24 year olds were participating in water activities at the time they were sunburnt), followed by passive (16% of and 19%) and active (15% and 16%) recreational activities (Bowles et al. 2005; Dobbins et al. 2005).

Sun protection behaviours

Adolescents tend to adopt sun protection behaviours less frequently than adults and it is more difficult to achieve behaviour change in this group. Despite a high level of knowledge about the dangers of sun exposure, adolescents typically engage in relatively few sun protection behaviours (Cancer Council Australia 2004b).

People can help protect their skin from the sun by wearing a hat, sunglasses, sunscreen and protective clothing, thereby reducing their sun exposure and the likelihood of sunburn.

Table 3.8: Sun protection behaviours adopted by young people aged 12–24 years when outdoors during peak UV periods by age, 2003–04 (per cent)

Type of sun protection behaviour	Age group	
	12–17 years	18–24 years
Wore headwear	38	37
Wore wide-brimmed hat	5	10
Used 15+ sunscreen	37	36
Wore 3/4 or long-sleeved top	11	11
Wore 3/4 or long leg cover	37	37
Stayed primarily in shade	19	26
Wore sunglasses	22	52

Note: Multiple responses were permitted therefore the total responses exceed 100%.

Source: Bowles et al. 2005; Dobbins et al. 2005.

INDICATOR:

Proportion of young people using sun protection

- The most commonly reported sun protection behaviours for 12–17 year olds were wearing headwear (38%), using 15+ sunscreen (37%) and wearing 3/4 or long leg cover (37%). For 18–24 year olds, behaviours were similar except wearing sunglasses was the most common (52%).

Skin checks

In addition to using sun protection, regular skin checks are important as they can help to detect skin cancers at an early and more easily treatable stage. The ABS 2004–05 National Health Survey (NHS) collected information about the proportion of young people whose skin is regularly checked by themselves, or anyone else, for changes in freckles and moles.

INDICATOR:

Proportion of young people aged 18–24 years whose skin is regularly checked for changes in freckles or moles

Table 3.9: Proportion of young people whose skin is regularly checked for changes in freckles or moles, by age group and sex, 2004–05

Sex	Age group			Total
	12–14 years	15–19 years	20–24 years	
Males	54.6	48.4	40.8	46.7
Females	58.1	50.2	55.4	54.0
Total	56.4	49.3	47.9	50.3

Source: ABS 2004–05 National Health Survey, unpublished data.

- According to the 2004–05 NHS, approximately 50% of young people had their skin regularly checked for changes in freckles or moles. A higher proportion of young females (54%) than young males (47%) aged 12–24 years regularly had their skin checked for freckles or moles.
- With increasing age, there was a general decrease in the proportion of young people who regularly had their skin checked for changes (from 56% among 12–14 year olds to 48% among 20–24 year olds). Young females at all age groups were more likely than young males to have their skin regularly checked for changes in freckles and moles.

Regional status

Less than half of young people in Major Cities (47%) reported that they had their skin regularly checked for changes in freckles or moles, while 60% of young people in Inner Regional areas and 54% of young people in Outer Regional and Remote areas had their skin regularly checked (ABS 2004–05 NHS, unpublished data).

Socioeconomic status

The proportion of young people who had their skin regularly checked for changes in freckles or moles was similar between the lowest (most disadvantaged) and the highest (least disadvantaged) socioeconomic quintiles (48% and 50% respectively) (ABS 2004–05 NHS, unpublished data).

Substance use

Youth is a stage in life when many people begin to experiment with substances that can, particularly if misused, cause immediate and long-term health problems. In the short term, drug use in young people may result in hospitalisations due to acute intoxication and related injuries, dependence, withdrawal symptoms, psychotic disorders and amnesia. In the long term, harmful drug use can lead to depression, infection with bloodborne diseases, and liver, heart and brain damage (Bruner & Fishman 1998). Alcohol and tobacco use, in particular, have been linked to a

range of cancers and serious long-term health problems (NHMRC 2001; U.S. Department of Health and Human Services 2004). Drug abuse has also been associated with family and relationship conflict, and legal and financial problems (Spooner & Hetherington 2005).

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 (NHMRC 2001; Spooner & Hetherington 2005). Other factors include peer antisocial behaviour, poor parental control and supervision, poor family bonding, and drug use among family members (Spooner & Hetherington 2005). Individual factors such as poor connection with family, school and community, academic failure, low self-esteem, and leaving school early have also been associated with risky levels of substance use (Guo et al. 2002; Kostecky 2005; Kosterman et al. 2000; Loxley et al. 2004; Spooner & Hetherington 2005; Sydow et al. 2002).

The information presented in this section is primarily drawn from the 2004 National Drug Strategy Household Survey, the ABS 2004–05 National Health Survey, the AIHW National Hospital Morbidity Database and the AIHW National Mortality Database.

Hospital separations for substance use

In 2004–05, there were over 8,021 hospital separations for mental and behavioural disorders due to psychoactive substance use among young people aged 12–24 years, representing 1.4% of all separations for this age group, and accounting for 16% of all separations for substance use (ICD-10-AM codes F10–F19).

Almost half of the hospital separations related to substance use were due to alcohol use among young people (48%), a further 15% were due to cannabis use, 12% to the use of ‘multiple drugs and other psychoactive substances’ and 12% to ‘other stimulants, including caffeine’. More young females than young males were hospitalised for alcohol use while more young males than females were hospitalised due to cannabis use.

One-quarter (25%) of substance use separations among young people aged 12–24 years were for drug dependence. Alcohol, opioids and cannabis were the major substances used by those hospitalised for drug dependence.

Tobacco smoking

In Australia, smoking is the single most preventable cause of premature death and chronic disease, responsible for 19,000 deaths every year (DoHA 2004). Smoking is known to cause damage to nearly every organ in the body and is causally linked to a range of cancers including lung, laryngeal, oral, bladder and kidney cancers. Smoking is also linked to cardiovascular disease, respiratory illnesses and diseases, pregnancy complications such as premature birth and low birth weight, periodontitis, and peptic ulcers (U.S. Department of Health and Human Services 2004).

Most adult tobacco users begin smoking during adolescence. Those people who begin smoking early are more likely to continue smoking (Tyas & Pederson 1998), thus tobacco use among young people is a key predictor of adult smoking. The first drug used by young people is often tobacco (U.S. Department of Health and Human Services 1994), so understanding why young people begin smoking is also important for trying to reduce both tobacco smoking and other drug use. In addition to the increased risk of disease in later life, young smokers experience immediate adverse health effects such as decreased physical fitness, a higher susceptibility to respiratory illnesses, and slower lung growth (U.S. Department of Health and Human Services 1994).

INDICATOR:

Hospital separation rate for substance use disorders for young people aged 12–24 years

INDICATOR:

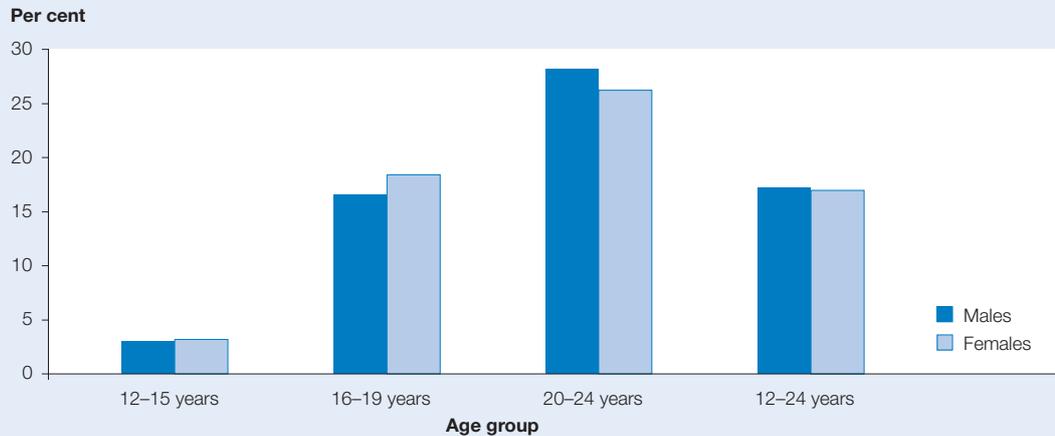
Hospital separation rate for drug dependence disorder in young people aged 12–24 years

Current smokers

The 2004 National Drug Strategy Household Survey collected information on the smoking status of young people aged 12–24 years. Current smokers were defined as people who reported that they smoke daily, weekly or less often than weekly.

INDICATOR:

Proportion of young people aged 12–24 years who are current smokers



Source: AIHW 2004 National Drug Strategy Household Survey data.

Figure 3.2: Percentage of young people who are current smokers by age group, 2004

- In 2004, 17% of 12–24 year olds were current smokers (17% for both males and females), compared with a rate of 21% for all Australians aged 14 years and over (AIHW 2005a).
- The proportion of current smokers was very similar for males and females in each age group, although the proportion for females was slightly higher than that for males (18% compared with 17%) among 16–19 year olds, and the proportion for males was slightly higher than that for females among 20–24 year olds (28% compared with 26%).
- The proportion of young people who were current smokers increased with age from 3% for 12–15 year olds to 17% for 16–19 year olds and 27% for 20–24 year olds.

Daily smokers

INDICATOR:

Proportion of young people aged 12–24 years who are daily smokers

Daily smoking is thought to be a precursor to nicotine addiction, with very few young adults becoming addicted before smoking daily (Hu et al. 2006).

In 2004, 2% of young people aged 12–15 years, 14% of young people aged 16–19 years, and 21% of young people aged 20–24 years were daily smokers. There was little difference between the proportions for males and females.

Ex-smokers

INDICATOR:

Proportion of young people who successfully quit smoking in the last 12 months

In the 2004 National Drug Strategy Household Survey, a small proportion (6%) of young people reported that they had quit smoking in the last 12 months. This proportion increased with age—0.9% of young people aged 12–15 years, 5.0% of young people aged 16–19 years and 10.1% of young people aged 20–24 years reported that they had previously been a smoker but had successfully quit in the last 12 months. The very small number of 12–15 year olds who had quit smoking reflects the small number of smokers in this age group.

Alcohol

Excessive alcohol consumption is a major risk factor for morbidity and mortality. In the short term, high doses of alcohol severely impair brain function and can result in coma or death from direct intoxication (NHMRC 2001). The immediate effects of excessive alcohol consumption include a lowering of inhibitions and impairment of motor, sensory and thought processes. When these effects are combined with the typical risk taking behaviours associated with adolescence, the risk of serious injury and death is high. Young people are the group at greatest risk of alcohol-related harm such as motor vehicle accidents, physical and sexual assault, falls, drowning and suicide (NHMRC 2001).

In the long term, excessive alcohol consumption can impair liver function, resulting in alcoholic hepatitis and cirrhosis of the liver, and have toxic effects on the cardiovascular system, resulting in high blood pressure and stroke (NHMRC 2001). Alcohol consumption is also a major factor in the development of certain forms of cancer, including cancers of the oral cavity, cancer of the oesophagus, cancer of the liver, cancer of the larynx, and female breast cancer (AIHW & AACR 2004). Other long-term health problems related to excessive alcohol consumption include sexual dysfunction, gastric ulcers, metabolic conditions such as gout, nutritional conditions such as folate deficiency, and nervous system disorders such as alcohol-related brain damage (NHMRC 2001).

Risky and high-risk drinking

Alcohol consumption is measured in standard drinks—one standard drink is any drink containing 10 g (equivalent to 12.5 ml) of alcohol. Consumption levels associated with harm are presented in Table 3.10. These levels relate to consumption among people aged 18 years and over. Young people under 18 years of age are more vulnerable to the risks of alcohol consumption than adults—they are physically smaller, they lack experience with drinking and its effects, and do not have a built-up tolerance to alcohol (NHMRC 2001).

NHMRC guidelines recommend that young people under the age of 18 years should not drink beyond the levels set for low-risk drinking by adults—for males, no more than 4 standard drinks per day on average, and never more than 6 standard drinks on any one day and for females, no more than 2 standard drinks per day on average, and never more than 4 standard drinks on any one day (NHMRC 2001).

Table 3.10: Alcohol consumption associated with harm among people aged 18 years and over

Alcohol consumption associated with harm	Short-term harm		Long-term harm	
	Risky	High-risk	Risky	High-risk
Males	7 to 10 standard drinks on any one day	11 or more standard drinks on any one day	29 to 42 standard drinks per week	43 or more standard drinks per week
Females	5 to 6 standard drinks on any one day	7 or more standard drinks on any one day	15 to 28 standard drinks per week	29 or more standard drinks per week

Source: AIHW 2006g.

Data on alcohol consumption among young people under 18 years of age are available from the 2002 Australian Secondary Students' Alcohol and Drug (ASSAD) survey (White & Hayman 2004a). The proportion of students who drank at a risky level (7 or more drinks for males, 5 or more drinks for females) on at least one day in the 7 days prior to the survey ranged from 2% among 12-year olds to 22% among 17-year olds. These proportions were very similar for males and females.

INDICATOR:

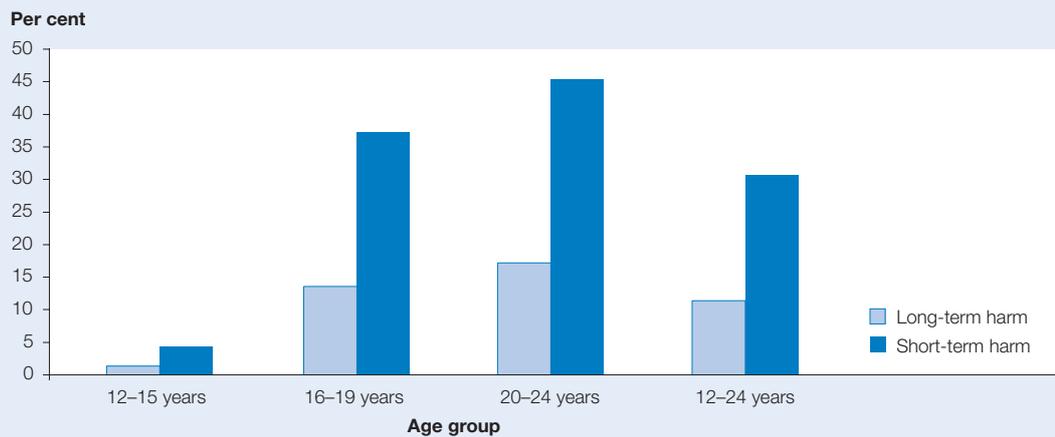
Proportion of young people under 18 years of age who have engaged in high-risk drinking at least once in the last week

INDICATOR:

Proportion of young people who drink at risky or high-risk levels in the short term

INDICATOR:

Proportion of young people who drink at risky or high-risk levels in the long term



Source: AIHW 2004 National Drug Strategy Household Survey.

Figure 3.3: Proportion of young people who drink at risky or high-risk levels for short-term and long-term harm, 2004

- According to the 2004 National Drug Strategy Household Survey, 31% of 12–24 year olds drank, once or more a month, at levels that put them at risk or high risk of alcohol-related harm in the short term, and 11% drank at levels that put them at risk or high risk of alcohol-related harm in the long term.
- An estimated 37% of 16–19 year olds and 45% of 20–24 year olds drank at risky or high risk levels for short-term harm. These rates are almost twice the rate for all Australians (21%; see AIHW 2005a). A much smaller proportion (4%) of young people aged 12–15 years were drinking at risky or high-risk levels for short-term harm.
- Relatively high proportions of young people were also drinking at risky or high-risk levels for long-term harm: 14% of young people aged 16–19 years and 17% of young people aged 20–24 years. This compares with 10% of all Australians. Less than 2% of young people aged 12–15 years drank at levels that were risky or high-risk for long-term harm.

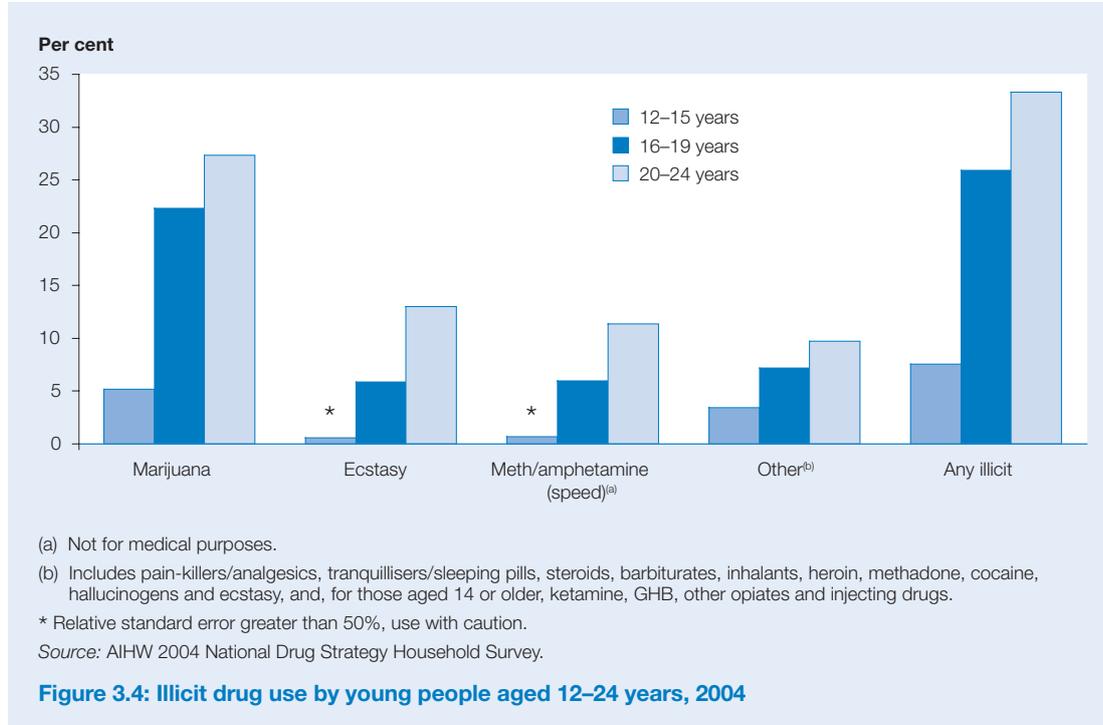
Other substance use

Other substances that can have harmful effects include both illicit drugs and licit drugs used inappropriately. These include pharmaceuticals when used for non medical purposes (for example, pain-killers), inhalants (for example, petrol sniffing), and illicit drugs such as cannabis, amphetamines, and heroin. Many of these drugs are associated with psychological and other health problems which are often exacerbated when multiple drugs are used in combination. In addition, there are risks associated with the ways in which these drugs are taken. For example, injection carries a risk of overdose as well as transmission of bloodborne diseases such as hepatitis C and HIV (Loxley et al. 2004). Similarly, long-term cannabis smoking may lead to chronic bronchitis and pre-cancerous changes (Midford et al. 2000).

Specific health problems associated with drug use vary according to the drug used, the dose and the duration of use. The most obvious effects on users are psychological and behavioural problems such as delusions and hallucinations, memory problems, suicidal ideation, and aggressive and erratic behaviour. Other problems include sleep disorders, weight loss, high blood pressure, respiratory problems and brain damage (Abetz 2005; Loxley et al. 2004; Vasica & Tennant 2002). As with alcohol use, the effects of intoxication combined with risk-taking behaviours can lead to serious injury or death. Intoxication is also linked with criminal behaviour that may lead to detention or imprisonment—59% of young people in juvenile justice detention in NSW reported that they had been under the influence of alcohol, drugs or both at the time of offending (Allerton & Champion 2003).

Illicit drug use

Results from the 2004 National Drug Strategy Household Survey indicate that 23% of young people aged 12–24 years had used an illicit drug in the 12 months prior to the survey, compared with a rate of 15% for all people aged 12 years and over.



INDICATOR:

Proportion of young people aged 12–24 years who had used an illicit drug within the last 12 months (per cent)

INDICATOR:

Proportion of young people aged 12–24 years who had used cannabis within the last 12 months (per cent)

- In 2004, rates of illicit drug use among young people increased with age from 8% for 12–15 year olds to 26% for 16–19 year olds and 33% for 20–24 year olds.
- Marijuana was the illicit drug most commonly used by young people—5% of 12–15 year olds, 22% of 16–19 year olds and 27% of 20–24 year olds reported using it in the 12 months prior to the survey.
- While a negligible proportion of 12–15 year olds had used meth/amphetamine or ecstasy in the last 12 months, meth/amphetamine had been used by 6% of 16–19 year olds and 11% of 20–24 year olds, and ecstasy had been used by 6% of 16–19 year olds and 13% of 20–24 year olds.

Deaths due to substance use

A small number of young people die each year as a result of drug dependence disorders. Dependence disorders are among the most common substance use disorders. They are characterised by specific behavioural, cognitive and physiological symptoms that develop after repeated use of a substance. Symptoms include having difficulty controlling the substance use, giving a higher priority to drug use than to other activities, repeated drug use despite harmful outcomes, increased tolerance and sometimes physical withdrawal symptoms due to the drug (NCCCH 2002).

The number of young people dying as a result of dependence disorders has been steadily declining in recent years—the number of deaths among young people aged 12–24 years has dropped from 142 deaths in 1997 to 3 deaths in 2004 (a rate of 0.1 per 100,000).

In 2004, there were 18 deaths among young people aged 12–24 years from accidental poisoning by narcotics and hallucinogens (a rate of 0.5 per 100,000). Since 1997, the number of young people dying each year from accidental poisoning by narcotics and hallucinogens has fluctuated but remained low (generally below 50 deaths).

INDICATOR:

Drug dependence disorder death rate for young people

INDICATOR:

Death rate for young people from accidental poisoning by narcotics and hallucinogens

Age of initiation

Drug use at an early age can interfere with normal cognitive and social development, and can be an indicator of behavioural problems which have their origins in childhood (Hanna et al. 2001). Early onset of drug use is associated with a number of problematic behaviours, including engaging in risky sexual behaviour, criminal activity, and poor educational achievement (AIHW 2005a; Degenhardt et al. 2000; Loxley et al. 2004). These relationships remain even after taking into account confounding factors such as parental drug use and socioeconomic status (see Degenhardt et al. 2000).

Information about the age of initiation for tobacco, alcohol and illicit drug use are available from the 2004 National Drug Strategy Household Survey (NDSHS). While it is illegal for people under the age of 18 years to be sold tobacco and alcohol, many young people find ways of obtaining them. Young people who had ever smoked a full cigarette, consumed a full serve of alcohol or used illicit drugs were asked at what age this first occurred.

INDICATOR:

Mean age of substance use initiation (tobacco, alcohol and illicit drugs)

Table 3.11: Mean age (in years) of initiation for tobacco, alcohol and illicit drugs, by age and sex, 12–24 year olds, 2004

Drug type	Males	Females	Persons
Licit drugs			
Tobacco	14.7	14.4	14.5
Alcohol	14.6	14.8	14.7
Illicit drugs			
Marijuana	15.7	15.6	15.7
Meth/amphetamine	18.1	17.8	18.0
Ecstasy	18.6	18.1	18.4
Other ^(a)	15.4	15.4	15.4

(a) Includes pain-killers/analgesics, tranquilisers/sleeping pills, steroids, barbiturates, inhalants, heroin, methadone cocaine, hallucinogens or, for those aged 14 years or older, ketamine, GHB and injected drugs.

Source: AIHW 2004 National Drug Strategy Household Survey.

- In 2004, the mean age of initiation for first use of tobacco and alcohol among 12–24 year olds was 14.5 years and 14.7 years respectively.
- The mean age of initiation for first use of illicit drugs was higher: 15.7 years for marijuana, 18.0 years for meth/amphetamine, and 18.4 years for ecstasy. This pattern was consistent across all 3 age groups.
- There was little difference in the mean ages of initiation for licit or illicit drugs between males and females.

