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**Australian Institute of  
Health and Welfare**

*Authoritative information and statistics  
to promote better health and wellbeing*

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Number 27

# **Drugs in Australia 2010**

## **Tobacco, alcohol and other drugs**

**November 2011**

Australian Institute of Health and Welfare

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# Abbreviations

|            |   |
|------------|---|
| AA         | Alcoholics Anonymous  |
| ABS        | Australian Bureau of Statistics                                     |
| ACC        | Australian Crime Commission   |
| ACCI       | Australian Chamber of Commerce and Industry                         |
| ACS        | Australian Customs Service  |
| ADF        | Australian Drug Foundation  |
| AFP        | Australian Federal Police   |
| AIC        | Australian Institute of Criminology                                 |
| AIDS       | Acquired immune deficiency syndrome                                 |
| AIHW       | Australian Institute of Health and Welfare                          |
| ANCD       | Australian National Council on Drugs                                |
| AOD        | Alcohol and other drugs   |
| AODTS-NMDS | Alcohol and Other Drug Treatment Services National Minimum Data Set |
| ASCDC      | Australian Standard Classification of Drugs of Concern              |
| ASOC       | Australian Standard Offence Classification                          |
| ASSAD      | Australian Secondary Students' Alcohol and Drug survey              |
| ATC        | Anatomical Therapeutic Chemical                                     |
| ATO        | Australian Taxation Office  |
| AUDIT      | Alcohol Use Disorder Identification Test                            |
| BEACH      | Bettering the Evaluation and Care of Health                         |
| DALY       | Disability-adjusted life year                                       |
| DDD        | Defined daily dose  |
| DoHA       | Australian Government Department of Health and Ageing               |
| DUMA       | Drug Use Monitoring in Australia                                    |
| DUSC       | Drug Utilisation Sub-Committee                                      |
| EDRS       | Ecstasy and Related Drugs Reporting System                          |
| GHB        | Gamma-hydroxybutyrate   |
| GP         | General practitioner  |
| GST        | Goods and services tax  |
| HBV        | Hepatitis B virus   |
| HCV        | Hepatitis C virus   |
| HILDA      | Household, Income and Labour Dynamics in Australia                  |
| HIV        | Human immunodeficiency virus  |

|         |   |
|---------|---|
| IDDI    | Illicit Drug Diversion Initiative   |
| IDRS    | Illicit Drug Reporting System   |
| IDU     | Injecting drug user   |
| MCDS    | Ministerial Council on Drug Strategy  |
| MDMA    | 3,4-Methylenedioxyamphetamine (also known as ecstasy)                         |
| NA      | Narcotics Anonymous   |
| NATSIHS | National Aboriginal and Torres Strait Islander Health Survey                  |
| NATSISS | National Aboriginal and Torres Strait Islander Social Survey                  |
| NCETA   | National Centre for Education and Training on Addiction                       |
| NCHECR  | National Centre in HIV Epidemiology and Clinical Research                     |
| NDARC   | National Drug and Alcohol Research Centre                                     |
| NDRI    | National Drug Research Institute  |
| NDS     | National Drug Strategy  |
| NDSHS   | National Drug Strategy Household Survey                                       |
| NHMRC   | National Health and Medical Research Council                                  |
| NHS     | National Health Survey  |
| NIDAC   | National Indigenous Drug and Alcohol Committee                                |
| NPDC    | National Perinatal Data Collection  |
| NPHC    | National Prisoner Health Census   |
| NSP     | Needle and Syringe Program  |
| OATSIH  | Office for Aboriginal and Torres Strait Islander Health                       |
| OECD    | Organisation for Economic Co-operation and Development                        |
| OEHHA   | Office of Environmental Health Hazard Assessment                              |
| OSR     | Office for Aboriginal and Torres Strait Islander Health<br>Services Reporting |
| PBS     | Pharmaceutical Benefits Scheme  |
| RPBS    | Repatriation Pharmaceutical Benefits Scheme                                   |
| RTD     | Ready to drink  |
| SAAP    | Supported Accommodation Assistance Program                                    |
| SEIFA   | Socio-Economic Indexes for Areas  |
| SES     | Socio-Economic Status   |
| SUSDP   | Uniform Scheduling of Drugs and Poisons                                       |
| UNODC   | United Nations Office on Drugs and Crime                                      |
| WET     | Wine Equalisation Tax   |
| WHO     | World Health Organization   |

# Symbols

|      |                                       |
|------|---------------------------------------|
| n.a. | Not available                         |
| n.p. | Not published                         |
| –    | Nil, or rounded to zero               |
| ..   | Not applicable                        |
| kg   | Kilogram(s)                           |
| m    | Million                               |
| #    | Significant difference (alpha = 0.05) |

# Summary

*Drugs in Australia 2010* assembles the most recently available information about tobacco, alcohol and other drugs in Australia from a variety of data sources. It is a reference publication for those looking for accessible information about drug-related issues in Australia. The report presents information on the prevalence of tobacco, alcohol and other drug use in the community; and on treatment services, drug-related health issues, and drugs in crime and law enforcement. It includes a special focus on two areas Aboriginal and Torres Strait Islander peoples, and patterns of drug use at key life stages.

## Patterns of drug use

### Tobacco and alcohol

Tobacco and alcohol are the drugs most commonly used by the Australian population.

Tobacco smoking is the leading cause of preventable illness and death in Australia, accounting for eight% of the total burden of disease in 2003. Total smoking-related costs to society – including those for healthcare and lost productivity, and intangible social costs – were estimated at \$31.5 billion in 2004–05.

In 2010, one in seven (15%) Australians aged 14 years or over were daily smokers, and one in four (24%) were ex-smokers. More than half the population (59%) had never smoked. Daily smoking rates have fallen by more than a third over the past two decades, from 24% in 1991. This is largely due to lower rates of smoking among adults aged 24–44 years.

Close to four in five (78%) Australians aged 12 years or over had consumed alcohol over the previous year in 2010, including 46% who drank at least weekly. There was a significant decline in daily drinking between 2007 and 2010 (from 8.1% to 7.2% of the population aged 12 years or over).

Most people drank at levels that did not put them at risk of harm. However, 28% of males and 11% of females drank alcohol at levels that put them at risk of alcohol-related harm over their lifetime. In addition, 23% of males and 9% of females consumed alcohol in quantities that put them at risk of alcohol-related injury from a single drinking occasion at least weekly. An estimated 13.1% of people aged 14 years or older had driven a motor vehicle under the influence of alcohol in 2010.

The consumption of alcohol was estimated to cost Australian society \$15.3 billion, in 2004–05 (Collins & Lapsley 2008a). These costs included both tangible costs (such as for healthcare, road accidents and crime) and intangible costs, including for pain and suffering. The majority of social costs for alcohol (71%) were tangible costs. Businesses bore 50% of tangible costs and governments 26%, with individuals making up the balance.

### Illicit drugs

In 2010, most Australians aged 14 years and over (60%) had never used an illicit drug. However, around 15% had used one or more illicit drugs in the past 12 months. Cannabis was the most common illicit drug used recently (10.3%) followed by ecstasy (3.0%) and amphetamines and cocaine (each used by 2.1% of people). Many people who used an illicit drug in 2010 also used other drugs, illicit or licit.

The social cost of illicit drug use in Australia was estimated at \$8.2 billion in 2004–05, including costs associated with crime, lost productivity and healthcare. Illicit drug use accounted for 2.0% of Australia's total burden of disease in 2003. Much of this was caused by hepatitis C, which can be contracted by risky injecting practices.

Around 8% of people in Australia aged 16–85 years have had a drug use disorder (including harmful use/abuse and/or dependence) in their lifetime.

## **Services related to drug use or treatment**

### **Substance use—specific services**

In 2009, 10,671 alcohol and other drug treatment agencies across Australia provided almost 150,000 episodes of service to people who were concerned about their own or someone else's drug use. In almost half these cases (46%), alcohol was the principal drug of concern, with cannabis nominated in almost one-quarter (23%) of episodes. While the ranking of the top two principal drugs of concern has not changed, seeking treatment related to alcohol use has become increasingly common (from 38% of episodes in 2002–03 to 48% in 2009–10); correspondingly, there were relatively fewer treatment episodes for heroin use (10% in 2009–10 compared with 18% in 2002–03).

The most common form of treatment provided by these agencies was counselling to individuals, groups or families (the main treatment type in 42% of episodes in 2009–10), followed by withdrawal management (detoxification, 15%).

One treatment option for people who are dependent on opioid drugs is opioid substitute pharmacotherapy. Just over 46,000 people were receiving pharmacotherapy as at 30 June 2010: mostly methadone (69%).

While Aboriginal and Torres Strait Islander people can access mainstream treatment services, the Australian Government also funds a number of Indigenous substance use services. In 2009–10, the large majority of these (92%) provided programs specifically targeted at alcohol use. Other common substances/drugs for which services provided treatment or assistance included cannabis (77%), multiple drug use (54%) and tobacco/nicotine (52%).

### **Other services**

There were 104,614 hospital separations reported with a drug-related principal diagnosis in 2009–10. More than half (58%) of these involved alcohol use.

Clients with mental or behavioural disorders due to the use of alcohol or other psychoactive drugs can receive treatment in a range of mental health-care settings. In 2007–08, 16% of overnight hospital separations to do with mental health involved a diagnosis related to the use of alcohol or other psychoactive drugs; the corresponding figure for same-day separations was 19%. In addition, these diagnoses were responsible for more than 171,000 community service contacts for mental healthcare (2.6% of all contacts in 2007–08).

In 2009–10, around 15% of the support services provided to people by homelessness services were related to the use of alcohol or other drugs.

## Vulnerable groups

A number of groups within the population had relatively high rates of tobacco, alcohol and other drug use, putting them at increased risk of harm.

For example, in 2008 45% of Aboriginal and Torres Strait Islander people aged 15 years or over were daily smokers—more than twice the proportion of non-Indigenous Australians, after accounting for age differences. Aboriginal and Torres Strait Islander people were also more likely to have used an illicit drug recently (21% in 2008). However, eight in ten Aboriginal and Torres Strait Islander people were non-drinkers or drank at levels that did not place them at risk. Furthermore, risk of long-term harm from alcohol consumption did not significantly differ from the non-Indigenous population.

Other vulnerable groups include:

- people living in the most socioeconomically disadvantaged areas— who were twice as likely to smoke as people living in the most advantaged areas
- people living in *Remote* and *Very remote* areas— were more likely than people living in *Major cities* to smoke, to drink alcohol at a level that puts them at risk of lifetime harm (as well as harm on a single occasion) at least weekly, and to have recently used illicit drugs other than cannabis
- people who are unemployed— who were more likely than people who were employed to smoke or have recently used illicit drugs
- people who identify as homosexual or bisexual— were twice as likely as people identifying as heterosexual to smoke or to have used cannabis or other illicit drugs in the past year, and more likely to consume alcohol at a level that puts them at risk of lifetime harm (as well as harm on a single occasion) at least weekly.

## Drugs and crime

There were more than 85,000 arrests in 2009–10 for illicit drug offences; two-thirds involved cannabis. Most arrests (81%) were for use or possession rather than other drug-related offences such as manufacture or trafficking.

According to prison census statistics, one in ten sentenced prisoners in 2010 had an illicit drug offence recorded as their most serious offence—largely manufacturing or trafficking. Close to two-thirds of adults detained by police tested positive to illicit drugs in 2010; these drugs were most commonly cannabis (46% of males and 43% of females), followed by amphetamines (17% of males and 22% of females) and opiates (15% of males and 24% of females).

People entering prison (for any offence) had high rates of drug use compared with the general population. In 2010, three in four (74%) prison entrants smoked daily and two-thirds (66%) reported using illicit drugs in the past 12 months. In addition, 58% drank alcohol at levels that put them at risk of alcohol-related harm, although this was measured in a different way to the wider population statistics, making direct comparisons difficult.

# 1 Introduction

This report is the thirteenth in a series that was previously titled *Statistics on drug abuse in Australia*, first produced in 1985 under the auspices of the National Campaign Against Drug Abuse. It is the sixth edition produced by the Australian Institute of Health and Welfare (AIHW) and is intended to be a general reference publication for Australian drug-related data.

*Drugs in Australia 2010* builds on past reports in the series, the last of which was *Statistics on drug use in Australia 2006* (AIHW 2007a). Chapters in the current edition are based either on tobacco, alcohol, illicit drugs or pharmaceuticals, or on population groups of interest. Each chapter provides data on consumption, drug-related behaviour and health effects.

There are two new chapters in the report – ‘Aboriginal and Torres Strait Islander people’, and ‘Life stages’. These chapters allow for a more detailed exploration of alcohol and other drug issues from each of these perspectives.

## 1.1 Data sources

A large part of the data in this report was sourced from the 2010 National Drug Strategy Household Survey (NDSHS), published by the AIHW in 2011 (AIHW 2011a). This was a comprehensive national survey of more than 26,000 Australians aged 12 years or over. The estimates for 2010 contained in this publication are based on information obtained from persons aged 12 years or over and 14 years or over (as specified), from the populations of all states and territories. Time series data were obtained from the 1995, 1998, 2001, 2004 and 2007 surveys and the 1991 and 1993 National Campaign Against Drug Abuse Surveys. Unless stated otherwise, data presented in this report are from this survey series.

- Other relevant information was obtained from a range of sources including: Australian Bureau of Statistics
- Australian Crime Commission
- Australian Customs and Border Protection Service
- Australian Government Department of Health and Ageing
- Australian Institute of Criminology
- Australian Institute of Health and Welfare
- Australian Taxation Office
- National Centre in HIV Epidemiology and Clinical Research
- National Drug and Alcohol Research Centre
- United Nations Office on Drugs and Crime.

## 2 Tobacco

### 2.1 Key findings

- Tobacco smoking is the leading cause of preventable death and ill health in Australia. Almost 8% of all Australia's burden of disease was attributable to tobacco smoking in 2003 (Vos et al. 2007). The health effects of smoking include premature death and tobacco-related illnesses such as cancer, chronic obstructive pulmonary disease and heart disease. However, most people do not consider tobacco smoking to be a drug problem.
- Smoking rates have declined in Australia over the last half century and Australia's smoking rate compares favourably with that for other Organisation for Economic Co-operation and Development (OECD) countries.
- Tobacco smoking cost Australian society an estimated \$31.5 billion in 2004–05 (Collins & Lapsley 2008b).
- In 2010, more than half (57.1%) of the population aged 14 years or over had never smoked, one in seven (15.1%) were daily smokers and one in four (24.1%) were ex-smokers.
- The proportion of people aged 14 years or older smoking daily decreased from 16.6% in 2007 to 15.1% in 2010; this was mainly due to a decrease in daily smoking by younger people (24–44 years).
- Consumption of tobacco in Australia has been consistently higher among males, those with the lowest socioeconomic status, those in *Remote* and *Very remote* areas and Aboriginal and Torres Strait Islander people.
- The number of cigarettes cleared through excise and customs fluctuated between 22 and 23 billion sticks between 2004–05 and 2007–08 and declined to about 20.6 billion sticks in 2009–10.

### 2.2 Introduction

Over the last century, tobacco consumption increased steadily between 1910 and the mid-1970s due to increasing affluence, advertising and the provision of ready-made cigarettes. With increasing public awareness of the ill-effects of smoking, and increased government deterrence measures, the amount of tobacco smoked per capita has declined since the mid-1970s (Scollo & Winstanley 2008).

However, smoking has remained a considerable public health concern, affecting the health and longevity of a substantial proportion of the Australian population. The burden of smoking-related harm has fallen unevenly on groups within the population.

The Australian National Tobacco Strategy 2004–2009 put in place various programs to prevent the uptake of smoking, to help smokers quit, and to reduce passive smoking and the harms caused by the use of tobacco. The National Preventative Health Taskforce has also identified the prevention of tobacco smoking as a key target area in improving the health of Australians (Commonwealth of Australia 2009a).

Australia has implemented a wide range of activities (such as introducing tougher advertising restrictions and removing tobacco on sale from plain sight) aimed at preventing the uptake of and reducing tobacco consumption.

## 2.3 Attitudes and opportunity to use

Nearly one in seven (15.3%) of people aged 14 years or over approved of regular tobacco use by an adult in 2010. In the same year, around one-quarter (22.5%) neither approved nor disapproved of regular use.

In 2010, the NDSHS asked people to identify what type of drug use they considered to be the most serious problem for the community. Tobacco smoking was second only to excessive alcohol use – 15.4% felt that tobacco was the most serious concern; however, most people do not consider tobacco smoking to be a drug problem (AIHW 2008a).

Almost half (45.6%) of people aged 14 years or older had been offered or had the opportunity to use tobacco in 2010. This represented a decrease in the proportion of people who had the opportunity to use tobacco compared with 2007 (49.2%). Women were proportionally less likely to report the opportunity to use tobacco. Both men and women had less opportunity to use tobacco in 2010 than in 2007 (50.7% compared with 53.7% among men, and 40.7% compared with 44.7% among women) (AIHW 2011a).

## 2.4 Reported consumption

### 2.4.1 Trends

In 2010, more than half of all people aged 14 years or older (57.8%, or 10.6 million people) had never smoked in their life, 15.1% (3.3 million) were daily smokers and nearly one-quarter (24.1%, or 4.4 million) were ex-smokers (Table 2.1) (AIHW 2008b).

**Table 2.1: Tobacco smoking status: people aged 14 years or older, Australia, 1991 to 2010 (per cent)**

| Smoking status              | 1991 | 1993 | 1995 | 1998 | 2001 | 2004 | 2007 | 2010  |
|-----------------------------|------|------|------|------|------|------|------|-------|
| Daily                       | 24.3 | 25.0 | 23.8 | 21.8 | 19.4 | 17.5 | 16.6 | #15.1 |
| Weekly                      | 2.8  | 2.3  | 1.6  | 1.8  | 1.8  | 1.6  | 1.3  | 1.5   |
| Less than weekly            | 2.4  | 1.8  | 1.8  | 1.3  | 2.0  | 1.6  | 1.5  | 1.4   |
| Ex-smokers <sup>(a)</sup>   | 21.4 | 21.7 | 20.2 | 25.9 | 26.2 | 26.4 | 25.1 | #24.1 |
| Never smoked <sup>(b)</sup> | 49.0 | 49.1 | 52.6 | 49.2 | 50.6 | 52.9 | 55.4 | #57.8 |

(a) Smoked at least 100 cigarettes (manufactured and/or roll-your-own) or the equivalent amount of tobacco in their life, and reports no longer smoking.

(b) Never smoked more than 100 cigarettes (manufactured and/or roll-your-own) or the equivalent amount of tobacco.

# Statistically significant difference between 2007 and 2010

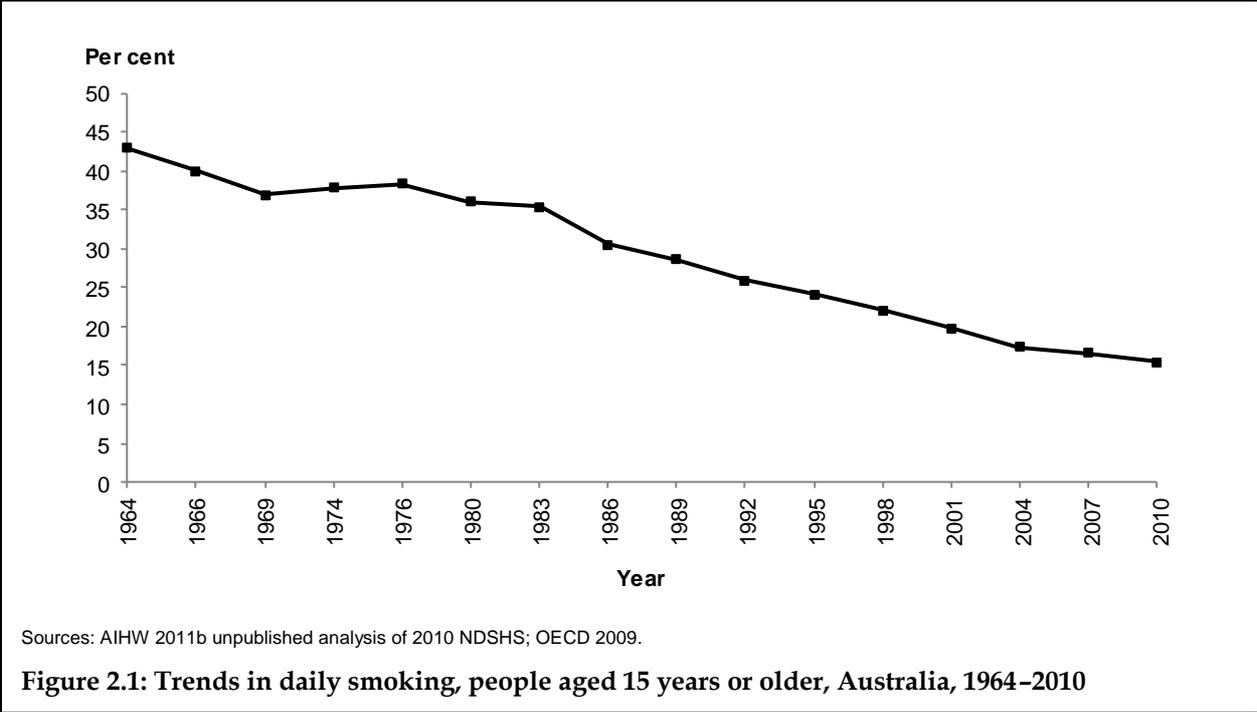
Note: Some trend data were updated in 2010 and may not match data presented in previous reports.

Source: AIHW 2011a.

Between 1991 and 2010, daily tobacco smoking declined by 37.9% to the lowest levels for this 19-year period. The daily smoking rate declined from around one in four people aged 14 years or older in 1991 to around one in seven in 2010. The proportion of people who smoked less than daily, but at least weekly, also decreased between 1991 and 2010 but has remained at around the same level since 1995. Correspondingly, there was an increase in the proportion of people in Australia who have never smoked (Table 2.1).

The downward trend in smoking as documented by the NDSHS is supported by results from the last (2007–08) National Health Survey. The survey showed that, in 2007–08, 19% of adults (aged 18 years and older) were daily smokers compared with 21% in 2004–05 and 22% in 2001 (ABS 2009c).

The recent decreases in daily smoking rates continue the longer term trend of a decline in tobacco consumption in Australia (Figure 2.1). In 1964, 43% of Australians aged 15 years or older were daily smokers (OECD 2009), compared with 15% in 2010.



### 2.4.2 Age and sex

Males aged 12 years and older were more likely to be daily smokers than females in 2010; and people aged 40–49 years were more likely than those in other age group to be daily smokers.

Few teenagers (12–17 year-olds) smoked tobacco in 2010, with around 2.5% smoking daily. This age group was the only age group where females (3.2%) were more likely to smoke daily than males (1.8%). The group aged 60 years or older had the highest proportion of ex-smokers (Table 2.2).

More detail about daily smoking among different age groups is presented in Figure 2.2. Overall, there was little change in the proportions of people who were daily smokers between 2004 and 2007 at each age group; however, in 2010 there was a considerable decrease in the proportion of daily smokers aged in their early-20s to mid-40s. While, overall, Australia has seen a decrease in the proportion of daily smokers, it is apparent from Figure 2.2 that this decrease is mainly due to a decrease in daily smoking by younger people (24–44 years).

**Table 2.2: Tobacco smoking status: people aged 12 years and older, by age group and sex, 2010 (per cent)**

|                             | 12–17 | 18–19 | 20–29 | 30–39 | 40–49 | 50–59 | 60–69 | 70+   | Total 12+   |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------------|
| <b>Males</b>                |       |       |       |       |       |       |       |       |             |
| Daily                       | *1.8  | 13.2  | 19.7  | 20.2  | 20.2  | 18.8  | 13.7  | 7.0   | <b>16.4</b> |
| Weekly                      | *1.0  | *3.3  | 3.0   | 2.3   | 1.9   | 1.6   | *1.0  | *0.3  | <b>1.9</b>  |
| Less than weekly            | **0.2 | **0.7 | 3.1   | 2.8   | 1.1   | *1.0  | *0.7  | *0.5  | <b>1.6</b>  |
| Ex-smokers <sup>(a)</sup>   | *1.5  | *4.0  | 11.4  | 23.0  | 28.6  | 34.6  | 43.5  | 48.4  | <b>26.4</b> |
| Never smoked <sup>(b)</sup> | 95.5  | 78.8  | 62.8  | 51.6  | 48.1  | 44.0  | 41.0  | 43.7  | <b>53.7</b> |
| <b>Females</b>              |       |       |       |       |       |       |       |       |             |
| Daily                       | 3.2   | 12.8  | 16.3  | 16.8  | 18.8  | 16.0  | 11.6  | 4.5   | <b>13.9</b> |
| Weekly                      | *0.6  | **1.1 | 2.7   | 1.4   | 1.2   | 0.9   | 0.6   | *0.2  | <b>1.2</b>  |
| Less than weekly            | *0.8  | *1.5  | 2.5   | 1.8   | 1.1   | *0.7  | *0.4  | **0.3 | <b>1.2</b>  |
| Ex-smokers <sup>(a)</sup>   | *1.7  | *2.8  | 12.0  | 25.6  | 28.4  | 28.3  | 29.2  | 21.5  | <b>21.8</b> |
| Never smoked <sup>(b)</sup> | 93.8  | 81.8  | 66.5  | 54.5  | 50.5  | 54.1  | 58.2  | 73.6  | <b>61.8</b> |
| <b>Persons</b>              |       |       |       |       |       |       |       |       |             |
| Daily                       | 2.5   | 13.0  | 18.0  | 18.5  | 19.5  | 17.4  | 12.7  | 5.6   | <b>15.1</b> |
| Weekly                      | *0.8  | *2.2  | 2.9   | 1.9   | 1.5   | 1.2   | 0.8   | *0.2  | <b>1.5</b>  |
| Less than weekly            | *0.5  | *1.1  | 2.8   | 2.3   | 1.1   | 0.9   | 0.6   | *0.4  | <b>1.4</b>  |
| Ex-smokers <sup>(a)</sup>   | 1.6   | 3.4   | 11.7  | 24.3  | 28.5  | 31.4  | 36.4  | 33.3  | <b>24.1</b> |
| Never smoked <sup>(b)</sup> | 94.6  | 80.2  | 64.6  | 53.1  | 49.3  | 49.1  | 49.6  | 60.5  | <b>57.8</b> |

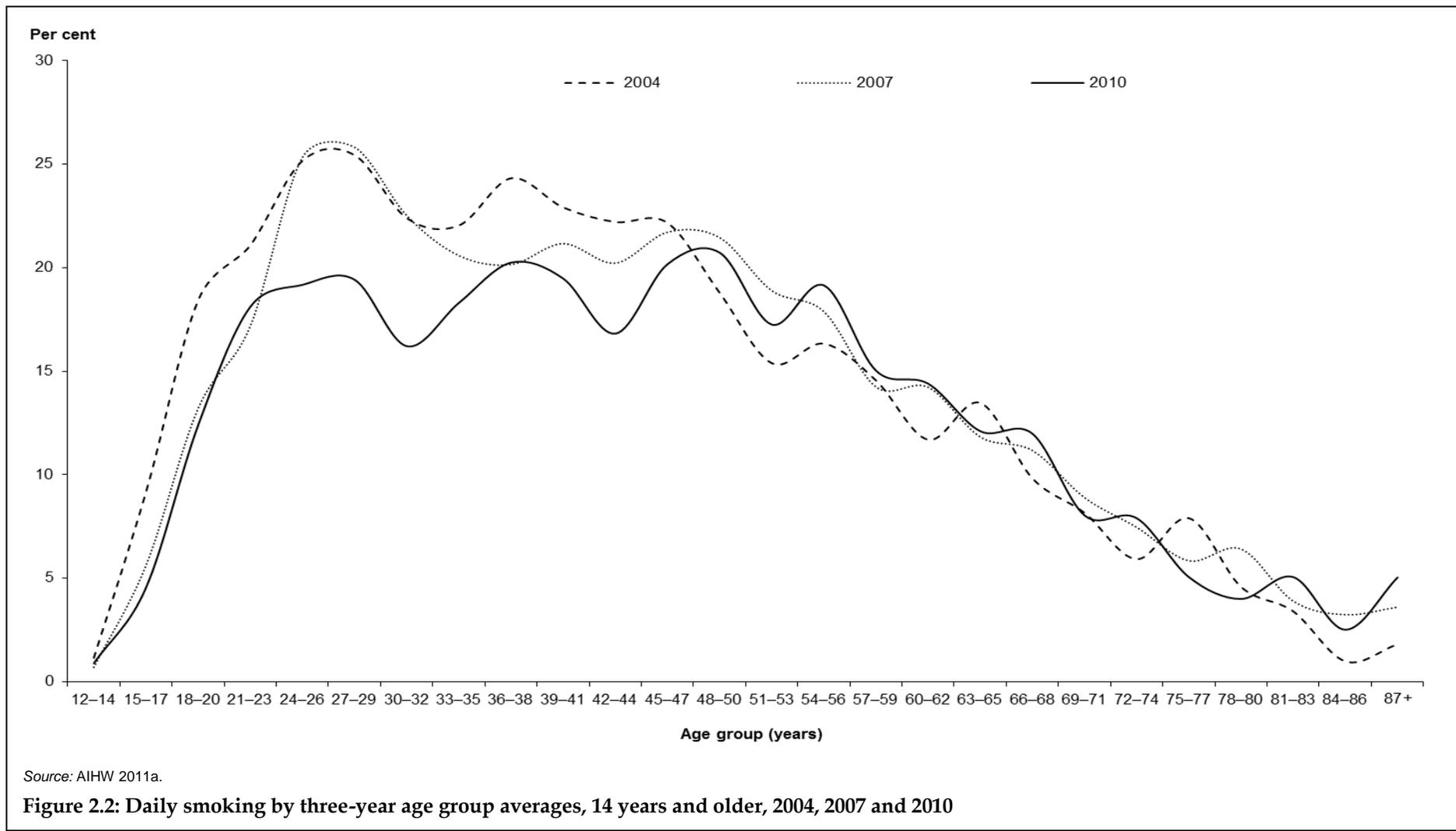
(a) An ex-smoker is a person who has smoked at least 100 cigarettes (manufactured and/or roll-your-own) or the equivalent amount of tobacco in their life, and reports no longer smoking.

(b) A person who has never smoked more than 100 cigarettes (manufactured and/or roll-your-own) or the equivalent amount of tobacco in their life is defined as never smoked.

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

\*\* Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Source: AIHW 2011a.



### 2.4.3 Younger people and school students

The NDSHS has included people aged 12 years and older since 2004. Estimates from the NDSHS of smoking prevalence among younger people (aged less than 19 years) should be interpreted with caution because of low smoking prevalence and small sample sizes in this age group (AIHW 2008b). Results from the NDSHS showed that far fewer young people are smokers compared with older age groups. Around one in forty (2.5%) of 12–17 year olds, and one in eight (13.0%) 18–19 year olds smoked daily in 2010. The average age of initiation to smoking has remained stable since 1995 at around 16 years.

A more detailed picture of smoking among young people is provided by a series of surveys administered in Australian schools. The 2008 Australian Secondary Students' Alcohol and Drug (ASSAD) Survey is the most recent survey for which national data are available. ASSAD data over time show that the proportion of school students who are current smokers has declined. (See Chapter 9 for more information.)

### 2.4.4 Aboriginal and Torres Strait Islander people

National data on smoking among Aboriginal and Torres Strait Islander people are available from the National Aboriginal and Torres Strait Islander Social Survey, the National Aboriginal and Torres Strait Islander Health Survey and the National Drug Strategy Household Survey. All three national surveys show that Aboriginal and Torres Strait Islander people are more likely than non-Indigenous people to be smokers. (See Chapter 8 for more information). It is important to note that socioeconomic status may have a large influence on this result, as outlined below for the whole Australian population.

### 2.4.5 Socioeconomic status

The Socio-Economic Indexes for Areas (SEIFA) summarises various attributes (such as income, unemployment, and educational attainment) of an area in which people live. It provides an indicator of socioeconomic status (SES) for geographic areas rather than individuals. Analyses using the index often classify respondents into five groups (quintiles) from the lowest socioeconomic status to the highest socioeconomic status based on where they live (ABS 2009a).

Results from the 2010 NDSHS showed that smoking rates declined with increasing socioeconomic status. People living in areas with the lowest SES were twice as likely to be smokers as people living in the highest SES areas (24.6% and 12.5%, respectively). The 2007–08 National Health Survey found similar patterns.

### 2.4.6 Other social characteristics

Smoking also varied by other social characteristics. The proportion of people who smoked was higher in *Remote* and *Very Remote* areas (28.9%) compared with *Major Cities* (16.8%) (Table 2.3). A larger proportion of unemployed people (27.6%), and those unable to work (35.4%), were smokers compared with those who were currently employed (19.6%), retired (11.3%) or studying (10.3%). There was a small difference between those without post-school qualifications (19.5%) and those with more education (17.0%). Marital status was also relevant – almost one-quarter of divorced/widowed/separated people were smokers (23.0%), whereas 16.2% of married/de facto people smoked. Those people who identified as

homosexual or bisexual were almost twice as likely to smoke as heterosexual people (34.2% and 17.5%, respectively).

**Table 2.3: Characteristics of persons aged 14 years or older by smoking status, 2010 (per cent)**

| Characteristic <sup>(a)</sup>       | Never smoked <sup>(b)</sup> | Ex-smokers <sup>(c)</sup> | Smokers <sup>(d)</sup> |
|-------------------------------------|-----------------------------|---------------------------|------------------------|
| <b>All persons (aged 14+)</b>       | <b>57.8</b>                 | <b>24.1</b>               | <b>18.1</b>            |
| <b>Education</b>                    |                             |                           |                        |
| With post-school qualifications     | 56.2                        | 26.8                      | 17.0                   |
| Without post-school qualifications  | 59.8                        | 20.7                      | 19.5                   |
| <b>Labour force status</b>          |                             |                           |                        |
| Currently employed                  | 54.9                        | 25.5                      | 19.6                   |
| Student                             | 85.0                        | 4.8                       | 10.3                   |
| Unemployed                          | 55.7                        | 16.7                      | 27.6                   |
| Engaged in home duties              | 54.2                        | 25.7                      | 20.1                   |
| Retired or on a pension             | 53.7                        | 35.0                      | 11.3                   |
| Unable to work                      | 42.4                        | 22.2                      | 35.4                   |
| Other                               | 53.4                        | 22.8                      | 23.8                   |
| <b>Main language spoken at home</b> |                             |                           |                        |
| English                             | 55.5                        | 26.1                      | 18.4                   |
| Other                               | 80.4                        | 8.0                       | 11.6                   |
| <b>Socioeconomic status</b>         |                             |                           |                        |
| 1st quintile (lowest status)        | 52.6                        | 22.8                      | 24.6                   |
| 2nd quintile                        | 55.8                        | 23.5                      | 20.7                   |
| 3rd quintile                        | 56.7                        | 25.7                      | 17.7                   |
| 4th quintile                        | 59.6                        | 24.1                      | 16.3                   |
| 5th quintile (highest status)       | 63.2                        | 24.3                      | 12.5                   |
| <b>Geography</b>                    |                             |                           |                        |
| Major cities                        | 60.2                        | 23.0                      | 16.8                   |
| Inner regional                      | 53.3                        | 26.8                      | 19.9                   |
| Outer regional                      | 53.5                        | 25.9                      | 20.7                   |
| Remote and Very remote              | 45.4                        | 25.7                      | 28.9                   |
| <b>Marital status</b>               |                             |                           |                        |
| Never married                       | 71.7                        | 9.0                       | 19.3                   |
| Divorced/separated/widowed          | 49.5                        | 27.5                      | 23.0                   |
| Married/de facto                    | 53.3                        | 30.4                      | 16.2                   |
| <b>Sexuality</b>                    |                             |                           |                        |
| Heterosexual                        | 57.5                        | 25.0                      | 17.5                   |
| Homosexual/bisexual                 | 46.6                        | 19.2                      | 34.2                   |
| Not sure/undecided                  | 73.3                        | 10.1                      | 16.6                   |

(a) Definitions of these characteristics are contained in Appendix 4 of the *2010 National Drug Strategy Household Survey report*. (See AIHW 2011a in References for full details.)

(b) Never smoked more than 100 cigarettes or the equivalent tobacco in their life.

(c) Smoked at least 100 cigarettes or the equivalent tobacco in their life, and no longer smoke.

(d) Smoked daily, weekly or less than weekly.

Source: AIHW 2011a.

## 2.5 Cessation attempts

In 2010, among those aged 14 years or over who reported smoking in the last 12 months, one-fifth (19.1%) had given up smoking for more than a month. A higher proportion (29.0%) reported having tried to give up with no success. Almost two in five smokers (37.6%) had reduced the amount they smoked in a day in 2010.

Respondents to the NDSHS could nominate more than one reason for smoking reduction. The most common reasons given for a change in smoking behaviour was that smoking was affecting their health or fitness, and the cost of tobacco (44.3% and 44.1%, respectively) (AIHW 2008a).

## 2.6 Apparent consumption

All of the prevalence data presented above are estimates based on self-reported behaviour (survey-based data). While such information is valuable, one limitation is that respondents may not self-report accurately. Reasons for this include imperfect recall or an unwillingness to divulge certain information. Therefore, it is useful to verify these data with a different measure of the amount of tobacco being consumed within a country.

In Australia, data are gathered about the volume of tobacco cleared through excise (on tobacco produced or manufactured in Australia) and customs (on imported tobacco products) (Table 2.4). However, these estimates do not take into account the volume of cigarettes bought duty free by international travellers, or any tobacco that is obtained illicitly within Australia. These data provide a picture of the amount of tobacco available for consumption in a given year, notwithstanding the possibility that excess tobacco stocks may be carried over from previous years. Increases in the Australian population over time, and changes to the age structure of the population, have an effect on the data.

The number of cigarettes cleared through excise increased from 22.6 billion sticks in 2001–02, to around 23.5 billion sticks in 2002–03 and 2003–04. The number of cigarettes then decreased, fluctuating between 22 and 23 billion for the following years up to 2009–10, when it settled at just under 21 billion sticks. The amount of other tobacco cleared through excise between 2001–02 and 2009–10 fluctuated between 550 and 800 thousand kilograms (Table 2.4).

The volume of tobacco cleared through customs between 1999–00 and 2009–10 showed fluctuations from year to year. The greatest volume cleared was in 2002–03, when 29.1 million kilograms of loose tobacco was cleared through customs. This was at least double the amount for any other year between 1999–00 and 2004–05. From 2005–06 to 2009–10, the volume of tobacco cleared through customs fluctuated between 17.1 and 19.7 million kilograms, settling at 19.1 million kilograms in 2009–10 (Table 2.4).

**Table 2.4: Volume of tobacco cleared through excise and customs, 2001–02 to 2009–10**

| Duty and product                         | 2001–02                        |                    | 2002–03                        |                    | 2003–04                        |                    | 2004–05                        |                    | 2005–06                        |                    | 2006–07                        |                    | 2007–08                        |                    | 2008–09 <sup>(f)</sup>         |                    | 2009–10 <sup>(f)</sup>         |                    |
|--|--------------------------------|--------------------|--------------------------------|--------------------|--------------------------------|--------------------|--------------------------------|--------------------|--------------------------------|--------------------|--------------------------------|--------------------|--------------------------------|--------------------|--------------------------------|--------------------|--------------------------------|--------------------|
|  | Loose<br>( <sup>'000</sup> kg) | By<br>stick<br>(m) |
| <b>Excise</b>                            |                                |                    |                                |                    |                                |                    |                                |                    |                                |                    |                                |                    |                                |                    |                                |                    |                                |                    |
| Cigarettes                               | ..                             | 22,613             | ..                             | 23,557             | ..                             | 23,516             | ..                             | 22,819             | ..                             | 22,281             | ..                             | 21,868             | ..                             | 22,372             | ..                             | 21,649             | ..                             | 20,622             |
| Other tobacco                            | 650                            | ..                 | 800                            | ..                 | 590                            | ..                 | 550                            | ..                 | 570                            | ..                 | 570                            | ..                 | 593                            | ..                 | 609                            | ..                 | 648                            | ..                 |
| <i>Total excise</i>                      | <i>650</i>                     | <i>22,613</i>      | <i>800</i>                     | <i>23,557</i>      | <i>590</i>                     | <i>23,516</i>      | <i>550</i>                     | <i>22,819</i>      | <i>570</i>                     | <i>22,281</i>      | <i>570</i>                     | <i>21,868</i>      | <i>593</i>                     | <i>22,372</i>      | <i>609</i>                     | <i>21,649</i>      | <i>648</i>                     | <i>20,622</i>      |
| <b>Customs</b>                           |                                |                    |                                |                    |                                |                    |                                |                    |                                |                    |                                |                    |                                |                    |                                |                    |                                |                    |
| Cigarettes                               | 18                             | 801                | 17                             | 946                | 15                             | 656                | 12                             | 855                | 7                              | 910                | 7                              | 999                | 9                              | 983                | 12                             | 1,150              | 12                             | 1,336              |
| Cigars, etc. <sup>(a)</sup>              | 89                             | 12                 | 91                             | 15                 | 94                             | 13                 | 101                            | 14                 | 93                             | 13                 | 82                             | 17                 | 78                             | 15                 | 80                             | 13                 | 74                             | 12                 |
| Other<br>manufactured<br>tobacco         | 838                            | ..                 | 1,447                          | ..                 | 1,001                          | ..                 | 1,053                          | ..                 | 1,067                          | ..                 | 1,268                          | ..                 | 1,307                          | <sup>(b)</sup>     | 1,233                          | ..                 | 1,265                          | ..                 |
| Unmanufactured<br>tobacco <sup>(c)</sup> | 10,479                         | ..                 | 27,582                         | ..                 | 9,135                          | ..                 | 11,927                         | ..                 | 16,000 <sup>(d)</sup>          | ..                 | 18,292                         | ..                 | 16,465                         | ..                 | 17,929                         | ..                 | 17,827                         | ..                 |
| <i>Total customs</i>                     | <i>11,424</i>                  | <i>813</i>         | <i>29,137</i>                  | <i>961</i>         | <i>10,246</i>                  | <i>669</i>         | <i>13,092</i>                  | <i>869</i>         | <i>17,167<sup>(d)</sup></i>    | <i>922</i>         | <i>19,649</i>                  | <i>1,016</i>       | <i>17,859</i>                  | <i>998</i>         | <i>19,254</i>                  | <i>1,163</i>       | <i>19,178</i>                  | <i>1,348</i>       |

(a) Includes cigars, cigarillos and cheroots.

(b) Less than 0.1 m.

(c) Much of this tobacco would have been used in the manufacture of cigarettes. When estimating the total amount of tobacco consumed in Australia, it should therefore be excluded from the total.

(d) Weight for unmanufactured tobacco for 2005–06 is an estimate.

(e) Includes homogenised or reconstituted tobacco and tobacco extracts and essences.

(f) Data for the 2008–09 and 2009–10 income years includes that processed up to 31 October 2009 and 31 October 2010, respectively.

Sources: AIHW 2007a; ATO 2011 and publications for previous years; Australian Customs and Border Protection Service (Customs and border protection) 2011a unpublished data.

## **2.7 Tobacco-related costs, revenue and expenditure**

In 2004–05, tobacco smoking was estimated to cost Australian society \$31.5 billion in tangible costs (such as for healthcare, fires and lost productivity) and intangible costs of pain and suffering (Collins & Lapsley 2008b). The majority (62%) were intangible social costs. Of the tangible costs, the government sector bore 8%, while households and businesses bore 50% and 42%, respectively.

Tobacco-related health expenditure includes primary healthcare and hospital costs. It also includes expenditure on the prevention of tobacco use through strategies such as social marketing campaigns and Quitline. In 2008–09, Australian governments spent \$55.6 million on these types of prevention programs (AIHW 2011c).

Overall, the revenue raised from tobacco exceeds the tobacco-related costs borne by governments (Collins & Lapsley 2008b). Nonetheless, tobacco use has a substantial impact on the health budget (AIHW 2011c).

The Australian Government raises revenue from tobacco through excise on locally manufactured tobacco and through customs duties on imported products. Total excise has increased from \$4.8 billion in 1999–00 to \$5.7 billion in 2009–10. Tobacco is also subject to the Goods and Services Tax (GST), with just under \$1 billion raised in GST from the sale of tobacco in 2009–10. Total revenue from all these taxes has steadily increased since 1999–00, from \$5 billion to \$7.5 billion in 2009–10 (Table 2.5).

**Table 2.5: Government revenue related to the sale of tobacco, 1999–00 to 2009–10 (\$m)**

| Duty  | 1999–00      | 2000–01           | 2001–02      | 2002–03      | 2003–04      | 2004–05      | 2005–06      | 2006–07      | 2007–08      | 2008–09      | 2009–10      |
|---|--------------|-------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>Excise</b>                                   |              |                   |              |              |              |              |              |              |              |              |              |
| Base  | 1,659        | 4,637             | 4,841        | 5,212        | 5,240        | 5,220        | 5,290        | 5,387        | 5,657        | 5,711        | 5,742        |
| Surcharge <sup>(a)</sup>                        | 3,139        | 61 <sup>(b)</sup> | ..           | ..           | ..           | ..           | ..           | ..           | ..           | ..           | ..           |
| <i>Total excise</i>                             | <i>4,798</i> | <i>4,698</i>      | <i>4,841</i> | <i>5,212</i> | <i>5,240</i> | <i>5,220</i> | <i>5,290</i> | <i>5,387</i> | <i>5,657</i> | <i>5,711</i> | <i>5,742</i> |
| <b>Customs</b>                                  |              |                   |              |              |              |              |              |              |              |              |              |
| Cigarettes                                      | 133          | 174               | 170          | 206          | 147          | 195          | 211          | 240          | 243          | 297          | 365          |
| Cigars, etc. <sup>(c)</sup>                     | 23           | 24                | 26           | 28           | 29           | 32           | 30           | 30           | 29           | 31           | 30           |
| Other manufactured tobacco, etc. <sup>(d)</sup> | 131          | 178               | 203          | 217          | 273          | 294          | 306          | 323          | 351          | 338          | 370          |
| <i>Total customs</i>                            | <i>286</i>   | <i>376</i>        | <i>399</i>   | <i>450</i>   | <i>449</i>   | <i>521</i>   | <i>547</i>   | <i>593</i>   | <i>623</i>   | <i>666</i>   | <i>765</i>   |
| GST <sup>(e)</sup>                              | ..           | 1,139             | 1,106        | 1,102        | 1,188        | 1,116        | 1,077        | 1,039        | 1,045        | 1,009        | 992          |
| <b>Total</b>                                    | <b>5,084</b> | <b>6,203</b>      | <b>6,346</b> | <b>6,764</b> | <b>6,877</b> | <b>6,857</b> | <b>6,914</b> | <b>7,019</b> | <b>7,325</b> | <b>7,386</b> | <b>7,499</b> |

(a) State franchise taxes were discontinued in August 1997 following a High Court determination that such taxes could not be imposed by the states and territories. Between August 1997 and June 2000, the Australian Government collected additional excise duty, referred to as a 'surcharge', and paid this to the states and territories under the so-called 'safety net' provisions as revenue replacement payments. With the introduction of GST, these replacement payments were no longer required, but a similar level of excise (with indexation) continued to be collected.

(b) This figure relates to surcharge revenue from 1990–2000 processed in the following year.

(c) Includes cigars, cigarillos and cheroots.

(d) Includes homogenised or reconstituted tobacco and tobacco extracts and essences.

(e) GST values are estimated as one-eleventh of household final consumption expenditure for cigarettes and tobacco, trend data. GST values are estimated as one-eleventh of household final consumption expenditure (March 2011 latest data).

Note: This table has been substantially revised since previous editions of *Statistics on drug use in Australia*.

Sources: ABS 2011b; AIHW 2007a; ATO 2010; Customs and Border Protection 2011a, unpublished data.

## 2.8 State, territory and international comparisons

Comparative analyses are complicated because of legal, political, demographic and cultural differences within and between countries. However, comparisons are useful for allowing informed discussion about drug use, service planning and policy. The methodology for collecting or estimating data also varies between countries. These issues should be considered when interpreting data in the next two sections.