Substance use among specific population groups

Aboriginal and Torres Strait Islander young people

Based on results from the ABS 2004–05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), just over one-third (35%) of Indigenous young people aged 18–24 years had never smoked, compared with 58% of non-Indigenous young people. Half (50%) of Indigenous young people aged 18–24 years were daily smokers, compared with one-quarter (26%) of non-Indigenous young people.

The 2004–05 NATSIHS found that 9% of Indigenous young people aged 18–24 years never consumed alcohol, compared with 8% of non-Indigenous young people. Sixteen per cent of Indigenous young people aged 18–24 years consumed alcohol at risky or high-risk levels, compared with 14% of non-Indigenous young people.

Regional status

According to the 2004 National Drug Strategy Household Survey, the proportions of risky and high-risk drinking for short-term harm among 12–24 year olds increased with remoteness, from 30% in Major Cities to 37% in Remote and Very Remote areas. The rates for long-term harm increased from 11% in Major Cities to 15% in Remote and Very Remote areas.

Illicit drug use in Outer Regional areas (17%) was lower than in Major Cities, Inner Regional, Remote and Very Remote areas (all 24%).

Sexual and reproductive health

Sexual development is a normal part of adolescence. Though most adolescents go through these changes without significant problems, all adolescents need support and care during this transition to adulthood and some may need special help. Young people can be put at risk if they do not have the information, skills, support or access to health services to deal with problems they may encounter as they pass through adolescence.

Sexual and reproductive behaviour during adolescence can have far-reaching consequences in later life. A supportive social environment is critical to healthy adolescent development. Important family and community factors that can prevent adolescents from engaging in unsafe or unwanted sexual behaviour include a strong relationship with parents, a connection to school, and open communication with sexual partners (WHO 2005).

The sexual and reproductive activities of young people are also of interest because they are related to the prevalence of sexually transmitted infections (STIs) and pregnancy in young women. Annual notification rates of HIV, chlamydia and gonorrhoea have all increased between 2000 and 2004, posing an increasing health problem for young Australians (National Centre in HIV Epidemiology and Clinical Research 2005). In 2005, half of STI notifications were for young people aged 12–24 years. These data are presented under *Communicable diseases* in Part 2 of this report.

Teenage pregnancy is a concern due to high associations with a range of poor health and socioeconomic outcomes. Teenage pregnancies are at increased risk of pre-term delivery, small-for-gestational-age babies, and neonatal deaths. Teenage mothers often find it difficult to complete their education, are separated from the child's father, often have less financial resources than older mothers, and the health of their children is often worse (Klein & Committee on Adolescence 2005; van der Klis et al. 2002). Children of adolescent parents have increased risk of developmental delay, behavioural problems, substance abuse, early sexual activity and becoming teenage parents themselves. Information on young people's fertility is provided in Part 1 of this report.

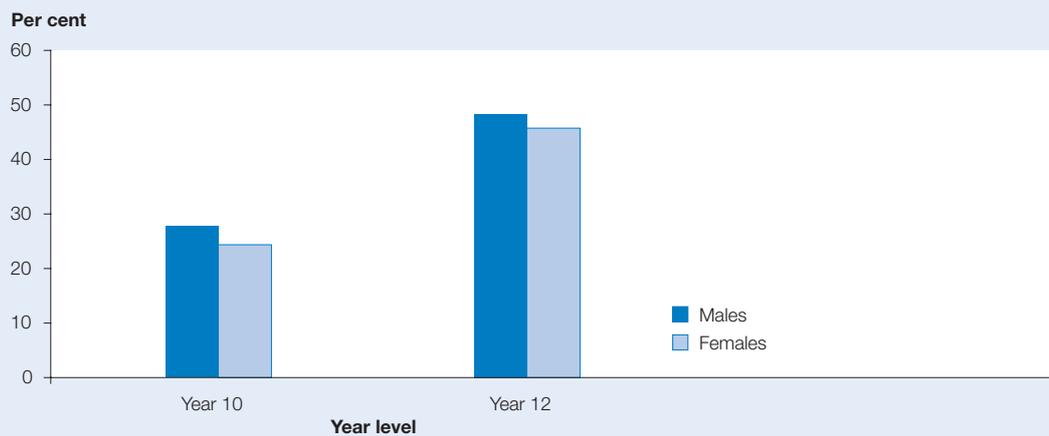
Sexual experience

The 3rd National Survey of Secondary Students and Sexual Health, 2002 interviewed 2,388 students in Years 10 and 12 from across Australia. For the first time, this survey included government, Catholic and independent schools in the study while the two previous studies only included government schools (Smith et al. 2003). Most data presented in this section come from these surveys and for any comparisons between surveys, only government school student responses were used.

The survey found that a large proportion of students had experienced some form of sexual activity (deep kissing, genital touching/ being touched, giving/receiving oral sex), with Year 12 students being more likely to have experienced each type of sexual activity. In the survey, 77% of Year 10 students and 86% of Year 12 students reported experiencing deep kissing, and 61% of Year 10 students and 75% of Year 12 students reported that they have touched others or been touched on the genitals.

INDICATOR:

Proportion of young people in year 10 and year 12 who have had sexual intercourse (per cent)



Source: Smith et al. 2003.

Figure 3.5: Proportion of students in Year 10 and Year 12 who have ever had sexual intercourse, 2002

- In 2002, 26% of Year 10 students and 47% of Year 12 students reported that they had had sexual intercourse. Both in Years 10 and 12, slightly more males than females reported having had sexual intercourse.

Between 1992 and 2002, the proportion of young people in Years 10 and 12 (in government schools) who had had sexual intercourse increased from 35% to 42% (an increase from 23% to 32% among Year 10 students and an increase from 48% to 55% among Year 12 students).

Number of sexual partners

The National Survey of Secondary Students and Sexual Health also looked at how many sexual partners Year 10 and Year 12 students had during one year.

Table 3.12: Reported number of sexual partners in the previous year for sexually active students, 2002 (per cent)

Frequency	Year 10		Year 12		Total	
	Males	Females	Males	Females	Males	Females
No sex in the past year	9.7	2.9	9.0	4.3	9.3	3.7
1 person	42.0	56.6	56.0	65.0	49.9	61.5
2 people	15.6	18.0	19.4	17.1	17.8	17.4
3 or more people	32.7	22.5	15.6	13.6	23.0	17.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Smith et al. 2003.

- In 2002, half of sexually active male students in Years 10 and 12 had reported having sexual intercourse with one sexual partner in the previous year, as did 62% of female students.
- Year 10 students were more likely than Year 12 students to report having had multiple partners in the last year.
- Around 38% of young people in Years 10 and 12 had more than one sexual partner in the previous year. A higher proportion of males in Years 10 and 12 reported having more than one sexual partner during the previous year (41%) compared with females (35%).

The proportions of sexually active young people who had had one sexual partner in the previous year increased slightly from 53% to 56% between 1992 and 2002. This was the case for both males and females. Also, the proportion of young people who had had three or more sexual partners in the previous year declined over time. In 1992, 26% young males reporting having had three or more sexual partners, compared with 20% in 2002. There was little change in the proportion of young females who had had three or more sexual partners (19% in 1992 compared with 18% in 2002) (Smith et al. 2003).

Sexual attraction

The majority of students (93%) surveyed in the 2002 National Survey of Secondary Students and Sexual Health reported that they were sexually attracted to the opposite sex only. Less than 1% reported exclusive attraction to same sex, and 5% reported attraction to both sexes. These groups are at risk of marginalisation and isolation. In addition, young gay men may be at increased risk of contracting a sexually transmitted infection like HIV/AIDS.

Table 3.13: The proportion of Year 10 and Year 12 students by sexual attraction, 2002

Sexual attraction	Males		Females	
	Year 10	Year 12	Year 10	Year 12
Attracted only to people of the opposite sex	94.7	96.4	91.0	91.4
Attracted to people of both sexes	2.4	2.2	6.9	5.7
Attracted only to people of same sex	1.2	0.7	0.1	0.6
Not sure	1.7	0.6	2.0	2.3
Total per cent	100.0	100.0	100.0	100.0

Source: Smith et al. 2003.

- The majority of Year 10 and Year 12 students reported attraction only to the opposite sex—95% of males and 91% of females in Year 10 and 96% of males and 91% of females in Year 12.
- Attraction to people of the same sex only was very low for young males and females in Years 10 and 12. Young females were more likely to report being attracted to people of both sexes than young males (6–7% compared with 2%).

Between 1997 and 2002, the proportions of young people who reported that they were attracted to the opposite sex remained stable (92% to 93%) and those attracted to people of the same sex decreased (3.1% to 0.7%). Between the two surveys, the proportion reporting that they were attracted to both sexes increased from 3% to 5%.

Contraceptive use

Given that one-quarter of Year 10 and almost half of Year 12 students have had sexual intercourse, and that 38% of young people have had multiple sexual partners, an important associated health behaviour is contraception use to avoid unwanted or unplanned pregnancies, and condom use to avoid sexually transmitted infections.

The Australian Study of Health and Relationships found that a high proportion of young people at risk of unplanned pregnancy used some form of contraception (90% of 16–19 and 94% of 20–29 year olds) (Richters et al. 2003). The main forms of contraception used by young people aged 16–19 and 20–29 were the contraceptive pill and condoms. Approximately 5% were using withdrawal as a method of contraception.

INDICATOR:

Proportion of young people in Year 10 and 12 who are attracted to the same sex, both sexes or unsure of their sexual attraction

INDICATOR:

Proportion of sexually active young people aged 16–24 who are currently using any form of contraception to avoid pregnancy (per cent)

Table 3.14: Type of contraception used at the last sexual encounter, 2002 (per cent)

Type of contraception	Sex	Year 10	Year 12	Total
Condom	Males	75.1	68.7	71.4
	Females	69.2	51.1	58.6
Contraceptive pill	Males	22.3	37.1	30.7
	Females	27.6	51.7	41.7
IUD	Males	0.7	0.9	0.8
	Females	0.0	0.1	0.0
Diaphragm	Males	1.3	0.8	1.0
	Females	0.0	0.0	0.0
Morning after pill	Males	7.0	3.0	4.7
	Females	1.8	4.5	3.4
Withdrawal	Males	8.4	10.0	9.3
	Females	8.6	17.5	13.8
Rhythm method	Males	0.7	0.8	0.8
	Females	0.0	2.9	1.7
Other	Males	2.3	1.7	1.9
	Females	2.1	1.5	1.7
No contraception used	Males	13.2	5.5	8.8
	Females	11.6	8.6	9.9

Note: Persons may have reported more than one type of contraceptive practice and therefore components may not add to totals.

Source: Richters et al. 2003.

- Results from the Australian Study of Health and Relationships indicate that in 2002, around 1 in 10 sexually active young people in Years 10 and 12 did not use any contraception at the last sexual encounter (9% for males and 10% for females). Both male and female students in Year 10 were more likely than their counterparts in Year 12 to report not using any contraception (12–13% compared with 6–9%).
- The most common form of contraception reported by students was condoms (71% for males and 59% for females), although a considerable proportion of students reported contraceptive pills (31% for males and 42% for females).
- The third most common method of contraception reported by students was withdrawal—a method mainly used by Year 12 students.

Condom use

In addition to the risk of unwanted pregnancies, sexually active young people may be at risk of sexually transmitted infections (STIs). Condom use is the most effective method of protection against STIs among sexually active people.

The National Survey of Secondary Students and Sexual Health found that in the year before the survey, 66% of Year 10 students and 42% of Year 12 students always used a condom. In contrast 6% of Year 10 students and 11% of Year 12 students never used a condom (Smith et al. 2003).

Young men in both Years were slightly more likely to use a condom than young women.

A particular concern about the sexually active students in the National Survey of Secondary Students and Sexual Health was that over half of the students who used contraceptive pills as a form of contraception did so without using a condom to protect against STIs. Year 12 students were more likely than Year 10 students to use the contraceptive pill without also using a condom (Smith et al. 2003).

The National Survey of Secondary Students and Sexual Health asked young sexually active students in Years 10 and 12 whether a condom was used at their most recent sexual encounter, and the nature of the relationship to the sexual partner (Smith et al. 2003).

INDICATOR:

Proportion of young people in Years 10 and 12 who used a condom at their most recent sexual encounter

Table 3.15: Percentage of students reporting condom use at most recent sexual encounter by relationship between sexual partners, 2002

	Males		Females	
	Year 10	Year 12	Year 10	Year 12
Someone you had just met	68.2	75.2	52.6	80.2
Someone you have known for while	74.8	85.5	76.3	58.2
Your current girlfriend/boyfriend	84.3	72.6	64.6	48.1

Source: National Survey of Secondary Students and Sexual Health, unpublished data.

- According to the 2002 National Survey of Secondary Students and Sexual Health, 68% and 53% Year 10 males and females respectively reported using a condom at their last sexual encounter with someone they had just met. Over three-quarters of Year 12 students (75% and 80% males and females respectively) said they used a condom at their recent sexual encounter with someone they had just met.
- The majority of male students in Years 10 and 12 reported using a condom at their most recent sexual encounter with their current girlfriend (84% and 73% respectively). In contrast, the proportion of female students who reported condom use at their most recent sexual encounter with their boyfriend was somewhat lower (65% and 48% for female students in Years 10 and 12 respectively).
- Over three-quarters of male students in Years 10 and 12 and female students in Year 10 reported using a condom at their most recent sexual encounter with someone they had known for a while; however a somewhat lower proportion of female Year 12 students did so (59%).

Cervical cancer

Cervical cancer is one of the most preventable and curable of all cancers. Infection with human papilloma virus (HPV) is believed to be necessary, though not sufficient, for development of cervical cancer (NHMRC 2005). Infection with high-risk HPV is almost always sexually transmitted, and the most common age at first infection is between 15 and 25 years (NHMRC 2005). The infection may progress to a lesion that may eventually progress to cancer.

Pre-cancerous changes or lesions can be detected through a Pap smear, and if they are promptly treated, cervical cancer can be prevented. The decline in cervical cancer incidence and mortality over the past two decades has been largely attributed to the implementation of organised Pap smear testing as part of the National Cervical Screening Program (Farnsworth & Mitchell 2003).

The Australian recommendation is for all women who have been sexually active at any stage in their lives to have a Pap smear every two years until they reach the age of 70 years. In 2003–2004, less than 50% of young women aged 20–24 years participated in the National Cervical Screening Program. This was well below the participation rate of women in the Program's target age group (61%).

Further information on cervical screening among young women is available under *Cervical screening* in Part 5 of this report.

Smoking during pregnancy

Maternal smoking is associated with poorer perinatal outcomes and is a risk factor for pregnancy complications (AIHW: Laws et al. 2006b). Smoking during pregnancy has been shown to be strongly associated with poor perinatal outcomes such as low birthweight, pre-term birth, birth anomalies and perinatal death (NHMRC 1997; Walsh et al. 2001).

Prenatal exposure to smoking has also been associated with problems for children later in childhood. Cornelius et al. (2000) found that maternal smoking during pregnancy was significantly associated with an increased incidence of tobacco experimentation among children. The same study showed that smoking during pregnancy also predicted childhood anxiety/depression and

externalising behaviours. Many other studies have also found a link between maternal smoking and childhood mental health and behavioural problems (see Brennan 2005; Thapar et al. 2003). However, causal connections between maternal smoking and psychosocial problems are difficult to establish since smoking mothers may differ from non-smoking mothers in other ways (such as socioeconomic status and parenting style), which may better account for the subsequent development of problem behaviours among their children.

INDICATOR:

Smoking during pregnancy

Table 3.16: Mother's tobacco smoking status during pregnancy by maternal age, 2004

Smoking status	Less than 20 ^(a)	20–24	25–29	30–34	35–39	Not stated	Total
Number							
Smoked	2,612	5,955	5,927	5,116	2,962	—	22,572
Did not smoke	3,584	13,915	30,878	40,338	23,011	17	111,743
Not stated	87	123	118	139	82	—	549
Total	6,283	19,993	36,923	45,593	26,055	17	134,864
Per cent							
Smoked	41.6	29.8	16.1	11.2	11.4	—	16.7
Did not smoke	57.0	69.6	83.6	88.5	88.3	100.0	82.9
Not stated	1.4	0.6	0.3	0.3	0.3	—	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) Includes 63 mothers aged less than 15 years.

— Nil or rounded to zero.

Notes

1. Includes data for NSW, WA, SA, ACT and NT. Data not available for Vic, Qld and Tas.
2. For SA, 'Smoked' includes women who quit before the first antenatal visit.
3. For NT, smoking status was recorded at the first antenatal visit.
4. Mother's tobacco smoking status during pregnancy is self-reported.

Source: National Perinatal Data Collection, AIHW National Perinatal Statistics Unit.

- Teenage mothers accounted for 12% of all mothers who reported smoking during pregnancy while mothers aged 20–24 years accounted for 26% of such mothers.
- Teenage mothers were more likely to report smoking during pregnancy than other mothers (42% compared with 17% for all women). This is consistent with previous research findings that showed teenage mothers had a higher smoking rate than adult mothers (see AIHW: Laws et al. 2006b).
- The smoking during pregnancy rate was also high for women aged 20–24 years (30%)—almost double the rate for all women (17%).

Aboriginal and Torres Strait Islander young people

Information on contraceptive use among young Indigenous women aged 18–24 years is available from the ABS 2004–05 National Aboriginal and Torres Strait Islander Household Survey (NATSIHS).

Table 3.17: Form of contraception used by young Indigenous women aged 18–24 years, 2004–05

Form of contraception	Number	Per cent
Condoms	10,847	24.9
Contraceptive pill	6,802	15.6
Implant	2,591	5.9
Contraceptive injection	2,563	5.9
Primarily non-contraception	6,199	14.2
Other forms of contraception	1,472	3.4
Not known/not stated	4,467	10.2
Not applicable, not known if using contraception, not stated, form not answered	8,693	19.9
Total	43,634	100.0

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

- Condoms followed by the pill were the main methods of contraception reported by young Indigenous women aged 18–24 years in 2004–05 (25% and 16% respectively). Implants and injections were reported by 6% each.
- An estimated 14% of young Indigenous women reported primarily not using any contraception.

3.2 Community and family capacity

Families play an important part in the lives of most young people—providing them with physical, emotional and economic support. Many young people, particularly those in the younger age groups, live with their parents, siblings and possibly other family members. This close proximity means that parents and other family members may directly or indirectly influence the health and health-related behaviours of young people.

Research suggests that being part of a cohesive family unit is a protective factor for children and young people, helping them to better cope with any stressors or adversity they may encounter. Sometimes the responsibilities that often come with being a member of a family can also be a source of stress for young people. In families where one or both parents have health problems, young people may take on greater responsibilities, possibly the role of carer, which may impact upon their own health and wellbeing.

The wider community, including friendship groups, schools, sports and cultural groups, also provide opportunities for young people's physical, social and emotional development.

Societies today are highly mobile. Families may move away from both their extended family and close friends for various reasons, thus distancing themselves from an established trusting and supportive social environment. Social isolation contributes to a sense of disempowerment and alienation. Often it is the poorer families that are likely to be highly mobile because of difficulties with housing. This can increase the adversity already experienced by children in such families (Vimpani 2001).

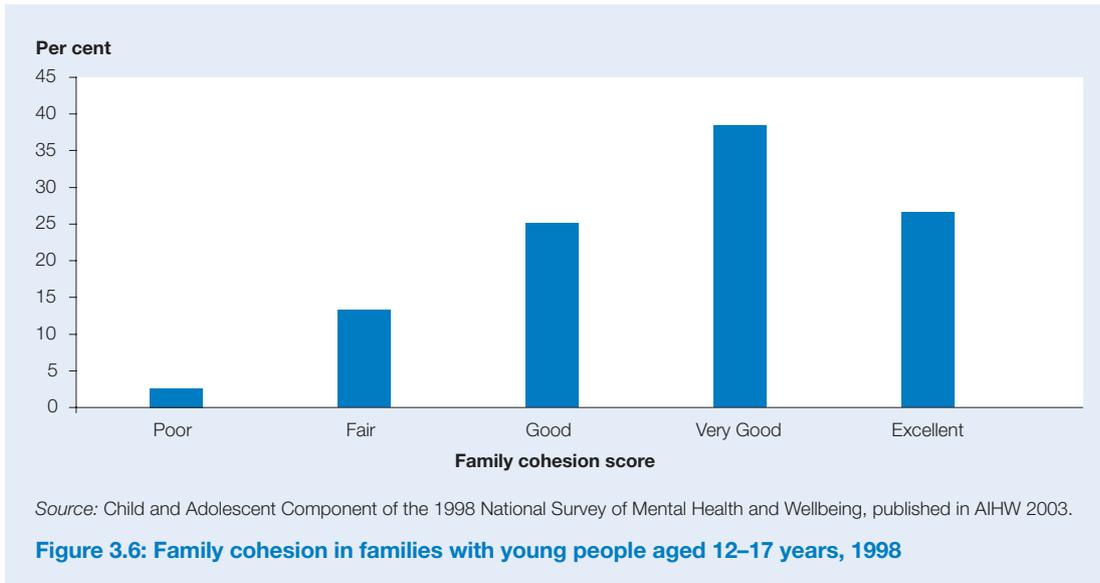
Families living in neighbourhoods characterised by greater community investment, trust and organisational affiliations tend to function better (Korbin & Coulton 1995). Children and adolescents living in families that have strong social supports are less likely to suffer neglect and maltreatment, even when the family experiences poverty and unemployment (AIC: Weatherburn & Lind 1998). Safe neighbourhoods are associated with better psychological wellbeing and educational achievement of adolescents (Meyers & Miller 2004).

This section covers a wide variety of indicators related to community and family capacity, including: family cohesion, parental health and disability, child protection, parents' socioeconomic status, social support, community and civic participation, assault and victimisation, homelessness, and legal and justice issues.

Family cohesion

The concept of family cohesion relates to the closeness or emotional bond that exists between family members and is typically measured in terms of interpersonal tensions. A low level of family cohesion is thought to be a risk factor during adolescent development. In particular, low family cohesion has been associated with mental health problems, suicide and substance abuse among young people (Sawyer et al. 2000; Toumbourou & Gregg 2001).

The 1998 Child and Adolescent Component of the National Survey of Mental Health and Wellbeing examined the relationship between the level of family cohesion, and the mental health of children aged 4–17 years (Sawyer et al. 2000). The survey measured family cohesion by asking parents with a child aged 4–17 years about their family's ability to 'get on with one another'. Families with difficulty getting on with one another were characterised as follows—'They do not always agree and they may get angry'. The ability of families to get on was rated on a five-point scale, from 'poor' to 'excellent'.



INDICATOR:
Proportion of young people aged 12–17 years living in families where cohesion is low

- In 1998, 16% of young people aged 12–17 years reported that their family’s ability to ‘get along’ was poor (3%) or fair (13%).
- Almost two-thirds (65%) of those aged 12–17 years rated their family’s ability to get on as very good (38%) or excellent (27%).

Family cohesion (as reported by adolescents) by emotional and behavioural problems (as reported by parents) is shown in Table 3.18. The clinical cut-off reflects the level of emotional and behavioural problems typically experienced by young people with mental health problems and disorders.

Table 3.18: Family cohesion, by emotional and behavioural problems of young people aged 12–17 years, 1998 (per cent)

Family cohesion	Below the clinical cut-off	Above the clinical cut-off
Poor	1.8	8.7
Fair	11.0	26.9
Good	24.6	30.9
Very Good	40.2	26.9
Excellent	22.4	6.7

Source: Child and Adolescent Component of the 1998 National Survey of Mental Health and Wellbeing, published in AIHW 2003a.

- In 1998, a higher proportion of young people aged 12–17 years with emotional and behavioural problems lived in less cohesive families—36% of young people with emotional and behavioural problems lived in families with poor or fair family cohesion, compared with only 13% of those without emotional and behavioural problems.

The relationship between family cohesion and young people’s emotional and behavioural problems may act in two ways: the poor degree of family cohesion may affect mental health of the young person, but also young people with emotional and behavioural problems are likely to affect family cohesion.

Parental health and disability

Having a parent with a chronic illness or disability may impact on the health and wellbeing of a young person in a number of ways. Parents with a disability or chronic health condition may pay less attention to the needs of the young person or may be unable to provide the young person with sufficient physical, emotional, or economic support. In addition, young people may be required to take on greater responsibilities or, in some cases, care for the parent. While taking on a caring role may have many positive effects on a young person’s development, such as increased maturity or compassion, it is also likely to be both physically and emotionally draining.

INDICATOR:

Proportion of parents rating their health as fair or poor

Parents with poor health

Even relatively mild health conditions which do not greatly impact on a parent's functioning, may lead to some adverse outcomes for young people. For example, children of mothers with asthma have higher school absences and are more often late than other students (Cassino et al. 1997). In general, the health of parents in Australia is good. The majority (83%) of parents living with young people aged 12–24 years and responding to the Household, Income and Labour Dynamics in Australia (HILDA) Survey in 2004 reported their health as good, excellent or very good. Around 1 in 6 parents (17%) reported their health as fair or poor.

Parents with a disability

Where a health condition leads to disability, the impact on the young person may be considerable as they may be required to take on caring responsibilities. Young people living in lone-parent families where the parent has a chronic illness or disability may have greater caring responsibilities and less support than young people in couple families due to the lack of a fall-back carer.

Estimates of the number of parents with a disability based on the ABS 2003 Survey of Disability, Ageing and Carers by family type (lone or couple) are presented in Table 3.19. For ABS survey purposes, a person has a disability if he or she has at least one of 17 limitations, restrictions or impairments, which has lasted or is likely to last for at least 6 months (for a detailed definition, see Technical Appendix, AIHW 2005b).

INDICATOR:

Proportion of parents with a disability.

Table 3.19: Parents with a disability and their co-resident children aged 15–24 years, by family type, 2003

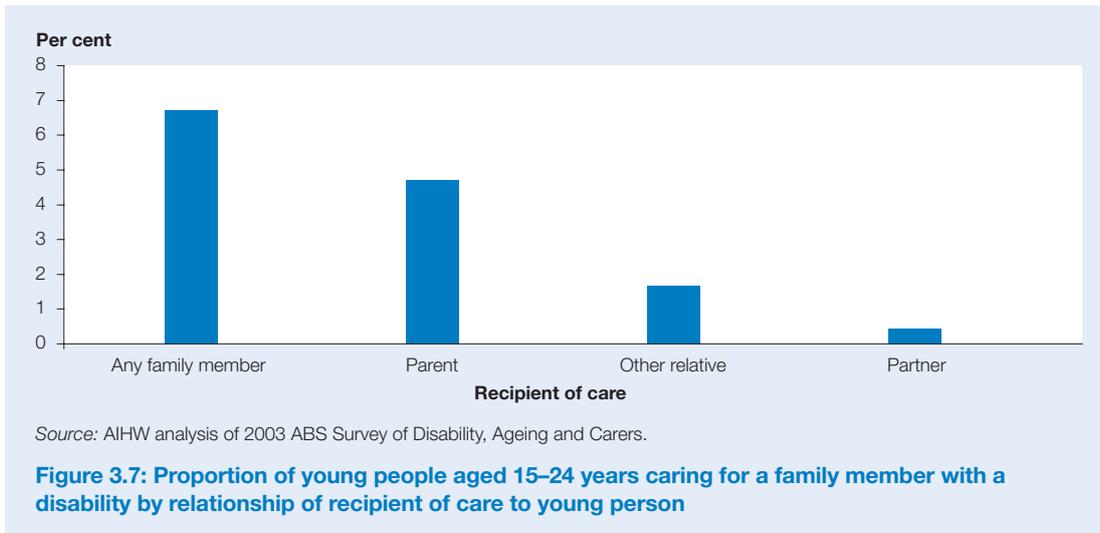
Family type	Parent has a profound or severe core activity limitation		Parent has a disability	
	Number	Per cent	Number	Per cent
Parents with a disability and co-resident children aged 15–24 years				
Couple family	65,800	3.6	271,200	15.0
Lone parent	12,100	4.2	71,300	24.5
Total parents	77,900	3.7	342,500	16.3
Young people aged 15–24 years living with a parent with a disability				
Couple family	146,900	10.1	371,800	25.7
Lone parent	21,600	5.2	97,100	23.5
Total young people	168,400	9.0	468,900	25.2

Source: AIHW analysis of ABS 2003 Survey of Disability, Ageing and Carers confidentialised unit record file.

- In 2003, 16.3% of parents with co-resident children aged 15–24 years had a disability (an estimated 342,500 parents). Of these parents, almost one-quarter (77,900 or 3.7% of all parents) had a severe or profound core activity limitation (meaning they sometimes or always need assistance with activities of daily living—self-care, mobility and communication).
- Lone parents had a higher rate of disability than parents in couple families (24.5% compared with 15.0%).
- Around one-quarter (25.2%) of young people aged 15–24 years who were living with their parents in 2003 had a parent with a disability, including 9.0% living with a parent with a profound or severe core activity limitation.

Young carers

Whether caring for a parent or other family members, young people who become carers may experience a restricted social life, lower educational achievement and increased stress (Mukherjee et al. 2002). In many cases, the demands of a caring role mean young people have less time available for study and socialising than other young people. Young carers' mental health may also be affected through social isolation and the stress of extra responsibilities (Gays 2000).

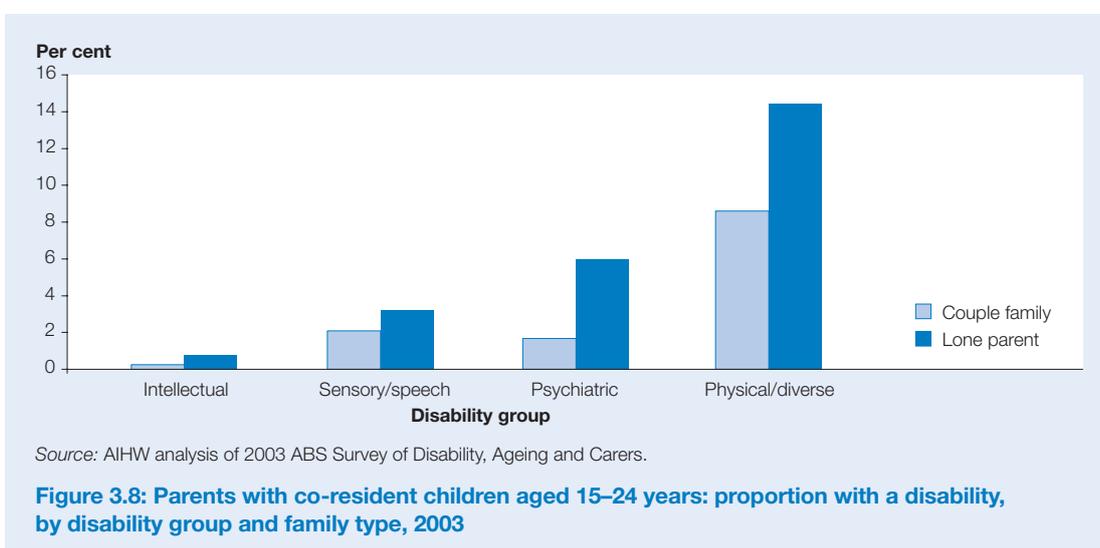


INDICATOR:
Proportion of young people who are carers of their family members.

- In 2003, 6.7% of young people aged 15–24 years were caring for a family member with a disability. The most common recipient of care was a parent—4.7% of young people were caring for one or both of their parents. An estimated 1.6% were caring for other relatives and less than 1% were caring for a spouse/partner.

The adverse outcomes experienced by young people may vary according to the specific type of disability or health condition that the parent has. For example, young people caring for a parent with a physical disability report a variety of physical ailments resulting from the caring role, including muscle strain, fatigue and exhaustion (Gays 2000). Young people living with a parent with mental illness may experience greater social isolation as a result of the stigma attached to mental illness, as well as the stress of coping with the parent's condition.

Figure 3.8 presents disability prevalence rates among parents for four disability groups: intellectual/learning, psychiatric, sensory/speech, and physical/diverse. Intellectual/learning disability is associated with impairment of intellectual functions, with limitations in a range of daily activities and with restriction in participation in various life areas. Psychiatric disability is associated with clinically recognisable symptoms and behaviour patterns frequently associated with distress that may impair personal functioning in normal social activity. Sensory/speech disability is associated with impairment of the eye, ear and related structures, and of speech structures and functions. Activity limitations may occur in various areas, for instance communication and mobility. Physical/diverse disability is associated with the presence of an impairment, which may have diverse effects within and among individuals, including effects on physical activities such as mobility.



- In 2003, physical/diverse conditions were the most prevalent disability group among parents of co-resident children aged 15–24 years (9.4%), followed by psychiatric (2.3), sensory/speech (2.2%), and intellectual (less than 1%).
- While lone parents had higher prevalence rates than parents in couple families for all disability groups, this difference was particularly pronounced for psychiatric disabilities (6.0% compared with 1.7%).

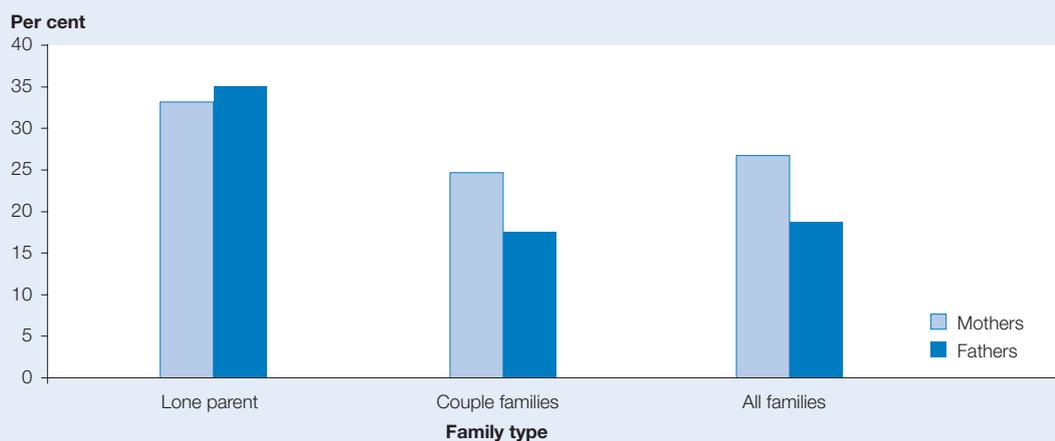
Parents with mental health problems

Children and young people living with a parent with mental health problems are thought to be at an increased risk of both physical and mental health problems (Fudge & Mason 2004). Farrell et al. (1999) reported higher rates of emotional and behavioural problems among children who live with a parent with mental illness. An estimated 25–50% of children whose parents suffer from a mental illness experience a psychological disorder during childhood, adolescence or adulthood, compared with 10–20% in the general population. Similarly, 10–14% of children with a parent with mental illness will be diagnosed with a psychiatric illness at some point in their lives, compared with 1–2% of the general population.

A number of factors related to parental mental illness are thought to compound a young person's risk of physical and mental health problems. These factors may work in combination, and include genetic inheritance, poverty, homelessness and extra caring responsibilities (Fudge & Mason 2004). In addition, a minority of young people living with a parent with a severe mental illness may need extra care and protection during periods when their parent's condition is difficult to manage (Fudge & Mason 2004).

It is difficult to measure the number of young people living with a parent with mental illness as the parental role of people accessing mental health services is not always recorded and definitions of mental illness vary in survey data. One measure of mental health is available from the Short Form 36 (SF-36)—a multipurpose, 36 item survey that measures 8 domains of subjective health. Scale scores for each of the 8 health domains can be summarised to produce a single measure of mental health: the Mental Component Summary (MCS) score. An analysis of population averages suggests an MCS score of less than 41 is indicative of poor mental health.

INDICATOR:
Proportion of parents scoring poorly on a mental health scale



Source: AIHW analysis of HILDA Survey data, Wave 4 (release 4.1).

Figure 3.9: Parents with co-resident children aged 12–24 years: proportion with a Mental Component Summary score of less than 41 by family type and sex, 2004

- Around one-quarter (23%) of parents with co-resident children aged 12–24 years responding to the HILDA survey had MCS scores of less than 41 (indicating poor mental health). A slightly higher proportion of mothers scored poorly (27%) compared with fathers (19%).

- Around 1 in 3 lone parents scored poorly compared with around 1 in 5 parents in couple-parent families.

Population groups

Some groups within the population have much higher rates of chronic illness and disability than others, especially Aboriginal and Torres Strait Islander people and those from low socioeconomic backgrounds. Parents in these population groups could be expected to experience similar higher rates of chronic illness and disability compared with other parents. Results for parents responding to the HILDA survey suggest that this may be the case, although the results for Indigenous parents are based on a small sample and should therefore be interpreted with caution.

Aboriginal and Torres Strait Islander young people

Indigenous parents with co-resident children aged 12–24 years and responding to the HILDA survey were more likely than non-Indigenous parents to report their health as fair or poor (30% compared with 17%) and less likely to report their health as good or excellent (20% compared with 45%). However, these results are based on a very small Indigenous sample and should therefore be interpreted with caution.

Socioeconomic status

Of parents living with young people aged 12–24 years and responding to the HILDA survey, those living in the most disadvantaged areas (lowest socioeconomic quintile) were more likely to report their health as fair or poor (22%) than those living in the least disadvantaged areas (highest quintile) (11%).

Almost one-third (30%) of parents in the most disadvantaged areas had an MCS score of less than 41 (indicating poor mental health). In contrast, only around one-fifth (18%) of parents in the least disadvantaged areas had an MCS score of less than 41.

Child protection

Abuse and neglect can have both short-term and long-term adverse consequences for young people. In the short term, young people are at immediate risk of physical injuries and emotional trauma. Abuse and neglect may also interrupt a young person's learning and development process, resulting in lower social competence and poor school performance. In the long term, young people who have experienced abuse are at increased risk of depression and suicidal and self-injurious behaviours (Shonkoff & Phillips 2000). The short- and long-term consequences of abuse may be related to the type, severity, and duration of abuse, and the context in which it occurs.

Child abuse and neglect is associated with a number of risk factors, including poor parental mental health, substance misuse, economic stress and social disadvantage, and family disruption. These factors may also compound the negative effects of abuse. Other factors may help to minimise the negative effects of abuse. For example, the effects of abuse have been found to be less harmful if a child receives emotional support from another important adult (Shonkoff & Phillips 2000).

Young people who are being abused or neglected, or whose parents cannot provide adequate care and protection, may come to the attention of child protection authorities. The AIHW compiles national data on child protection notifications, investigations and substantiations, children on care and protection orders, and children in out-of-home care. It is important to note that these data include only cases of abuse and neglect that have come to the attention of child protection authorities, and therefore represent only a proportion of all cases of abuse and neglect.

In Australia, child protection is the responsibility of state and territory governments and each state and territory has its own legislation, policies and practices in relation to child protection. Variations between jurisdictions in recorded cases of abuse or neglect reflect the different policies, practices

and data systems in place in each jurisdiction, rather than a true variation in the levels of abuse and neglect (see Bromfield & Higgins 2005).

The trends presented in this section need to be interpreted with caution. Increases over time may be due to more children requiring a child protection response, but are more likely to be a result of:

- increased community awareness due to media and departmental campaigns about child abuse and neglect and the role of community service departments in this area
- changes to policies, practices and data reporting methods.

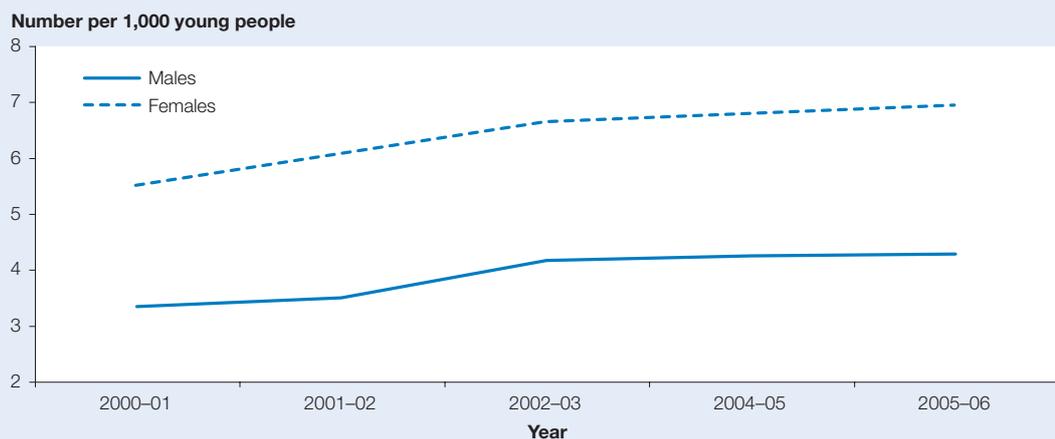
Child protection substantiations

All states and territories have some level of legislation requiring the compulsory reporting of suspected abuse or neglect. Reports are assessed by state and territory departments in the community services sector to determine whether further investigation or other action is required. An investigation of suspected abuse or harm is classified as 'substantiated' if there is reasonable cause to believe that a young person has been, is being or is likely to be abused or neglected or otherwise harmed (AIHW 2006c).

Due to the small numbers involved, young people aged 17 years are not included in the following indicator.

INDICATOR:

Rate of young people aged 12–16 years who are the subject of a child protection substantiation



Note: Data for 2003–04 have been excluded from the time series since New South Wales provided limited data due to the introduction of a new client information system.

Source: AIHW Child Protection Data Collection.

Figure 3.10: Rate of young people aged 12–16 years who were the subject of a child protection substantiation 2000–01 to 2005–06

- The rate of young males aged 12–16 years who were the subject of a child protection substantiation increased from 3.3 per 1,000 young males in 2000–01 to 4.3 per 1,000 young males in 2005–06. The corresponding rate for young females increased from 5.5 per 1,000 young females to 6.9 per 1,000 young females.
- Between 2000–01 and 2005–06, the rates for young females who were the subject of child protection substantiations were consistently higher than the rates for young males.

Care and protection orders

In cases where there are serious concerns about a young person's safety and wellbeing, child protection authorities may apply to the relevant court to place the young person on a care and protection order. Recourse to court is generally a last resort and is used in situations where supervision and counselling are resisted by the family, where other avenues for resolution of the situation have been exhausted, or where removal of a child into out-of-home care requires legal authorisation. These orders include guardianship and custody orders as well as supervision orders.

Young people may be placed on a care and protection order for reasons other than abuse and neglect—for example, in situations where the parents are deceased, ill or otherwise unable to care for the young person, or where there is an irreversible breakdown in the child–parent relationship (AIHW 2006c)

Table 3.20: Young people aged 12–17 years on care and protection orders at 30 June 1998 to 30 June 2006

Age (years)		1998	1999	2000	2001	2002	2003	2004	2005	2006
12–14	Number	3,370	3,378	3,469	3,638	3,847	4,213	n.a.	4,734	5,080
	Rate (per 1,000)	4.3	4.3	4.3	4.5	4.8	5.1	—	5.7	6.0
15–17	Number	3,167	3,013	3,688	3,446	3,458	3,570	n.a.	3,781	4,196
	Rate (per 1,000)	4.1	3.8	4.6	4.3	4.3	4.4	—	4.6	5.0

n.a. Not available.

— Nil or rounded to zero.

Note: Data for 2004 have been excluded from the time series since New South Wales provided limited data due to the introduction of a new client information system.

Source: AIHW Child Protection Data Collection.

INDICATOR:

Rate of young people aged 12–17 years who are the subject of care and protection orders

- In 2006, there were 9,276 young people aged 12–17 years on care and protection orders (5.5 per 1,000 young people), an increase of almost one-third since 1998 (4.2 per 1,000 young people). The majority (55%) of these were aged 12–14 years.
- The rate of young people aged 12–14 years on care and protection orders increased from 4.3 to 6.0 per 1,000 young people between 1998 and 2006. The corresponding rate for 15–17 year olds increased from 4.1 to 5.0 per 1,000 young people.

The increase in the number of children on care and protection orders is attributed to a greater awareness of child abuse and neglect, but also to the cumulative effect of the growing number of children who enter the child protection system at a young age and remain on orders until they reach 18 years of age. Also, jurisdictional analyses indicate that children are being admitted to care and protection orders for increasingly complex factors related to parental substance abuse, mental health and family violence.

Table 3.21: Living arrangements of children on care and protection orders, at 30 June 2006 (per cent)

Living arrangements	12–14 years	15–17 years
Home-based care		
Relatives/kin	34.9	24.8
Foster care	40.8	35.7
Parents	11.2	9.9
Other home-based care	1.5	1.8
<i>Total home-based care</i>	88.3	72.3
Facility-based care	8.8	13.6
Independent living	1.4	10.2
Other	1.5	4.0
Total	100.0	100.0

Source: AIHW Child Protection Data Collection.

- The vast majority of young people aged 12–14 years and 15–17 years on care and protection orders were living in home-based care (88% and 72% respectively). Home-based care includes living with parents or other relatives and foster care.
- Young people aged 15–17 years were more likely than 12–14 year olds to be living in facility-based care (14% compared with 9%). One in ten young people aged 15–17 years were also living independently in 2006.

Out-of-home care

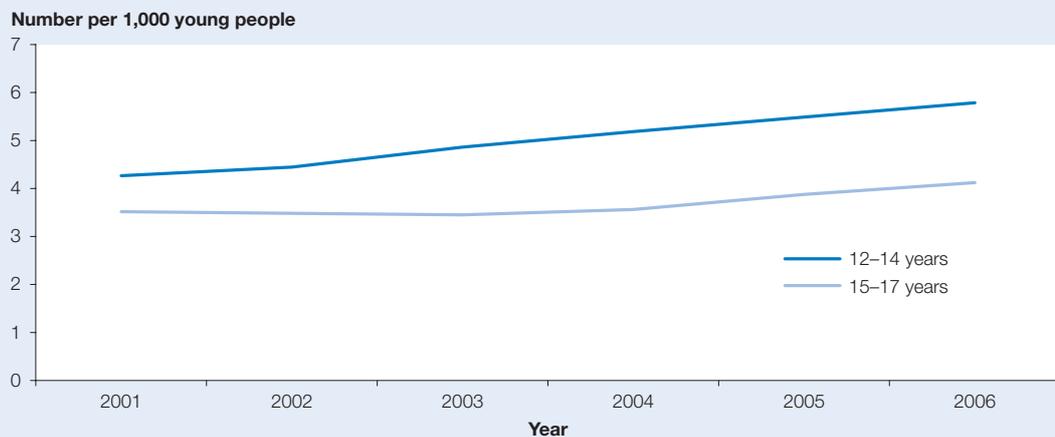
Out-of-home care provides alternative accommodation for young people who are unable to live with their parents. In the majority of cases young people in out-of-home care are also on a care and protection order of some kind.

Placing young people in out-of-home care is usually a last resort as the current emphasis in policy and practice is to keep families together wherever possible. If it is necessary to place young people in out-of-home care, then placement with other relatives or kin is preferred. In cases where it is not possible to place young people with relatives or kin, they may be placed in foster care or residential care. At 30 June 2006, 36% of 12–17 year olds in out-of-home care were living with relatives or kin, 49% were in foster care and 11% were in residential care. The remainder (4%) were living independently, in family groups, or had other living arrangements. Most young people placed in out-of-home care are eventually reunited with their families (AIHW 2006c).

Young people in out-of-home care represent a particularly disadvantaged group. Most young people in out-of-home care have experienced child abuse or neglect, as well as the breakdown of their families.