### 2.8.1 State and territory comparisons

Among the states and territories, the Northern Territory (22.3%) had the highest daily smoking rate in 2010, followed by Queensland (16.7%) and Tasmania (15.9%). The Australian Capital Territory (61.2%) had the highest percentage of people who had never smoked, followed by New South Wales (59.8%) and Victoria (59.0%). Males had a higher prevalence of daily smoking than females in all jurisdictions, and the proportion of male daily smokers in the Northern Territory (27.5%) was more than double that in the Australian Capital Territory (12.0%) (Table 2.6). The demographic profiles of states and territories are likely to influence the differences in drug use patterns.

**Table 2.6: Tobacco smoking status: proportion of the population aged 14 years or older, states and territories, 2010 (per cent)**

| Smoking status              | NSW  | Vic  | Qld  | WA   | SA   | Tas   | ACT   | NT   | Total |
|-----------------------------|------|------|------|------|------|-------|-------|------|-------|
| <b>Males</b>                |      |      |      |      |      |       |       |      |       |
| Daily                       | 15.6 | 15.0 | 18.4 | 17.5 | 17.1 | 16.1  | 12.0  | 27.5 | 16.4  |
| Weekly                      | 1.7  | 2.6  | 1.7  | 2.1  | *0.6 | *1.9  | *1.6  | *2.1 | 1.9   |
| Less than weekly            | 1.3  | 1.5  | 1.7  | *2.4 | *1.4 | *1.2  | *3.0  | *1.8 | 1.6   |
| Ex-smoker <sup>(a)</sup>    | 25.1 | 25.2 | 28.2 | 26.8 | 29.2 | 33.6  | 25.6  | 23.3 | 26.4  |
| Never smoked <sup>(b)</sup> | 56.3 | 55.6 | 50.1 | 51.2 | 51.8 | 47.2  | 57.8  | 45.3 | 53.7  |
| <b>Females</b>              |      |      |      |      |      |       |       |      |       |
| Daily                       | 12.9 | 14.7 | 15.0 | 13.6 | 13.1 | 15.8  | 10.1  | 16.8 | 13.9  |
| Weekly                      | 1.0  | 1.4  | 1.5  | *0.8 | *0.8 | *1.4  | **0.4 | *2.4 | 1.2   |
| Less than weekly            | 1.2  | 1.4  | 1.1  | *0.9 | 2.0  | **0.6 | *0.7  | *1.0 | 1.2   |
| Ex-smoker <sup>(a)</sup>    | 21.7 | 20.1 | 23.5 | 21.9 | 22.5 | 24.0  | 24.3  | 25.0 | 21.8  |
| Never smoked <sup>(b)</sup> | 63.3 | 62.4 | 58.8 | 62.8 | 61.6 | 58.2  | 64.5  | 54.9 | 61.8  |
| <b>Persons</b>              |      |      |      |      |      |       |       |      |       |
| Daily                       | 14.2 | 14.9 | 16.7 | 15.6 | 15.0 | 15.9  | 11.0  | 22.3 | 15.1  |
| Weekly                      | 1.4  | 2.0  | 1.6  | 1.5  | 0.7  | 1.7   | *1.0  | 2.2  | 1.5   |
| Less than weekly            | 1.2  | 1.4  | 1.4  | 1.6  | 1.7  | *0.9  | 1.8   | 1.4  | 1.4   |
| Ex-smoker <sup>(a)</sup>    | 23.3 | 22.6 | 25.8 | 24.4 | 25.8 | 28.7  | 24.9  | 24.1 | 24.1  |
| Never smoked <sup>(b)</sup> | 59.8 | 59.0 | 54.5 | 56.9 | 56.8 | 52.8  | 61.2  | 49.9 | 57.8  |

(a) Smoked at least 100 cigarettes (or equivalent amount of tobacco) in lifetime, but no longer smokes.

(b) Never smoked more than 100 cigarettes (or equivalent amount of tobacco) in lifetime.

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

\*\* Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Source: AIHW 2011a.

## 2.8.2 International comparisons

The OECD Health Data 2009 covers the 30 member countries of the OECD for the period 1960 to 2007. It is a comprehensive source of inter-country statistics in key areas of health and health-care systems.

As at 2009, Australia had one of the lowest daily smoking rates among OECD countries. Only Sweden, Iceland, Denmark and the United States had a lower prevalence of daily smoking among people aged 15 years or over (Table 2.7). Prevalence varied substantially across OECD countries – from 14% in Sweden to 40% in Greece.

Over the period since 1979, most OECD countries have experienced substantial declines in daily smoking rates, with the speed of the decline slowing over more recent years.

**Table 2.7: Prevalence of daily smoking, population aged 15 years or over, selected countries, 1979 to 2009**

| Country          | 1979                    | 1989              | 1999                    | 2009                    |
|------------------|-------------------------|-------------------|-------------------------|-------------------------|
| Greece           | n.a.                    | 43.5              | 37.6 <sup>1</sup>       | 39.7 <sup>1</sup>       |
| Chile            | n.a.                    | n.a.              | n.a.                    | 37.9 <sup>4</sup>       |
| Ireland          | n.a.                    | 29.5              | 33.0 <sup>1</sup>       | 29.0 <sup>2</sup>       |
| Netherlands      | 45.0                    | 33.0              | 34.0                    | 28.0                    |
| Turkey           | n.a.                    | 43.6              | 47.4 <sup>4</sup>       | 27.4 <sup>1</sup>       |
| Spain            | n.a.                    | 35.9              | 33.2 <sup>2</sup>       | 26.4 <sup>3</sup>       |
| France           | n.a.                    | 28.0              | 28.0                    | 26.2 <sup>1</sup>       |
| Korea            | n.a.                    | 34.6              | 33.5 <sup>1</sup>       | 25.8 <sup>1</sup>       |
| Slovak Republic  | n.a.                    | n.a.              | n.a.                    | 25.0 <sup>3</sup>       |
| Japan            | 44.3                    | 36.9              | 33.6                    | 24.9                    |
| Czech Republic   | n.a.                    | n.a.              | 23.5                    | 24.3 <sup>1</sup>       |
| Italy            | n.a.                    | 29.1 <sup>3</sup> | 24.7                    | 23.3                    |
| Austria          | 23.5                    | 25.5 <sup>3</sup> | 24.3 <sup>2</sup>       | 23.2 <sup>3</sup>       |
| Germany          | 28.5 <sup>1</sup>       | 25.1              | 24.7                    | 23.2 <sup>4</sup>       |
| United Kingdom   | 40.0 <sup>1</sup>       | 32.0 <sup>1</sup> | 27.0 <sup>1</sup>       | 22.0 <sup>1</sup>       |
| Norway           | 38.0                    | 36.0              | 32.0                    | 21.0                    |
| Switzerland      | n.a.                    | n.a.              | 28.9 <sup>2</sup>       | 20.4 <sup>2</sup>       |
| Finland          | 27.2                    | 25.9              | 23.2                    | 20.4 <sup>1</sup>       |
| Luxembourg       | n.a.                    | 33.0 <sup>2</sup> | 32.0 <sup>1</sup>       | 20.0 <sup>1</sup>       |
| Belgium          | n.a.                    | 32.5              | 29.0                    | 20.0 <sup>1</sup>       |
| Portugal         | n.a.                    | 19.0 <sup>2</sup> | 20.6                    | 19.6 <sup>3</sup>       |
| New Zealand      | 36.0 <sup>3</sup>       | 27.0              | 26.0                    | 18.1 <sup>2</sup>       |
| Canada           | 34.4                    | 31.0              | 23.8 <sup>1</sup>       | 17.5 <sup>1</sup>       |
| <b>Australia</b> | <b>38.4<sup>3</sup></b> | <b>28.6</b>       | <b>22.1<sup>1</sup></b> | <b>16.6<sup>2</sup></b> |
| United States    | 33.5                    | 28.1 <sup>1</sup> | 19.2                    | 16.5 <sup>1</sup>       |
| Denmark          | 51.0                    | 44.0              | 31.0                    | 16.0                    |
| Iceland          | n.a.                    | 32.0              | 25.2                    | 15.8                    |
| Sweden           | n.a.                    | 25.9              | 19.3                    | 14.0 <sup>1</sup>       |
| Hungary          | n.a.                    | 34.5 <sup>3</sup> | n.a.                    | n.a.                    |
| Mexico           | n.a.                    | 25.8 <sup>1</sup> | 27.7 <sup>1</sup>       | n.a.                    |
| Poland           | n.a.                    | n.a.              | 31.5 <sup>3</sup>       | n.a.                    |

n.a. No data available for the year, or any of the four previous years.

*Notes*

1. Data from the year before that indicated (e.g. 2008 for 2009 column).
2. Data from 2 years before (e.g. 2007 for 2009 column).
3. Data from 3 years before (e.g. 2006 for 2009 column).
4. Data from 4 years before (e.g. 2005 for 2009 column).

Source: OECD 2010.

Another way of comparing smoking between countries is to look at how many cigarettes are smoked per smoker per day. This comparison is presented in Table 2.8, which shows recent estimates for each OECD country for which data were available. All estimates for OECD countries fall between 11 and 21 cigarettes per day per smoker aged 15 years and over.

**Table 2.8: Number of cigarettes per smoker per day, population aged 15 years or over, selected countries, 2009 (or most recent estimate)**

| Country          | Cigarettes per smoker per day |
|------------------|-------------------------------|
| Spain            | 20.9 <sup>3</sup>             |
| Austria          | 16.7 <sup>3</sup>             |
| United States    | 15.9 <sup>1</sup>             |
| Turkey           | 15.8 <sup>1</sup>             |
| Korea            | 15.5 <sup>1</sup>             |
| Canada           | 15.0 <sup>1</sup>             |
| Slovak Republic  | 15.0 <sup>3</sup>             |
| Germany          | 15.0 <sup>4</sup>             |
| Finland          | 14.7 <sup>1</sup>             |
| Czech Republic   | 14.4 <sup>1</sup>             |
| France           | 14.4 <sup>3</sup>             |
| Ireland          | 14.0 <sup>2</sup>             |
| <b>Australia</b> | <b>13.9<sup>2</sup></b>       |
| Denmark          | 13.5 <sup>4</sup>             |
| Italy            | 13.5 <sup>1</sup>             |
| United Kingdom   | 13.0 <sup>1</sup>             |
| New Zealand      | 13.1                          |
| Norway           | 11.8                          |
| Switzerland      | 11.7 <sup>2</sup>             |
| Netherlands      | 11.4                          |

*Notes*

1. Data from 2008.
2. Data from 2007.
3. Data from 2006.
4. Data from 2005.

Source: OECD 2010.

## 2.9 Health and harms

### 2.9.1 Health of smokers

There were 15,512 deaths attributable to tobacco in Australia in 2003 (Begg et al. 2007). The overall burden of disease in Australia from smoking decreased from 10% of the total burden in 1996 to 8% in 2003 (Begg et al. 2007); however, it remained the largest single risk factor contributing to disease and death. Lung cancer was the largest contributor to smoking-related deaths. Lung cancer was also the largest contributor to 'disability-adjusted life years' (DALYs) – a concept that expresses lost years of healthy life (Table 2.9).

**Table 2.9: Number of deaths and DALYs attributable to tobacco by condition, 2003**

| Condition                             | Deaths        |                   | DALYs          |                   |
|---------------------------------------|---------------|-------------------|----------------|-------------------|
|                                       | Number        | Per cent of total | Number         | Per cent of total |
| Lung cancer                           | 6,309         | 4.8               | 72,213         | 2.7               |
| Chronic obstructive pulmonary disease | 4,175         | 3.2               | 54,492         | 2.1               |
| Ischaemic heart disease               | 1,961         | 1.5               | 31,433         | 1.2               |
| Stroke                                | 577           | 0.4               | 11,812         | 0.4               |
| Oesophagus cancer                     | 572           | 0.4               | 6,248          | 0.2               |
| Other                                 | 1,918         | 1.4               | 28,740         | 1.1               |
| <b>Total attributable</b>             | <b>15,512</b> | <b>11.7</b>       | <b>204,788</b> | <b>7.8</b>        |

Source: Begg et al. 2007.

Based on the 2010 NDSHS results, smokers aged 18 years and older were less likely to feel they had very good or excellent health (40.9%) compared with those who had never smoked (59.4%). Almost one in six smokers (17.4%) felt that their health was fair or poor compared with one in ten (10.0%) of those who had never smoked.

There appears to be some association between smoking and poorer mental health based on the 2010 NDSHS. While 12.0% of people aged 18 years and older reported having a mental illness in the 12 months prior to survey, for smokers this proportion was 19.4% (AIHW 2008a). Adult smokers were also more likely to report high or very high levels of psychological distress than ex-smokers or those who had never smoked (Table 2.10).

**Table 2.10: Psychological distress<sup>(a)</sup>, by smoking status: people aged 18 years or older, Australia, 2010 (per cent)**

| Tobacco smoking status      | Low  | Moderate | High | Very high |
|-----------------------------|------|----------|------|-----------|
| Smokers <sup>(b)</sup>      | 59.8 | 24.5     | 11.3 | 4.4       |
| Ex-smokers <sup>(c)</sup>   | 71.8 | 19.9     | 6.6  | 1.7       |
| Never smoked <sup>(d)</sup> | 71.9 | 19.5     | 6.5  | 2.1       |
| All persons (aged 18+)      | 69.6 | 20.5     | 7.4  | 2.4       |

(a) Using the Kessler 10 (K10) scale of psychological distress.

(b) Smoked daily, weekly or less than weekly.

(c) Smoked at least 100 cigarettes or the equivalent tobacco in their life, and no longer smoke.

(d) Never smoked more than 100 cigarettes or the equivalent tobacco.

Source: AIHW 2011a.

## 2.9.2 Second-hand smoke

### In the home

One of the most thoroughly researched areas of social harm due to smoking is the effect of second-hand smoke. In 2010, more than three-quarters of non-smokers lived in homes where no-one regularly smoked (77.2%). Another 18% lived with one or more people who smoked only outside the home. However, 5.1% of non-smokers were exposed to smoke at home at least once a day by another resident (Table 2.11).

**Table 2.11: Exposure to environmental tobacco smoke in the home at least daily, non-smokers aged 14 years or older, by sex, 2010 (per cent)**

| Exposure                         | Males | Females | Persons |
|----------------------------------|-------|---------|---------|
| Yes, inside the home             | 5.4   | 4.9     | 5.1     |
| No, only smokes outside the home | 16.6  | 18.7    | 17.7    |
| No-one at home regularly smokes  | 78.0  | 76.4    | 77.2    |

Source: AIHW 2011a.

## In the workplace

According to Safe Work Australia, workers across a range of occupations are exposed to gases, vapours, smoke or fumes. Of workers in health and community services who were exposed to these hazards, 8% reported that tobacco or cigarette smoke was the main type of gas to which they were exposed in the last week (Australian Safety and Compensation Council 2008).

Workers compensation claims for diseases of the respiratory system declined between 2000–01 and 2006–07. Claims for work-related asthma, which may be induced by exposure to environmental smoke, also declined over that period (Safe Work Australia 2010).

### 2.9.3 Social issues associated with smoking

The Household, Income and Labour Dynamics in Australia Survey (HILDA) is a household panel-based survey that began in 2001. Interviews are conducted annually with adults in selected households covering topics such as wellbeing, labour market participation and family dynamics (University of Melbourne 2010).

One of the findings from HILDA is that smoking appears to be associated with financial stress in a variety of ways. Smokers who quit are less likely to experience financial stress than those who continue to smoke. In addition, smokers with financial stress were less likely to quit, and ex-smokers with more financial stress were more likely to relapse (Scollo & Winstanley 2008).

Another study using HILDA data looked at the factors associated with marital instability. Among other factors such as educational disparity in the couple, female partner smoking was associated with a greater likelihood of separation or divorce. The authors of the study did not suggest a causal relationship between smoking and relationship breakdown. Rather, they hypothesised that smoking may indicate social disadvantage which, in turn, is linked to relationship breakdown (Butterworth et al. 2008).

# 3 Alcohol

## 3.1 Key findings

- The consumption of alcohol is widespread within Australia and is entwined with many social and cultural activities. Around four in five (78.3%) people aged 12 years and older were recent drinkers in 2010.
- Among people who consume alcohol, consumption patterns have generally remained stable since 1991; however, there was a significant decline in daily drinking between 2007 and 2010 (from 8.1% to 7.2%).
- The majority of people in Australia do not drink at levels that place them at risk of harm. Even so, in 2010, around two in five (38.6%) people aged 12 years and older had consumed alcohol at levels that put them at risk of an alcohol-related injury at least once in the previous 12 months.
- Many people who consume alcohol also use other drugs such as tobacco or illicit drugs. Among daily drinkers, 28.1% were also daily smokers. People who had never had a drink were far less likely to use any other type of drug than drinkers or ex-drinkers.
- In 2010, people drinking at levels for lifetime risk or at levels that put them at risk of harm from a single occasion of drinking were more likely to report moderate to very high levels of psychological distress than low-risk drinkers and abstainers.
- Apparent consumption, measured through calculation of the volume of alcohol available for consumption, has fluctuated since 1997–98, with a small decline in 2009–10.
- An estimated 13.1% of people aged 14 years or older had driven a motor vehicle under the influence of alcohol in 2010.
- Government revenue from the sale of alcohol has increased from around \$3.6 billion in 1995–96 to around \$6.8 billion in 2009–10.

## 3.2 Introduction

The consumption of alcohol is widespread within Australia and is entwined with many social and cultural activities. However, excessive use of alcohol leads to substantial health and social harms each year. The National Alcohol Strategy 2006–11 aims to address some of these harms by focusing on intoxication, public safety and amenity, the health impacts of drinking, and the cultural place and availability of alcohol in Australian society (Commonwealth of Australia 2006a). Consistent with a focus to reduce the incidence of intoxication, a National Binge Drinking Strategy is in place to ‘... help tackle binge-drinking by young people’ (Roxon & McLucas 2008). The National Health and Hospitals Network implementation plan has also identified the need for prevention activities to target and reduce alcohol-related harms (Commonwealth of Australia 2010b). The National Preventative Health Strategy includes preventing alcohol-related harm in Australia as a key priority (Commonwealth of Australia 2009b).

In Australia, guidelines about alcohol use are produced by the National Health and Medical Research Council (NHMRC). The most recent version of these guidelines, *Australian guidelines to reduce health risks from drinking alcohol*, was released in 2009. These guidelines aim to assist Australians with decisions about whether to drink alcohol and, if so, how much (See

Box 3.1). Both men and women are advised to drink no more than two standard drinks per day to reduce their risk of health effects over their lifetime, and no more than four standard drinks per day to reduce the risk of injury on a single occasion of drinking. Furthermore, under the new guidelines, young people (under 18 years) and pregnant or breastfeeding women are advised not to drink at all (NHMRC 2009).

**Box 3.1: Summary of the 2009 Australian guidelines to reduce health risks from drinking alcohol**

**Guideline 1: Reducing the risk of alcohol-related harm over a lifetime**

The lifetime risk of harm from drinking alcohol increases with the amount consumed. For healthy men and women, drinking no more than two standard drinks on any day reduces the lifetime risk of harm from alcohol-related disease and injury.

**Guideline 2: Reducing the risk of injury on a single occasion of drinking.**

On a single occasion of drinking, the risk of alcohol-related injury increases with the amount consumed.

For healthy men and women, drinking no more than four standard drinks on a single occasion reduces the risk of alcohol-related injury arising from that occasion.

**Guideline 3: Children and young people under 18 years of age.**

For children and young people under the age of 18 years, not drinking alcohol is the safest option.

**Guideline 4: Pregnancy and breastfeeding**

For women who are pregnant or breastfeeding, not drinking alcohol is the safest option.

*Source:* NHMRC 2009.

The changes between the 2001 and 2009 guidelines have implications for the interpretation of data from surveys about alcohol use; this should be considered when comparing findings from previous reports. The data presented in this chapter are analysed according to the guidelines applying at the time (2009). Risks of harm from alcohol are generally discussed in terms of different drinking patterns and the associated risks of single-occasion and lifetime harms. This chapter provides some information about these dimensions of risk. The risk of harm from polydrug use (that is, the use of alcohol with other drugs) is also covered.

### 3.3 Attitudes and opportunity to use

The National Drug Strategy Household Survey (NDSHS) provides data about attitudes to drug use. The survey asked people to name the drug they first thought of when people talked about a 'drug problem'. In 2010, only 6.5% of people aged 14 years or over first identified alcohol as a drug associated with a drug problem. Heroin was the most commonly reported response (31.0%) (AIHW 2008b).

When asked about approval of regular drug use by adults in 2010, 44.8% of those aged 14 years or over approved of regular alcohol use, the highest approval rating of any drug.

The proportion of people aged 14 years or over reporting that they had the opportunity to use alcohol in 2010 (87.5%) was slightly lower than the proportion in 2007 (89.3%). Women (84.8%) were proportionally less likely than men (90.2%) to have the opportunity to use alcohol (AIHW 2008b).

## 3.4 Reported consumption

### 3.4.1 Trends

Most people in Australia drink alcohol. In 2010, less than one in ten (7.2%) drank daily. Four in ten (39.5%) people aged 14 years or older drank at least once a week but not as often as every day (shown as 'weekly' in Table 3.1). Around three in ten (33.8%) drank less often than weekly.

Among people who consume alcohol, consumption patterns have generally remained stable since 1991; however, there was a significant decline in daily drinking between 2007 and 2010 (Table 3.1). Weekly and less-than-weekly drinking has fluctuated since 1991.

**Table 3.1: Alcohol drinking status: people aged 14 years or older, 1991 to 2010 (per cent)**

| Drinking status                   | 1991 | 1993 | 1995 | 1998 | 2001 | 2004 | 2007 | 2010  |
|-----------------------------------|------|------|------|------|------|------|------|-------|
| Daily                             | 10.2 | 8.5  | 8.8  | 8.5  | 8.3  | 8.9  | 8.1  | #7.2  |
| Weekly                            | 41.0 | 39.9 | 35.2 | 40.1 | 39.5 | 41.2 | 41.3 | 39.5  |
| Less than weekly                  | 30.4 | 29.5 | 34.3 | 31.9 | 34.6 | 33.5 | 33.5 | 33.8  |
| Ex-drinker <sup>(a)</sup>         | 12.0 | 9.0  | 9.5  | 10.0 | 8.0  | 7.1  | 7.0  | 7.4   |
| Never had a full serve of alcohol | 6.5  | 13.0 | 12.2 | 9.4  | 9.6  | 9.3  | 10.1 | #12.1 |

(a) Has consumed at least a full serve of alcohol, but not in the last 12 months.

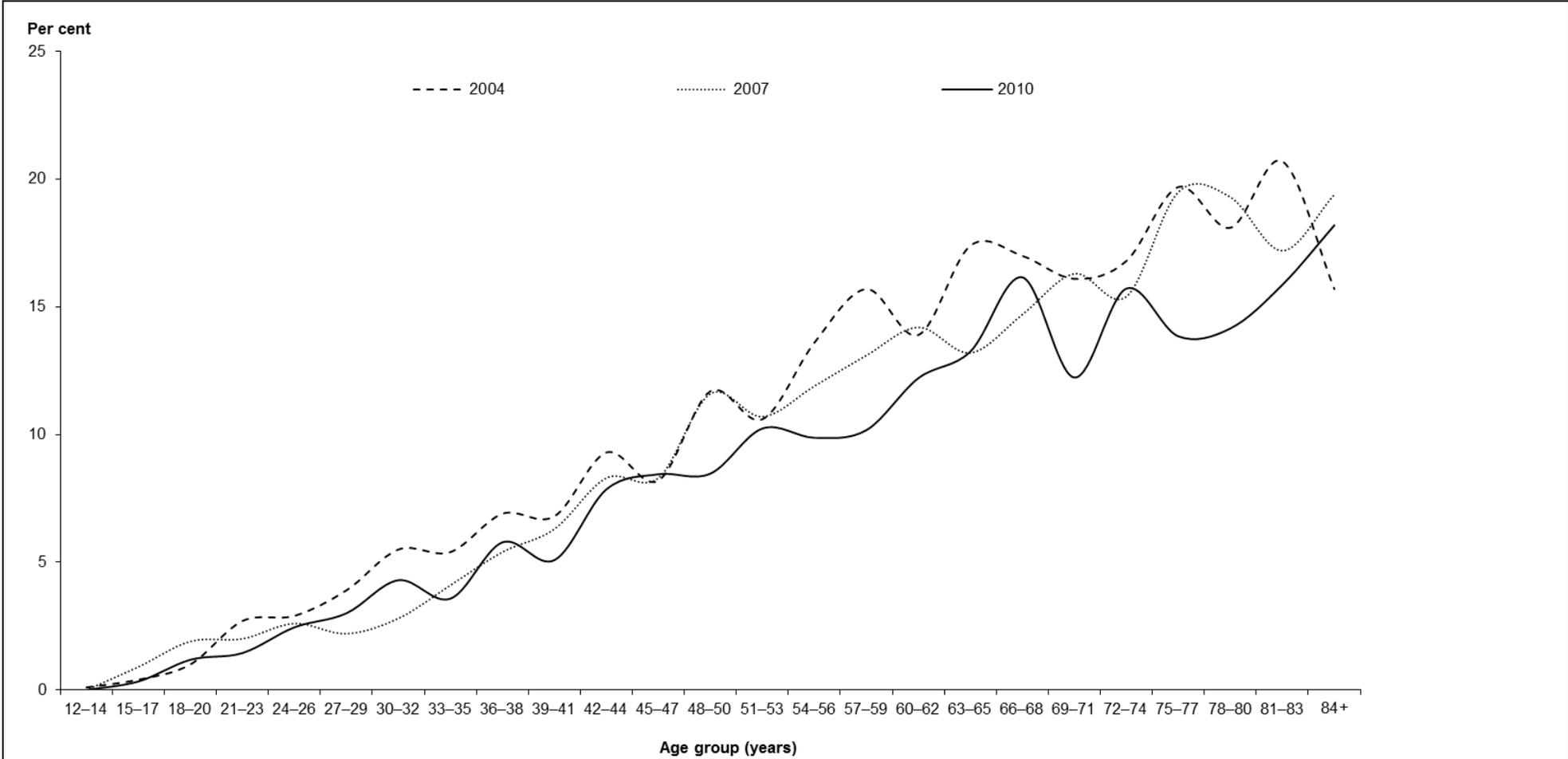
# Statistically significant difference between 2007 and 2010

Source: AIHW 2011a.

### 3.4.2 Age and sex

There are some differences in frequency of drinking by age and sex. Generally, younger people (aged between 12 and 17 years) were more likely to have never had a full serve of alcohol than adults. Younger people were also very unlikely to drink daily (0.1%) (Table 3.2). People in older age groups were more likely to drink daily than younger people (Figure 3.1). In 2010, 14.8% of people aged 70 years or over and 13.3% of people in their sixties drank daily.

As a group, males drank more often than females. Males were more likely than females to drink daily and also to drink several times a week.



Source: AIHW 2011a.

**Figure 3.1: Daily drinkers by three-year age group averages, 14 years or older, 2004, 2007 and 2010**

**Table 3.2: Alcohol drinking status: people aged 12 years and older, by age and sex, 2010**

|                                     | 12–17 | 18–19 | 20–29 | 30–39 | 40–49 | 50–59 | 60–69 | 70+  | Total 12+   |
|-------------------------------------|-------|-------|-------|-------|-------|-------|-------|------|-------------|
| <b>Males</b>                        |       |       |       |       |       |       |       |      |             |
| Daily                               | **0.1 | *1.8  | 3.4   | 6.6   | 10.2  | 14.0  | 17.8  | 18.4 | <b>9.3</b>  |
| Weekly                              | 5.3   | 46.2  | 49.7  | 50.2  | 49.3  | 50.6  | 45.9  | 37.3 | <b>43.8</b> |
| Less than weekly                    | 32.2  | 39.4  | 33.0  | 29.7  | 28.0  | 22.7  | 22.7  | 22.6 | <b>28.1</b> |
| <i>Recent drinker<sup>(a)</sup></i> | 37.6  | 87.5  | 86.1  | 86.5  | 87.5  | 87.2  | 86.5  | 78.3 | <b>81.2</b> |
| Ex-drinker <sup>(b)</sup>           | *2.7  | *2.0  | 3.1   | 6.1   | 6.5   | 7.8   | 8.3   | 12.4 | <b>6.3</b>  |
| Never had a full serve of alcohol   | 59.6  | 10.5  | 10.8  | 7.4   | 6.0   | 5.0   | 5.2   | 9.3  | <b>12.5</b> |
| <b>Females</b>                      |       |       |       |       |       |       |       |      |             |
| Daily                               | —     | **0.6 | *0.9  | 2.5   | 4.8   | 6.4   | 8.8   | 12.0 | <b>4.7</b>  |
| Weekly                              | 4.9   | 30.4  | 37.9  | 37.3  | 40.9  | 38.9  | 33.0  | 23.5 | <b>32.9</b> |
| Less than weekly                    | 34.2  | 54.1  | 45.6  | 42.3  | 38.4  | 34.6  | 32.2  | 27.3 | <b>37.8</b> |
| <i>Recent drinker<sup>(a)</sup></i> | 39.1  | 85.1  | 84.4  | 82.1  | 84.0  | 79.8  | 74.0  | 62.7 | <b>75.5</b> |
| Ex-drinker <sup>(b)</sup>           | *1.9  | *5.0  | 4.3   | 7.7   | 7.2   | 10.7  | 12.5  | 13.4 | <b>8.1</b>  |
| Never had a full serve of alcohol   | 59.0  | 9.9   | 11.4  | 10.2  | 8.8   | 9.4   | 13.4  | 23.8 | <b>16.4</b> |
| <b>Persons</b>                      |       |       |       |       |       |       |       |      |             |
| Daily                               | **0.1 | *1.2  | 2.1   | 4.6   | 7.5   | 10.1  | 13.3  | 14.8 | <b>7.0</b>  |
| Weekly                              | 5.1   | 38.6  | 43.9  | 43.7  | 45.0  | 44.7  | 39.5  | 29.5 | <b>38.3</b> |
| Less than weekly                    | 33.2  | 46.5  | 39.2  | 36.0  | 33.3  | 28.7  | 27.5  | 25.2 | <b>33.0</b> |
| <i>Recent drinker<sup>(a)</sup></i> | 38.4  | 86.3  | 85.3  | 84.3  | 85.7  | 83.5  | 80.2  | 69.6 | <b>78.3</b> |
| Ex-drinker <sup>(b)</sup>           | 2.3   | *3.5  | 3.7   | 6.9   | 6.9   | 9.3   | 10.4  | 13.0 | <b>7.2</b>  |
| Never had a full serve of alcohol   | 59.3  | 10.2  | 11.1  | 8.8   | 7.4   | 7.2   | 9.3   | 17.4 | <b>14.5</b> |

(a) Has consumed at least a full serve of alcohol in the previous 12 months

(b) Has consumed at least a full serve of alcohol, but not in the previous 12 months.

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

\*\* Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Source: AIHW 2011a.

### **3.4.3 Risk levels**

The 2009 *Australian alcohol guidelines* focus on the prevention of alcohol-related harm over a lifetime and on a single occasion. These guidelines have moved away from previous threshold-based definitions of 'risky' or 'high-risk' drinking for men and women, recognising that the lifetime risk of harm from consuming alcohol increases progressively with the amount consumed (NHMRC 2009).

Guideline 1 (see Box 3.1) states that the lifetime risk of harm from drinking alcohol increases with the amount consumed and that, for healthy men and women, drinking no more than 2 standard drinks on any day reduces the risk of harm from alcohol-related disease or injury.

Guideline 2 states that, on a single occasion of drinking, the risk of alcohol-related injury increases with the amount consumed. For healthy men and women, drinking no more than 4 standard drinks on a single occasion reduces the risk of alcohol-related injury arising from that occasion.

#### **Risk of alcohol-related harm from a single drinking occasion**

Among people in Australia aged 12 years and older in 2010, around two in five (38.6%) drank, at least once in the previous 12 months, in a pattern that placed them at risk of an alcohol-related injury from a single drinking occasion. About one in six (15.4%) did so at least once a week (Table 3.3). Men were far more likely than women to drink alcohol in quantities that placed them at risk from a single occasion of drinking (50.0% compared with 29.8% for women). They were also likely to do this more often than women, with 23.2% of men consuming these quantities at least weekly (compared with 8.8% of women).

**Table 3.3: Alcohol consumption: people aged 12 years and older at risk of harm on a single occasion, by age and sex, 2010 (per cent)**

| Age group          | Abstainers <sup>(a)</sup> | Low risk <sup>(b)</sup> | Single occasion risk           |                                 |                                |
|--------------------|---------------------------|-------------------------|--------------------------------|---------------------------------|--------------------------------|
|                    |                           |                         | At least yearly <sup>(c)</sup> | At least monthly <sup>(d)</sup> | At least weekly <sup>(e)</sup> |
| <b>Males</b>       |                           |                         |                                |                                 |                                |
| 12–15              | 78.7                      | 15.4                    | *2.2                           | *2.9                            | **0.8                          |
| 16–17              | 30.7                      | 24.3                    | 11.0                           | 21.6                            | 12.5                           |
| 18–19              | 12.5                      | 15.6                    | 7.3                            | 24.0                            | 40.6                           |
| 20–29              | 13.9                      | 19.9                    | 11.2                           | 22.0                            | 32.9                           |
| 30–39              | 13.5                      | 24.8                    | 16.6                           | 19.3                            | 25.9                           |
| 40–49              | 12.5                      | 33.1                    | 14.3                           | 14.7                            | 25.5                           |
| 50–59              | 12.8                      | 38.0                    | 13.8                           | 12.1                            | 23.3                           |
| 60–69              | 13.5                      | 50.7                    | 9.0                            | 9.6                             | 17.3                           |
| 70+                | 21.7                      | 62.1                    | 4.6                            | 3.3                             | 8.2                            |
| <b>Total (12+)</b> | <b>18.8</b>               | <b>32.8</b>             | <b>11.4</b>                    | <b>14.5</b>                     | <b>22.5</b>                    |
| <b>Females</b>     |                           |                         |                                |                                 |                                |
| 12–15              | 75.6                      | 14.2                    | *3.5                           | 5.7                             | *1.0                           |
| 16–17              | 32.5                      | 31.0                    | 10.4                           | 17.1                            | 9.0                            |
| 18–19              | 14.9                      | 24.7                    | 9.2                            | 27.6                            | 23.6                           |
| 20–29              | 15.6                      | 29.8                    | 17.3                           | 18.7                            | 18.5                           |
| 30–39              | 17.9                      | 43.4                    | 16.4                           | 12.7                            | 9.6                            |
| 40–49              | 16.0                      | 52.1                    | 13.4                           | 9.9                             | 8.7                            |
| 50–59              | 20.2                      | 59.0                    | 9.1                            | 5.6                             | 6.2                            |
| 60–69              | 26.0                      | 65.2                    | 4.1                            | 2.7                             | 2.1                            |
| 70+                | 37.3                      | 59.2                    | 1.2                            | *0.9                            | 1.5                            |
| <b>Total (12+)</b> | <b>75.6</b>               | <b>46.5</b>             | <b>10.6</b>                    | <b>9.9</b>                      | <b>8.6</b>                     |
| <b>Persons</b>     |                           |                         |                                |                                 |                                |
| 12–15              | 77.2                      | 14.8                    | 2.8                            | 4.3                             | *0.9                           |
| 16–17              | 31.6                      | 27.5                    | 10.7                           | 19.4                            | 10.8                           |
| 18–19              | 13.7                      | 20.0                    | 8.2                            | 25.7                            | 32.4                           |
| 20–29              | 14.7                      | 24.8                    | 14.2                           | 20.4                            | 25.8                           |
| 30–39              | 15.7                      | 34.1                    | 16.5                           | 16.0                            | 17.7                           |
| 40–49              | 14.3                      | 42.6                    | 13.8                           | 12.3                            | 17.0                           |
| 50–59              | 16.5                      | 48.6                    | 11.4                           | 8.8                             | 14.7                           |
| 60–69              | 19.8                      | 58.0                    | 6.5                            | 6.1                             | 9.7                            |
| 70+                | 30.4                      | 60.4                    | 2.7                            | 2.0                             | 4.4                            |
| <b>Total (12+)</b> | <b>21.7</b>               | <b>39.7</b>             | <b>11.0</b>                    | <b>12.2</b>                     | <b>15.4</b>                    |

(a) Not consumed alcohol in the previous 12 months.

(b) Never had more than 4 standard drinks on any occasion.

(c) Had more than 4 standard drinks at least once a year but not as often as monthly.

(d) Had more than 4 standard drinks at least once a month but not as often as weekly.

(e) Had more than 4 standard drinks at least once a week.

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

\*\* Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Source: AIHW 2011a.

## Risk of alcohol-related harm over a lifetime

In 2010, most people in Australia aged 12 years and older drank at levels that did not place them at risk of harm over their lifetime – they either drank at low-risk levels (58.8%) or abstained (21.7%). Males were more likely than females to drink at risky levels (28.1% and 11.0%, respectively) and males in their late teens (aged 18–19 years) were the most likely group to drink at risky levels (42.3%) (Table 3.4).

**Table 3.4: Risk of alcohol-related harm over a lifetime by sex: people aged 12 years and older, 2010 (per cent)**

| Age group (years)  | Abstainers <sup>(a)</sup> | Lifetime risk           |                      |
|--------------------|---------------------------|-------------------------|----------------------|
|                    |                           | Low risk <sup>(b)</sup> | Risky <sup>(c)</sup> |
| <b>Males</b>       |                           |                         |                      |
| 12–15              | 78.7                      | 20.7                    | **0.6                |
| 16–17              | 30.7                      | 58.1                    | 11.2                 |
| 18–19              | 12.5                      | 45.2                    | 42.3                 |
| 20–29              | 13.9                      | 50.0                    | 36.1                 |
| 30–39              | 13.5                      | 55.4                    | 31.1                 |
| 40–49              | 12.5                      | 56.7                    | 30.8                 |
| 50–59              | 12.8                      | 56.4                    | 30.8                 |
| 60–69              | 13.5                      | 58.6                    | 27.9                 |
| 70+                | 21.7                      | 59.6                    | 18.7                 |
| <b>Total (12+)</b> | <b>18.8</b>               | <b>53.1</b>             | <b>28.1</b>          |
| <b>Females</b>     |                           |                         |                      |
| 12–15              | 75.6                      | 22.9                    | *1.5                 |
| 16–17              | 32.5                      | 58.9                    | 8.6                  |
| 18–19              | 14.9                      | 64.8                    | 20.3                 |
| 20–29              | 15.6                      | 67.0                    | 17.4                 |
| 30–39              | 17.9                      | 70.8                    | 11.3                 |
| 40–49              | 16.0                      | 71.2                    | 12.8                 |
| 50–59              | 20.2                      | 68.0                    | 11.9                 |
| 60–69              | 26.0                      | 66.5                    | 7.5                  |
| 70+                | 37.3                      | 58.0                    | 4.7                  |
| <b>Total (12+)</b> | <b>24.5</b>               | <b>64.4</b>             | <b>11.0</b>          |
| <b>Persons</b>     |                           |                         |                      |
| 12–15              | 77.2                      | 21.8                    | *1.0                 |
| 16–17              | 31.6                      | 58.5                    | 9.9                  |
| 18–19              | 13.7                      | 54.7                    | 31.7                 |
| 20–29              | 14.7                      | 58.3                    | 26.9                 |
| 30–39              | 15.7                      | 63.2                    | 21.1                 |
| 40–49              | 14.3                      | 64.0                    | 21.7                 |
| 50–59              | 16.5                      | 62.2                    | 21.3                 |
| 60–69              | 19.8                      | 62.5                    | 17.7                 |
| 70+                | 30.4                      | 58.7                    | 10.9                 |
| <b>Total (12+)</b> | <b>21.7</b>               | <b>58.8</b>             | <b>19.5</b>          |

(a) Not consumed alcohol in the previous 12 months.

(b) On average, had no more than 2 standard drinks per day.

(c) On average, had more than 2 standard drinks per day.

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

\*\* Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Source: AIHW 2011a.

### 3.4.4 Social characteristics

In 2010, there was little difference in the characteristics of drinkers who consumed alcohol at risky levels at least once a year but not as often as weekly. However, the characteristics of weekly risky drinkers were noticeably different. In particular, those living in *Remote* or *Very remote* areas were more likely to drink at risky levels (for both lifetime and single-occasion harm) than those living in other areas. Similarly, employed people were more likely than unemployed people or those not in the labour force to drink at levels that placed them at risk of lifetime harm (24.8%) and at risk of alcohol-related injury on a single drinking occasion (30.4% at least yearly but not weekly, and 20.1% at least weekly). Homosexual or bisexual people were more likely to drink at risky levels (for both lifetime and single-occasion risk) than heterosexual people.

Information on alcohol use by Aboriginal and Torres Strait Islander people is presented in Chapter 8.

**Table 3.5: Lifetime and single-occasion risk, people aged 14 years or older, by social characteristics, 2010 (per cent)**

|   | Abstainer/<br>ex-drinker <sup>(a)</sup> | Lifetime risk           |                      | Single-occasion risk    |                                |                                |
|---|---|-------------------------|----------------------|-------------------------|--------------------------------|--------------------------------|
|   |   | Low risk <sup>(b)</sup> | Risky <sup>(c)</sup> | Low risk <sup>(d)</sup> | At least yearly <sup>(e)</sup> | At least weekly <sup>(f)</sup> |
| <b>All persons (aged 14+)</b>             | <b>19.5</b>                             | <b>60.4</b>             | <b>20.1</b>          | <b>40.7</b>             | <b>23.9</b>                    | <b>15.9</b>                    |
| <b>Education</b>                          |   |                         |                      |                         |                                |                                |
| Without post-school qualifications        | 26.2                                    | 56.1                    | 17.7                 | 38.7                    | 20.3                           | 14.9                           |
| With post-school qualifications           | 14.2                                    | 63.8                    | 22.0                 | 42.4                    | 26.7                           | 16.8                           |
| <b>Labour force status</b>                |   |                         |                      |                         |                                |                                |
| Currently employed                        | 11.1                                    | 64.1                    | 24.8                 | 38.4                    | 30.4                           | 20.1                           |
| Student                                   | 36.7                                    | 49.3                    | 14.0                 | 24.8                    | 24.3                           | 14.1                           |
| Unemployed                                | 25.9                                    | 52.3                    | 21.7                 | 29.9                    | 24.6                           | 19.5                           |
| Home duties                               | 22.7                                    | 67.2                    | 10.1                 | 48.7                    | 21.5                           | 7.0                            |
| Retired or on a pension                   | 25.6                                    | 60.1                    | 14.3                 | 58.3                    | 8.7                            | 7.4                            |
| Volunteer/charity work                    | 32.2                                    | 55.7                    | 12.1                 | 46.2                    | 11.8                           | 9.8                            |
| Unable to work                            | 31.6                                    | 50.4                    | 18.0                 | 39.5                    | 13.4                           | 15.5                           |
| Other                                     | 28.3                                    | 57.0                    | 14.7                 | 40.7                    | 19.4                           | 11.7                           |
| <b>Main language spoken at home</b>       |   |                         |                      |                         |                                |                                |
| English                                   | 16.1                                    | 62.4                    | 21.6                 | 41.5                    | 25.4                           | 17.0                           |
| Other                                     | 49.5                                    | 45.1                    | 5.4                  | 35.2                    | 10.9                           | 4.4                            |
| <b>Socioeconomic status</b>               |   |                         |                      |                         |                                |                                |
| 1st quintile (lowest status)              | 25.6                                    | 55.7                    | 18.7                 | 38.7                    | 20.0                           | 15.7                           |
| 2nd quintile                              | 22.0                                    | 58.0                    | 20.0                 | 38.4                    | 24.1                           | 15.6                           |
| 3rd quintile                              | 18.6                                    | 60.7                    | 20.7                 | 41.0                    | 23.1                           | 17.3                           |
| 4th quintile                              | 18.1                                    | 61.8                    | 20.1                 | 41.5                    | 24.7                           | 15.6                           |
| 5 <sup>th</sup> quintile (highest status) | 14.4                                    | 64.8                    | 20.8                 | 43.5                    | 26.7                           | 15.4                           |
| <b>Geography</b>                          |   |                         |                      |                         |                                |                                |
| Major cities                              | 20.4                                    | 61.0                    | 18.6                 | 41.3                    | 23.4                           | 14.9                           |
| Inner regional                            | 17.7                                    | 60.3                    | 22.0                 | 40.2                    | 25.0                           | 17.0                           |
| Outer regional                            | 17.5                                    | 57.9                    | 24.6                 | 39.9                    | 24.1                           | 18.5                           |
| Remote and Very remote                    | 15.3                                    | 54.2                    | 30.5                 | 33.4                    | 25.6                           | 25.8                           |

(continued)

**Table 3.5 (continued): Lifetime and single-occasion risk, people aged 14 years or older, by social characteristics, 2010 (per cent)**

| Characteristic                     | Abstainer/<br>ex-drinker <sup>(a)</sup> | Lifetime risk           |                      | Single-occasion risk    |                                |                                |
|------------------------------------|---|-------------------------|----------------------|-------------------------|--------------------------------|--------------------------------|
|                                    |   | Low risk <sup>(b)</sup> | Risky <sup>(c)</sup> | Low risk <sup>(d)</sup> | At least yearly <sup>(e)</sup> | At least weekly <sup>(f)</sup> |
| <b>Marital status</b>              |   |                         |                      |                         |                                |                                |
| Never married                      | 22.7                                    | 54.2                    | 23.1                 | 26.4                    | 27.8                           | 23.0                           |
| Divorced/separated/widowed         | 24.6                                    | 58.9                    | 16.5                 | 48.9                    | 14.1                           | 12.4                           |
| Married/de facto                   | 16.3                                    | 64.1                    | 19.6                 | 45.7                    | 24.4                           | 13.6                           |
| <b>Household composition</b>       |   |                         |                      |                         |                                |                                |
| Single with dependent children     | 19.1                                    | 62.3                    | 18.6                 | 37.2                    | 26.8                           | 16.9                           |
| Couple with dependent children     | 15.4                                    | 65.1                    | 19.5                 | 40.2                    | 30.1                           | 14.3                           |
| Parent with non-dependent children | 20.7                                    | 61.3                    | 18.1                 | 50.2                    | 16.9                           | 12.3                           |
| Single without children            | 20.2                                    | 55.7                    | 24.2                 | 39.3                    | 19.9                           | 20.6                           |
| Couple without children            | 15.4                                    | 63.2                    | 21.4                 | 50.3                    | 20.5                           | 13.7                           |
| Other <sup>(g)</sup>               | 24.7                                    | 55.9                    | 19.4                 | 29.9                    | 26.1                           | 19.3                           |
| <b>Sexual orientation</b>          |   |                         |                      |                         |                                |                                |
| Heterosexual                       | 18.0                                    | 61.8                    | 20.3                 | 41.6                    | 24.6                           | 15.8                           |
| Homosexual/bisexual                | 14.2                                    | 56.5                    | 29.2                 | 29.8                    | 29.4                           | 26.5                           |
| Other                              | 51.7                                    | 36.0                    | 12.3                 | 29.4                    | 6.5                            | 12.3                           |

(a) Not consumed alcohol in the previous 12 months.

(b) On average, had no more than 2 standard drinks per day.

(c) On average, had more than 2 standard drinks per day.

(d) Never had more than 4 standard drinks on any occasion.

(e) Had more than 4 standard drinks at least once a year but not as often as weekly.

(f) Had more than 4 standard drinks at least once a week.

(g) People who live in a household with children, but are not the parent/guardian; younger people living with their parents; or respondents who selected 'other household type'.