INDICATOR:

Proportion of young people aged 12–17 years who were in out of home care



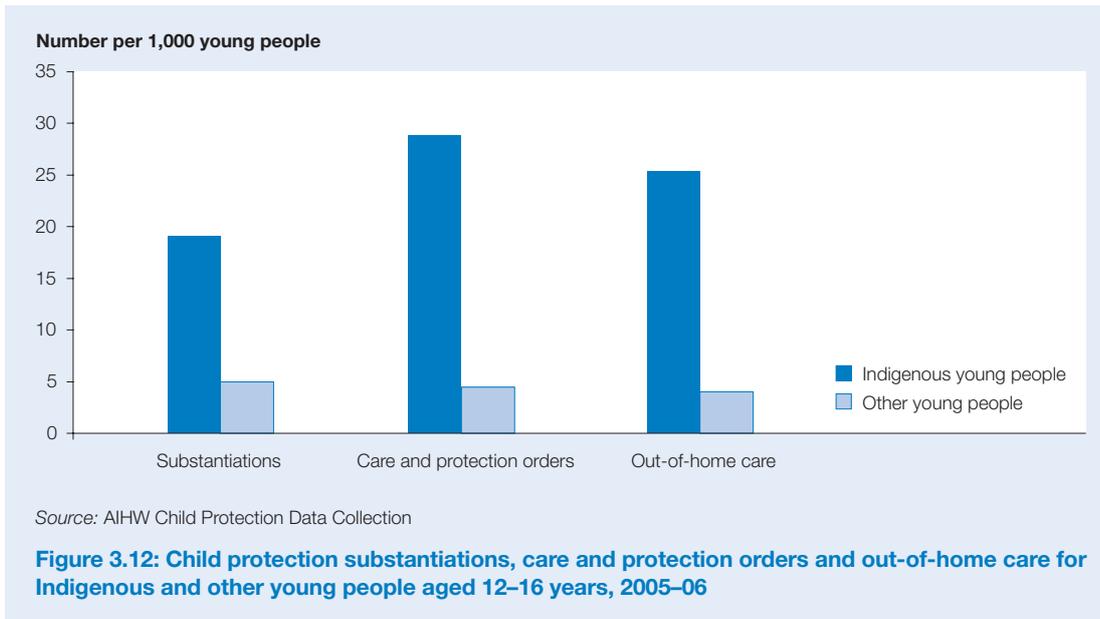
Source: AIHW Child Protection Data Collection.

Figure 3.11: Young people aged 12–17 years in out-of-home care, 30 June 2001 to 30 June 2006

- In 2006, 8,332 young people aged 12–17 years were in out-of-home care (5.0 per 1,000 young people).
- The rate of young people aged 12–14 years in out-of-home care increased from 4.3 to 5.8 per 1,000 young people between 2001 and 2006. The corresponding rate for 15–17 year olds increased from 3.5 to 4.1 per 1,000 young people.
- Between 2001 and 2006, the rate of young people in out-of-home care was higher for 12–14 year olds than for those aged 15–17 years. This may be because young people aged 15–17 years are legally able to live independently whereas those aged 12–14 years are required to be placed in the care of an adult.

Aboriginal and Torres Strait Islander young people

Indigenous young Australians are heavily over-represented in the child protection system. The likely reasons for this over-representation include the intergenerational effects of the ‘stolen generation’ such as separation from family and culture, the poor socioeconomic status of Indigenous families, family violence and cultural differences in child rearing practices (AIFS 2005; AIHW: Al-Yaman et al. 2006; Cunneen & Libesman 2000; Memmott et al. 2001).



- During 2005–06, 1,170 Indigenous young people aged 12–16 years were the subject of a substantiated child protection report—a rate of 19 per 1,000 young people (15 and 24 per 1,000 for males and females respectively). The corresponding rate for other Australians was 5 per 1,000 young people.
- Indigenous young people were 6 times as likely as other young Australians to be on care and protection orders and to be placed in out-of-home care. In 2005–06, the rate of Indigenous young people on care and protection orders was 29 per 1,000 young people, compared with 5 per 1,000 for other Australians. Similarly, 25 per 1,000 Indigenous young people were in out-of-home care, compared with 4 per 1,000 for other young Australians.

The Aboriginal Child Placement Principle outlines the preferential order for the placement of Aboriginal and Torres Strait Islander children when they are placed outside their immediate family (Lock 1997:50):

- with the child’s extended family;
- within the child’s Indigenous community; then
- with other Indigenous people.

All jurisdictions have adopted the Aboriginal Child Placement Principle either in legislation or policy. The impact of the Principle is reflected in the relatively high proportion (76%) of Indigenous children who were placed either with Indigenous caregivers or with relatives at 30 June 2006.

Social support

Social support is an important part of wellbeing, and can also have positive health effects. Research suggests that people without social support have higher rates of morbidity and mortality than people with social networks. There are several ways in which social support may have positive effects on health. People within a social network may play a role in health promotion and positively influence the health related behaviours of others. In addition, a broad social network may increase a person’s resources and knowledge, allowing them to gain access to quality health services. Social support may also have positive psychological or emotional effects, helping people to better cope with stress and illness.

Studies looking specifically at the link between social support and adolescent health have found a relationship between a young person’s level of social support and a number of health risk factors, including physical inactivity, depression, and tobacco smoking (Beets et al. 2006; Vilhjalmsson 1994). Similarly, studies have found that young people with high levels of social support report better self-assessed health than those with low support (Geckova et al. 2003; Vilhjalmsson 1994).

Measuring social support

There is no single universally accepted definition of social support, and no single method to measure social support. Some measures of social support look at the frequency of contact with family and friends or the ability to find help in a time of crisis, while other measures look at people’s perceptions of the quality of their relationships with others and their feelings of loneliness.

The 2004 HILDA survey used 10 subjective statements to measure social support—5 statements suggesting a low level of social support and 5 statements suggesting a high level of social support. Respondents rated the statements on a 7-point scale ranging from strongly disagree to strongly agree. Young people’s responses to these statements are presented in this section.

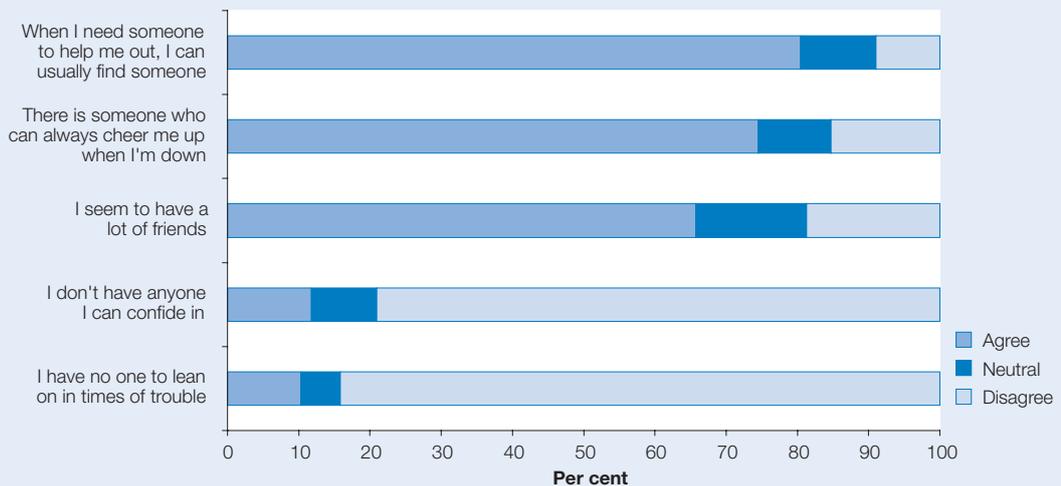
While responses differed between statements, the majority of young people agreed with statements suggesting high social support (66% to 94% of young people gave a rating of 5 or higher) and disagreed with statements suggesting low social support (51% to 84% gave a rating of 3 or lower).

Combining responses for all 10 statements, around 91% of young people aged 15–24 years had social support in 2004 (90% of males and 93% of females).

Lack of social support was associated with a number of health risk behaviours. Around 30% of young people who lacked social support were daily smokers compared with 17% of other young people. Similarly, around 30% of young people who lacked social support did not participate in physical activity or participated less than once per week, compared with 20% of other young people.

INDICATOR:

Proportion of young people aged 15–24 years who score well on a social support scale



Source: AIHW analysis of HILDA Survey data, Wave 4, (release 4.1).

Figure 3.13: Young people aged 15–24 years, ratings on social support scales, 2004

- Of the statements suggesting a high level of social support, the statement ‘I seem to have a lot of friends’ had the lowest proportion of young people agreeing with it (66%). Around 1 in 10 young people agreed with the statements ‘I don’t have anyone I can confide in’ and ‘I have no one to lean on in times of trouble’.

Population groups

Outside their immediate and/or extended families, young people are likely to find support among their peers at school, university or in the workplace. For young people who are unemployed, geographically isolated or highly mobile, establishing social networks may be more difficult. It could be expected that young people living in remote parts of Australia, or in communities with high youth unemployment, will experience greater social isolation than other young people.

Aboriginal and Torres Strait Islander young people

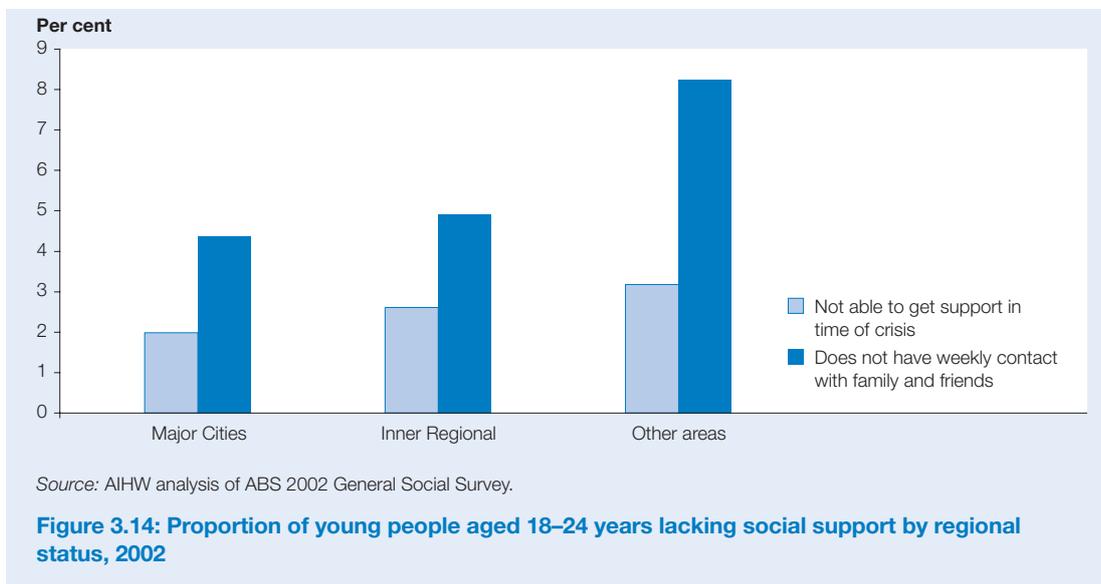
Based on results from the 2004 HILDA survey, there was no statistically significant difference between the proportions of Indigenous and non-Indigenous young people who lacked social support (11% and 8% respectively).

Based on results from the ABS 2002 National Aboriginal and Torres Strait Islander Social Survey, around 91% of Indigenous young people aged 15–24 years were able to get support in a time of crisis from someone outside their household (91% for both males and females) (ABS 2004f).

Regional status

Among young people aged 15–24 years responding to the HILDA survey in 2004, there was no statistically significant difference between the proportions of young people living in major cities who lacked social support (7%) and young people living in regional or remote areas (11%).

Social support was measured in the ABS 2002 General Social Survey through items such as the availability of support in a time of crisis and frequency of contact with family and friends. Results from the survey indicate that young people aged 18–24 years living in 'Other areas' (Outer Regional, Remote and Very Remote areas) were less likely to have weekly contact with families and friends than young people in Major Cities.



Socioeconomic status

Based on results from the HILDA survey, 11% of young people aged 15–24 years living in the most disadvantaged areas (lowest socioeconomic quintile) lacked social support compared with 5% of young people living in the least disadvantaged areas (highest socioeconomic quintile) in 2004.

Community and civic participation

Young people's health and wellbeing has been shown to be associated with a sense of connectedness to family, school and the community (AIHW 2003a). Community and civic participation refers to those activities which demonstrate people's connectedness to their community, and includes activities such as being a member of a community organisation, enrolling to vote, signing a petition and volunteering.

Both the community and young people themselves benefit from youth participation in community and civic life. Community benefits include increased social trust, stronger social ties, and a greater capacity for collective action. The benefits for individuals have largely been examined with reference to adults (for example, Baum et al. 2000), where patterns of participation have been linked to overall physical and mental health. Young people who participate in community activities can also contribute to their own development through learning new skills, building confidence, and establishing diverse social networks.

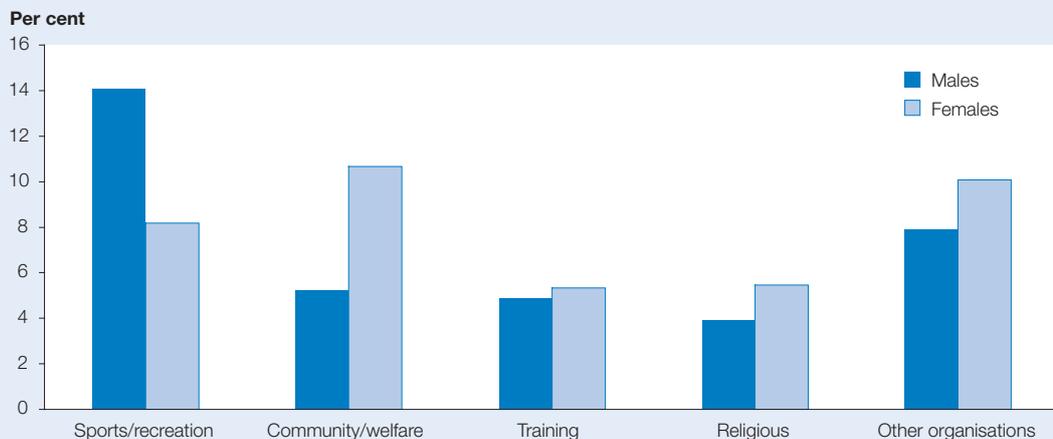
Participation in community activities: volunteering

Participation in social and community life is an important aspect of life for most people, and provides social and psychological benefits which are important for wellbeing. Volunteering is one form of community participation, which not only provides young people with social contact and learning opportunities, but also provides a valuable contribution to many community and welfare organisations.

In 2002, over one-quarter (28%) of young people aged 18–24 years were involved in unpaid voluntary work, according to the ABS 2002 General Social Survey. Proportions were similar for young males (27%) and young females (29%).

INDICATOR:

Volunteering rate for young people aged 18–24 years



Source: AIHW analysis of 2002 ABS General Social Survey.

Figure 3.15: Proportion of young people aged 18–24 years engaged in unpaid volunteer work, by type of organisation, 2002

- Females were twice as likely as males to be engaged in unpaid volunteer work with community/welfare organisations (10.7% and 5.2% respectively). In contrast, males were more likely than females to be engaged in unpaid volunteer work with sports/recreation organisations (14.1% and 8.2% respectively).

Young people were less likely to be involved in voluntary work than people in other age groups. The age group with the highest involvement was 35–44 years—42% of people in this age group were volunteers. The only age group with a lower volunteering rate was 75 years and over—24% of people in this age group were volunteers.

Young people who volunteer in cultural and leisure activities may experience particular benefits. Cultural and leisure activities are often social activities that bring people with similar interests together in a relaxed and friendly environment. Many leisure activities offer young people an opportunity to rest and unwind or get outdoors, be active, and have fun—all of which is likely to help relieve stress and improve health.

Based on results from the ABS 2004 Survey of Work in Selected Culture and Leisure Activities, 21% of young people aged 15–24 years were involved in culture or leisure activities as a volunteer—25% of young females and 17% of young males. When considering unpaid involvement only, young people had a higher rate of involvement than any other age group (15%).

INDICATOR:

Proportion of young people aged 15–24 involved in cultural or leisure activities as a volunteer

Participation in civic activities: voting

Civic engagement is an extension of community engagement, and refers to participation in more civically oriented organisations or events. It includes involvement in both formal and informal political processes, such as attending protest meetings, signing petitions, or making a regular commitment to a non-profit organisation's activities.

One of the most fundamental civic activities in Australia is enrolling to vote. At age 17, all Australians are entitled to register on the electoral roll and voting is compulsory for those aged 18 years and above.

Estimates from the Australian Electoral Commission indicate that at the 2004 electoral close, approximately 82% of young Australians (17–25 years of age) had enrolled to vote, compared with 95% of other Australians.

INDICATOR:

Proportion of 17 and 18 year olds who have registered to vote

Aboriginal and Torres Strait Islander young people

Results from the ABS 2002 National Aboriginal and Torres Strait Islander Social Survey indicate that one-quarter of Indigenous young people aged 15–24 years undertook voluntary work in the 12 months prior to the survey (ABS 2004f). Proportions were similar for young Indigenous males (26%) and young females (24%).

Assault and victimisation

Obtaining an accurate count of the number of Australians who are the victims of violence is difficult as many victims are reluctant to report the crime. It is estimated that while 94% of motor vehicle thefts are reported to police, only 37% of assaults are reported (AIC: Johnson 2005). Research suggests that young victims aged under 25 years are less likely to report a violent crime than older victims (AIC: Johnson 2005). Young people, in particular, may feel intimidated and reluctant to report personal crimes if the perpetrator is known to them, or is in a position of power (perhaps because they are older or an authority figure). Despite their reluctance to report violent crime, young people have higher rates of all types of personal crime and rates decline with age (AIC: Johnson 2005).

Data sources and limitations

There are numerous sources of crime data, both administrative and survey, and victimisation rates vary considerably across these data sources (ABS 2004e). Victimisation rates based on administrative data tend to be significantly lower than those based on survey data as many people do not report crimes to the police.

Even within a particular type of data source (that is, administrative or survey), rates will vary. For example, survey data will vary according to the survey methodology and people's willingness to disclose their experiences in the survey context. Similarly, administrative sources vary according to the recording practices of police in different jurisdictions. In 2005, recording practices for assault

and sexual assault differed so widely across jurisdictions that they cannot be compared. As a result, there are no recent national recorded crime statistics for these offences (ABS 2006e).

Data reported in this section include victimisation rates from three ABS surveys—the 2005 Crime and Safety Survey, the 2005 Personal Safety Survey, and the 2002 General Social Survey. Age groups vary across surveys, as does the detail of information collected. In all surveys, respondents were asked about personal crimes they had experienced in the last 12 months. The AIHW 2004 National Drug Strategy Household Survey provides additional information about young people who are victims of alcohol- and drug-related violence. Together, these sources provide a broad picture of physical and sexual assault among young people in Australia.

Physical and sexual assault

A large body of international research suggests that physical and sexual violence has multi-faceted short- and long-term negative effects on development (Paolucci et al. 2001). In addition to physical injuries, a history of abuse has been associated with depression, anxiety disorders, and substance abuse (Molnar et al. 2001). Data also show that young victims of violent crime are more likely than other young people to become victims of violent crime in adulthood (AIC (Australian Institute of Criminology): Johnson 2005).

INDICATOR:

Rate of young people aged 12–24 years who have been the victim of physical and/or sexual assault

Table 3.22: Victims of assault aged 15–24 years, by age group and sex, 2005

Age group	Males		Females		Persons		Victimisation prevalence rate (%)
	'000	Per cent of all male victims	'000	Per cent of all female victims	'000	Per cent of all victims	
15–19	68.1	16.5	65.4	18.3	133.5	17.3	9.9
20–24	66.9	16.2	45.3	12.7	112.2	14.6	7.9
15–24	135.0	32.7	110.7	21.0	245.7	21.9	8.9

Source: ABS 2006e.

- In 2005, there were 245,700 young people aged 15–24 years who were victims of assault (a victimisation prevalence rate of 8.9%).
- The victimisation prevalence rate for assault in 2005 was slightly higher for 15–19 year olds (9.9%) than for 20–24 year olds (7.9%).
- One-third (32.7%) of all male victims of assault and one-fifth (21.0%) of all female victims of assault were aged 15–24 years.

Table 3.23: Victims of violence 18–24 years, by type of violence and sex, 2005

Type of violence	Males		Female		Persons	
	Per cent of all male victims	Per cent of young males	Per cent of all female victims	Per cent of young females	Per cent of all victims	Per cent of young people
Physical assault	42.7	21.1	27.2	7.0	37.5	14.2
Physical threat	35.4	14.2	30.2	5.2	33.9	9.8
Sexual assault	*32.6	*1.4	28.2	3.0	29.5	2.2

Note: Estimates marked with * have a relative standard error (RSE) of between 25% and 50% and should be interpreted with caution.

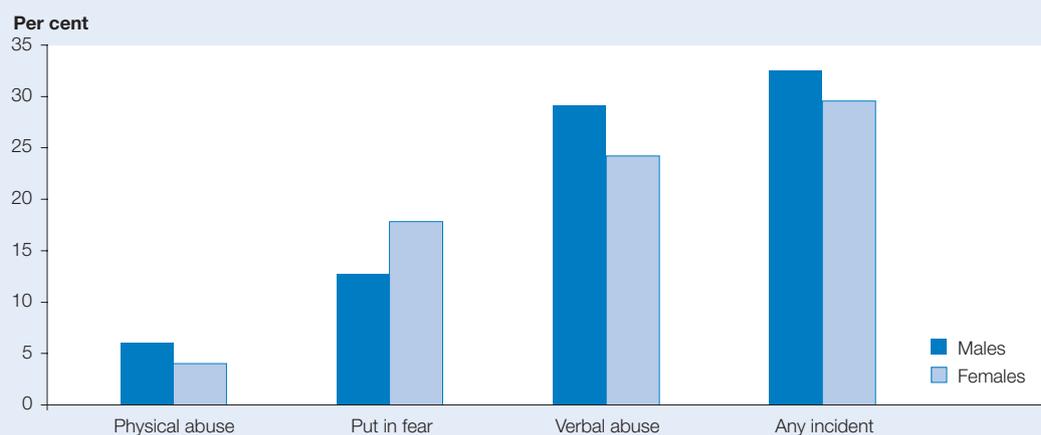
Source: ABS 2006n.

- In 2005, 14% of 18–24 year olds were the victims of physical assault, 10% of physical threats and 2% of sexual assault.
- Males had much higher rates of physical assault (21.1%) and physical threat (14.2%) than females (7.0% and 5.2% respectively).
- More than one-third of all victims of physical assault (37.5%) and physical threat (33.9%) were young people aged 18–24 years.

Alcohol- and drug- related violence

There is a strong link between alcohol and other drug consumption and violence. Young people are more likely to be involved in alcohol and other drug-related violence than other Australians, particularly young males. Violence can include physical and verbal abuse, as well as being put in fear by another person, all of which can impact on a person's health and wellbeing.

Data on alcohol and drug related violence is from the 2004 National Drug Strategy Household Survey—a comprehensive survey focused on licit and illicit drug use among Australians.



Source: AIHW analysis of 2004 National Drug Strategy Household Survey.

Figure 3.16: Victims of alcohol- and drug-related incidents in the past 12 months, aged 14–24 years, by incident and sex, 2004

INDICATOR:

Alcohol- and drug-related violence victimisation rate for young people aged 14–24 years

- In the 12 months prior to the survey, 31% of young people aged 14–24 years were the victim of drug-related violence (including alcohol-related violence). Verbal abuse was the most common form of drug-related violence experienced by young people (27%), followed by being 'put in fear' (15%), and physical abuse (5%).
- Males were slightly more likely to report being the victim of alcohol and drug-related violence than females (33% compared with 30%).
- While females were more likely than males to report being 'put in fear', males were more likely than females to report being the victim of drug-related verbal abuse or drug-related physical abuse.