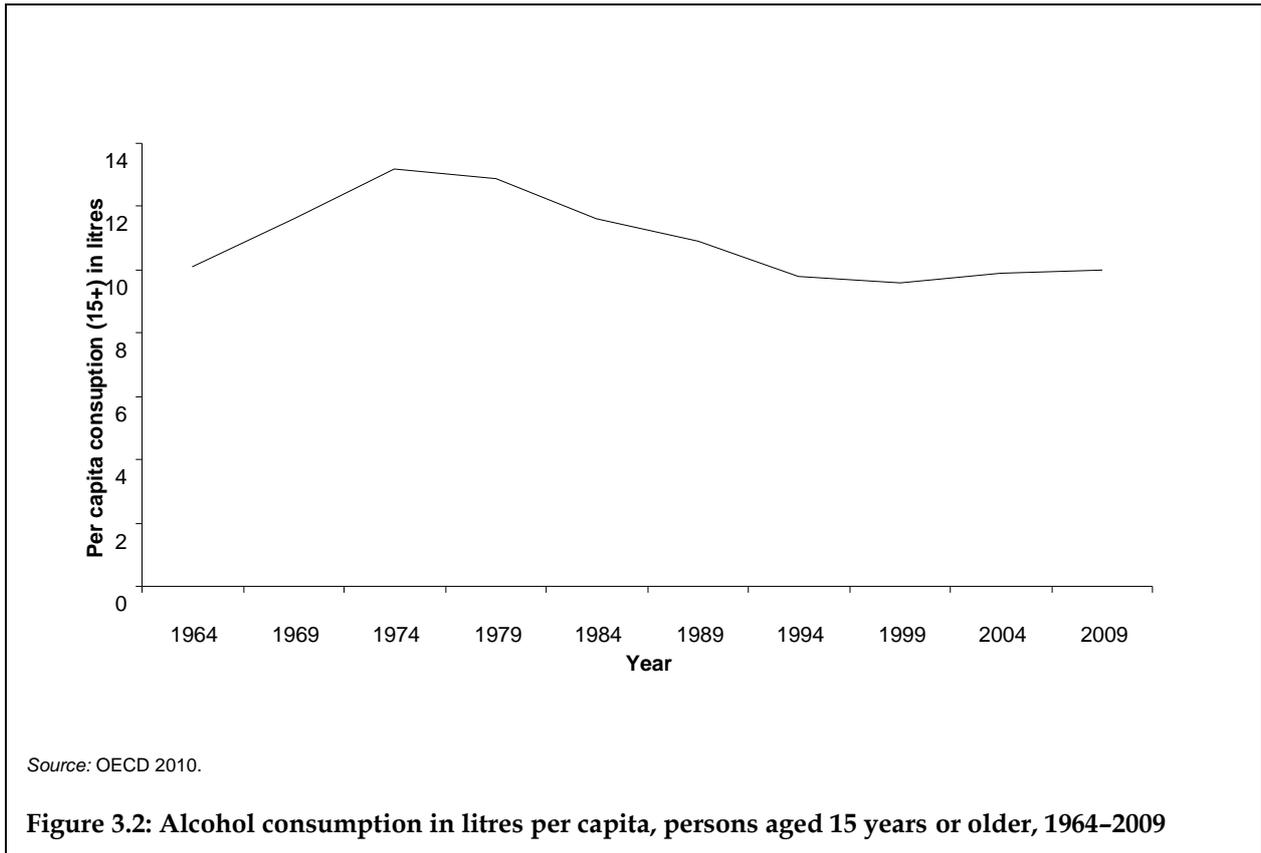
Source: AIHW 2011a.

## 3.5 Apparent consumption

There are two approaches to measuring alcohol consumption: directly, by asking people how much they drink through the use of surveys; and indirectly, through data about the volume of alcohol available for consumption. The information presented up to this point in the chapter has been based on survey data.

Data about the volume of alcohol available for consumption are collated by the ABS from information about import clearances, excise and domestic alcohol sales. Based on these data, estimates are calculated for per capita consumption. These estimates are available at the national level, but not at a state or regional level (Hall et al. 2008).

Between 1964 and 2009, the volume (in litres) of alcohol consumed by Australians aged 15 years or older initially rose and then fell back to a level that was similar to that at the start of the period (Figure 3.2).



Focusing on the last decade, indirect measures of consumption show that the amount of alcohol available for consumption in Australia has increased (Table 3.6). However, when population increases are taken into account, the apparent consumption has remained around 10 litres of pure alcohol per person. Beer has consistently dominated the alcohol supply.

**Table 3.6: Alcohol available for consumption ('000 litres of pure alcohol) and apparent annual per person consumption by persons aged 15 years or older, 1997–98 to 2009–10**

| Available for consumption            | 1997–98        | 1998–99        | 1999–00        | 2000–01        | 2001–02        | 2002–03        | 2003–04        | 2004–05        | 2005–06        | 2006–07        | 2007–08        | 2008–09        | 2009–10        |
|--------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Beer                                 | 76,237         | 75,607         | 76,097         | 77,861         | 75,162         | 78,767         | 75,573         | 75,075         | 76,388         | 77,849         | 79,496         | 81,148         | 79,734         |
| Wine <sup>(a)</sup>                  | 45,452         | 46,540         | 48,624         | 49,708         | 50,261         | 52,872         | 55,122         | 57,275         | 58,311         | 62,263         | 62,807         | 65,600         | 68,452         |
| Spirits and Ready to drink (RTD)s    |                |                |                |                |                |                |                |                |                |                |                |                |                |
| Ready to drink (pre-mixed beverages) | ..             | ..             | ..             | ..             | ..             | 12,190         | 13,589         | 15,338         | 16,383         | 18,123         | 18,693         | 13,056         | 12,811         |
| Spirits                              | ..             | ..             | ..             | ..             | ..             | 19,439         | 19,336         | 19,667         | 19,154         | 19,355         | 20,160         | 22,865         | 23,023         |
| <i>Total spirits and RTDs</i>        | <i>26,518</i>  | <i>26,298</i>  | <i>24,869</i>  | <i>27,665</i>  | <i>29,008</i>  | <i>31,629</i>  | <i>32,925</i>  | <i>35,005</i>  | <i>35,537</i>  | <i>37,478</i>  | <i>38,853</i>  | <i>35,921</i>  | <i>35,835</i>  |
| <b>Total</b>                         | <b>148,207</b> | <b>148,445</b> | <b>149,590</b> | <b>155,234</b> | <b>154,431</b> | <b>163,268</b> | <b>163,620</b> | <b>167,355</b> | <b>170,236</b> | <b>177,590</b> | <b>181,156</b> | <b>182,669</b> | <b>184,021</b> |
| <b>Apparent consumption</b>          |                |                |                |                |                |                |                |                |                |                |                |                |                |
| Beer                                 | 5.2            | 5.1            | 5.1            | 5.1            | 4.8            | 5.0            | 4.7            | 4.6            | 4.6            | 4.6            | 4.6            | 4.6            | 4.4            |
| Wine <sup>(a)</sup>                  | 3.1            | 3.1            | 3.2            | 3.3            | 3.2            | 3.4            | 3.4            | 3.5            | 3.5            | 3.7            | 3.7            | 3.7            | 3.8            |
| Spirits and RTDs                     |                |                |                |                |                |                |                |                |                |                |                |                |                |
| Ready to drink (pre-mixed beverages) | ..             | ..             | ..             | ..             | ..             | 0.8            | 0.9            | 0.9            | 1.0            | 1.1            | 1.1            | 0.7            | 0.7            |
| Spirits                              | ..             | ..             | ..             | ..             | ..             | 1.2            | 1.2            | 1.2            | 1.2            | 1.1            | 1.2            | 1.3            | 1.3            |
| <i>Total spirits and RTDs</i>        | <i>1.8</i>     | <i>1.8</i>     | <i>1.7</i>     | <i>1.8</i>     | <i>1.9</i>     | <i>2.0</i>     | <i>2.1</i>     | <i>2.2</i>     | <i>2.2</i>     | <i>2.2</i>     | <i>2.3</i>     | <i>2.0</i>     | <i>2.0</i>     |
| <b>Total<sup>(b)</sup></b>           | <b>10.1</b>    | <b>10.0</b>    | <b>9.9</b>     | <b>10.2</b>    | <b>9.9</b>     | <b>10.4</b>    | <b>10.2</b>    | <b>10.3</b>    | <b>10.3</b>    | <b>10.6</b>    | <b>10.6</b>    | <b>10.4</b>    | <b>10.3</b>    |

(a) Data for wine consumed before 2004-05 may not be comparable with data for after that time.

(b) Totals do not always equal the data presented due to rounding of figures.

Note: This table has been revised since previous editions of *Statistics on Drug Use in Australia*.

Source: ABS 2011.

### **3.6 Alcohol-related costs, revenue and expenditure**

In 2004–05, the consumption of alcohol was estimated to cost Australian society \$15.3 billion (Collins & Lapsley 2008a). These costs included both tangible costs (such as for healthcare, road accidents and crime) and intangible costs, including for pain and suffering. The majority of social costs for alcohol (71%) were tangible costs (Collins & Lapsley 2008a). Businesses bore 50% of tangible costs and governments 26%, with individuals making up the balance. Recent research has suggested that when additional social costs to individuals around the drinker (rather than to the drinker themselves) are factored into the analysis, the financial burden of alcohol use in Australia is higher (Laslett et al. 2010).

Alcohol-related health expenditure includes that for primary healthcare and hospital costs. It also includes expenditure on the prevention of alcohol use through strategies such as the National Alcohol Strategy 2006–2011, the National Binge Drinking Strategy, social marketing campaigns and other programs. In 2008–09 the Australian Government spent \$41.2 million on these types of prevention programs (AIHW 2011c).

The Australian Government raises revenue from alcohol through excise on locally manufactured alcohol, customs duties on imported products, and the wine equalisation tax. Alcohol is also subject to GST, with revenue from GST increasing from just under \$1 billion in 2000–01 to \$1.2 billion in 2009–10. Total revenue has increased from \$3.6 billion in 1995–96 to \$6.8 billion in 2009–10, although the types of taxes have changed (Table 3.7).

**Table 3.7: Government revenue related to the sale of alcohol, 1995-96 to 2009-10 (\$m)**

|                              | 1995-96      | 1996-97      | 1997-98      | 1998-99      | 1999-00      | 2000-01        | 2001-02        | 2002-03        | 2003-04        | 2004-05        | 2005-06        | 2006-07        | 2007-08        | 2008-09        | 2009-10        |
|------------------------------|--------------|--------------|--------------|--------------|--------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| <b>Excise</b>                |              |              |              |              |              |                |                |                |                |                |                |                |                |                |                |
| Beer                         | 845          | 875          | 876          | 874          | 883          | 1,697          | 1,657          | 1,679          | 1,638          | 1,653          | 1,739          | 1,836          | 1,888          | 1,986          | 1,991          |
| Spirits                      | 201          | 164          | 142          | 144          | 155          | 238            | 339            | 560            | 662            | 739            | 808            | 880            | 959            | 1,106          | 1,114          |
| <b>Total excise</b>          | <b>1,045</b> | <b>1,040</b> | <b>1,018</b> | <b>1,018</b> | <b>1,039</b> | <b>1,935</b>   | <b>1,996</b>   | <b>2,239</b>   | <b>2,300</b>   | <b>2,392</b>   | <b>2,547</b>   | <b>2,716</b>   | <b>2,847</b>   | <b>3,092</b>   | <b>3,105</b>   |
| <b>Customs<sup>(a)</sup></b> |              |              |              |              |              |                |                |                |                |                |                |                |                |                |                |
| <b>Beer</b>                  |              |              |              |              |              |                |                |                |                |                |                |                |                |                |                |
| Excise                       | ..           | ..           | ..           | ..           | ..           | ..             | ..             | ..             | 84.2           | 87.1           | 93.3           | 114.6          | 162.8          | 190.1          | 202.9          |
| Duty                         | ..           | ..           | ..           | ..           | ..           | ..             | ..             | ..             | 0.1            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            | 0.0            |
| <i>Beer total</i>            | <i>7.1</i>   | <i>9.3</i>   | <i>11.5</i>  | <i>13.6</i>  | <i>14.4</i>  | <i>35.5</i>    | <i>45.3</i>    | <i>55.6</i>    | <i>84.3</i>    | <i>87.1</i>    | <i>93.3</i>    | <i>114.6</i>   | <i>162.8</i>   | <i>190.1</i>   | <i>202.9</i>   |
| <b>Other beverages</b>       |              |              |              |              |              |                |                |                |                |                |                |                |                |                |                |
| Excise                       | ..           | ..           | ..           | ..           | ..           | ..             | ..             | ..             | 8.6            | 7.6            | 9.6            | 23.3           | 22.0           | 23.6           | 23.2           |
| Duty                         | ..           | ..           | ..           | ..           | ..           | ..             | ..             | ..             | 0.1            | 0.2            | 0.1            | *              | 0.1            | 0.1            | 0.1            |
| <i>Other beverages total</i> | <i>..</i>    | <i>..</i>    | <i>..</i>    | <i>..</i>    | <i>..</i>    | <i>..</i>      | <i>..</i>      | <i>..</i>      | <i>8.7</i>     | <i>7.8</i>     | <i>9.7</i>     | <i>0.0</i>     | <i>22.1</i>    | <i>23.7</i>    | <i>23.3</i>    |
| Wine (WET paid)              | 4.0          | 2.8          | 3.8          | 4.3          | 4.4          | 3.5            | 3.9            | 4.1            | 4.8            | 5.4            | 6.8            | 12.0           | 17.2           | 20.8           | 18.7           |
| <b>Spirits</b>               |              |              |              |              |              |                |                |                |                |                |                |                |                |                |                |
| Excise                       | ..           | ..           | ..           | ..           | ..           | ..             | ..             | ..             | 968.2          | 985.8          | 1036.2         | 1,110.4        | 1,204.2        | 1,430.0        | 1,462.7        |
| Duty                         | ..           | ..           | ..           | ..           | ..           | ..             | ..             | ..             | 12.8           | 12.0           | 9.7            | 10.1           | 10.8           | 12.0           | 13.2           |
| <i>Spirits total</i>         | <i>565.4</i> | <i>645.1</i> | <i>716.8</i> | <i>719.6</i> | <i>751.0</i> | <i>1,073.9</i> | <i>1,062.0</i> | <i>950.3</i>   | <i>981.0</i>   | <i>997.8</i>   | <i>1,045.9</i> | <i>1,120.5</i> | <i>1,215.0</i> | <i>1,442.0</i> | <i>1,475.9</i> |
| <b>Total customs</b>         | <b>576.5</b> | <b>657.2</b> | <b>732.1</b> | <b>737.4</b> | <b>769.9</b> | <b>1,112.9</b> | <b>1,111.2</b> | <b>1,010.0</b> | <b>1,078.8</b> | <b>1,098.1</b> | <b>1,155.7</b> | <b>1,270.4</b> | <b>1,417.1</b> | <b>1,676.6</b> | <b>1,720.8</b> |

(continued)

**Table 3.7 (continued): Government revenue related to the sale of alcohol, 1995–96 to 2009–10 (\$m)**

|  | 1995–96        | 1996–97        | 1997–98        | 1998–99        | 1999–00        | 2000–01        | 2001–02        | 2002–03        | 2003–04        | 2004–05        | 2005–06        | 2006–07        | 2007–08        | 2008–09        | 2009–10        |
|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| <b>State franchise taxes<sup>(b)</sup></b> | <b>735.0</b>   | <b>774.0</b>   | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             |
| Sales tax                                  |                |                |                |                |                |                |                |                |                |                |                |                |                |                |                |
| Wholesale sales tax                        | 1,274          | 1,407          | 1,482          | 1,618          | 1,669          | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             |
| Surcharge <sup>(b)</sup>                   | ..             | ..             | 769            | 996            | 1,036          | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             |
| <b>Total sales tax</b>                     | <b>1,274</b>   | <b>1,407</b>   | <b>2,251</b>   | <b>2,614</b>   | <b>2,705</b>   | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             | ..             |
| <b>Wine equalisation tax<sup>(c)</sup></b> | ..             | ..             | ..             | ..             | ..             | 523            | 640            | 669            | 704            | 682            | 663            | 645            | 644            | 729            | 739            |
| <b>GST<sup>(d)</sup></b>                   | ..             | ..             | ..             | ..             | ..             | 918            | 939            | 971            | 1,001          | 1,088          | 1,126          | 1,168          | 1,192          | 1,215          | 1,246          |
| <b>Total</b>                               | <b>3,630.5</b> | <b>3,878.2</b> | <b>4,001.1</b> | <b>4,369.4</b> | <b>4,513.9</b> | <b>4,489.9</b> | <b>4,686.2</b> | <b>4,889.0</b> | <b>5,083.8</b> | <b>5,260.1</b> | <b>5,491.7</b> | <b>5,799.4</b> | <b>6,100.1</b> | <b>6,712.6</b> | <b>6,810.8</b> |

(a) Customs excise groups have been revised back to 2003–04 where Other beverages were included in Beer before 2006–07, and from 2006–07 split into their own category. This has added some extra duty/excise value to all groups except Wine (Wine Equalisation Tax [WET] paid).

(b) State franchise taxes were discontinued in August 1997 following a High Court determination that such taxes could not be imposed by the states and territories. Between August 1997 and June 2000, the Australian Government collected an additional 15% sales tax, referred to as a 'surcharge', and paid this to the states and territories under the so-called 'safety net' provisions as revenue replacement payments. With the introduction of GST (and the removal of wholesales sales tax), these replacement payments were no longer required, but a similar level of revenue continued to be collected as increased excise.

(c) The Wine Equalisation Tax, currently levied at 29% of the wholesale sales value of wine, was introduced along with GST to replace the 41% sales tax on wine.

(d) GST values are estimated as one-eleventh of household final consumption expenditure (March 2011 latest data).

\* Less than \$50,000.

Sources: ABS 2010d; ABS 2011b; AIHW 2007a; ATO 2010; ATO 2011; Customs and Border Protection 2011a unpublished data.

### 3.7 Polydrug use

Many people who drink alcohol also use other drugs such as tobacco or illicit drugs (Table 3.8). There is a concentration of health risks in the group of daily drinkers (7.0% of people aged 12 years or over) who also smoke daily. Among daily drinkers, 28.1% were also daily smokers in 2010 whereas only 14.7% of the population aged 12 years or over were daily smokers.

Daily drinkers were slightly more likely than other people to have used marijuana or any other illicit drug in the last 12 months. People who drank at least once a week (but less often than daily) were more likely than all people in Australia aged 12 years or over to have also used illicit drugs – 16.2% had used cannabis (compared with 10.0% of Australians) in the last 12 months and, correspondingly, 11.7% had used any other illicit drug.

Conversely, people who had never had a drink were far less likely to have used any other type of drug than drinkers or ex-drinkers.

**Table 3.8: Smoking status and other drug use, by alcohol drinking status, people aged 12 years and older, 2010 (per cent)**

|                                      | Daily | Weekly <sup>(a)</sup> | Less often than once a week | Ex-drinker <sup>(b)</sup> | Never <sup>(c)</sup> | Total 12+ |
|--------------------------------------|-------|-----------------------|-----------------------------|---------------------------|----------------------|-----------|
| Daily smoker                         | 28.1  | 16.2                  | 15.1                        | 15.9                      | 2.4                  | 14.7      |
| Used cannabis in last 12 months      | 12.2  | 16.2                  | 8.0                         | 3.2                       | 0.5                  | 10.0      |
| Used other illicit in last 12 months | 10.3  | 11.7                  | 6.4                         | 5.9                       | 1.9                  | 8.1       |

(a) People who drank alcohol at least one day per week and up to 6 days per week.

(b) Has consumed at least a full serve of alcohol, but not in the previous 12 months.

(c) Has never consumed a full serve of alcohol

Source: AIHW 2011b. unpublished analysis of 2010 NDSHS.

### 3.8 Reduction and cessation of consumption

Of recent drinkers in 2010, the overwhelming majority (99%) moderated their alcohol use; for example, by limiting the number of drinks consumed or alternating between alcoholic and non-alcoholic drinks. The most common measure, used ‘always’ or ‘most of the time’ by around four in five (76.7%) recent drinkers aged 14 years or older, was to limit the number of drinks consumed in an evening. The main reason for moderating drinking was health reasons (AIHW 2011a).

Those drinking at risky levels were most likely to have reduced their alcohol consumption. However, only a small proportion of people had stopped drinking altogether (less than 5% for lifetime risk levels). Those drinking at low levels of risk were more likely to have stopped drinking altogether (AIHW 2011a).

### 3.9 State, territory and international comparisons

Comparative analyses are complicated because of legal, political, demographic and cultural differences within and between countries. However, comparisons are useful for allowing informed discussion about drug use, service planning and policy. Methodologies for

collecting or estimating data also vary between countries. These issues should be considered when interpreting data in the next two sections.

### 3.9.1 State and territory comparisons

There is some variation in drinking patterns between the Australian states and territories. Among them, Queensland had the largest proportion of daily drinkers in 2010 (8.3%) and the Australian Capital Territory had the smallest (5.4%). New South Wales had the largest proportion of people who had never had a full serve of alcohol (14.4%). The age structure of state and territory populations is likely to influence these results (Table 3.9).

**Table 3.9: Alcohol drinking status: people aged 14 years or older, states and territories, 2010 (per cent)**

| Drinking status               | NSW  | Vic  | Qld  | WA   | SA   | Tas  | ACT  | NT   | Australia |
|-------------------------------|------|------|------|------|------|------|------|------|-----------|
| Daily                         | 7.4  | 6.6  | 8.3  | 7.5  | 6.0  | 6.4  | 5.4  | 7.5  | 7.2       |
| Weekly                        | 38.0 | 37.9 | 40.6 | 43.4 | 40.9 | 39.7 | 45.6 | 44.7 | 39.5      |
| Less than weekly              | 32.8 | 34.7 | 34.3 | 32.0 | 34.1 | 39.4 | 35.5 | 34.1 | 33.8      |
| Ex-drinker <sup>(a)</sup>     | 7.4  | 7.4  | 7.5  | 7.0  | 8.1  | 7.3  | 5.0  | 5.6  | 7.4       |
| Never a full serve of alcohol | 14.4 | 13.5 | 9.3  | 10.1 | 10.9 | 7.1  | 8.5  | 8.0  | 12.1      |

(a) Has consumed at least a full serve of alcohol, but not in the past 12 months.

Source: AIHW 2011a.

### 3.9.2 International comparisons

International comparisons of population prevalence generally focus separately on countries where it is the norm to consume alcohol and those where low consumption is influenced by culture or religion. A more useful comparative indicator of consumption is total litres of pure alcohol per capita (or per capita aged 15 years and over), which has been shown to be correlated with other measures of alcohol-related harm (AIHW 2007b).

As noted in the apparent consumption section, Australia's per capita consumption has been around 10 litres of pure alcohol per person aged 15 years and over in recent years. The range for OECD countries is large. Excluding Turkey, consumption ranged from 5.9 litres in Mexico in 2009 to just under 13 litres per person in several countries, including Austria, France, Hungary and the Republic of Ireland (Table 3.8).

There is variation among OECD countries in terms of patterns of change in per capita alcohol consumption over the past 40 years (Table 3.10). Many countries, including Australia, appear to have experienced a peak in consumption in the 1970s and 1980s followed by a tapering off in the 1990s and early 21<sup>st</sup> century. A few countries, including the Republic of Ireland, the United Kingdom and Denmark, have seen an increase in consumption over the past 40 years, while Portugal, France and Italy have experienced a considerable decline over this period (AIHW 2007b).