Table 3.24: Victims of alcohol- and drug-related incidents in the past 12 months, aged 14–24 years, by influence and incident, by sex, 2004 (per cent)

Influence and incident	Males	Females	Persons
Alcohol			
Verbal Abuse	27.5	22.5	25.0
Physical Abuse	5.4	3.5	4.4
Put in Fear	10.6	15.4	13.0
Any incident	30.4	27.4	28.9
Illicit drugs			
Verbal Abuse	10.8	8.8	9.8
Physical Abuse	1.8	1.4	1.6
Put in Fear	6.0	8.5	7.3
Any incident	13.3	12.5	12.9

Source: AIHW analysis of 2004 National Drug Strategy Household Survey.

- In 2004, 29% of young people aged 14–24 years were the victims of alcohol-related violence and 13% were the victims of illicit drug-related violence.
- One-quarter of 14–24 year olds had been verbally abused by a person under the influence of alcohol.

Hospital separations due to assault

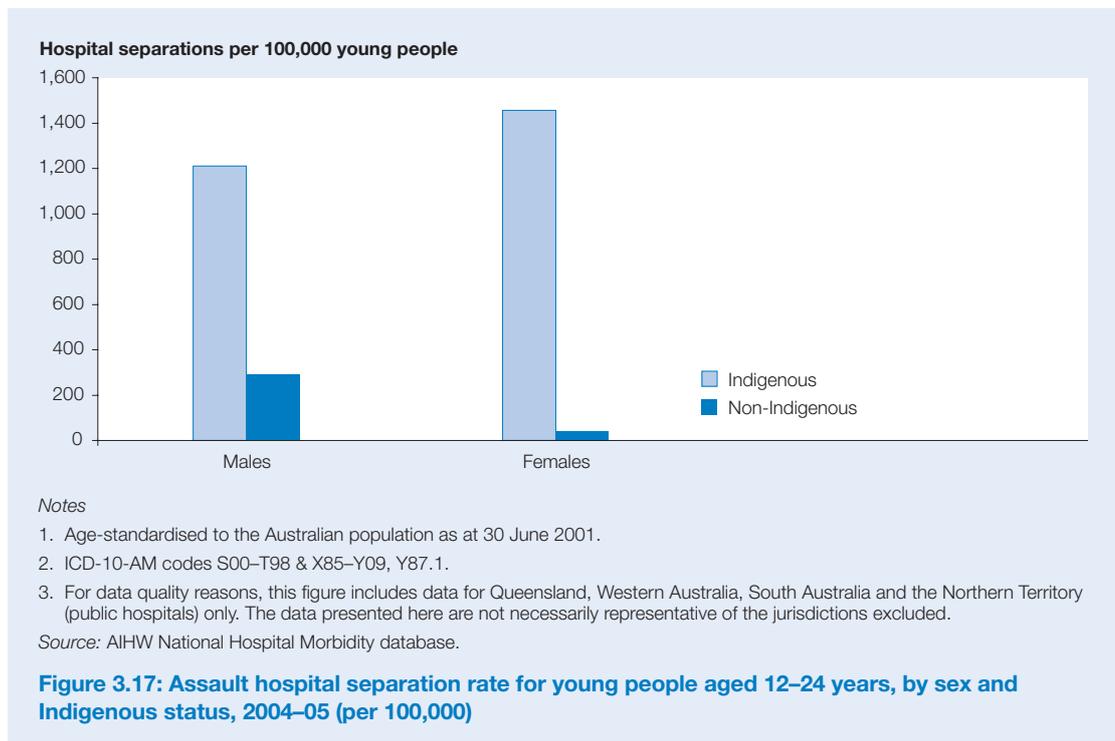
In more serious cases of assault, the victim may require medical treatment or may be hospitalised. In 2004–05, there were 7,359 hospital separations among young people aged 12–24 years for an injury caused by assault, a rate of 203 per 100,000 young people (ICD-10-AM codes S00–T98 & X85–Y09, Y87.1).

The young person's relationship to the person identified as the perpetrator of the assault differed for young males and young females. Among the separations for young males, 16% were due to assaults perpetrated by one or multiple strangers, compared with 8% for young females. In contrast, 33% of the separations for young females were due to assaults perpetrated by a spouse or domestic partner, compared with less than 1% for young males.

Further information on hospital separations for injuries caused by assault is available under *Injury and poisoning* in Part 2 of this report.

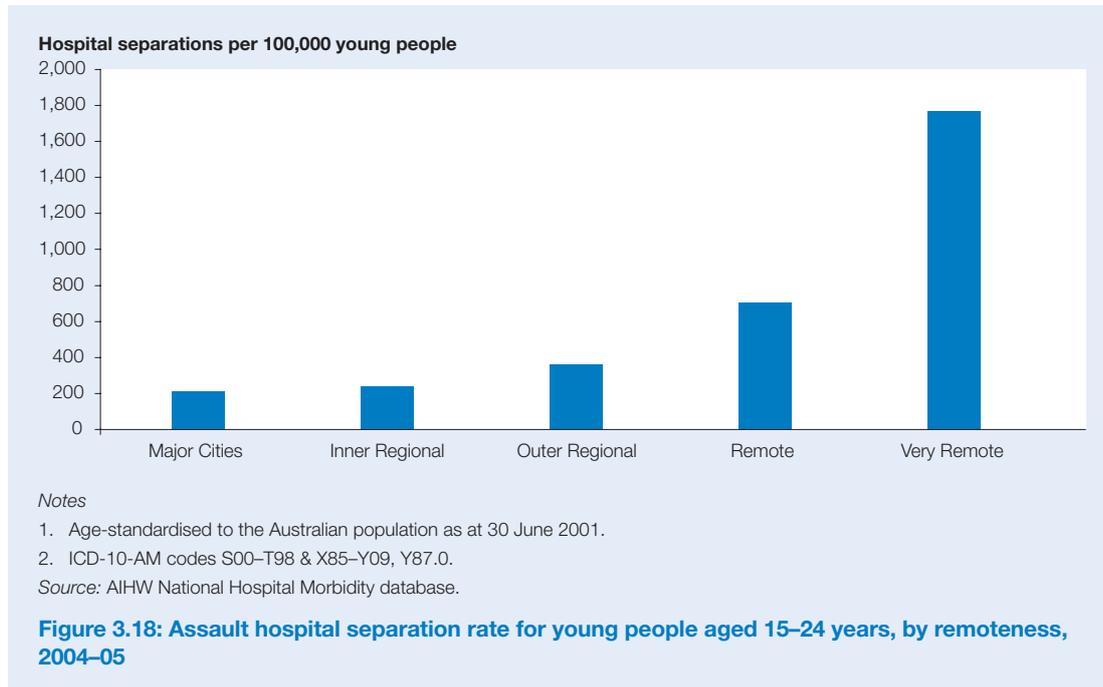
Population groups

Aboriginal and Torres Strait Islander young people



- In 2004–05, age-standardised hospital separation rates for injuries due to assault were significantly higher among Indigenous young people aged 12–24 years compared with other young Australians (Qld, WA, SA and public hospitals in NT only). The rates for Indigenous young people were 1,248 per 100,000 for males and 1,502 per 100,000 for females, compared with 298 per 100,000 for other Australian males and 46 per 100,000 for other young Australian females.

Regional status



- In 2004–05, age-standardised hospital separation rates for injuries due to assault were lowest among young people aged 15–24 years living in Major Cities (210 per 100,000) and Inner Regional areas (240 per 100,000) and highest among young people living in Remote (706 per 100,000) or Very Remote areas (1,771 per 100,000).

Results from the ABS 2002 General Social Survey indicate that young people aged 18–24 years living in Inner Regional areas were more likely to report being the victim of physical or threatened violence (20%) than young people living in Major Cities (16%) or other areas (10%).

Socioeconomic status

Results from the ABS 2002 General Social Survey showed a steady increase in the proportion of young people aged 18–24 years reporting that they had been the victim of physical or threatened assault with increasing socioeconomic disadvantage. The most disadvantaged young people (lowest socioeconomic quintile) were more likely to be the victim of physical or threatened violence (20%) than the least disadvantaged young people (highest socioeconomic quintile) (12%).

A similar pattern was observed in the 2004–05 hospital separation rates for injuries due to assault by relative disadvantage. Young people aged 15–24 years living in the most disadvantaged areas were twice as likely to be hospitalised (3.4%) as young people living in the least disadvantaged areas (1.6%).

Homelessness

It is well documented that children and young people who are homeless, whether as part of a family unit or on their own, experience negative social and health consequences (AIHW 2006d). A number of specific health conditions have been associated with homelessness, including gastroenteritis and a range of respiratory conditions, such as bronchitis and asthma (Kermode et al. 1998). Mental illnesses, such as depression and schizophrenia, are also relatively common among homeless people (Kermode et al. 1998).

The social and physical conditions in which many homeless people live contribute to, or exacerbate, their poor health (Kermode et al. 1998). Young people who become homeless are at an increased risk of exposure to a number of social and environmental factors that could damage their health. These include physical and sexual assault, poor diet, and inadequate shelter. Young homeless people are also more likely than other young people to engage in health risk behaviours such as tobacco use, drug and alcohol abuse, and unsafe sex (Sibthorpe et al. 1993).

Estimating the homeless population

Obtaining an accurate count of the homeless population is difficult as people often move in and out of homelessness and may never be counted. There are two major data sources providing information on the number of homeless people in Australia—the ABS Census of Population and Housing, and statistics collected from homeless refuges funded under the Supported Accommodation Assistance Program (SAAP).

The ABS uses a cultural definition of homelessness to identify the homeless population in the Census (ABS 2003b; for a discussion of alternative definitions of homelessness see AIHW 2005b). Homelessness is defined in reference to culturally acceptable minimum standards of housing. In Australia, this is considered to be a small rental flat with a bedroom, living room, kitchen, bathroom and an element of security of tenure. People without such accommodation are considered homeless.

People living on the streets or in makeshift accommodation, people living temporarily with others, and people living in boarding houses were counted, where possible, among the homeless in the 2001 Census. Census data provides a point-in-time measure of the homeless population—the number of people homeless on a particular night.

SAAP is the major government response to homelessness, providing recurrent funding to agencies offering a variety of support services to homeless people. The definition of homelessness used to determine eligibility for SAAP services is broader than the cultural definition and includes people at imminent risk of homelessness. SAAP data provides an estimate of the number of people who were homeless at some point over a 12-month (or other) period of time and who sought assistance.

The ABS combines information from the Census with SAAP statistics to produce an estimate of the number of people that are homeless on Census night (ABS 2003b). Using these combined sources, the ABS estimates that on Census night, 2001, 99,900 people were homeless, including 36,173 young people aged 12–24 years (36% of the homeless population and 1% of the population aged 12–24 years).

SAAP clients

SAAP data provide important information about service utilisation among young homeless people, and are the most recent available data on youth homelessness. Young people may access SAAP services in one of two ways—they may themselves become a SAAP client, or they may accompany a parent or guardian who is a SAAP client.

INDICATOR:

Proportion of young people aged 12–24 who are currently homeless

Table 3.25: SAAP clients by age and sex, 2004–05

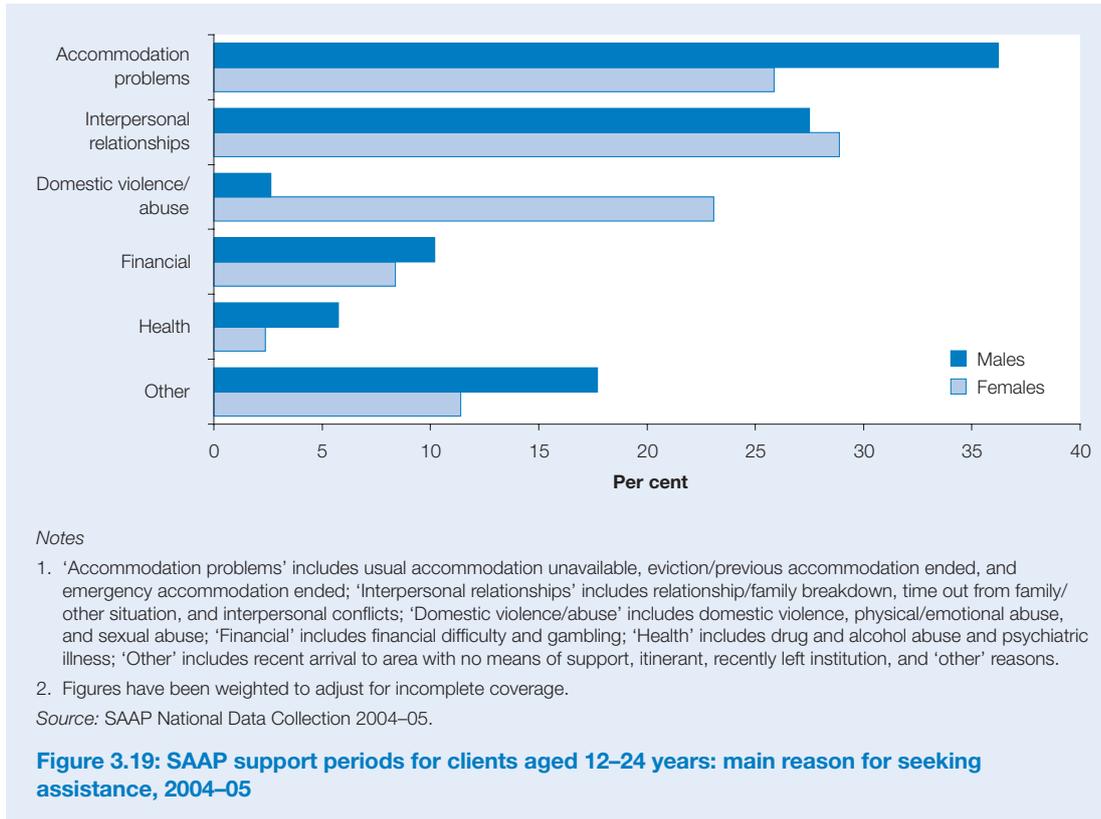
Age	Males		Females		Persons	
	Number	Percent	Number	Percent	Number	Percent
12–14 years	500	1.2	800	1.3	1,400	1.4
15–17 years	3,600	8.9	6,000	10.1	9,500	9.5
18–19 years	3,000	7.4	4,800	8.1	7,800	7.8
20–24 years	5,600	13.9	9,800	16.5	15,400	15.4
Ages 12–24 years	12,700	31.5	21,400	36.0	34,100	34.2
All ages	40,400	100.0	59,400	100.0	99,800	100.0

Note: Figures have been weighted to adjust for incomplete coverage.

Source: SAAP National Data Collection 2004–05.

- In 2004–05, 34,100 young people aged 12–24 years accessed SAAP services (less than 1% of 12–24 year olds). A further 7,500 children aged 13–17 years accompanied a parent or guardian who was receiving SAAP support.
- During 2004–05, 1 in 3 (34%) clients of SAAP funded agencies were aged 12–24 years.
- The majority of young SAAP clients were female (63%; or 21,400 out of 34,100).

Reasons for seeking SAAP assistance

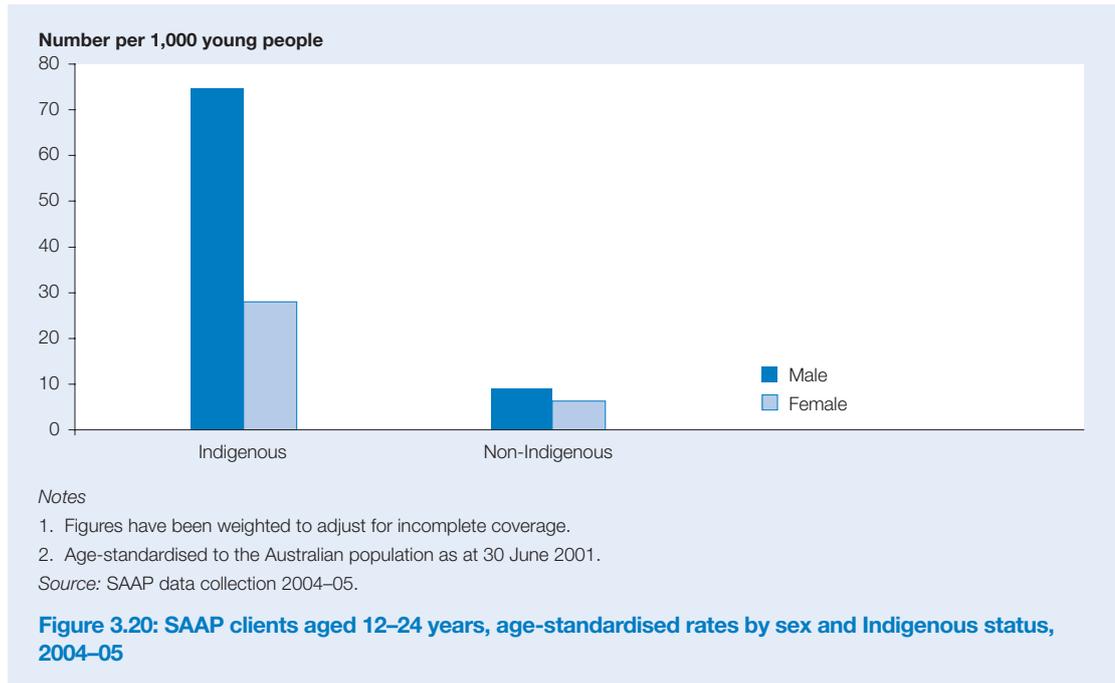


- In 2004–05, among young male SAAP clients, the most common main reason for seeking assistance was accommodation problems (36% of support periods for young males). In the same year, the most common main reason for seeking assistance among young females was interpersonal relationships (29% of support periods for young females). Domestic violence/abuse was also a common main reason for seeking assistance among females (23%).

Aboriginal and Torres Strait Islander young people

The rate of homelessness among Indigenous Australians is considerably higher than among other Australians. While 2.4% of the Australian population identify as Indigenous, 9% of the homeless population at the 2001 Census were Indigenous (ABS 2003b).

Indigenous people were also over-represented among SAAP clients during 2004–05, making up 16% of all SAAP clients for that period (AIHW 2006e). Indigenous young people were also over-represented among SAAP clients. While 3.4% of the young people aged 12–24 years identify as Indigenous, 19% of young SAAP clients aged 12–24 years were Indigenous.



- Among young people aged 12–24 years, the age-standardised rate for seeking SAAP assistance for Indigenous females (74 per 1,000) was 8 times the rate for non-Indigenous females (9 per 1,000), and the rate for Indigenous males (27 per 1,000) was 4 times the rate for non-Indigenous males (6 per 1,000).

Legal and justice issues

Young people who come into contact with the criminal justice system represent a particularly disadvantaged population, characterised by high levels of socioeconomic stress, physical abuse and childhood neglect. In fact, childhood neglect is considered to be one of the strongest predictors of later youth offending. There are a number of family and community factors leading to neglect, including economic hardship, housing inadequacy, poor social support networks, and poor family functioning.

Young offenders often have significant physical and mental health needs, and many have engaged in health-risk behaviours from an early age (Allerton & Champion 2003; Bickel & Campbell 2002). A recent study looking at the health needs of young people in juvenile justice custody in NSW found high prevalence rates for a number of conditions, particularly sexually transmissible and bloodborne infections such as hepatitis B and hepatitis C (Allerton & Champion 2003). Injuries were also common (sometimes the result of assaults perpetrated by fellow detainees), as were symptoms of psychological disorders, substance use problems, suicide, and self-harm.

Depending on their age, young people accused of committing crimes are dealt with within either the juvenile justice system or the adult justice system. Young people aged up to 17 years are generally considered 'juveniles' and those aged 18 years or over are considered 'adults', although this varies somewhat between states and territories. This section looks at the proportion of young people aged 12–17 years in juvenile justice supervision and the rate of imprisonment among young people aged 18–24 years.

Juvenile justice

Although every state and territory has its own juvenile justice legislation, the legislation is similar across Australia. For example, key principles of juvenile justice in all jurisdictions include: diversion of young people from court where appropriate; incarceration as a last resort; victim's rights; the acceptance of responsibility by the offender for his or her behaviour; and community safety (AIHW 2005b:117–121).

National data on young people under juvenile justice supervision, either pre-sentence or sentenced, are available from the Juvenile Justice National Minimum Data Set (JJ NMDS). These data are collected by the AIHW from the departments in each state and territory with responsibility for juvenile justice (AIHW 2006f).

Juvenile justice supervision may be either community-based or detention-based. The vast majority of supervision is, however, community-based. During 2003–04, only a small proportion (9%) of periods of supervision involved detention (AIHW 2006f).

Table 3.26: Young people under juvenile justice supervision aged 12–17 years, by age and sex, 2003–04 (per 100,000 young people)

Age group	Male		Female		Persons	
	Number	Per 100,000	Number	Per 100,000	Number	Per 100,000
12–13 years	667	233.9	173	63.8	840	151.0
14–15 years	2,626	938.4	667	250.0	3,293	602.4
16–17 years	4,026	1,448.5	867	331.2	4,902	903.7
Total 12–17 years	7,319	868.2	1,749	213.8	9,035	549.1

Source: 2003–04 Juvenile Justice National Minimum Dataset.

- During 2003–04, 9,035 young people aged 12–17 years were under juvenile justice supervision (a rate of 549 per 100,000 young people).
- The supervision rate for males was higher than that for females (868 compared with 214 per 100,000 young people).
- Supervision rates increased with age—the rate for 16–17 year olds was 1.5 times the rate for 14–15 year olds (904 compared with 602 per 100,000 young people).

Young people in prison

The health status of prisoners is generally poor. Inmate surveys have shown that high proportions of prisoners have communicable diseases such as hepatitis B and hepatitis C, and that prisoners are more likely to engage in health-risk behaviours such as smoking (Butler et al. 2004; Butler et al. 1999; D'Souza et al. 2005; Young et al. 2005).

Following release, the health status of prisoners remains poor and participation in health-risk behaviours is high. Studies have consistently found that recently released prisoners have a higher risk of death than the general population. A recent study in Western Australia found the most common causes of death were related to drug and alcohol abuse, suicide or motor vehicle accidents (Stewart et al. 2004).

Young people are over-represented in the prison population. In 2006, young people aged 18–24 years comprised 20% of the total prison population (ABS 2006o), yet only 10% of the total Australian population were aged 18–24 years in the same year.

INDICATOR:

Proportion of young people aged 12–17 years in juvenile justice supervision

Table 3.27: Rate of imprisonment among young people aged 18–24 years, by age and sex, 30 June 2006 (per 100,000 young people)

INDICATOR:
Rate of imprisonment among young people aged 18–24 years

Age	Males		Females		Persons	
	Number	Rate	Number	Rate	Number	Rate
18 years	247	172.9	16	11.8	263	94.4
19 years	488	336.4	31	22.6	519	183.8
20–24 years	4,008	537.5	268	37.9	4,276	294.4
18–24 years	4,743	458.9	315	32.1	5,058	251.2

Source: ABS 2006o.

- In 2006, there were approximately 5,058 18–24 year olds in prison, a rate of 251 per 100,000 young people.
- Young males were far more likely to be imprisoned than young females. Of young people imprisoned in 2006, 94% were males.
- Among people aged 18–24 years, imprisonment rates increased with age from 94 per 100,000 for 18 year olds to 294 per 100,000 for 20–24 year olds.

Aboriginal and Torres Strait Islander young people

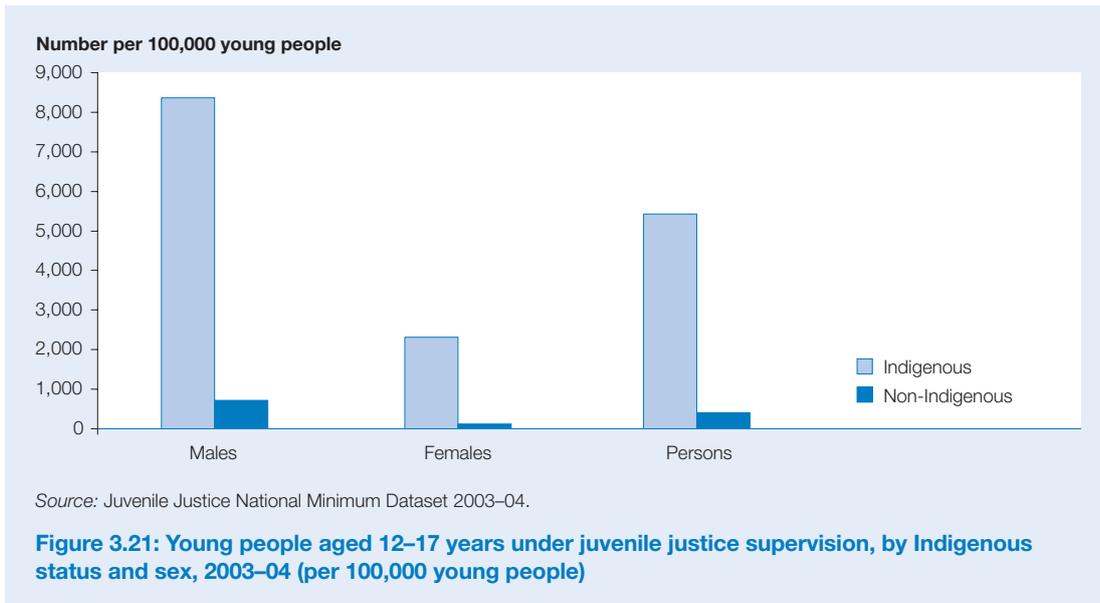
Indigenous people are over-represented in Australian prisons. In 2006, Indigenous people made up 24% of the prison population, and 1.8% of the total adult population (ABS 2006o). The age-standardised rate of imprisonment for Indigenous adults aged 18 years or more was 1,668 per 100,000, making Indigenous adults 13 times more likely to be in prison than other Australians (ABS 2006o). Similar to the adult population, Indigenous young people aged 12–24 years also experience high rates of imprisonment and juvenile justice supervision.

Table 3.28: Rate of imprisonment among young people aged 18–24 years, by age, sex and Indigenous status, 30 June 2006 (per 100,000 young people)

Age	Males		Females		Persons	
	Number	Rate	Number	Rate	Number	Rate
Indigenous						
18 years	112	2,040.8	9	169.3	121	1,120.1
19 years	192	3,568.1	15	296.4	207	1,982.6
20–24 years	1,182	5,113.6	117	511.5	1,299	2,824.6
18–24 years	1,486	4,372.6	141	424.1	1,627	2,420.0
Non-Indigenous						
18 years	126	91.7	4	3.1	130	48.5
19 years	283	202.6	13	9.8	296	108.8
20–24 years	2,780	384.8	144	21.1	2,924	207.9
18–24 years	3,189	319.0	161	17.0	3,350	172.1

Source: ABS 2006o.

- Among young people aged 18–24 years, the Indigenous imprisonment rate (2,420 per 100,000) was 14 times the non-Indigenous rate (172 per 100,000) in 2006.
- Indigenous young people accounted for almost one-third of the prison population aged 18–24 years, despite accounting for only an estimated 3.3% of the total Australian population aged 18–24 years.



- The rate of Indigenous 12–17 year olds in juvenile justice supervision was 13 times the non-Indigenous rate (5,430 per 100,000 compared with 409 per 100,000). This pattern was observed for both sexes.

3.3 Socioeconomic factors

Both Australian and overseas studies have demonstrated that people who are socially and economically disadvantaged have higher rates of morbidity and mortality (AIHW 2006a). This effect is not just limited to the extremely disadvantaged—health inequalities are apparent across all levels of society. For example, mortality rates have been found to fall in a continuous gradient from least to most disadvantaged, with those in the middle levels of society experiencing higher mortality than those in the wealthiest levels (Turrell & Mathers 2001).

Socioeconomic disadvantage can have many forms, including low income, poor education, unemployment, limited access to health services, living in poor housing, and working in an unsafe, unrewarding, or menial job. Alone or in combination, and over time, these stressful economic and social circumstances have an effect on health and wellbeing.

This section covers indicators relating to young peoples socioeconomic circumstances, focusing on three broad areas: education, employment and income. While these three factors are discussed separately, they are closely related: education is often a key determinant of employment, and employment is a major determinant of income. People experiencing socioeconomic disadvantage tend to be disadvantaged in each of these areas, compounding the negative effects on their health.

When looking at the social and economic circumstances of young people, it is important to also consider the socioeconomic status of their parents, since many young people share the same level of advantage or disadvantage as their parents (at least until they become independent). For this reason, indicators relating to the socioeconomic circumstances of parents in the areas of education and employment are also presented.

Education

International and Australian research supports a link between less education and poorer health status (see Turrell et al. 2006). In Australia, individuals with higher levels of education report fewer illnesses and have better mental health than those with lower levels of education (Turrell et al. 2006). Turrell et al. (2006) examined data from the 1989–90, 1995 and 2001 ABS National Health Surveys and found that people with lower educational attainment (no post-school qualification or a diploma/vocational qualification) rated their own health more poorly, and reported a number of illnesses more often than those with a bachelor degree or higher.

There are a number of ways, both direct and indirect, that education may impact upon health. Education may directly impact upon health by providing young people with greater knowledge and understanding about health, particularly an awareness of health risk and protective factors. For example, smoking, insufficient physical activity and obesity are less common among people with more education (Ball & Mishra 2006; Hill et al. 1998; Turrell et al. 2006). Education may also indirectly affect health through its association with typically safe, secure and generally better paid and more rewarding employment. This, in turn, positively influences health-related factors such as stress level, injury risk, diet and ability to acquire quality medical care.

In general, Australians are highly educated. In 2004, Australia was above the OECD average in terms of mean years of formal education and proportion of the population with a tertiary qualification (OECD 2006). Literacy and numeracy levels are also generally high among young people in Australia. In a recent international study of reading, mathematical and scientific literacy among 15 year olds, Australian students had a mean score significantly higher than the mean score for all OECD students (Thomson et al. 2004). However, this study also found a large variation in the performance of students within Australia, suggesting the education system may not be meeting the needs of all students equally.

Apparent retention rate and Year 12 completion

As the number of low-skilled jobs in the employment market decreases, the importance of educational qualifications increases. Students who fail to complete Year 12 have fewer employment opportunities and are more likely to experience extended periods of unemployment than Year 12 graduates (Lamb et al. 2000). In May 2005, 20% of school leavers who had completed Year 12 were not fully engaged in either study or work compared with 40% of Year 11 completers and nearly 50% of Year 10 or below completers (Dusseldorp Skills Forum & Monash University–ACER 2006).

One measure of Year 12 attainment among young people is the apparent retention rate to Year 12, defined as the percentage of students who remain in secondary education from the start of secondary school to Year 12. To calculate the apparent retention rate in 2006, the total number of full-time students in Year 12 in 2006 is divided by the number of full-time students in the base year—Year 7 in NSW, Vic, Tas and the ACT in 2001 and Year 8 in Qld, SA, WA and the NT in 2002 (since those years represent the commencement of the secondary school system in the respective state or territory). This is then converted to a percentage.

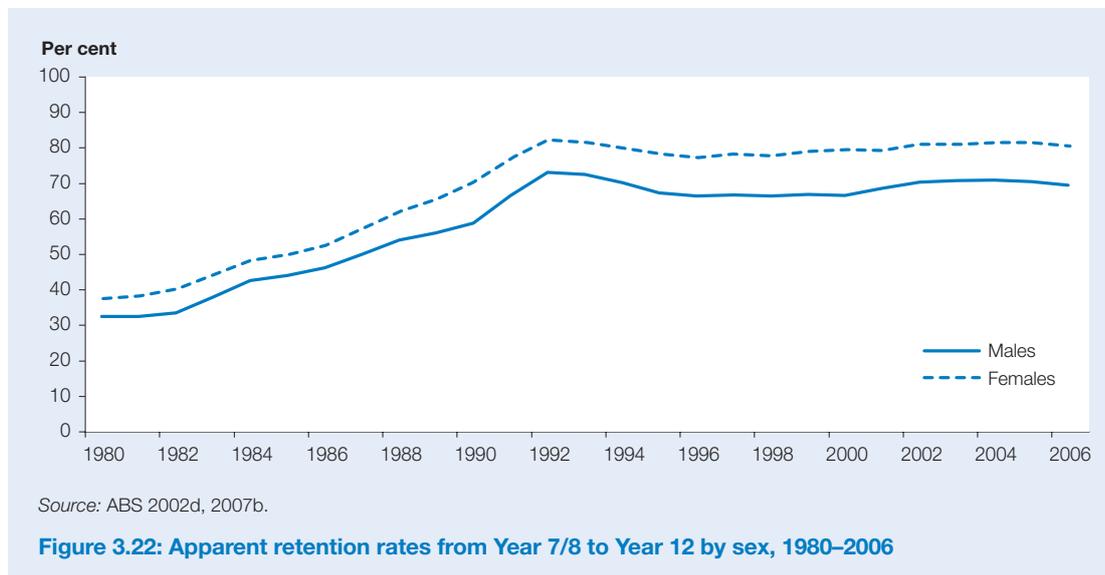


Figure 3.22: Apparent retention rates from Year 7/8 to Year 12 by sex, 1980–2006

- In 2006, the apparent retention rate to Year 12 was 75% (69% for males and 81% for females).
- Since 1981, the national retention to Year 12 has increased substantially from 35% in 1980 to 75% in 2006.
- Throughout the period, retention rates were consistently higher for females than for males. In 2006, the rate for females was 12 percentage points higher than the rate for males.

While most young people complete Year 12 at the end of their schooling before entering further study or the employment market, other young people may decide to complete Year 12 at a later stage. The calculation of the apparent retention rate does not include such students. It also does not take into account students repeating a year of education, migration and other changes to the school population.

An alternative measure of educational achievement is the Year 12 completion rate, which is the number of students who obtain a Year 12 certificate as a proportion of the estimated potential Year 12 population. In 2004, the Year 12 completion rate was 68%. Year 12 completion rates remained fairly constant between 1998 and 2004, varying between 68% and 69% (MCEETYA 2006).

Year 12 attainment can also be measured by the proportion of young people aged 20–24 years who have completed Year 12. In 2005, 75% of 20–24 year olds had completed Year 12—an increase from 65% in 1996 (ABS 2006c).

INDICATOR:

Apparent retention rates for young people to Year 12

INDICATOR:

Proportion of young people aged 20–24 who have completed Year 12

INDICATOR:

Proportion of young people aged 15–24 years undertaking study leading to qualifications

Study leading to a qualification

Qualifications are an important indicator of an individual's capacity to compete in demanding labour markets. While tertiary qualifications are often used as a proxy for income and employment prospects, obtaining a qualification at any level is likely to improve young people's employment opportunities and their ability to compete for higher paid positions.

Based on results from the ABS 2006 Survey of Education and Work, around 77% of young people aged 15–19 years and 36% of young people aged 20–24 years were enrolled in a course leading to a qualification (including Year 12 or below) (ABS 2006g). Overall, the rate of young people aged 15–24 years undertaking study leading to a qualification has increased from 51% in 1996 to 57% in 2006 (ABS 2006g).

Table 3.29: People aged 15–24 years undertaking study leading to a qualification: level of current study by sex and age group, 2006 (per cent)

Level of current study	Males		Females	
	15–19 years	20–24 years	15–19 years	20–24 years
Bachelor degree	14.2	51.2	18.8	63.7
Advanced diploma/diploma	2.8	9.1	4.4	10.4
Certificate	15.5	31.7	8.0	14.5
Year 12 or below	66.8	*0.5	67.8	*1.0
Other/level not determined	*0.7	7.6	*1.0	10.4
<i>Total per cent</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>
Total number	531,600	253,900	518,200	254,500

Note: Estimates marked with * have a relative standard error (RSE) of between 25% and 50% and should be interpreted with caution.

Source: ABS 2006g.

- In 2006, young people aged 15–19 years undertaking a course of study leading to a qualification were most likely to be studying for their Year 12 or below (67% for males and 68% for females).
- Most young people aged 20–24 years who were enrolled in a course leading to a qualification were studying towards a bachelor degree (51% of males and 64% of females).
- For both age groups, a higher proportion of females were studying towards a bachelor degree than males. Males, on the other hand, were more likely to be studying towards a certificate than females.

Post-school qualifications

'Post-school' qualifications are sometimes referred to as 'non-school qualifications'. The ABS 2006 Survey of Education and Work defined non-school qualifications as educational attainments other than those of pre-primary, primary or secondary education. Non-school qualifications included postgraduate Degree level, Master Degree level, Graduate diploma and Graduate certificate level, Bachelor Degree level, Advanced Diploma and Diploma level, and Certificates I, II, III, and IV levels.

Results from the survey indicate that around 12% of 15–19 year olds and 18% of 20–24 year olds were currently enrolled in a course leading to a non-school qualification, and 8% of 15–19 years olds and 44% of 20–24 year olds had non-school qualifications in 2006 (ABS 2006g). The proportion of young people aged 15–24 years with non-school qualifications has increased from 23% in 1996 to 26% in 2006.

Literacy and numeracy levels

In addition to being enrolled in education, it is important that young people are actively learning while they are there. Proficiency in literacy and numeracy is regarded as essential for day-to-day living, for further educational opportunities and for employment prospects. Conversely, poor literacy and numeracy skills are a predictor of early school leaving (Parliament of Australia. House of Representatives Standing Committee on Education and Training 2002).

INDICATOR:

Proportion of young people aged 15–24 years undertaking or with post school qualifications

The Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) has established national benchmarks for reading, writing and numeracy for Years 3, 5 and 7 students. A benchmark is a nationally agreed minimum standard of performance below which a student will have difficulty progressing satisfactorily at school. The performance of students across Australia is measured against these benchmarks.

In 2004, the vast majority of students in Year 7 (aged approximately 12–14 years) met the national reading, writing and numeracy benchmarks (91%, 94%, and 82% respectively).

There was a statistically significant difference in the proportion of males and females meeting the reading benchmark (89% and 93% respectively) and the writing benchmark (91% and 96% respectively). There was no significant difference between the proportions of males and females meeting the numeracy benchmark (both 82%).

INDICATOR:

Percentage of young people in Year 7 meeting national literacy and numeracy benchmarks

Population groups

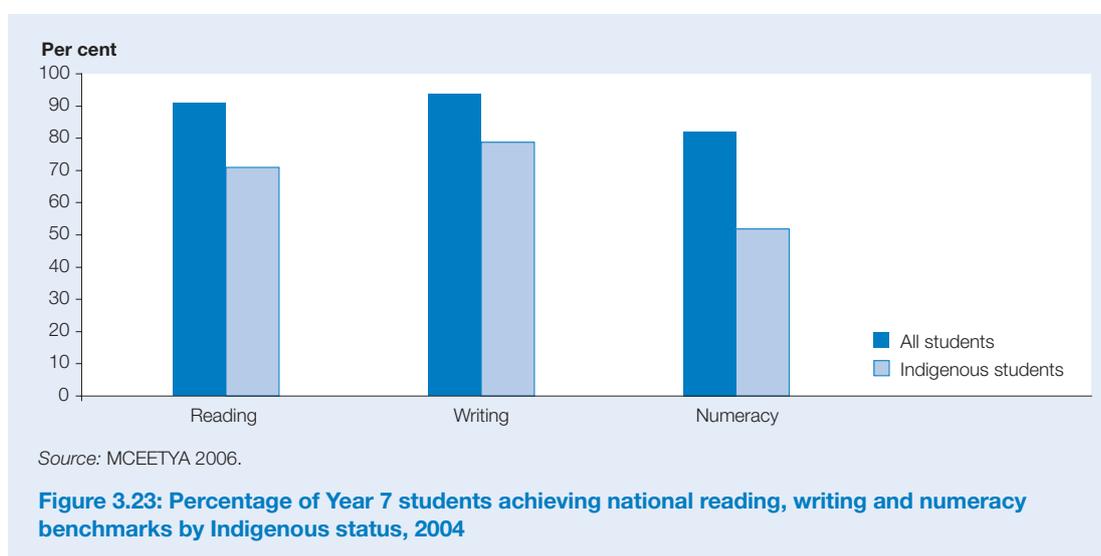
While education levels are generally high among young Australians, some groups of young people appear to be at a disadvantage. Indigenous young people, young people living in remote areas, and young people from low socioeconomic backgrounds often do not achieve the same educational outcomes as other young Australians, and are more likely to leave school early (Hunter & Schwab 2003; Lamb et al. 2000).

There are a variety of factors that may lead to underachievement among particular population groups, including social, cultural and language differences, differences in family and community attitudes to schooling, and proximity to schools. There is also a growing awareness of the importance of student engagement with the concepts of learning and with the school community in order to achieve academically. Underachievement among particular groups may reflect something in the school, home or social environment which is causing disengagement among these students.

Aboriginal and Torres Strait Islander young people

The lower achievement of Indigenous students compared with other Australian students is apparent in the results of the OECD's 2003 Programme for International Student Assessment. In all areas of assessment, the average achievement of Indigenous students was considerably below the average achievement of other Australian students and, in many cases, significantly below international averages (Thomson et al. 2004).

A higher proportion of Indigenous students compared with other Australian students are also failing to meet national benchmarks in reading, writing and numeracy.



- In 2004, the proportion of Indigenous Year 7 students reaching the benchmarks for reading (71%), writing (79%) and numeracy (78%) was statistically significantly lower than the proportions of all Year 7 students reaching these benchmarks (91%, 94%, and 82% respectively).

While the percentage of Indigenous students completing Year 12 is increasing (ABS 2006c), most Indigenous students leave school before completion of Year 12. In 2006, the apparent retention rate to Year 12 for Indigenous students was 40%, compared with a rate of 76% for non-Indigenous students (ABS 2007b).

Socioeconomic status

In 2004, students living in the most disadvantaged areas (3 lowest deciles) had a lower Year 12 completion rate than students living in the least disadvantaged areas (3 highest deciles) (59% compared with 79% respectively) (MCEETYA 2006). The Year 12 completion rate for the most disadvantaged areas was also lower than the national average (59% compared with 68%).

Regional status

The MCEETYA Classification of Geographical Location divides students into three broad geographical areas: Metropolitan, Provincial and Remote. The classification is based on a combination of population size and the Accessibility/Remoteness Index of Australia (ARIA).

In 2004, the Year 12 completion rate in Metropolitan areas (70%) was higher than the rates for Provincial areas (63%) and Remote areas (54%) (MCEETYA 2006).

In 2003, a lower proportion of students in Remote areas compared with Metropolitan areas met national benchmarks for reading (83% compared with 92%), writing (84% compared with 94%), and numeracy (73% compared with 83%) (MCEETYA 2006).

Employment

Secure and satisfactory employment offers young people not only financial independence, but also a sense of control, self-confidence and social contact. In contrast, unemployment, insecure employment and unfavourable working conditions have all been associated with low self-esteem, feelings of depression and mental health problems in young people (Morrell et al. 1998). Studies have also found an association between unemployment and a range of health concerns among both youth and adults, including low self-rated health, cardiovascular disease, and drug and alcohol abuse (Ahs & Westerling 2006; Hammarstrom & Janlert 2002; Jin & Shah 1995; Muir et al. 2003; Saunders 2002).

The Longitudinal Survey of Australian Youth (LSAY) found that young people who became unemployed experienced a 50% increase in the risk of psychological disturbance. Psychologically well young men who became unemployed reported feeling depressed, whereas young women reported loss of confidence; both complained of not having a useful role in their lives (Morrell et al. 1994). Morrell et al. (1998) reviewed evidence from a number of different data sources and found that youth unemployment, particularly for extended periods, is associated with self-harm, suicide and attempted suicide among young men.

Since the 1980s, increasing proportions of young people have participated in higher education rather than progressing directly from school to work (Wyn 2004). A large number of young people combine study and work, while others combine intervals of work and study. School leavers are now taking long (often years) and varied pathways from school to full-time work. This section looks at the patterns of participation in work and education among young people aged 15–24 years. Young people aged 12–14 years are too young to legally enter into paid employment and so are not included in the employment indicators. It is assumed that all young people aged 12–14 years are full-time students.

Full-time participation

Full-time participation includes young people who are in full-time education and/or full-time work, and those who combine part-time study with part-time work. Young people who are not participating full-time in work and/or study are considered to be at risk of personal and social stresses and may have poorer long-term labour market outcomes than other young people (Dusseldorp Skills Forum & Monash University–ACER 2006).

Table 3.30: Proportion of young people aged 15–24 years in employment and/or education by age group, 2006

Education and employment status	Age group	
	15–19 years	20–24 years
Full-time education only	41.3	10.0
Full-time employment only	10.1	43.6
Full-time employment and part-time education	5.4	8.6
Full-time education and part-time employment	27.2	13.1
Full-time education and full-time employment	0.8	1.0
Part-time education and part-time employment	1.4	1.8
Part-time education only	0.6	1.0
Part-time employment only	5.6	8.6
Not in education or employment	7.7	12.3
Total	100.0	100.0

Source: ABS 2006g.

INDICATOR:

Full-time participation rate of young people aged 12–24 years

- Based on results of the ABS 2006 Survey of Education and Work, 85% of young people aged 15–19 years and 76% of young people aged 20–24 years were participating full-time in education and/or work in 2006.
- The majority (69%) of young people aged 15–19 years were in full-time education in 2006, including 28% who combined full-time education with part-time or full-time work.
- Half (53%) of young people aged 20–24 years were in full-time employment, including 10% who combined full-time employment with full-time (1%) or part-time study (9%).
- Around 8% of young people aged 15–19 years and 12% of young people aged 20–24 years were neither working nor studying. These figures include young people who were not in the labour force as well as those who were unemployed.

Casual Employment

Casual employment is defined as employment where the employee is not entitled to either paid holiday leave or paid sick leave (ABS 2006b). Casual employment is more commonly part-time, but in contrast to the common perception, it is not necessarily short-term or irregular. In 2004, 55% of casual employees had been with their employer for 12 months or more, and 69% were part-time (ABS 2006p). Perhaps since many young people combine part-time work with study, they are over-represented among casual employees. While young people made up 21% of employees in 2004, they comprised 40% of casual employees (ABS 2006p).

In August 2005, 66% of employed 15–19 year olds and 33% of employed 20–24 year olds were casual employees. This is an increase from 1992, when the corresponding proportions were 54% and 23% respectively (ABS 2006b).

INDICATOR:

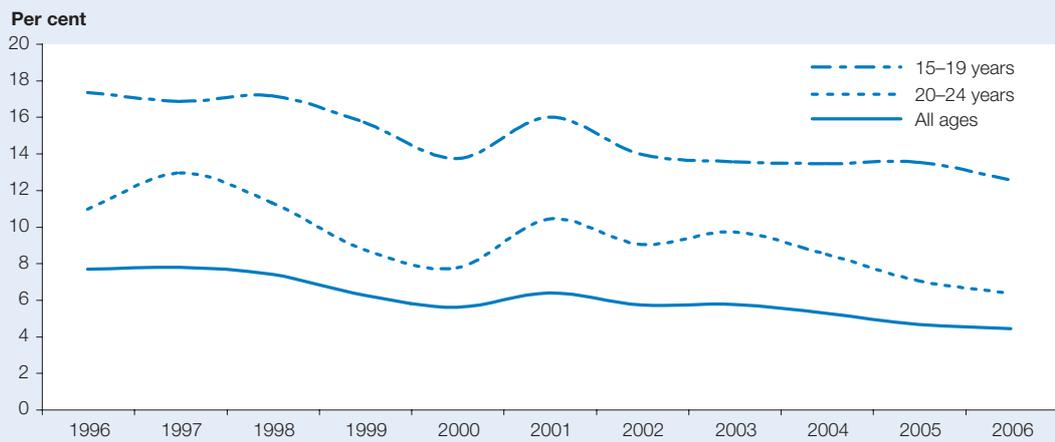
Proportion of young people participating in casual work

Unemployment

In July 2006, young people comprised 38% of the unemployed population—22% of the unemployed population were aged 15–19 years and a further 16% were aged 20–24 years (ABS 2006j). Many unemployed young people are either full- or part-time students. In May 2006, 58% of unemployed 15–19 year olds and 22% of unemployed 20–24 year olds were enrolled in a course of study (ABS 2006g).