**Table 3.10: Alcohol consumption, litres of pure alcohol per capita, population aged 15 years or over, selected countries, 1969 to 2009**

| Country             | 1969              | 1979              | 1989        | 1999       | 2009                     |
|---------------------|-------------------|-------------------|-------------|------------|--------------------------|
| Hungary             | 11.1              | 14.1              | 14.1        | 12.2       | 12.6 <sup>2</sup>        |
| France              | n.a.              | 19.1              | 16.3        | 14.5       | 12.6 <sup>2</sup>        |
| Austria             | 14.0              | 14.5              | 14.8        | 13.4       | 12.5 <sup>1</sup>        |
| Republic of Ireland | 6.5               | 10.0              | 10.2        | 13.8       | 12.4 <sup>1</sup>        |
| Czech Republic      | n.a.              | n.a.              | 10.5        | 11.9       | 12.1 <sup>1</sup>        |
| Denmark             | 7.9               | 11.5              | 11.6        | 11.6       | 10.9 <sup>1</sup>        |
| Poland              | n.a.              | n.a.              | 9.3         | 8.4        | 10.8 <sup>1</sup>        |
| United Kingdom      | 6.8               | 9.8               | 9.8         | 10.3       | 10.8 <sup>1</sup>        |
| Finland             | 5.7               | 7.8               | 9.4         | 8.6        | 10.3 <sup>1</sup>        |
| Switzerland         | 14.0              | 13.3              | 13.1        | 11.1       | 10.2 <sup>1</sup>        |
| <b>Australia</b>    | <b>11.6</b>       | <b>12.9</b>       | <b>10.9</b> | <b>9.6</b> | <b>10.0</b> <sup>2</sup> |
| Germany             | 10.2 <sup>4</sup> | 15.9 <sup>4</sup> | 13.8        | 10.6       | 9.9 <sup>1</sup>         |
| Netherlands         | 7.2               | 12.2              | 10.0        | 10.1       | 9.6 <sup>2</sup>         |
| Slovak Republic     | 12.2              | 14.1              | 13.0        | 10.0       | 9.6 <sup>1</sup>         |
| New Zealand         | 5.8 <sup>4</sup>  | 11.6              | 10.2        | 8.9        | 9.3                      |
| United States       | 9.3               | 10.3              | 9.4         | 8.1        | 8.7 <sup>2</sup>         |
| Canada              | 8.5               | 10.9              | 7.5         | 7.6        | 8.2                      |
| Korea               | n.a.              | n.a.              | 9.5         | 9.2        | 8.1 <sup>1</sup>         |
| Italy               | 17.8              | 16.1              | 10.8        | 8.9        | n.a.                     |
| Iceland             | 3.3               | 4.5               | 5.5         | 5.9        | 7.3 <sup>1</sup>         |
| Sweden              | 7.0               | 7.1               | 6.5         | 6.1        | 6.9 <sup>2</sup>         |
| Norway              | 4.4               | 5.6               | 5.1         | 5.5        | 6.8 <sup>1</sup>         |
| Mexico              | n.a.              | n.a.              | 5.1         | 4.9        | 5.9 <sup>1</sup>         |
| Turkey              | 1.1               | 2.0               | 1.4         | 1.6        | 1.4 <sup>1</sup>         |
| Chile               | n.a.              | n.a.              | n.a.        | n.a.       | n.a.                     |
| Greece              | n.a.              | 12.0              | 10.4        | 10.0       | n.a.                     |
| Japan               | 5.8               | 7.2               | 8.6         | 8.8        | 7.5 <sup>1</sup>         |
| Luxembourg          | n.a.              | 12.3              | 15.1        | 15.2       | n.a.                     |
| Spain               | 16.1              | 18.5              | 13.9        | 11.7       | n.a.                     |
| Belgium             | 10.5              | 13.2              | 11.6        | 10.2       | n.a.                     |
| Portugal            | 17.8              | 14.6              | 14.4        | 13.0       | n.a.                     |

n.a. No data available for the year, or any of the four previous years.

*Notes*

1. Data from the year prior to that indicated (e.g. 2008 for 2009 column).
2. Data from 2 years prior (e.g. 2007 for 2009 column).
3. Data from 3 years prior (e.g. 2006 for 2009 column).
4. Data from 4 years prior (e.g. 2005 for 2009 column).

Source: OECD 2010.

## 3.10 Health and harms

In 2003, the most recent year for which data are available, an estimated 2% of the total burden of disease in Australia was attributable to excessive alcohol consumption, with a large proportion of this burden falling on males under the age of 45 years. However, alcohol was also estimated to prevent 1% of the total burden of disease (Begg et al. 2007), mainly through its protective effect for heart disease in older populations. The net impact of alcohol across the whole population was almost 1,100 deaths and over 61,000 DALYs (disability-adjusted-life-years) (Table 3.11).

The majority of harm associated with alcohol consumption was from alcohol abuse (918 deaths and 34,116 DALYs). As indicated above, the greatest benefit of alcohol consumption came from the prevention of ischemic heart disease (1,950 deaths and 20,659 DALYs prevented).

**Table 3.11: Number of deaths and DALYs attributable to alcohol, by condition, 2003**

| Condition                           | Deaths        |                         | DALYs          |                         |
|-------------------------------------|---------------|-------------------------|----------------|-------------------------|
|                                     | Number        | Per cent <sup>(a)</sup> | Number         | Per cent <sup>(b)</sup> |
| <b>Harm</b>                         |               |                         |                |                         |
| Alcohol abuse                       | 918           | 0.7                     | 34,116         | 1.3                     |
| Suicide and self-inflicted injuries | 553           | 0.4                     | 12,245         | 0.5                     |
| Road traffic accidents              | 396           | 0.3                     | 11,121         | 0.4                     |
| Oesophagus cancer                   | 368           | 0.3                     | 4,594          | 0.2                     |
| Breast cancer                       | 184           | 0.1                     | 4,152          | 0.2                     |
| Other                               | 1,012         | 0.8                     | 19,207         | 0.7                     |
| <i>Total attributable harm</i>      | <i>3,430</i>  | <i>2.6</i>              | <i>85,435</i>  | <i>3.2</i>              |
| <b>Benefit</b>                      |               |                         |                |                         |
| Ischaemic heart disease             | -1,950        | -1.5                    | -20,659        | -0.8                    |
| Stroke                              | -380          | -0.3                    | -3,451         | -0.1                    |
| Other                               | -16           | 0.0                     | -233           | 0.0                     |
| <i>Total attributable benefit</i>   | <i>-2,346</i> | <i>-1.8</i>             | <i>-24,343</i> | <i>-0.9</i>             |
| <b>Total attributable</b>           | <b>1,084</b>  | <b>0.8</b>              | <b>61,091</b>  | <b>2.3</b>              |

(a) Of total deaths.

(b) Of total DALYs.

Source: Begg et al. 2007.

Other research has called into question the health benefits of drinking. A meta-analysis of 54 published studies found that many of those studies grouped abstainers and former drinkers when analysing data. As a result, the studies may exaggerate the poorer health of non-drinkers by including former drinkers who may have poorer health than abstainers. This may be misleading in contrast with moderate drinkers' better health. The authors emphasise that there are too few studies focused on abstainers to know whether there are health benefits from moderate drinking (Fillmore et al. 2006).

Trends in alcohol-related deaths and hospitalisations help to build a picture of health harms in Australia. A recent study by the National Drug Research Institute (NDRI) found that, between 1996 and 2005, around 33,000 Australians aged 15 years or over died from alcohol-attributable injury or disease caused by risky drinking (NDRI 2009). Male death

rates generally declined over the ten-year period in most states and territories; the trends for females were less consistent. Alcohol-attributable hospitalisations, expressed as a rate per 10,000 people aged 15 years or over, increased between 1996 and 2005 (NDRI 2009).

### 3.10.1 Mental health

'Mental health' in this section includes both mental disorders, as defined by the ABS's Survey of Mental Health and Wellbeing, and self-reported psychological wellbeing. The 2007 National Survey of Mental Health and Wellbeing gathered information about drug use disorders. The alcohol-related disorders captured were 'harmful use' (the pattern of use responsible for, or substantially contributing to, physical or psychological harm) and 'alcohol dependence' (a maladaptive pattern of use in which alcohol takes on a much higher priority for a person than other behaviours that once had greater value) (ABS 2007). The survey found that around 4% of Australians aged 16–85 years had experienced harmful alcohol use or were dependent on alcohol in the year before the survey. Around 23% of 16–85 year olds had experienced one of those disorders in their lifetime.

The 2010 NDSHS also asked people about their psychological wellbeing. It found that people drinking at risky levels for lifetime harm or at levels that put them at risk of harm from a single occasion of drinking were more likely to report moderate to very high levels of psychological distress than low-risk drinkers and abstainers (Table 3.12).

**Table 3.12: Psychological distress<sup>(a)</sup> by risk of alcohol harm, people aged 18 years or older, 2010 (per cent)**

|  | Abstainer/<br>ex-drinker <sup>(a)</sup> | Lifetime risk              |                      | Single-occasion risk       |                                   |                                   |
|--|---|----------------------------|----------------------|----------------------------|-----------------------------------|-----------------------------------|
|  |   | Low<br>risk <sup>(b)</sup> | Risky <sup>(c)</sup> | Low<br>risk <sup>(d)</sup> | At least<br>yearly <sup>(e)</sup> | At least<br>weekly <sup>(f)</sup> |
| <b>Level of psychological distress<sup>(g)</sup></b> |   |                            |                      |                            |                                   |                                   |
| Low  | 69.3                                    | 70.8                       | 66.4                 | 73.4                       | 67.6                              | 63.2                              |
| Moderate   | 19.4                                    | 20.5                       | 21.6                 | 18.5                       | 23.0                              | 23.5                              |
| High   | 8.0                                     | 6.7                        | 9.2                  | 6.2                        | 7.3                               | 10.1                              |
| Very high  | 3.4                                     | 2.0                        | 2.8                  | 1.9                        | 2.1                               | 3.2                               |

(a) Not consumed alcohol in the previous 12 months.

(b) On average, had no more than 2 standard drinks per day.

(c) On average, had more than 2 standard drinks per day.

(d) Never had more than 4 standard drinks on any occasion.

(e) Had more than 4 standard drinks at least once a year but not as often as weekly.

(f) Had more than 4 standard drinks at least once a week.

(g) Low: K10 score 10–15; Moderate: 16–21; High: 22–29; Very high: 30–50.

Source: AIHW 2011a.

### 3.10.2 Social harms

Information about social harms is available from the NDSHS. It was estimated that 13.1% of people aged 14 years or older had driven a motor vehicle under the influence of alcohol in 2010. Also, 5.7% had verbally abused someone and 5.0% went to work while under the influence of alcohol (Table 3.13).

**Table 3.13: Activities undertaken while under the influence of alcohol in the past 12 months: proportion of the population aged 14 years or older, by sex, 2010 (per cent)**

| <b>Influence and activity</b>                          | <b>Males</b> | <b>Females</b> | <b>Persons</b> |
|--|--------------|----------------|----------------|
| Drove a vehicle  | 17.1         | 8.8            | 13.1           |
| Verbally abused someone                                | 7.2          | 4.2            | 5.7            |
| Went swimming  | 9.2          | 5.4            | 7.4            |
| Went to work   | 6.8          | 3.1            | 5.0            |
| Created a disturbance, damaged or stole goods          | 5.5          | 2.7            | 4.2            |
| Operated a boat or hazardous machinery                 | 2.5          | 0.3            | 1.4            |
| Physically abused someone                              | 1.6          | 0.6            | 1.1            |
| Took part in at least one potentially harmful activity | 27.9         | 16.6           | 22.4           |

Source: AIHW 2011a.

Further information from the survey shows that risky behaviours and alcohol-related harm both increased as the usual number of drinks in one day increased (Table 3.14). For example, around one in five drinkers aged 12 years and over, who usually consumed 11 or more drinks on a drinking day, had been injured or injured someone in the last 12 months (21.1% compared with 4.2% of all drinkers aged 12 years and over). In the younger age groups, the risk of injury or injuring someone else was even greater at the same level of drinking – approximately 28.3% of 18–24 year olds and 38.8% of 12–17 year olds had been injured or injured someone else in the last 12 months.

**Table 3.14: Selected risks and harms in the last 12 months, persons aged 12 years or over, by number of drinks on a drinking day, 2010 (per cent)**

| Usual number of drinks on a drinking day | Injured or injured someone | Went to work | Went swimming | Drove a motor vehicle | Created a public disturbance or nuisance | Caused damage to property / stole money, goods or property | Verbally abused someone | Physically abused someone | Missed a day of work due to alcohol use, injury or illness (last 3 months) | Missed a day of work due to alcohol use (last 3 months) |
|--|----------------------------|--------------|---------------|-----------------------|--|--|-------------------------|---------------------------|--|---|
| <b>12–17-year-olds</b>                   |                            |              |               |                       |  |  |                         |                           |  |   |
| 11 or more drinks                        | 38.8                       | *14.3        | 28.5          | *10.4                 | 27.1                                     | 30.4   | 34.0                    | *10.8                     | 84.0   | *18.4   |
| 7–10 drinks                              | 27.3                       | **4.1        | 18.6          | **4.7                 | 19.4                                     | 20.7   | *16.9                   | *5.1                      | 64.2   | *7.2  |
| 5–6 drinks                               | *12.5                      | *6.5         | *7.0          | **2.2                 | *10.0                                    | *5.9   | *10.0                   | **2.4                     | 50.9   | **2.4   |
| 3–4 drinks                               | 19.5                       | **1.1        | *13.2         | **1.4                 | *14.5                                    | **3.6  | *6.5                    | **0.6                     | 57.6   | **1.0   |
| 1–2 drinks                               | *5.7                       | **2.2        | **2.0         | **2.3                 | **1.6                                    | **1.5  | **2.2                   | **0.4                     | 53.1   | **0.8   |
| <b>All 12–17-year-olds</b>               | <b>17.0</b>                | <b>4.2</b>   | <b>10.9</b>   | <b>*3.2</b>           | <b>11.5</b>                              | <b>9.0</b>   | <b>10.3</b>             | <b>2.7</b>                | <b>59.5</b>  | <b>4.1</b>  |
| <b>18–24-year-olds</b>                   |                            |              |               |                       |  |  |                         |                           |  |   |
| 11 or more drinks                        | 28.3                       | 26.4         | 37.4          | 33.6                  | 29.7                                     | 26.6   | 35.5                    | 14.1                      | 58.2   | 20.5  |
| 7–10 drinks                              | 20.4                       | 17.3         | 24.3          | 19.6                  | 18.2                                     | 8.8  | 24.5                    | *6.3                      | 57.2   | 11.5  |
| 5–6 drinks                               | 13.5                       | 13.7         | 19.5          | 20.6                  | 12.0                                     | *6.5   | 15.5                    | **1.3                     | 50.5   | *6.0  |
| 3–4 drinks                               | 8.6                        | 6.4          | 11.2          | 10.4                  | 5.8                                      | *1.6   | 9.5                     | *1.0                      | 45.5   | *4.2  |
| 1–2 drinks                               | *4.4                       | *3.9         | 6.0           | 11.0                  | *3.6                                     | *1.5   | *5.3                    | **0.7                     | 42.5   | *1.4  |
| <b>All 18–24-year-olds</b>               | <b>14.0</b>                | <b>12.3</b>  | <b>17.9</b>   | <b>17.5</b>           | <b>12.4</b>                              | <b>7.7</b>   | <b>16.5</b>             | <b>4.1</b>                | <b>50.0</b>  | <b>7.8</b>  |
| <b>All 12 years and older</b>            |                            |              |               |                       |  |  |                         |                           |  |   |
| 11 or more drinks                        | 21.1                       | 22.0         | 28.3          | 29.7                  | 19.5                                     | 17.5   | 29.1                    | 10.1                      | 53.1   | 16.9  |
| 7–10 drinks                              | 11.9                       | 12.9         | 19.0          | 23.1                  | 9.5                                      | 5.5  | 17.4                    | 3.5                       | 47.2   | 8.4   |
| 5–6 drinks                               | 6.6                        | 8.6          | 12.2          | 20.8                  | 4.9                                      | 2.7  | 9.2                     | 1.1                       | 40.9   | 4.3   |
| 3–4 drinks                               | 3.5                        | 4.4          | 7.8           | 15.0                  | 2.1                                      | 1.0  | 4.6                     | 0.3                       | 39.8   | 2.4   |
| 1–2 drinks                               | 0.9                        | 1.4          | 2.1           | 7.6                   | 0.6                                      | 0.2  | 1.2                     | 0.1                       | 36.4   | 0.7   |
| <b>All 12+ who drink</b>                 | <b>4.2</b>                 | <b>5.0</b>   | <b>7.5</b>    | <b>13.3</b>           | <b>3.2</b>                               | <b>2.0</b>   | <b>5.8</b>              | <b>1.1</b>                | <b>40.1</b>  | <b>3.4</b>  |

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

\*\* Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Source: AIHW analysis of the 2010 NDSHS.

# 4 Illicit drugs overview

## 4.1 Key findings

- Most people in Australia did not support the regular use or legalisation of illicit drugs in 2010. Three in five (60.2%) people aged 14 years or older had never tried an illicit drug.
- In 2010, 14.7% of people in Australia aged 14 years and older had used an illicit drug in the last 12 months – an increase since 2007 (13.4%). Many illicit drug users also used licit drugs or more than one illicit drug, most commonly cannabis.
- Illicit drug use in Australia appears to be moderate to high compared with that for other OECD countries, although it is important to be cautious when making such comparisons because of differences in methodology.
- The social cost of illicit drug use was around \$8.2 billion in Australia in 2004–05 and accounted for 2.0% of Australia's total burden of disease in 2003. Much of this burden was caused by hepatitis C, which can be contracted by poor/risky injecting practices.
- Around 8% of people in Australia aged 16–85 years have had a drug use disorder (including harmful use/abuse and/or dependence) in their lifetime.
- Almost one in five (18.0%) people who had used an illicit drug in the last 12 months reported driving a car while under the influence.

## 4.2 Introduction

This chapter provides an overview of illicit drug use within Australia. 'Illicit drug use' is defined here as use of drugs that are illegal to possess or use and any legal drug used in an illegal manner (for example, volatile substances such as petrol and paint and pharmaceuticals being used for non-medical purposes) – the definition used in the National Drug Strategy Household Survey (NDSHS).

The purpose of this chapter is to set the scene for subsequent chapters that cover illicit drug use in more depth. They provide information about levels of use, how Australia compares with other countries, and an overview of illicit drug-related harms. Unless otherwise stated, data are drawn from the NDSHS. More detail about cannabis, the most commonly used illicit drug, is provided in Chapter 5. Data on illicit drugs other than cannabis are described in more detail in Chapter 6, pharmaceuticals are covered in Chapter 7 and illicit drug use and crime is the focus of Chapter 11.

The National Drug Strategy 2010–2015 was approved by the Ministerial Council on Drug Strategy on 25 February 2011. Its continuing aim is 'to build safe and healthy communities by minimising alcohol, tobacco and other drug-related health, social and economic harms among individuals, families and communities' (MCDS 2011, p. ii). The overarching pillars of demand reduction, supply reduction and harm reduction, which have guided the National Drug Strategy since its inception in 1985, will continue through 2010–2015.

Under this broad strategy, more detailed strategies and programs have been developed to address illicit drug use, including the National Illicit Drugs Strategy 2010–2015 and the National Pharmaceutical Drug Misuse Strategy 2010–2015 (MCDS 2011).

## 4.3 Attitudes

Data from the 2010 NDSHS indicated that most people in Australia aged 14 years or older accepted the use of tobacco and alcohol. In contrast, the use of illicit drugs by adults was not accepted by the vast majority of people. Most supported increased penalties for the sale and supply of these drugs. Most people in Australia did not support the legalisation of illicit drugs and illicit drugs were more likely than licit drugs to be associated with the concept of a drug ‘problem’ (AIHW 2008b).

## 4.4 Consumption

In 2010, most people had never used an illicit drug (60.2%). Those who had were most likely to have used cannabis – around one-third (35.4%) of people aged 14 years and over had ever used cannabis. Much smaller proportions of the population had ever used other types of illicit drugs. Around one in ten people had ever used ecstasy (10.3%) or hallucinogens (8.8%) while fewer than one in ten had used meth/amphetamine (7.0%), cocaine (7.3%), pain-killers/ analgesics (4.8%) or heroin (1.4%) (Table 4.1).

**Table 4.1: Summary of illicit drug use: people aged 14 years or over, 2010 (per cent)**

|  | Drugs ever used <sup>(a)</sup> | Drugs used in the last 12 months |
|--|--------------------------------|----------------------------------|
| Cannabis                                     | 35.4                           | 10.3                             |
| Pain-killers/analgesics <sup>(b)</sup>       | 4.8                            | 3.0                              |
| Tranquillisers/sleeping pills <sup>(b)</sup> | 3.2                            | 1.5                              |
| Steroids <sup>(b)</sup>                      | 0.4                            | 0.1                              |
| Inhalants                                    | 3.8                            | 0.6                              |
| Heroin                                       | 1.4                            | 0.2                              |
| Methadone <sup>(c)</sup> or Buprenorphine    | 0.4                            | 0.2                              |
| Other opiates/opioids <sup>(b)</sup>         | 1.0                            | 0.4                              |
| Meth/amphetamine (speed) <sup>(b)</sup>      | 7.0                            | 2.1                              |
| Cocaine                                      | 7.3                            | 2.1                              |
| Hallucinogens                                | 8.8                            | 1.4                              |
| Ecstasy                                      | 10.3                           | 3.0                              |
| Ketamine                                     | 1.4                            | 0.2                              |
| GHB  | 0.8                            | 0.1                              |
| Injected drugs                               | 1.8                            | 0.4                              |
| Any illicit drug                             | 39.8                           | 14.7                             |
| None of the above                            | 60.2                           | 85.3                             |

(a) Used at least once in lifetime.

(b) For non-medical purposes.

(c) Non-maintenance/not medically supplied.

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

Source: AIHW 2011a.

The average age of first use of an illicit drug was 19 years. The latest average age of uptake was among those who had used tranquillisers or sleeping pills for non-medical use (27 years).

Injecting drug use is of particular interest because it is associated with a range of health and social harms. The proportion of people in Australia (14 years and over) who had ever injected illicit drugs was small (1.8%).

The proportion of people who had used any illicit drug in the last 12 months was less than half that of people who had ever tried an illicit drug (14.7% compared with 39.8%). While one-third of people aged 14 years or over had tried cannabis, only 10.3% had used it in the last 12 months. Similarly, 3.0% had used ecstasy in the last 12 months (compared with the 10.3% who had ever tried it). The proportion of people who had injected drugs in the last 12 months was very small (0.4%).

#### 4.4.1 Age and sex

In 2010, the use of illicit drugs was more common among males than females, both for recent and lifetime use. People aged 20–29 years were most likely to have used an illicit drug in the last 12 months; almost one in three (30.5%) males and one in four (24.3%) females (Table 4.2).

**Table 4.2: Use of any illicit drug; people aged 14 years or older, by age and sex, 2010 (per cent)**

| Age group  | Ever used <sup>(a)</sup> |             |             | Recent use <sup>(b)</sup> |             |             |
|------------|--------------------------|-------------|-------------|---------------------------|-------------|-------------|
|            | Males                    | Females     | Persons     | Males                     | Females     | Persons     |
| 14–19      | 25.3                     | 24.9        | 25.1        | 18.1                      | 18.2        | 18.2        |
| 20–29      | 52.0                     | 50.5        | 51.3        | 30.5                      | 24.3        | 27.5        |
| 30–39      | 62.0                     | 56.5        | 59.3        | 22.6                      | 15.0        | 18.8        |
| 40–49      | 56.8                     | 47.0        | 51.9        | 16.6                      | 9.0         | 12.8        |
| 50–59      | 43.3                     | 32.1        | 37.6        | 10.5                      | 7.1         | 8.8         |
| 60+        | 17.4                     | 10.9        | 14.0        | 5.5                       | 4.9         | 5.2         |
| <b>14+</b> | <b>43.2</b>              | <b>36.5</b> | <b>39.8</b> | <b>17.0</b>               | <b>12.3</b> | <b>14.7</b> |

(a) Used at least once in lifetime

(b) Used in the previous 12 months

Source: AIHW 2011a.

#### 4.4.2 Trends

Since 1991, recent use of illicit drugs has fluctuated, peaking in 1998 at 22.0% and declining to 13.4% in 2007 before increasing again in 2010 to 14.7%. Much of the change in prevalence was accounted for by increases in recent use of cannabis, cocaine, hallucinogens, inhalants and pharmaceuticals for non-medical purposes (Table 4.3).

Self-reported use of ecstasy among people aged 14 years and over in the last 12 months decreased for the first time since 1995, from 3.5% in 2007 to 3.0% in 2010. The proportion of people reporting injecting drug use in the past 12 months has remained stable over the 17-year period at less than 1%.