INDICATOR:

Unemployment rate for young people aged 15–24 years (per cent)



Source: ABS 2006j.

Figure 3.24: Unemployment rates from July 1996 to July 2006

- The unemployment rates for 15–19 and 20–24 year olds were 12.5% and 6.3% respectively in July 2006, a much higher rate than the national unemployment rate of 4.4%.
- Unemployment rates for young people aged 15–19 years and 20–24 years have shown a general decline over the last decade, although there have been some fluctuations. The unemployment rate for young people aged 15–19 years has decreased from 17.3% to 12.5% and for 20–24 year olds from 10.9% to 6.3%.
- Over the period, unemployment rates for young people aged 15–19 years and 20–24 years have remained consistently higher than the national rate. On average, the rate for young people aged 15–19 years and 20–24 years was 2.5 times and 1.5 times the national rate respectively.

Long-term unemployment

Long-term unemployment is defined as a continuous period of unemployment of 12 months or more. The health risks associated with unemployment, particularly depression, have been found to increase with the duration of unemployment. People who experience long-term unemployment may also find it difficult to maintain and develop skills relevant to the work place, and so may have greater difficulty in finding work.

INDICATOR:

Proportion of young people aged 15–24 years who were long-term unemployed

Table 3.31: Labour force underutilisation rates by age group, September 2005

Age group (years)	Long-term unemployment rate	Unemployment rate	Underemployment rate	Labour force underutilisation rate
15–19	1.1	16.2	11.8	27.9
20–24	0.9	7.4	7.5	14.9
25–34	0.8	4.7	4.0	8.6
35–44	0.7	3.5	4.9	8.5
45–54	1.1	3.6	4.8	8.4
55–69	1.1	3.0	3.6	6.6
Total	0.9	5.1	5.3	10.5

Note: All rates are expressed as a proportion of the labour force. The labour force underutilisation rate is the unemployed and the underemployed as a proportion of the labour force.

Source: ABS 2006b.

- Despite high unemployment rates among young people, the long-term unemployment rates for young people aged 15–19 years (1.1%) and 20–24 years (0.9%) were similar to the national rate of 0.9%.

Since many young unemployed people are recent school leavers, the number of long-term unemployed young people as a proportion of all unemployed young people is comparatively low.

Underemployment

Underemployment is conceptualised in a variety of ways, but most commonly in terms of an inadequate wage or an insufficient number of hours worked (for example, involuntary part-time work). Underemployed workers report lower levels of health and wellbeing than adequately employed workers and are more likely to experience low self-esteem, alcohol abuse and depression (Dooley et al. 2000; Friedland & Price 2003).

While unemployment rates are declining among young people, part-time work is increasing. In some cases, young people accept part-time work because they cannot find a full-time position—one-quarter of young people working part-time in 2002 were doing so only because they could not find full-time work (Dusseldorp Skills Forum & Monash University–ACER 2006). Since 1995, full-time jobs have declined by 14,000 for 15–19 year olds and 52,000 for 20–24 year olds (Dusseldorp Skills Forum & Monash University–ACER 2006). In contrast, full-time jobs for Australians aged 25–64 years have risen by more than one million (Dusseldorp Skills Forum & Monash University–ACER 2006).

In the ABS Labour Force Survey, underemployed workers are defined as employed persons who want, and are available for, more hours of work than they currently have (ABS 2006b). According to this survey, the underemployment rate for young people aged 15–24 years was higher than the rate for any other age group in September 2005. While the national underemployment rate was 5.3%, the rates for young people aged 15–19 years and 20–24 years were substantially higher at 11.8% and 7.5% respectively (see Table 3.31).

INDICATOR:

Underemployment rate for young people aged 15–24 years (per cent)

Income

The relationship between income and health and, in particular, whether health status is associated with the inequality of income and wealth in a society, is a much debated area of interest. There is strong evidence from a number of research studies indicating that countries or regions with higher levels of income inequality (disparity between high and low incomes) had worse health status than those with lower levels of income inequality (AIHW 2006a; Mackenbach 2002; Mackenbach & Howden-Chapman 2003). Studies have also shown a link between level of morbidity and personal income (Marmot 2002; Wilkinson & Marmot 2003). However, it is difficult to interpret the relationship between income and health as there is little understanding of what determines income and what benefits incomes might bring (Martikainen et al. 2003). Personal income is, to a greater degree, determined by educational qualifications and occupational status and these are more important predictors of health status than income alone.

Nevertheless, higher personal incomes increase the ability to purchase health-related goods and services such as better food, housing, recreation and health care, and may provide psychological benefits such as a greater sense of control. Income can also lead to positive health-related behaviours and psychosocial wellbeing (Marmot et al. 1998). In Australia, 19% of the mortality burden for males and 12% for females has been associated with socioeconomic disadvantage (AIHW: Mathers et al. 1999). That is, if all Australians had the same death rates as people living in the least disadvantaged areas (highest socioeconomic quintile), then overall mortality rates would reduce by 19% for males and 12% for females.

This section examines the weekly income distribution of young people and the mean weekly earnings of full-time and part-time workers. Indicators of low income presented here are based on income support including the Youth Allowance received by young people, and young people experiencing hardship because of a shortage of money.

INDICATOR:

Proportion of young people who are financially dependent on their families

Financial dependence

Young people who are financially dependent on parents may have different standards of living as their peers depending on the willingness and ability of their parents to provide for them. Although the wellbeing of individuals who are financially dependent on parents are largely unknown, this may lead to conflict and family breakdown and, in extreme situations, this can lead to youth homelessness (Chamberlain & Mackenzie 2002; Schneider 2000). Studies in Sydney and Melbourne have shown that crimes involving stealing and drug dealing by young people were undertaken to supplement their incomes and in some cases for 'survival' (Vinson et al. 1997; White 1997).

According to the ABS, young people aged 15–24 years who are attending an educational institution on a full-time basis and living with parents are considered dependent on their parents. Young people living with parents are often not eligible for income support programs such as Youth Allowance, which is a means-tested income support payment to eligible people aged between 16 and 24 years, unless the parents themselves are considered low income earners. With high unemployment and extended periods spent in education, young people are not in a position to fully provide for their own expenses, and this will prolong their transition to independent living. As noted previously, the unemployment rate in July 2006 for 15–19 and 20–24 year olds were 12.5% and 6.3% respectively, a much higher rate than the national unemployment rate of 4.4% (ABS 2006j). The national apparent retention rate to Year 12 in 1980 was 35% but in 2006 this rate rose to 75% (ABS 2007b).

According to the 2001 Census, 38% of young persons aged 15–24 years (37% males and 39% females) were dependent students. Approximately 80% of these young dependent students lived in couple-parent families while the remainder were from one-parent families.

The HILDA survey provides data on pocket money or allowance received by young people from their parents, but this does not include the financial contribution from parents for accommodation and various goods and services.

INDICATOR:

Proportion of young people aged 12–24 years who are receiving a regular allowance/income from parents

Table 3.32: Young people aged 15–24 years receiving any pocket money or a regular allowance from parents, 2004

Per cent receiving income and average amount received	Age group (years)				
	15–17	18–19	20–21	22–24	15–24
Per cent receiving regular allowance from parents	41.5	25.0	19.4	11.2	25.1
Mean annual income received from parents	\$463	\$460	\$750	\$427	\$512

Source: AIHW analysis of HILDA Survey data, Wave 4 (release 4.1).

- In 2004, one-quarter of young people aged 15–24 years were in receipt of pocket money or a regular allowance from their parents. On average, young people received about \$500 annually from their parents, or just under \$10 per week.
- The proportion of young people receiving financial support from parents steadily decreased with increasing age. A little over 40% of young people aged 15–17 years in 2004 received a regular allowance from parents, while among young people aged 22–24 years this proportion was 11%.
- The average annual income provided from parents to young people is similar across all age groups, except for 20–21 year olds, who received over 1.5 times the amount received by others.

Mean and gross income

In 2005, approximately 60% of young people aged 15–24 years were in full- or part-time employment. The income received by young people varies considerably depending on whether they are in full-time or part-time employment.

Table 3.33: Mean weekly earnings of employees in their main job by full- or part-time employment and age group, 2005 (dollars)

Age group	Full-time employment			Part-time employment			Total		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
15–19 years	448	434	444	136	137	136	272	196	234
20–24 years	737	671	710	298	294	296	622	514	570
All ages	1,047	854	979	342	374	366	946	630	798

Source: ABS 2006h.

- The average weekly income of employed 15–19 year olds was lower (\$234) than the income earned by those aged 20–24 years (\$570). This is largely due to the higher proportion of 15–19 year olds working in part-time jobs and the lower rates of pay received by younger people.
- In total, males in both age groups earned more money than their female counterparts.
- The average weekly income of full-time employed 20–24 year olds was lower than that of all full-time employees (\$570 per week compared with \$798 per week).

The income earned by young people varies considerably depending on their employment status and whether they are in full-time or part-time education. Therefore, gross weekly income without information on study and labour force participation does not provide a complete picture of income distribution among young people. Most young people with no personal income live with their parents in middle- to high-income families. Those who have their own personal income receive it through employment and/or government income support. Most young people who receive government income support live in low-income families or independently on a low income.

Table 3.34: Gross weekly income of young people aged 15–24 years, 2001 (per cent)

Gross weekly income	Males		Females	
	15–19 years	20–24 years	15–19 years	20–24 years
\$1–\$119	46.5	7.2	52.1	9.0
\$120–\$199	17.5	15.5	20.0	15.7
\$200–\$399	25.3	22.8	21.8	29.7
\$400–\$599	8.2	29.5	5.1	27.7
\$600–\$799	1.7	15.6	0.7	13.6
\$800–\$999	0.4	5.6	0.1	3.1
\$1,000 or more	0.4	3.7	0.2	1.3
Negative/Nil income	34.3	6.3	30.0	6.2
Total with an income	65.7	93.7	70.0	93.8
Total young people	591,025	582,192	571,046	574,390

Note: Excludes 306,282 young people aged 15–24 years who were either visitors or whose income was not stated.

Source: ABS 2001 Census of Population and Housing, unpublished data.

- The proportion of young people aged 15–19 years without an income was 32% (34% males and 30% females). Among 20–24 year olds, the proportion of males and females without an income was just over 6%. Most of these young people with no income would have been dependent on their parents for financial support.
- Approximately two-thirds of males aged 15–19 years (66%) and 70% of females had an income in 2001. Of those aged 15–19 years with an income, 64% of males and 72% of females had an income of less than \$200 per week. A further 25% of males and 22% of females had a weekly income of \$200 to \$399.
- Around one-quarter of 20–24 year olds (23% males and 25% females) received an income of less than \$200 per week. Over 50% of males and females in this age group had their weekly incomes in the \$200–\$599 range.

INDICATOR:

Mean income earned by young people

- Overall, 98% of young people aged 15–19 years who had an income, had an income of less than \$600 per week. In comparison, 79% of those aged 20–24 years with an income had an income of less than \$600 per week.
- Young males aged 20–24 years were more likely to earn higher incomes than their female counterparts. Of those with an income, 25% of males compared with 18% of females had an income of \$600 or more per week.

Government income support

The most common income support provided directly to young people is Youth Allowance. It should be noted that families may opt to continue to receive Family Tax Benefit, a payment made in respect of young people, when a young person turns 16 years. Since young people do not receive this payment directly, it is not included in Table 3.35. Young people in families which choose to continue to receive Family Tax Benefit are not entitled to receive Youth Allowance at the same time.

Table 3.35: Government income support by age and type of benefit, 2001 and 2006 (per cent)

Types of income support	2001		2006	
	15–19 years	20–24 years	15–19 years	20–24 years
Youth Allowance (total)	20.0	9.8	15.8	8.3
Youth Allowance (Full-Time Students)	15.1	7.9	11.5	7.0
Youth Allowance (other)	4.9	1.9	4.1	1.2
Youth Allowance (Australian Apprentice) ^(a)	n.a	n.a	0.2	0.1
Parenting Payment				
Parenting Payment Single	0.8	3.6	0.6	3.1
Parenting Payment Partnered	0.3	1.3	0.2	1.0
Newstart Allowance ^(b)	..	10.3	..	6.1
Disability Support Pension	1.1	1.8	1.2	2.0
Sickness Allowance	—	0.1	—	0.1
ABSTUDY	1.1	0.3	0.9	0.1
<i>Young people receiving income support (per cent)</i>	<i>23.3</i>	<i>25.2</i>	<i>18.8</i>	<i>19.5</i>
Total number receiving income support	314,592	327,873	264,421	282,762
Total number of young people	1,352,745	1,302,412	1,405,419	1,453,429

(a) Youth Allowance for Australian Apprentices was introduced on 1 July 2005.

(b) Newstart Allowance is paid to eligible people from age 21 and therefore the denominator population for this benefit was 21–24 year olds. In 2001, there were 8 persons aged 15–19 years who received Newstart Allowance.

.. Not applicable.

— Nil or rounded to zero.

Notes

1. The denominator used to calculate proportions in this table was the estimated resident population in 2001 and 2006 at 30 June.

2. This table excludes young people receiving Carer Payment and Special Benefits. In 2006, 1,025 and 389 young people aged 15–19 years and 2,623 and 515 young people aged 20–24 years received Carer Payment and Special Benefits respectively.

Source: Government income support data, 2001 and 2006, SuperStar Pensions Database, and Newstart SuperStar Database, unpublished data.

- In 2006, approximately 19% of 15–19 year olds and 20% of 20–24 year olds received some form of income support. The main type of income support received by young people was Youth Allowance.
- Between 2001 and 2006 the number and proportion of young people receiving government income support decreased for both 15–19 year olds (from 23% to 19%) and for 20–24 year olds (from 25% to 20%). This was largely true across all types of income support received by young people.

INDICATOR:

Proportion of young people aged 15–24 years receiving government income support

The legal age at which a person is considered an adult is 18 years and until then parents can be expected to provide much of the support to young people. However, a small proportion of young people aged 15–17 years are considered independent from parents for receiving the Youth Allowance.

At June 2006, 12,138 young people aged 15–17 years (1.5% of all 15–17 year olds) lived separately from their parents. Of them, 88% (38% males and 62% females) lived independently of their parents due to serious family breakdowns, 4% due to other exceptional circumstances, 1.3% for not having a parental home and 7% for other reasons not specified.

A further 2,367 young people aged 15–17 years lived independently at June 2006 for a number of reasons. These included being in state care/ward (34%), being an orphan (18%), earning 75% of Commonwealth Training Award pay (6%), parents not being able to exercise responsibilities (4%) and other (38%).

For young people, the transition to independent living is one of the most important decisions in their lives. While for most young people this is a daunting experience as it means severing their links with parents, home and familiar surroundings, for a minority, it may represent a break from a difficult family situation such as domestic violence or abuse. Whatever the context in which young people are seeking independent accommodation, the process of finding and establishing adequate, affordable housing can be a daunting experience (Burke et al. 2002).

Commonwealth Rent Assistance (CRA) provides assistance to low-income households and individuals in the private rental market to help improve their housing situation, as well as education and employment outcomes.

As at June 2002, there were 162,695 young people aged less than 25 years receiving CRA. On receiving CRA, the proportions of young people paying more than half of their income on rent decreased from 38% to 14%. However, compared with other CRA recipients, young people spent the largest proportion of their income on rent before and after receiving CRA. For example, 35% each of those aged 45–54 and 55–64 years spent more than 50% of their income on rent before CRA, but after CRA these proportions decreased to 12% and 10% for the two groups respectively (AIHW 2004b).

INDICATOR:

Proportion of young people who are living independently and receiving rent assistance

Debt and financial hardship

Young people taking on increasing levels of debt have become a concern in recent years. This is exacerbated by various financial and telecommunication companies' strategy of 'buy now, pay later', and young people's lack of money management skills (Dangar Research 2003).

A small-scale survey of NSW's city and regional young people aged 15–24 years conducted in 2003 provides quantitative and qualitative data on youth debt. Types of debt covered in the study include: mobile phones, credit cards, car, fines, personal loans, rent arrears, gambling, HECS, and Centrelink debt. The data may not be generalised to all young people, as there are many biases associated with small sample size (see Dangar Research 2003 for details).

According to the NSW survey, approximately 20% of young people (11% of 15–17 year olds and 24% of 18–24 year olds) had experienced personal debt sometime in their lives. The survey also reported that over half of young people had either gotten into problematic debt themselves, or knew someone who had.

INDICATOR:

Proportion of young people aged 12–24 years who carry various types of debt (and overall debt)

Table 3.36: Common types of debt experienced by young people in 2003, NSW (per cent)

Type of debt	15–17 years	18–24 years
Mobile phone bills	35	22
Car repayments/expenses	14	33
Fines	6	4
Credit card debt	4	15
Phone bill	11	9
Personal loans	11	11
Debt to family	8	5
Drug debt	7	1
Debt to friends	14	2
Rent arrears	4	3
Gambling	3	7
Centrelink debt	2	2
Miscellaneous	2	2

Note: Multiple responses were permitted therefore total responses exceed 100%.

Source: Dangar Research 2003.

- Of the young people who have encountered various debts, the most common types of debt among those aged 15–17 years were mobile phone bills, car repayments/expenses, debt to friends, phone bills and personal loans. Among young people aged 18–24 years, the most common types of debt were car repayments/expenses, mobile phone bills, credit card debt and personal loans.

The same survey also estimated that the average debt among young people aged 15–17 years was \$3,300 while it was \$5,830 among those aged 18–24 years.

A number of factors were mentioned by both parents and young people themselves as contributing to youth debt. These included social pressures that encourage spending: the credit mentality and the need to ‘keep up’ with peers and to ‘belong’. In addition, credit is easily available to young people without being informed of the realities and risks of paying back the debt. Parents felt that young people lacked money management skills, as they often purchased things on credit, and that families give into children’s demands too easily.

The HILDA survey asked young people whether they owned any credit cards, store cards and charge cards, and how often they paid off monthly balances.

Table 3.37: Frequency of paying off credit card balances by young people aged 15–24 years, 2004 (per cent)

Payment frequency	Age group (years)				
	15–17	18–19	20–21	22–24	15–24
Pays off entire balance always/almost always	22.4	42.1	46.2	49.9	47.2
Pays off entire balance most months	6.2	14.0	11.5	14.8	13.7
Pays off entire balance about half the time	10.9	3.2	12.1	7.7	8.3
Pays off entire balance not very often	0.0	14.0	9.0	12.3	11.4
Pays off entire balance hardly ever/never	60.6	26.7	21.1	15.3	19.5
Proportion with credit cards	2.0	11.5	22.2	43.5	19.7
Total number with credit cards	17,269	64,505	126,514	335,438	543,725

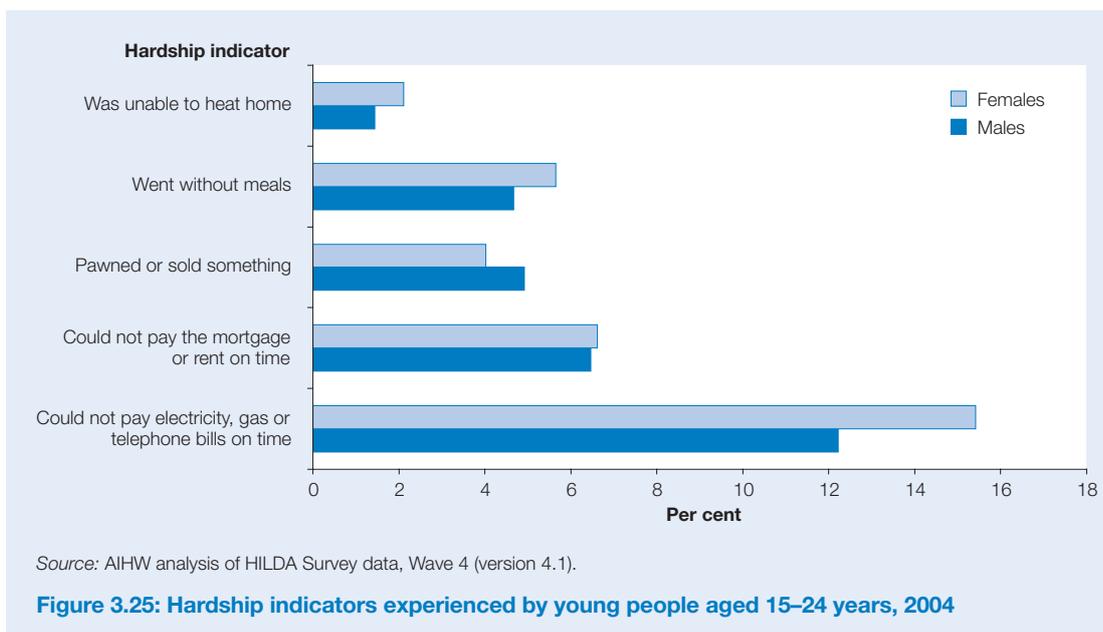
Source: AIHW analysis of HILDA Survey data, Wave 4 (version 4.1).

- In 2004, an estimated 543,725 young people aged 15–24 years responded that they owned a credit card (20% of all responding young people).

- Almost half (47%) of the young people aged 15–24 years who owned and used a credit card, always or almost always paid off the entire card balance. A further 14% said that they paid off the entire balance most months.
- The proportion of young people who always paid off credit card balances increased with age; half of young people aged 22–24 years with credit cards always or almost always paying off the entire balance, compared with 22% for 15–17 year olds.
- Young people aged 15–17 years were less likely to pay off credit card bills: approximately 61% of those who used a credit card said they hardly ever/never paid off the entire credit card balance. However, of all young people who owned credit cards, 15–17 year olds accounted for only 3%.
- The proportion of young people owning a credit card increased with age, from 2% among 15–17 year olds to 44% among 22–24 year olds.

Young people experiencing financial hardship may have a range of poor health and wellbeing outcomes, including experiencing stress and distress, lacking money to visit doctors and other health professionals, and being unable to socialise with other young people (Nicholson et al. 2004).

The HILDA survey included questions on various types of hardship experienced by young Australians. Hardship includes being unable to pay bills on time, being unable to pay mortgage or rent on time, pawning or selling something, going without meals, being unable to heat home, asking for financial help from friends or family and asking for help from welfare/community organisations. This information was collected from all young people aged 15–24 years participating in the survey, regardless of their living arrangements.



INDICATOR:

Proportion of young people aged 15–24 years who experienced hardship because of a shortage of money

- In 2004, the most common form of hardship experienced by young people aged 15–24 years was not being able to pay electricity, gas or telephone bills on time because of a shortage of money (12.2% of males and 15.4% of females).
- Just over 6% of males and females could not pay mortgage repayments or rent on time.
- Around 5 to 6% of young people aged 15–24 years had gone without meals and less than 2% were unable to heat their homes due to a shortage of money.

The HILDA survey results also showed that 19% of males 23% females aged 15–24 years had difficulty raising \$2,000 in an emergency. Young people also reported that they needed to seek financial assistance from friends or family (19% and 22% of young males and females) and welfare/community organisations (3% males and 4% females).

Socioeconomic status of parents

When looking at the social and economic circumstances of young people, it is important to also consider the socioeconomic status of their parents. Young people who are still living in the family home, and particularly those who are financially dependent on their parents, will share the same social and economic circumstances as their parents. This section presents indicators relating to the socioeconomic circumstances of parents in the areas of education and employment.

As previously noted, socioeconomic disadvantage is associated with higher morbidity and mortality rates. There is also evidence to suggest that the socioeconomic status of parents can have a lasting impact on the health of young people, even after young people reach adulthood and financial independence. Research suggests that people who were socially disadvantaged during childhood are more likely to experience certain health problems as adults, regardless of their current social circumstances. While improvements in socioeconomic status are generally associated with improvements in health, the impact of social disadvantage in earlier years appears to persist for health problems such as cardiovascular disease and obesity (Ball & Mishra 2006; Claussen et al. 2003).