**Table 4.3: Summary of illicit drug use in the last 12 months: people aged 14 years or over, by drug type, 1993 to 2010 (per cent)**

| Drug/behaviour   | 1993        | 1995        | 1998        | 2001        | 2004        | 2007        | 2010         |
|--|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| Illicit drugs (excluding pharmaceuticals)                  |             |             |             |             |             |             |              |
| Cannabis   | 12.7        | 13.1        | 17.9        | 12.9        | 11.3        | 9.1         | #10.3        |
| Ecstasy <sup>(a)</sup>                                     | 1.2         | 0.9         | 2.4         | 2.9         | 3.4         | 3.5         | #3.0         |
| Meth/amphetamines <sup>(b)</sup>                           | 2.0         | 2.1         | 3.7         | 3.4         | 3.2         | 2.3         | 2.1          |
| Cocaine  | 0.5         | 1.0         | 1.4         | 1.3         | 1.0         | 1.6         | #2.1         |
| Hallucinogens  | 1.3         | 1.9         | 3.0         | 1.1         | 0.7         | 0.6         | #1.4         |
| Inhalants  | 0.6         | 0.4         | 0.9         | 0.4         | 0.4         | 0.4         | #0.6         |
| Heroin   | 0.2         | 0.4         | 0.8         | 0.2         | 0.2         | 0.2         | 0.2          |
| Ketamine   | n.a.        | n.a.        | n.a.        | n.a.        | 0.3         | 0.2         | 0.2          |
| GHB  | n.a.        | n.a.        | n.a.        | n.a.        | 0.1         | 0.1         | 0.1          |
| Injectable drugs   | 0.5         | 0.5         | 0.8         | 0.6         | 0.4         | 0.5         | 0.4          |
| <i>Any illicit<sup>(c)</sup> excluding pharmaceuticals</i> | <i>13.7</i> | <i>14.2</i> | <i>19.0</i> | <i>14.2</i> | <i>12.6</i> | <i>10.9</i> | <i>#12.0</i> |
| Pharmaceuticals  |             |             |             |             |             |             |              |
| Pain-killers/analgesics <sup>(b)</sup>                     | 1.7         | 3.4         | 5.2         | 3.1         | 3.1         | 2.5         | #3.0         |
| Tranquillisers/sleeping pills <sup>(b)</sup>               | 0.9         | 0.7         | 3.0         | 1.1         | 1.0         | 1.4         | 1.5          |
| Steroids <sup>(b)</sup>                                    | 0.3         | 0.2         | 0.2         | 0.2         | —           | —           | 0.1          |
| Methadone <sup>(d)</sup> or buprenorphine <sup>(e)</sup>   | n.a.        | n.a.        | 0.2         | 0.1         | 0.1         | 0.1         | #0.2         |
| Other opiates/opioids <sup>(b)</sup>                       | n.a.        | n.a.        | n.a.        | 0.3         | 0.2         | 0.2         | #0.4         |
| <i>Any pharmaceutical<sup>(f)</sup></i>                    | <i>n.a.</i> | <i>4.1</i>  | <i>6.3</i>  | <i>3.9</i>  | <i>3.8</i>  | <i>3.7</i>  | <i>#4.2</i>  |
| <b>Any illicit<sup>(c)(f)</sup></b>                        | <b>14.0</b> | <b>16.7</b> | <b>22.0</b> | <b>16.7</b> | <b>15.3</b> | <b>13.4</b> | <b>#14.7</b> |
| None of the above  | 21.0        | 17.8        | 14.2        | 14.7        | 13.7        | 14.1        | #16.6        |

(a) Included 'designer drugs' before 2004.

(b) For non-medical purposes.

(c) Did not include GHB and Ketamine from 1993 to 2001.

(d) Non-maintenance.

(e) Did not include buprenorphine before 2007.

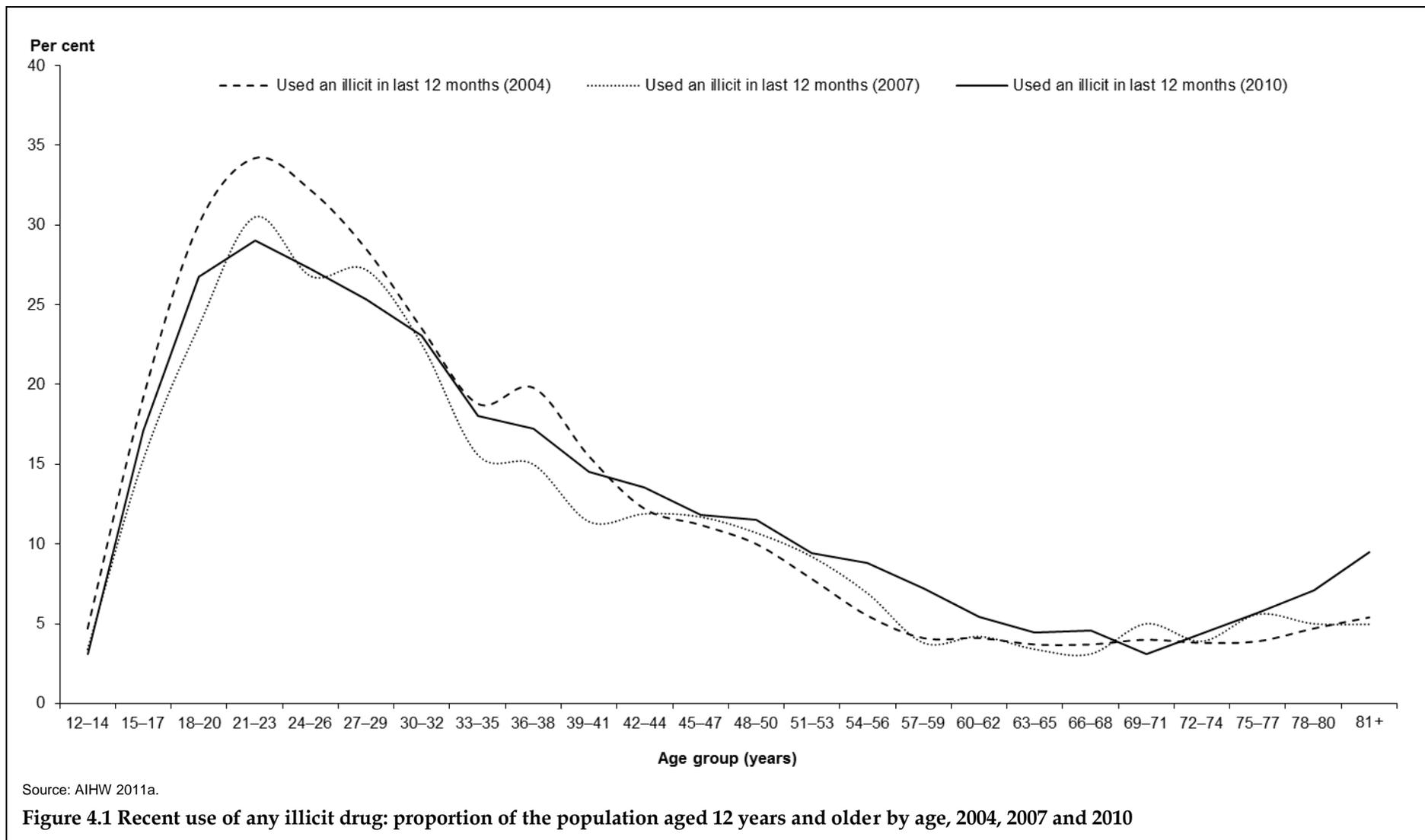
(f) Included barbiturates up until 2007; did not include methadone in 1993 and 1995; did not include other opiates from 1993 to 1998.

# Statistically significant difference between 2007 and 2010

Note: Some trend data were updated in 2010.

Source: AIHW 2011a.

More detail about the use of illicit drugs by different age groups is provided in Figure 4.1. The use of *any* illicit drug in the last 12 months has consistently been highest among those aged 21–23 years, however, this proportion has been declining since 2004.



### **4.4.3 Concurrent drug use**

Many people who used an illicit drug in 2010 also used other illicit or licit drugs. Table 4.4 shows the proportion of users for each type of drug who also used one or more additional illicit drugs in the 12 months before the survey (but not necessarily at the same time). As well, it shows the proportions of illicit drug users who were also daily or weekly drinkers or smokers.

Cannabis was the drug most often used in addition to other illicit drugs, with proportions ranging from 31.5% of pharmaceuticals users to 90.0% of hallucinogen users also reporting using cannabis in the previous 12 months.

Users of pharmaceuticals and cannabis were the least likely to be using other illicit drugs in the same 12-month period; the drugs most likely to be used concurrently by these groups were ecstasy and cocaine for cannabis users (21.6% and 14.9%, respectively), and cannabis and ecstasy for pharmaceutical users (31.5% and 16.3%, respectively).

People who used illicit drugs as shown in Table 4.4 were generally more likely to smoke or drink at least weekly compared to other people.

**Table 4.4: Concurrent drug use<sup>(a)</sup>, recent drug users aged 14 years or older, 2010 (per cent)**

| Recent users of                          | Marijuana/<br>cannabis | Ecstasy <sup>(b)</sup> | Meth/<br>amphetamines | Cocaine | Hallucinogens | Inhalants | Heroin | Pharmaceuticals <sup>(c)</sup> | All 14+ |
|--|------------------------|------------------------|-----------------------|---------|---------------|-----------|--------|--------------------------------|---------|
| <b>Other illicit drugs recently used</b> |                        |                        |                       |         |               |           |        |                                |         |
| Cannabis                                 | ..                     | 74.3                   | 73.1                  | 71.7    | 90.0          | 62.0      | 79.7   | 31.5                           | 10.3    |
| Ecstasy <sup>(b)</sup>                   | 21.6                   | ..                     | 59.2                  | 62.4    | 64.0          | 41.6      | *25.9  | 16.3                           | 3.0     |
| Meth/amphetamines <sup>(c)</sup>         | 14.6                   | 40.6                   | ..                    | 39.4    | 42.2          | 29.5      | 50.6   | 15.5                           | 2.1     |
| Cocaine                                  | 14.9                   | 45.1                   | 41.5                  | ..      | 37.9          | 28.3      | 37.0   | 14.6                           | 2.1     |
| Hallucinogens                            | 11.9                   | 29.3                   | 28.3                  | 24.0    | ..            | 37.6      | *20.9  | 9.3                            | 1.4     |
| Inhalants                                | 3.6                    | 8.3                    | 8.6                   | 7.9     | 16.4          | ..        | *12.5  | 5.1                            | 0.6     |
| Heroin                                   | 1.8                    | *2.1                   | 5.8                   | 4.1     | *3.6          | *4.8      | ..     | 3.7                            | 0.2     |
| Pharmaceuticals <sup>(c)</sup>           | 12.5                   | 22.2                   | 31.1                  | 27.6    | 27.6          | 35.1      | 64.0   | ..                             | 4.2     |
| Did not use any other illicit            | 61.0                   | 9.7                    | 7.9                   | 10.2    | 2.7           | 24.9      | 5.8    | 61.8                           |         |
| <b>Alcohol and tobacco use</b>           |                        |                        |                       |         |               |           |        |                                |         |
| Daily smoker                             | 39.4                   | 34.4                   | 47.7                  | 32.7    | 39.0          | 31.1      | 57.6   | 26.5                           | 15.1    |
| Weekly smoker                            | 5.3                    | 6.6                    | 6.3                   | 5.9     | 10.8          | **4.2     | —      | 2.6                            | 1.5     |
| Daily drinker                            | 8.5                    | 6.3                    | 9.7                   | 9.2     | *6.4          | *7.9      | *10.7  | 10.5                           | 7.2     |
| Weekly drinker                           | 62.2                   | 76.7                   | 68.0                  | 76.0    | 78.2          | 56.1      | 33.9   | 42.6                           | 39.5    |

(a) Used at least once in the previous 12 months.

(b) Included 'designer drugs' before 2004.

(c) For non-medical purposes.

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

\*\* Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Source: AIHW 2011b. unpublished analysis of 2010 NDSHS.

## 4.5 International comparisons

The data presented in Table 4.5 relate to the use of cannabis, amphetamines, ecstasy, cocaine and opiates and are collated by the United Nations Office on Drugs and Crime (UNODC). For the purposes of consistency, countries are asked to focus on the 15–64 year age group for this data collection.

It is important to note that different countries use various types of population surveys and other data collection methods to estimate use. The data relate to different years, and comparisons should be treated with caution. For more details on the methods and sources, readers are referred to *World drug report 2010* (UNODC 2010).

The levels and patterns of illicit drug use in the selected countries vary considerably (Table 4.5). Cannabis use in the last 12 months was most prevalent in the Czech Republic (15%). Ecstasy and amphetamine use was most prevalent in Australia (4% and 3%, respectively). Cocaine use was most common in Scotland (4%). The level of opiate use was low in all countries – below 1% in all countries except New Zealand and Scotland.

**Table 4.5: Annual prevalence of drug use as a percentage of the population aged 15–64years<sup>(a)</sup>, selected countries, 2010 estimates**

| Country             | Cannabis    | Ecstasy    | Amphetamine | Cocaine    | Opiates     |
|---------------------|-------------|------------|-------------|------------|-------------|
| <b>Australia</b>    | <b>10.6</b> | <b>4.2</b> | <b>2.7</b>  | <b>1.9</b> | <b>0.40</b> |
| Austria             | 3.5         | 0.5        | 0.5         | 0.9        | 0.43        |
| Belgium             | 5.0         | 1.1        | 0.9         | 1.2        | n.a.        |
| Canada              | 13.6        | 1.7        | 1.5         | 1.9        | 0.50        |
| Chile               | 6.7         | 0.1        | 0.4         | 2.4        | 0.50        |
| Czech Republic      | 15.2        | 3.6        | 1.7         | 0.7        | 0.40        |
| Denmark             | 5.5         | 0.4        | 1.2         | 1.4        | 0.60        |
| Finland             | 3.1         | 0.5        | 0.6         | 0.5        | 0.23        |
| France              | 8.6         | 0.5        | 0.2         | 0.6        | 0.47        |
| Germany             | 4.7         | 0.4        | 0.5         | 0.7        | 0.21        |
| Greece              | 1.7         | 0.2        | 0.2         | 0.1        | 0.27        |
| Hungary             | 2.3         | 0.5        | 0.5         | 0.2        | 0.10        |
| Iceland             | 3.4         | 0.5        | 0.7         | 0.9        | 0.40        |
| Republic of Ireland | 6.3         | 1.2        | 0.4         | 1.7        | 0.50        |
| Italy               | 14.6        | 0.7        | 0.6         | 2.2        | 0.72        |
| Japan               | n.a.        | n.a.       | n.a.        | n.a.       | n.a.        |
| Korea, Republic     | 0.3         | <0.1       | 0.1         | <0.1       | 0.08        |
| Luxembourg          | 7.6         | n.a.       | 0.4         | 0.9        | 0.93        |
| Mexico              | 1.0         | <0.1       | 0.2         | 0.4        | 0.08        |
| Netherlands         | 5.4         | 1.2        | 0.3         | 0.6        | 0.31        |
| New Zealand         | 14.6        | 2.6        | 2.1         | 0.6        | 1.10        |
| Norway              | 4.6         | 0.5        | 1.1         | 0.8        | 0.30        |
| Poland              | 2.7         | 0.3        | 0.7         | 0.2        | 0.10        |
| Portugal            | 3.6         | 0.4        | 0.2         | 0.6        | 0.46        |
| Slovak Republic     | 6.9         | 1.6        | 0.3         | 0.6        | 0.25        |
| Spain               | 10.1        | 1.1        | 0.9         | 3.0        | 0.13        |
| Sweden              | 2.1         | 0.3        | 0.4         | 0.6        | 0.17        |
| Switzerland         | 9.7         | 0.3        | 0.6         | 0.8        | 0.61        |
| Turkey              | 1.9         | 0.3        | 0.2         | <0.1       | 0.05        |
| United Kingdom      |             |            |             |            |             |
| England and Wales   | 7.9         | 1.8        | 1.1         | 3.0        | 0.81        |
| Scotland            | 8.4         | 2.5        | 1.4         | 3.9        | 1.54        |
| Northern Ireland    | 7.2         | 1.8        | 1.0         | 1.9        | 0.10        |
| United States       | 12.5        | 1.0        | 1.3         | 2.6        | 0.58        |

(a) The methodology for deriving prevalence, specific data year and population age group varies. See UNODC 2010 for these details.

n.a. No recent reliable estimate located by the UNODC.

Source: UNODC 2010.

## 4.6 Costs and expenditure

In 2004–05, it was estimated that illicit drug use cost Australian society \$8.2 billion. Most of these costs (84%) were the tangible costs associated with crime, lost productivity and healthcare (Collins & Lapsley 2008b).

In 2008–09, Australian governments also spent \$83.9 million on the prevention of hazardous and harmful drug use associated with illicit drugs (AIHW 2011c). A further \$114.5 million was spent on prevention related to ‘mixed’ drugs (programs that targeted more than one drug type). These funds were spent on prevention activities such as information campaigns and education programs.

## 4.7 Health and harms

The health impact of illicit drug use has been estimated in a study that looks at the sources of disease burden in Australia. The last study of this kind found that illicit drug use was responsible for 2% of the total burden of disease in Australia in 2003 (Begg et al. 2007). There were 1,705 deaths in 2003 and almost 51,500 disability-adjusted-life-years (DALYs or lost years of healthy life) attributable to illicit drug use (Table 4.6).

**Table 4.6: Number of deaths and DALYs attributable to illicit drug use, by condition, 2003**

| Condition                           | Deaths       |                         | DALYs         |                         |
|-------------------------------------|--------------|-------------------------|---------------|-------------------------|
|                                     | Number       | Per cent <sup>(a)</sup> | Number        | Per cent <sup>(b)</sup> |
| Heroin/polydrug use                 | 263          | 0.2                     | 16,758        | 0.6                     |
| Hepatitis C                         | 759          | 0.6                     | 11,709        | 0.4                     |
| Cannabis abuse                      | —            | —                       | 5,206         | 0.2                     |
| Suicide and self-inflicted injuries | 204          | 0.2                     | 4,458         | 0.2                     |
| Hepatitis B                         | 329          | 0.2                     | 3,637         | 0.1                     |
| Other                               | 150          | 0.1                     | 9,696         | 0.4                     |
| <b>Total attributable</b>           | <b>1,705</b> | <b>1.3</b>              | <b>51,463</b> | <b>2.0</b>              |

(a) Of total deaths.

(b) Of total DALYs. For a complete definition of DALYs see Begg et al. 2007.

Source: Begg et al. 2007.

It is estimated that a large proportion of those who contract hepatitis C do so by sharing injecting equipment with infected people in the course of using illicit drugs. Hepatitis C was a major cause of illicit drug-related death and disability in 2003. It accounted for 759 of the deaths attributable to illicit drug use in 2003 and was a major contributor to DALYs (0.4% of all DALYs). After hepatitis C, hepatitis B, heroin/polydrug use, and illicit drug-related suicide or self-inflicted injuries were each responsible for 0.2% of the total number of deaths in 2003. Among illicit drug use categories, heroin/polydrug use was the major cause of DALYs (16,758 DALYs), followed by ‘other’ conditions.

### 4.7.1 Mental health

Some patterns of drug use and associated harms have a detrimental effect on mental health and wellbeing. Around 8% of people in Australia aged 16–85 years have had a drug use disorder (including harmful use/abuse and/or dependence) in their lifetime (ABS 2007). In 2007, about one in seventy people (1.4%) had a drug use disorder in the last 12 months.

Chapters 5 and 6 provide information about the level of psychological distress and rates of co-morbid mental illnesses for cannabis users and those using other illicit drugs, respectively.

## 4.7.2 Social harms

In 2010, it was estimated from the NDSHS that around one in five males (21.5%) who were recent illicit drug users had driven a vehicle while under the influence of illicit drugs in the previous 12 months (Table 4.7). Female recent users were less likely to report that they had driven a vehicle under the influence of illicit drugs (13.2%). Other risky or harmful activities that people reported they had engaged in while under the influence of illicit drugs included going swimming (11.4%), going to work (11.7%) and verbally abusing someone (5.3%).

**Table 4.7: Activities undertaken in the previous 12 months while under the influence of illicit drugs, recent users aged 14 years or older, by sex, 2010 (per cent)**

| Activity                                      | Males | Females | Persons |
|---|-------|---------|---------|
| Drove a vehicle                               | 21.5  | 13.2    | 18.0    |
| Went to work                                  | 14.5  | 7.9     | 11.7    |
| Went swimming                                 | 13.8  | 8.2     | 11.4    |
| Verbally abused someone                       | 6.1   | 4.3     | 5.3     |
| Created a disturbance, damaged or stole goods | 5.8   | 3.3     | 4.8     |
| Operated a boat or hazardous machinery        | 5.4   | *1.5    | 3.8     |
| Physically abused someone                     | 1.7   | *0.9    | 1.4     |

\* Estimate has a relative standard error of 25% to 50% and should be used with caution. *Notes*

1. Base is recent illicit drug users.
2. This analysis includes cannabis and all other illicit drugs.

Source: AIHW 2011a.

# 5 Cannabis

## 5.1 Key findings

- Among people in Australia aged 12 years or over in 2010, one in four (23.9%) thought of cannabis when they thought of a drug problem.
- In 2010, cannabis was still the most common illicit drug used in Australia. Recent use of cannabis has increased since 2007, from 9.1% to 10.3% but is still lower than the peak of 17.9% observed in 1998.
- Cannabis use was most prevalent among young people, with those in their late-teens and twenties the most likely to be recent cannabis users. People who were currently unemployed were more likely than those who were employed to be recent users of cannabis.
- Those who had used cannabis in the previous month were more likely to assess their health as fair or poor than those who had not used cannabis in the previous 12 months. Mental illness was reported in higher proportions by those who had smoked cannabis in the last 12 months compared with those who did not.
- In 2010, 11% of recent cannabis users had tried to reduce their use but been unable to do so and of the people who reported using cannabis in the previous 12 months, 3.0% accessed counselling.

## 5.2 Introduction

Cannabis is the most prevalent illicit drug used among the Australian population. About one in three (34.3%) people aged 12 years or over have used cannabis at some time.

A specific National Cannabis Strategy was developed and released in 2006 (Commonwealth of Australia 2006b). This strategy drew on the other initiatives that were implemented under the broader National Drug Strategy. The National Cannabis Strategy aims to prevent cannabis uptake by educating the general community and by reducing the acceptability of cannabis use and limiting its supply. In addition, harm reduction strategies were supported in policy directions to assist people who use cannabis to decrease their use and to encourage those who were occasional users not to become frequent users. Overall, it aims to reduce problems at an individual as well as at a societal level to reduce the harms associated with cannabis use.

The Australian Government has made a substantial investment in prevention through funding a National Cannabis Prevention and Information Centre. Measures include an online clearing house for cannabis-related information, a telephone helpline, workforce capacity building activities and the development of clinical guidelines relating to treatment.

## 5.3 Attitudes and opportunity to use

The 2010 NDSHS found that around one in four people (23.9%) aged 14 years or over reported that cannabis was the drug they thought of when people talked about a drug 'problem'. This was a decline from 2007 when 25.2% thought that cannabis was associated with a drug problem. In the same survey, 8.1% of those aged 14 years and over reported they approved of regular cannabis use (AIHW 2011a).

In 2010, one in four people aged 14 years or over in Australia (24.8%) supported legalising the personal use of cannabis. This was an increase from 2007 when about one in five people supported this (21.2%), but not as high as the level of support in 2004 (27.0%) (AIHW 2011a).

The NDSHS asked respondents if they had been offered or had the opportunity to use cannabis in 2010 and 17.9% reported they had, which was a similar proportion to that for 2007 (17.1%). Women were proportionally less likely to report having been offered or having the opportunity to use cannabis than men (14.1% and 21.7%, respectively (AIHW 2008b).

## 5.4 Reported consumption

It is estimated from the 2010 NDSHS that the average age of initiation of cannabis use was 18.5 years (AIHW 2008b). About one-third (34.3%) of people aged 12 years or over reported using cannabis at some point in their lifetime. Only about one in 25 people (3.8%) reported using cannabis in the week before the survey (Table 5.1). Age, sex and time series comparisons are provided in Table 5.3 and Figure 5.1.

**Table 5.1: Cannabis use, people aged 12 years and older, by age, 2010 (per cent)**

|                       | 12–17 | 18–19 | 20–29 | 30–39 | 40+  | Total (12+) |
|-----------------------|-------|-------|-------|-------|------|-------------|
| In lifetime           | 11.0  | 32.0  | 46.9  | 55.7  | 27.8 | 34.3        |
| In the last 12 months | 8.8   | 21.3  | 21.3  | 13.6  | 4.7  | 10.0        |
| In the last month     | 3.3   | 13.3  | 11.1  | 7.8   | 3.0  | 5.6         |
| In the last week      | 1.4   | 7.8   | 7.2   | 5.5   | 2.3  | 3.8         |

Source: AIHW 2011a.