Parental employment

Living in a jobless family may have long-term effects on young people's development, their educational progress and their own employment prospects. Families without an employed parent generally have low incomes and live in poor economic circumstances. Such families are also more likely to be socially isolated than families with an employed parent. Long-term unemployment often leads to stress, tension and family conflict, which may impact on young people's emotional and mental health (McClelland 1994). Jobless parents may experience particular difficulty providing financially for young people with chronic or serious health problems, adding to the stress a family is experiencing.

INDICATOR:

Proportion of young people aged 12–24 years where no parent is employed

INDICATOR:

Proportion of young people aged 12–24 years living in jobless families

Table 3.38: Proportion of young people aged 12–24 living in households where no parent is employed, 2003 (per cent)

	Age of young person			Total 12–24 years
	Child 12–14 years	Dependent student 15–24 years	Non-dependent child 15–24 years	
Young people in families where no parent is employed				
Couple-parent family	7.1	7.6	10.0	8.2
Lone-parent family	46.7	32.1	32.9	37.4
All families	15.8	12.0	14.5	13.9
Young people in households where no-one is employed				
Couple-parent family	5.9	3.9	1.5	3.8
Lone-parent family	40.6	18.8	10.0	23.7
All families	13.6	6.6	3.2	7.7

Source: ABS 2004d.

- In 2003, around 13.9% of young people aged 12–24 years were living in a family where no parent was employed, and around 7.7% of young people were living in a family where no-one was employed.
- Across all age-groups, young people in lone-parent families were more likely than young people in couple families to live in a family where no parent was employed. This difference was most pronounced among children aged 12–14 years. Almost half (47%) of children in lone-parent families were living with a parent who was not employed, compared with 7% of children in couple-parent families.

- Young people in lone-parent families were also more likely to live in jobless households than young people in couple-parent families. For example, 19% of dependent students aged 15–24 years were living in jobless households compared with 4% of those living in couple-parent families.

Parental education

Caldwell (1999) has shown that mortality and morbidity in young people are highly correlated with maternal education. The evidence in less developed countries has been that even when controlling for factors such as family income and access to services, parental education (especially mother's education) is one of the best predictors of child health.

In more developed countries such as Australia, a direct link between parents' education and children's health is harder to establish, however parental education is clearly associated with employment and income (Ewald & Boughton 2002; Silburn et al. 1996). The problem-solving skills and health knowledge that are often acquired through education may also assist parents in caring for the health and wellbeing of young people and promoting positive health behaviours. For example, children of more highly educated mothers have been found to consume a diet that more closely conforms to guidelines on healthy eating (Rogers & Emmett 2003).

Table 3.39: Young people aged 12–24 years living with their parents: parents' highest year of school completed by family type, 2004 (per cent)

Highest year of school completed by parent	Couple family ^(a)	Lone-parent family	Total
Parent completed secondary school			
Year 12 or equivalent/Senior secondary	52.9	43.9	50.9
Year 11 or equivalent	14.7	6.9	13.0
Year 10 or equivalent/Junior secondary	25.9	29.6	26.7
<i>Subtotal</i>	93.5	80.4	90.6
Parent did not complete secondary school			
Year 9 or below	6.5	19.6	9.4
Total	100.0	100.0	100.0

(a) Highest year of school completed by either parent.

Source: AIHW analysis of HILDA Survey data, Wave 4 (release 4.1).

- In 2004, based on results from the 2004 HILDA survey, almost 1 in 10 (9%) young people aged 12–24 years were living with parents who did not complete secondary school.
- Young people in lone-parent families were more likely than those in couple-parent families to be living in a family where no parent had completed secondary school (20% compared 7%).
- Differences between family types were not as large for Year 12 completion rates—43% of young people in lone-parent families were living with a parent who had completed Year 12, compared with 53% of young people in couple-parent families.

Aboriginal and Torres Strait Islander young people

Based on results from the 2004 HILDA survey, almost one-quarter (24%) of Indigenous young people aged 12–24 years were living in a household where no parent had completed junior secondary school (Year 10). The corresponding figure for non-Indigenous young people was 9%. These results are based on a small Indigenous sample and should therefore be interpreted with caution.

INDICATOR:

Proportion of young people aged 12–24 years whose parents did not complete secondary school (Year 10 or above)

3.4 Environmental factors

Environmental factors include many physical, chemical and biological conditions and agents that may affect human health, both positively and negatively. Clean air, water and food, and safe human-made environments benefit the health and wellbeing of individuals and communities. On the other hand, the natural environment and natural disasters can be harmful, as can human-caused changes such as land degradation, freshwater depletion and climate change (AIHW 2006a).

Environmental influences on health can be direct or indirect, obvious or subtle, straightforward or complex, and immediate or delayed. This makes it challenging to estimate the full range and scale of the harmful health effects of the environment. These effects include communicable diseases due to microbial contamination of food or water, vectorborne diseases transmitted by insects such as mosquitoes, respiratory and heart diseases due to air pollution and chemicals in workplaces, other consequences of chemical toxicity, effects of noise and heat, and injuries due to poorly designed traffic systems and home or workplace environments. The increasing interest in global climate change has focused attention on how ecological systems influence disease occurrence (AIHW 2006a).

Young people have biological and behavioural characteristics that can place them at increased risk of exposure to environmental contaminants, relative to adults. For example, adolescents have higher metabolic rates, which means they consume more oxygen, water and food (and any environmental hazards contained therein) per kilogram of body weight than an adult (Pike-Paris 2004; Yassi et al. 2001). In addition, their normal growth may be affected when exposed to pollutants at critical periods of development (Hansen et al. 2003; Mathieu-Nolf 2002). Young people are also at a higher risk of exposure to certain environmental factors (for example, air pollution) as they tend to spend more time outdoors than adults, participating in physical play and sports activities (Hansen et al. 2003).

This section presents data on two indicators: environmental tobacco smoke and the housing environment. Additional information on air, water and food quality are also presented.

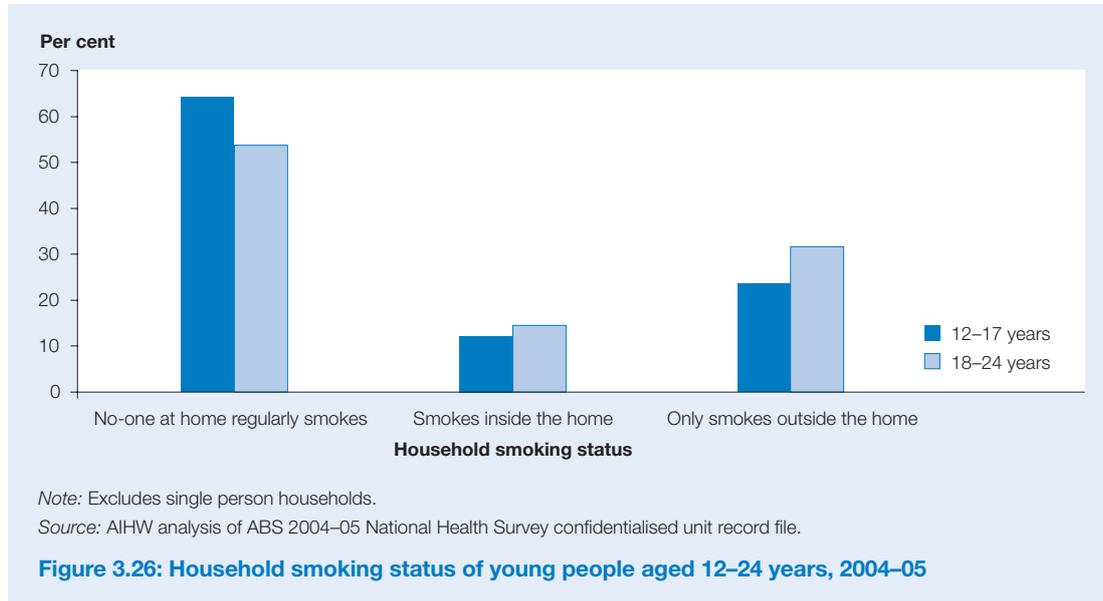
Environmental tobacco smoke

Environmental tobacco smoke is a toxin known to contain more than 4,000 different chemical substances, making it one of the most hazardous environmental exposures for young people (Kum-Nji et al. 2006). The adverse health effects of inhaling environmental tobacco smoke, commonly referred to as passive smoking, are well documented. Exposure to environmental tobacco smoke is associated with respiratory illness, decreased lung function, increased risk of cardiovascular disease, and an increase in the frequency and severity of asthma symptoms among young people (Cook & Strachan 1997; Corbo et al. 1996; Jordan et al. 2005; U.S. Department of Health and Human Services 2006). It has also been associated with an increase in illness-related school absences (Wenton et al. 2005).

Young people in households with a smoker are more likely to take up smoking themselves. Darling & Reeder (2003) found a threefold increase in daily smoking behaviour among high school students exposed to passive smoking.

With increased awareness about the harmful effects of environmental tobacco smoke, and increasing legislation, smoking restrictions at home, work, school and public places are becoming more common (Merom & Rissel 2001; Wakefield et al. 2000). According to the ABS National Health Survey (NHS), between 1995 and 2004–05 the proportion of Australian households with dependent children where household members smoked inside decreased from 31% to 12%. In households without dependent children, the proportion of indoor smokers decreased from 32% to 17% over this period (AIHW 2006a).

It has been argued that, because of the enormous potential harm to children and adolescents from tobacco exposure, implementing effective tobacco control through legislation and other government initiatives is not only a valid concern, but also a binding obligation under the UN Convention on the Rights of the Child (WHO 2001b).



- In 2004-05, 13% of young people aged 12-24 years lived in households where household members smoked inside the home. Proportions were similar for young people aged 12-17 and 18-24 years (12% and 15% respectively).
- Young people aged 18-24 years were less likely than those aged 12-17 years to live in households where no household members smoked (54% compared with 64%). They were also more likely than those aged 12-17 years to live in a household with more than one regular smoker (21% compared with 13%). This may be because young adults are more likely to be smokers themselves (see *Substance use* in Part 3 of this report).

Aboriginal and Torres Strait Islander Young People

In 2004-05, Indigenous young people aged 12-24 years were more likely than non-Indigenous young people (almost 3 times) to be living in households where household members smoked inside (36% compared with 13%) (AIHW analysis of ABS 2004-05 NATSIHS confidentialised unit record file).

Housing environment

In 2001, while most young people lived in the family home, around 1 in 6 (16%) young people aged 15-24 years lived in independent accommodation (ABS 2006a). The majority (96%) of young people aged 12-24 years lived in private dwellings—of these, 83% lived in a separate house, with a further 16% living in flats, apartments or townhouses (ABS Census of population and housing 2001, unpublished data). Only 4% resided in non-private dwellings such as boarding houses, hostels, residential colleges and boarding schools. Less than 1% of young people were living in accommodation that could be considered temporary, including caravans, cabins or houseboats, improvised homes or tents. Homelessness among young people is discussed under *Homelessness* in Part 3 of this report.

A number of links between health and housing are especially relevant to young people. Due to financial constraints, young people are more likely to live in substandard or overcrowded dwellings and therefore be at increased risk of poor health outcomes. Waters (2001) found that people living in rented accommodation in Australia were significantly more likely to report fair or poor health status, to be smokers, to have recently visited a doctor, or to have a higher than average number of serious health conditions than home owners.

Overcrowding can be a subjective concept, and may be influenced by cultural norms. Indigenous people may have different views about what constitutes overcrowding, especially in remote areas. For a number of Indigenous people, living in large family groupings may be culturally acceptable or non-problematic (Keys Young 1998). Nevertheless, overcrowding can result in severe health and wellbeing problems (Waters 2001).

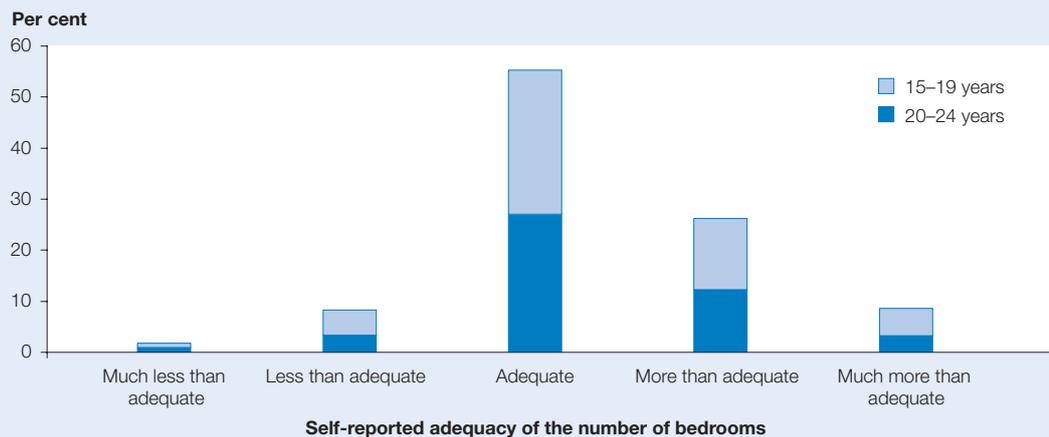
Overcrowding can put excessive demand on bathroom, kitchen and laundry facilities, as well as on sewerage systems such as septic tanks. It can lead to the spread of infectious diseases such as meningococcal meningitis or septicaemia, tuberculosis, rheumatic fever, respiratory diseases and skin infections (Bailie & Runcie 2001; Waters 2001). It has also been associated with poorer self-reported health and higher rates of smoking (Waters 2001). In 2001, the proportion of Indigenous households that were overcrowded was 6 times as high as that of other households (9.5% compared with 1.6%) (AIHW 2005f).

Various measures can be used to assess the extent of overcrowding in dwellings. Occupancy standards are well-recognised, objective measures of overcrowding, which relate the household size and composition to the number of bedrooms available. For example, a house may be defined as overcrowded where two or more extra bedrooms are required to satisfy the proxy occupancy standard (AIHW 2005c). Using this measure, 6% of young people aged 12–24 years in public rental dwellings and state owned and managed Indigenous dwellings lived in overcrowded households at 30 June 2005 (AIHW analysis of National Housing Data Agreement national minimum data set).

This report mostly uses data on the self-reported adequacy of the number of bedrooms in the homes of young people, obtained from the HILDA longitudinal survey, as a measure of overcrowding.

INDICATOR:

Proportion of young people aged 15–24 years who live in overcrowded housing



Source: AIHW analysis of HILDA Survey data, Wave 1.

Figure 3.27: Self-reported adequacy of the number of bedrooms in households of young people aged 15–24 years, 2001

- In 2001, around 1 in 10 young people aged 15–24 years considered the number of bedrooms in their home to be less than adequate (8%) or much less than adequate (2%).
- The vast majority of young people lived in households where the number of bedrooms was perceived as adequate (55%), more than adequate (26%) or much more than adequate (9%).

Of young people aged 15–24 years, similar proportions of those living with their parents and those not living with their parents considered the number of bedrooms in their home to be less or much less than adequate (10% compared with 9%). However, those living with their parents were 1.6 times as likely as those not living with their parents to report that the number of bedrooms in their home was more or much more than adequate (40% compared with 25%).

Other environmental factors

In addition to passive smoking and overcrowding, there are a range of other environmental factors that can have an impact on the health and wellbeing of young people, including air and water quality, vectorborne diseases and food quality.

Air quality

The air can be contaminated by pollutants, micro-organisms and odours, all of which can be harmful to human health and wellbeing. Ambient (that is, outdoor) air pollution in Australia is mainly caused by emissions from motor vehicles, heavy industry and mining activities. Air may also contain emissions from the combustion of fossil fuels for electricity generation, smoke from home heating and bushfires, and wind-blown dust. Indoor air may contain pollutants such as nitrogen dioxide from gas cookers and unflued gas heaters, volatile organic compounds from surface coatings and adhesives, moulds from moist surfaces, and tobacco smoke (AIHW 2006a).

Exposure to air pollutants has been associated with respiratory illness, asthma, allergy symptoms, eye and throat irritation, and reduced lung function among young people (Hansen et al. 2003; Peters et al. 1999). However, adverse health effects can also extend to cardiovascular conditions, impaired mental development and premature mortality (BTRE 2005; Kjellstrom et al. 2002).

Urban air pollution

Air quality in Australia is relatively good by international standards (Manins et al. 2001) but requires regulation and continual monitoring. Environmental regulation has markedly reduced the ambient levels of sulfur dioxide, nitrogen dioxide, lead and carbon monoxide (BTRE 2005), and the concentration of lead in urban air has decreased substantially since unleaded fuels were introduced in the mid-1980s (Australian State of the Environment Committee 2001). However, levels of nitrogen oxides and of particulate matter with diameters of up to 10 microns (PM_{10}) are of ongoing policy concern, as are those with diameters less than 2.5 microns ($PM_{2.5}$), known to cause respiratory and cardiovascular illness (AIHW 2006a).

In 2004, two major capital cities exceeded the maximum allowable number of days when pollutant concentrations exceeded the National Environmental Protection Measure (NEPM) ambient air quality standard levels—Melbourne for PM_{10} and Sydney for ozone concentrations (AIHW 2006a). There are no national data on air quality specific to young people.

Water quality

Providing a safe drinking water supply is fundamental to maintaining good public health. Disease outbreaks from public water supplies are rare in Australia, but they periodically occur from small private water supplies. In Australia, 93% of households are connected to mains water supplies, and over 80% use mains water as their primary source of drinking water. Other important sources of drinking water are rainwater tanks (11% of households), particularly in rural areas, and bottled water (7.6%) (ABS 2005c).

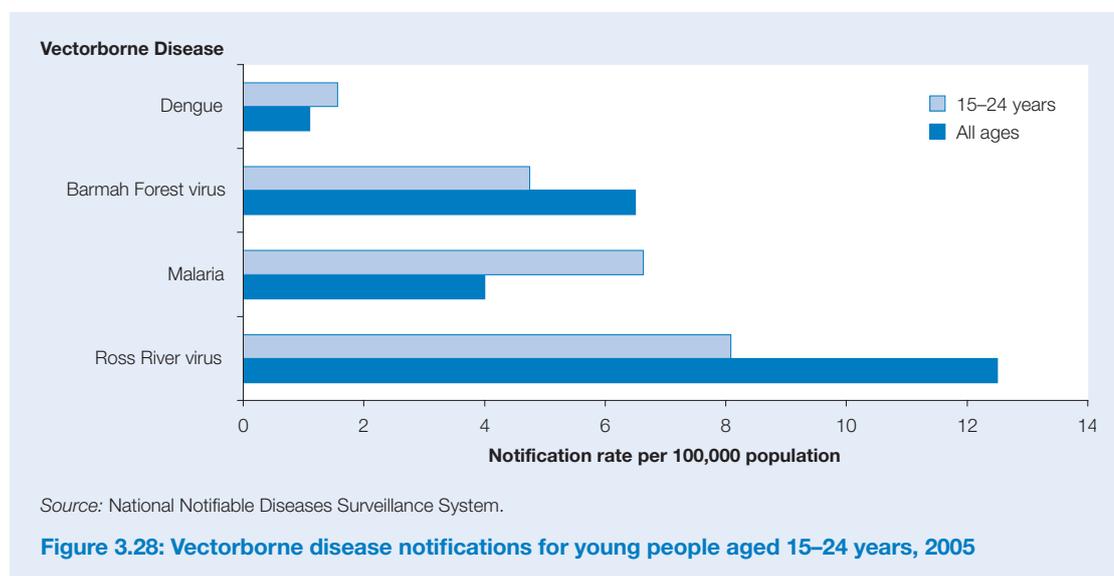
While national data are not available, results for New South Wales in 2003 indicate that almost 100% of drinking water samples met guidelines for permissible levels of inorganic chemicals and pesticides (NSW Department of Health 2004). Although most Australians have access to good quality drinking water, in 2001 it was found that about 17,000 people living in Indigenous communities had drinking water supplies that failed testing at least once in the 12 months before the survey (ABS 2002b).

Fluoridation of tap water delivers public health benefits by reducing dental caries, and most young Australians live in areas that are currently supplied by fluoridated mains water (see *Oral health* in Part 2 of this report).

Water-based recreation promotes healthy physical activity and enhances wellbeing, but may also expose participants to microbial (such as blue-green algae) or chemical contaminants. Public swimming pools have been the source of a number of outbreaks of cryptosporidiosis in recent years in Australia (Hellard et al. 2000; Paterson & Goldthorpe 2006).

Vectorborne disease

Water also provides a habitat for insect vectors of water-related diseases, such as mosquitoes (Yassi et al. 2001). The occurrence of vectorborne disease fluctuates considerably with patterns of human mobility, weather, and the ecology of vector species. Changes in the environment, weather and climate, but also mosquito control activities, influence the prevalence and geographic range of some mosquito-borne diseases within Australia (AIHW 2006a). These include dengue (44 cases notified in Australia in 2005, among 15–24 year olds), Ross River virus disease (228 cases), Barmah Forest virus disease (134 cases) and malaria (187 cases).



- In 2005, the most common vectorborne disease among 15–24 year olds was Ross River virus (8.1 per 100,000 young people), followed by malaria (6.6 per 100,000), Barmah Forest virus disease (4.8 per 100,000), and dengue (1.6 per 100,000).
- In 2005, notification rates for young people for dengue and malaria were higher than the national notification rates.
- Of all age groups in Australia in 2005, the 20–24 year and 15–19 year age groups had the second and third highest malaria notification rates (6.8 and 6.5 respectively).

Food quality

Contamination of food anywhere on the food chain from ‘paddock to plate’ can lead to foodborne illness. An estimated 4 to 7 million cases of foodborne infection (gastroenteritis) occur annually in Australia (Hall et al. 2005) and foodborne infectious illnesses other than gastroenteritis can also occur. Various pesticides and other non-natural contaminants can also be found in some foods, but the estimated average dietary exposures to pesticides and other contaminants in Australia remain within acceptable health standards (AIHW 2006a; FSANZ 2002).

Foodborne infections

Poor hygiene and temperature control in any part of the food production chain can increase the risk of illness. In Australia, notification rates for potentially foodborne infections have increased over recent decades. This is partly because of more complete reporting and improved laboratory capacity to identify pathogens, but is probably also due to changed behaviours—people are eating more takeaway and pre-prepared meals, which may pose higher risks if not carefully prepared (AIHW 2006a).

Campylobacteriosis and salmonellosis are common types of bacterial gastroenteritis. All age groups can be affected but infection is more common in children under 5 years of age and young adults. The most common symptoms of infection are diarrhoea, abdominal pain, fever, nausea and vomiting. Dehydration can be a serious complication.

Table 3.40: Foodborne disease notification rates^(a) for young people aged 15–24 years, 2001 to 2005

Disease	Age (years)	2001	2002	2003	2004	2005
Campylobacteriosis	15–19	110.4	102.8	105.1	107.0	113.2
	20–24	169.4	166.0	161.1	155.2	166.2
	All ages	125.3	116.2	116.4	116.5	121.6
Salmonellosis	15–19	28.8	28.7	27.2	28.5	32.1
	20–24	31.6	40.0	35.4	41.3	46.0
	All ages	36.2	39.8	35.3	39.0	41.5

(a) Notification rate per 100,000 population.

Source: National Notifiable Diseases Surveillance System.

- In 2005, there were 3,768 notifications of salmonellosis and campylobacteriosis among 15–24 year olds, with 60% of these occurring in young people aged 20–24 years.
- Since 2001, the campylobacteriosis notification rate among young people aged 20–24 years has remained much greater than the notification rate for all ages (33% to 43% greater). In addition, this age group had the second highest campylobacteriosis notification rates across all age groups in Australia over this period (ages 0–4 years had the highest).
- Since 2001, the notification rates for salmonellosis and campylobacteriosis have remained relatively constant among young people aged 15–24 years.