**Table 5.2: Cannabis use, people aged 12 years and older, by sex, 2010 (per cent)**

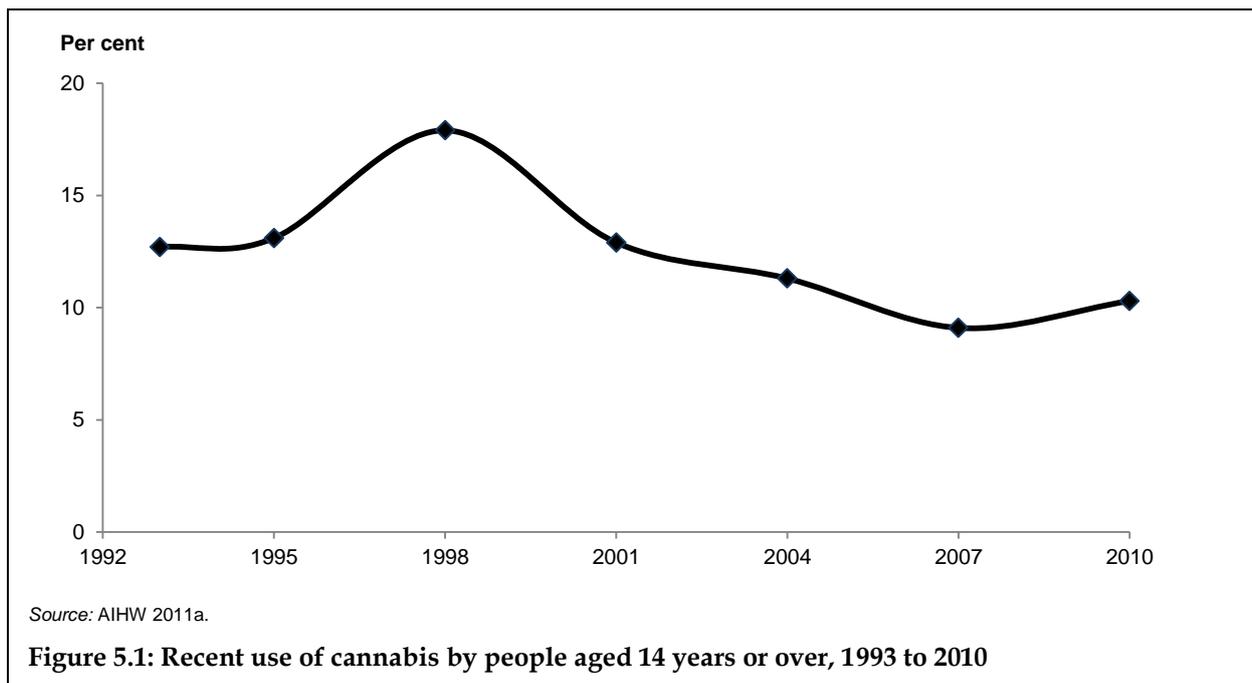
|                       | Males | Females | Persons |
|-----------------------|-------|---------|---------|
| In lifetime           | 38.9  | 32.0    | 35.4    |
| In the last 12 months | 12.9  | 7.7     | 10.3    |
| In the last month     | 7.6   | 4.0     | 5.8     |
| In the last week      | 5.2   | 2.6     | 3.9     |

Source: AIHW 2011a.

### 5.4.1 Trends

Cannabis use among people aged 14 years and over declined between 1998 and 2007. However, recent use of cannabis increased between 2007 and 2010, from 9.1% to 10.3%. Recent use refers to those who said they used cannabis in the last 12 months (Figure 5.1).

Estimates of recent use of cannabis vary by age and sex and over time. Recent use was highest among those aged 20–29 years (Table 5.3). Overall, a higher proportion of males used cannabis than females, though females aged 14–19 years reported recent use of cannabis in similar proportions to males in this age group. Recent cannabis use has declined among 14–19 year olds from over one in three young people in 1998 (35.1%) to about one in six who reported recent use in 2010 (15.7%).



**Table 5.3: Recent<sup>(a)</sup> use of cannabis: people aged 14 years or older by age and sex, 1995–2010 (per cent)**

| Age group        | 1995        | 1998        | 2001        | 2004        | 2007        | 2010                    |
|------------------|-------------|-------------|-------------|-------------|-------------|-------------------------|
| <b>Males</b>     |             |             |             |             |             |                         |
| 14–19            | 35.9        | 35.6        | 26.6        | 18.4        | 13.1        | 15.9                    |
| 20–29            | 43.7        | 44.8        | 35.1        | 32.4        | 25.7        | 25.0                    |
| 30–39            | 19.0        | 24.1        | 20.8        | 21.4        | 15.9        | 18.2                    |
| 40–49            | 8.0         | 16.7        | 10.7        | 11.9        | 11.6        | 12.7                    |
| 50–59            | 1.9         | 5.2         | 4.5         | 4.3         | 5.4         | <sup>#</sup> 7.8        |
| 60+              | <0.1        | 1.1         | 0.7         | 0.4         | 0.6         | 0.8                     |
| <b>Total 14+</b> | <b>17.6</b> | <b>21.4</b> | <b>15.8</b> | <b>14.4</b> | <b>11.6</b> | <b><sup>#</sup>12.9</b> |
| <b>Females</b>   |             |             |             |             |             |                         |
| 14–19            | 21.8        | 34.6        | 22.6        | 17.4        | 12.7        | 15.5                    |
| 20–29            | 23.4        | 28.9        | 23.2        | 19.5        | 15.9        | 17.5                    |
| 30–39            | 8.2         | 16.4        | 11.7        | 10.6        | 8.4         | 9.0                     |
| 40–49            | 2.2         | 6.4         | 6.6         | 5.7         | 5.1         | 6.2                     |
| 50–59            | 1.2         | 7.3         | 2.0         | 2.1         | 2.2         | 3.2                     |
| 60+              | 0.5         | 1.3         | 0.3         | 0.2         | 0.4         | 0.4                     |
| <b>Total 14+</b> | <b>8.7</b>  | <b>14.5</b> | <b>10.0</b> | <b>8.3</b>  | <b>6.6</b>  | <b><sup>#</sup>7.7</b>  |

(a) Used in the previous 12 months.

# Statistically significant difference between 2007 and 2010 (2-tailed  $\alpha = 0.05$ ).

Note: Some trend data were updated in 2010 and may not match previously reported data.

Source: AIHW 2011a.

Of recent users, 13.0% used cannabis every day and 20.9% used it once a week or more (but not every day). About a third (34.7%) of recent users used cannabis only once or twice a year.

Males were more likely to be more regular cannabis users than females, for example, with more males using daily, weekly or monthly (Table 5.4).

**Table 5.4: Frequency of cannabis use, recent<sup>(a)</sup> users aged 12 years and older, by age, 2010 (per cent)**

|                      | 12–17 | 18–19 | 20–29 | 30–39 | 40+  | Total (12+) |
|----------------------|-------|-------|-------|-------|------|-------------|
| Every day            | **1.8 | *10.1 | 12.3  | 14.0  | 17.6 | <b>13.0</b> |
| Once a week or more  | 10.9  | 24.8  | 16.8  | 23.2  | 27.0 | <b>20.9</b> |
| About once a month   | 18.5  | 17.5  | 12.9  | 12.5  | 12.3 | <b>13.4</b> |
| Every few months     | 21.7  | 20.2  | 20.2  | 15.4  | 15.1 | <b>18.0</b> |
| Once or twice a year | 47.1  | 27.4  | 37.8  | 34.8  | 28.1 | <b>34.7</b> |

(a) Used in the previous 12 months.

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

\*\* Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Note: Base is recent users of cannabis.

Source: AIHW 2011a

## 5.4.2 Characteristics of recent cannabis users

Table 5.5 shows variations in cannabis use by different social and demographic characteristics. Those who identified themselves as ‘currently employed’, ‘unemployed’ or engaged in home duties were more likely than other labour force categories (e.g. students, retired people) to have ever used cannabis. Those who were currently unemployed were more likely than people who were employed to be recent users of cannabis.

Those who reported speaking a language other than English at home were much less likely to have ever used cannabis than those who spoke English at home. As the NDSHS is a survey conducted in English, people from non-English-speaking Australian communities may be under-represented in the sample.

Those who identified as homosexual or bisexual were more than twice as likely to have used cannabis recently as those who identified as heterosexual (26.0% compared with 10.0%).

**Table 5.5: Cannabis use, people aged 14 years or older, by social characteristics, 2010 (per cent)**

|                                     | Never used  | Ex-users <sup>(a)</sup> | Recent users <sup>(b)</sup> |
|-------------------------------------|-------------|-------------------------|-----------------------------|
| <b>All persons (aged 14+)</b>       | <b>64.7</b> | 25.0                    | <b>10.3</b>                 |
| <b>Education</b>                    |             |                         |                             |
| Without post-school qualifications  | 71.7        | 17.9                    | 10.4                        |
| With post-school qualifications     | 59.2        | 30.6                    | 10.2                        |
| <b>Labour force status</b>          |             |                         |                             |
| Currently employed                  | 54.4        | 34.1                    | 11.5                        |
| Student                             | 74.5        | 9.4                     | 16.1                        |
| Unemployed                          | 60.7        | 19.2                    | 20.1                        |
| Home duties                         | 60.5        | 33.2                    | 6.2                         |
| Retired or on a pension             | 90.4        | 7.7                     | 1.8                         |
| Volunteer/charity work              | 79.2        | 15.0                    | *5.8                        |
| Unable to work                      | 62.7        | 23.3                    | 14.0                        |
| Other                               | 63.2        | 27.1                    | 9.7                         |
| <b>Main language spoken at home</b> |             |                         |                             |
| English                             | 61.9        | 27.3                    | 10.8                        |
| Other                               | 91.1        | 5.3                     | 3.6                         |
| <b>Socioeconomic status</b>         |             |                         |                             |
| 1st quintile (lowest)               | 68.7        | 21.0                    | 10.3                        |
| 2nd quintile                        | 66.5        | 22.8                    | 10.7                        |
| 3rd quintile                        | 64.5        | 25.4                    | 10.1                        |
| 4th quintile                        | 63.8        | 26.8                    | 9.4                         |
| 5th quintile (highest)              | 60.6        | 28.4                    | 11.1                        |
| <b>Geography</b>                    |             |                         |                             |
| Major cities                        | 64.8        | 24.8                    | 10.4                        |
| Inner regional                      | 65.5        | 24.7                    | 9.8                         |
| Outer regional                      | 64.2        | 25.4                    | 10.4                        |
| Remote and Very remote              | 55.2        | 33.4                    | 11.4                        |
| <b>Marital status</b>               |             |                         |                             |
| Never married                       | 63.4        | 16.7                    | 19.9                        |
| Divorced/separated/widowed          | 71.1        | 21.4                    | 7.5                         |
| Married/de facto                    | 63.8        | 29.7                    | 6.5                         |
| <b>Household composition</b>        |             |                         |                             |
| Single with dependent children      | 44.7        | 39.8                    | 15.5                        |
| Couple with dependent children      | 51.8        | 40.5                    | 7.6                         |
| Parent with non-dependent children  | 75.1        | 19.9                    | 5.1                         |
| Single without children             | 62.7        | 21.0                    | 16.3                        |
| Couple without children             | 73.9        | 20.1                    | 6.0                         |
| Other <sup>(c)</sup>                | 69.4        | 14.5                    | 16.0                        |
| <b>Sexual orientation</b>           |             |                         |                             |
| Heterosexual                        | 64.2        | 25.8                    | 10.0                        |
| Homosexual/bisexual                 | 43.2        | 30.8                    | 26.0                        |
| Not sure/other                      | 85.6        | 6.9                     | 7.5                         |

(a) Used cannabis previously, but not in previous 12 months.

(b) Used in the previous 12 months.

(c) People who live in a household with children but are not the parent/guardian; younger people living with their parents; or respondents who selected 'other household type'.

Note: Some trend data have been updated in 2010 and may not match previously reported data.

Source: AIHW 2011a.

### 5.4.3 Place of use

The place of use most commonly nominated by those who used cannabis in the 2010 NDSHS was at home (86.7%). Respondents to the survey could nominate more than one place of use, and use at private parties was also frequently stated (males 49.1% and females 39.9%).

### 5.4.4 Attempts to reduce use

In 2010, 11% of recent cannabis users had tried to reduce their use but been unable to do so. The 2010 NDSHS also gathered information about people who sought treatment through various treatment programs (Table 5.6).

Of the people who reported using cannabis in the previous 12 months, 3.0% accessed counselling, though it is not known if this was for their cannabis use.

**Table 5.6: Proportion of cannabis users who had accessed treatment programs, 14 years or older, 2010 (per cent)**

| Treatment program                  | When treatment program accessed | Used cannabis in the last 12 months |
|------------------------------------|---------------------------------|-------------------------------------|
| Telephone helplines                | In last 12 months               | 2.0                                 |
|                                    | More than 12 months ago         | 3.2                                 |
| Peer group community-based support | In last 12 months               | *1.0                                |
|                                    | More than 12 months ago         | 2.0                                 |
| Counselling                        | In last 12 months               | 3.0                                 |
|                                    | More than 12 months ago         | 3.0                                 |
| Therapeutic community              | In last 12 months               | *0.3                                |
|                                    | More than 12 months ago         | *0.5                                |
| Online/internet support            | In last 12 months               | 1.2                                 |
|                                    | More than 12 months ago         | *0.6                                |
| Residential rehabilitation         | In last 12 months               | *0.4                                |
|                                    | More than 12 months ago         | 1.5                                 |
| Information and education          | In last 12 months               | 2.5                                 |
|                                    | More than 12 months ago         | 2.7                                 |
| Other                              | In last 12 months               | 1.6                                 |
|                                    | More than 12 months ago         | 1.4                                 |

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

Source: AIHW 2011b. unpublished analysis of 2010 NDSHS.

## 5.5 State and territory comparisons

The jurisdiction with the highest proportion of cannabis users was the Northern Territory (15.9%), followed by Western Australia (13.0%) (Table 5.7). These differences were, however, very similar after adjusting for differences in age structure.

**Table 5.7: Recent<sup>(a)</sup> use of cannabis, people aged 12 years and older, by age and state/territory, 2010 (per cent)**

|          | NSW | Vic | Qld  | WA   | SA   | Tas | ACT | NT   | Australia |
|----------|-----|-----|------|------|------|-----|-----|------|-----------|
| Cannabis | 9.1 | 9.1 | 10.6 | 13.0 | 10.9 | 8.3 | 9.2 | 15.9 | 10.0      |

(a) Used in the past 12 months.

Source: AIHW 2011a.

## 5.6 Health and harms

### 5.6.1 Self-reported health status of cannabis users

In 2010, 84.0% of people in Australia aged 18 years and older reported having good to excellent health. Those who had used cannabis in the previous month were more likely to assess their health as fair or poor than those who had not used cannabis in the previous 12 months (Table 5.8).

**Table 5.8: Self-assessed health status<sup>(a)</sup>, people aged 18 years or over, 2010 (per cent)**

|                                | Excellent   | Very good   | Good        | Fair        | Poor       |
|--------------------------------|-------------|-------------|-------------|-------------|------------|
| <b>All persons (14+)</b>       | <b>16.0</b> | <b>37.6</b> | <b>34.1</b> | <b>10.5</b> | <b>1.8</b> |
| Cannabis                       |             |             |             |             |            |
| Used in the last month         | 12.4        | 34.9        | 38.8        | 11.3        | 2.6        |
| Used in the last 12 months     | 14.7        | 38.2        | 35.3        | 10.1        | 1.6        |
| Not used in the last 12 months | 16.1        | 37.6        | 34.0        | 10.5        | 1.8        |

(a) In response to the question: 'In general, would you say your health is...?'

Source: AIHW 2011a.

Table 5.9 shows the proportions of people aged 18 years and over who reported a selection of health conditions by whether or not they had used cannabis in the last 12 months. Mental illness was reported in higher proportions by those who had smoked cannabis in the last 12 months compared with those who did not. Conditions that were less often reported by recent cannabis users were diabetes, heart disease and cancer, although these results are likely to be influenced by the younger age profile of recent cannabis users.

**Table 5.9 Cannabis use by self-reported health condition, people aged 18 years or over, 2010 (per cent)**

|                                | Diabetes   | Heart diseases <sup>(b)</sup> | Asthma     | Cancer     | Mental illness <sup>(c)</sup> |
|--------------------------------|------------|-------------------------------|------------|------------|-------------------------------|
| <b>All persons (14+)</b>       | <b>5.4</b> | <b>19.1</b>                   | <b>8.6</b> | <b>2.8</b> | <b>12.0</b>                   |
| Cannabis                       |            |                               |            |            |                               |
| Used in the last 12 months     | 2.0        | 5.9                           | 10.0       | 0.9        | 18.7                          |
| Not used in the last 12 months | 5.8        | 20.5                          | 8.5        | 3.0        | 11.3                          |

(a) Respondents could select more than one condition, in response to the question: 'In the last 12 months, have you been diagnosed or treated for...?'

(b) Includes heart diseases and hypertension (high blood pressure).

(c) Includes depression, anxiety disorder, schizophrenia, bi-polar disorder, an eating disorder, and other form of psychosis.

Source: AIHW 2011a.

## 5.6.2 Psychological distress

Table 5.10 shows analysis of the results of the Kessler 10 scale of psychological distress (K10) as categories of the level of psychological distress reported in the 2010 NDSHS.

People who had used cannabis in the previous month were generally more likely to report high or very high levels of psychological distress than those who had not used cannabis.

**Table 5.10: Psychological distress<sup>(a)</sup>, by use of cannabis in the last month, people aged 18 years and over, 2007 (per cent)**

|  | Not used in last 12 months <sup>(b)</sup> | Used in last 12 months | Used in last month | All persons (18+) |
|--|---|------------------------|--------------------|-------------------|
| <b>Level of psychological distress<sup>(c)</sup></b> |   |                        |                    |                   |
| Low  | 71.1                                      | 56.7                   | 54.8               | 69.6              |
| Moderate   | 19.8                                      | 27.0                   | 26.1               | 20.5              |
| High   | 6.8                                       | 12.7                   | 14.9               | 7.4               |
| Very high  | 2.3                                       | 3.6                    | 4.2                | 2.4               |

(a) Using the Kessler 10 scale of psychological distress.

(b) Includes those who have never used and ex-users.

(c) Low: K10 score 10–15; Moderate: 16–21; High: 22–29; Very high: 30–50.

Source: AIHW 2011a.

## 5.7 Recent use of cannabis among population sub-groups

This section includes data sources that provide information on those who are sampled by the Ecstasy and Related Drugs Reporting System, injecting drug users, people detained by police and those who are remanded in custody or sentenced to prison.

### Use among ecstasy and related drug users

The Ecstasy and Related Drugs Reporting System collects data on a group of users of these drugs (for more information on the sample and methods refer to Sindicich et al. 2010). The majority (82%) reported cannabis use in the six months before interview. There was a significant increase in the proportion of recent cannabis users from 2008 to 2009. In 2008, 75% reported use of cannabis in the six months preceding interview (Sindicich et al. 2010).

### Use among injecting drug users

The Illicit Drug Reporting System collects data on a group of users who injected a drug on six or more occasions in the previous six months (for more information on the sample and methods refer to Stafford & Burns 2010). The results show that people who were injecting drug users were also likely to have used cannabis in the last six months. In 2010, among a sample of injecting drug users, 75% reported they had also used cannabis. This finding was not significantly different from the proportion of injecting drug users reporting cannabis use in 2009 (76%) and 2008 (77%) (Stafford & Burns 2010).

## **Use among prisoners**

In 2010, it was estimated that 51% of prison entrants reported using cannabis in the last 12 months. Cannabis use was reported by a higher proportion of male prison entrants (52%) than female prison entrants (49%). Prison entrants who were younger reported using cannabis in the last 12 months in higher proportions than those who were older (60% among those aged 18–24 and 28% among those aged 45 years or older) (AIHW 2011b). (For more information see Chapter 11.)

## **Use among police detainees**

Data about people detained by the police in 2008 from a selection of watchhouses around Australia showed that 48% of these people tested positive for cannabis from urine samples taken (see Chapter 11 for additional information on police detainees). Similar to findings for prison entrants, more people in the 18–24 year age group (56%) used cannabis recently than those in the 40+ age group (28%). Use remained high among those aged 25–39 (50%).

## **5.8 Supply reduction**

Law enforcement agencies in Australia target cannabis suppliers and growers. In 2009–10, cannabis continued to be the predominant illicit drug seized in Australia, with 44,736 seizures in 2009–10 (ACC 2011). (For more information about cannabis and law enforcement see Chapter 11.)

## 6 Illicit drugs other than cannabis

### 6.1 Key findings

- Very few people in Australia approve of regular, adult use of illicit drugs, with most types of drugs approved of by less than 2% of people aged 14 years or over.
- In 2010, for most illicit drug types, less than 5% of those aged 14 years or over had been offered or had the opportunity to use that drug in the last 12 months. The most accessible drug was pain-killers/analgesics, with around one in five people having access to pain-killers/analgesics that could be used for non-medical purposes (18.2%).
- Males were more likely than females to have used an illicit drug other than cannabis in the previous 12 months and in their lifetime.
- Ecstasy was the second most commonly used illicit drug after cannabis – 2.9% of people in Australia aged 12 years or over had used ecstasy in the previous 12 months in 2010. Less than 1% were recent users of heroin.
- People in Australia aged 14 years or over who were unemployed (13%) were more likely than those who were employed (9%) to have recently used any illicit drug other than cannabis.
- People who identified as homosexual or bisexual were three times as likely as heterosexual people to have used ecstasy, meth/amphetamine or any illicit drug in the previous 12 months and twice as likely to have used cocaine.
- People aged 18 years and over who had used any illicit drug other than cannabis in the previous 12 months were more likely to have a mental illness or asthma than the general population.
- The injecting practices of some users place them at increased health risk, such as contracting viruses by sharing needles. One in ten injecting drug users reported sharing needles in 2010 and almost four in ten had shared other injecting equipment.

### 6.2 Introduction

This chapter explores data relating to illicit drugs other than cannabis. While cannabis has been used by around one-third of people aged 14 years or over at some stage in their lifetime, the use of other illicit drugs is far less common. This chapter focuses on meth/amphetamines, heroin, cocaine and ecstasy while providing an overall view of all illicit drugs other than cannabis. (See Chapter 5 for more information on cannabis.) The non-medical use of pharmaceuticals is covered in more detail in Chapter 7. Chapter 11 provides more information on illicit drugs and crime.

## 6.3 Attitudes and opportunity to use

Very few people in Australia approve of regular, adult use of illicit drugs, with most types of drugs approved of by less than 2% of people aged 14 years or over. Aside from cannabis, kava, hallucinogens and ecstasy attracted the highest level of approval (4.3%, 2.4% and 2.3%, respectively)(AIHW 2008b).

Most people in Australia have limited access to illicit drugs. For most illicit drug types, less than 5% of those aged 14 years or over had been offered or had the opportunity to use that drug in the last 12 months (Table 6.1). A slightly higher proportion of people had access to ecstasy (7.2%) and tranquilisers/sleeping pills (7.3%). The type of drug most accessible was pain-killers/analgesics, with around one in five people having access to pain-killers/analgesics that could be used for non-medical purposes (18.2%).

Meth/amphetamines and cocaine were the two illicit drugs (apart from cannabis) most likely to be used when the opportunity arose; both were used by around half of those who had the opportunity. Hallucinogens and ecstasy were used by around 2 in 5 of those offered or with the opportunity. Inhalants and tranquilisers/sleeping pills (for non-medical purposes) were used by over one-fifth of those who had the opportunity, while steroids were the least commonly used.

**Table 6.1: Offer/opportunity to use, and proportion who accepted, in the last 12 months, people aged 14 years or over, 2010 (per cent)**

| Drug  | Offer/opportunity | Used by those who were offered or had the opportunity to use |
|---|-------------------|--|
| Pain-killers/analgesics <sup>(a)</sup>      | 18.2              | 16.2   |
| Tranquilisers/sleeping pills <sup>(a)</sup> | 7.3               | 20.6   |
| Inhalants                                   | 3.0               | 20.2   |
| Heroin                                      | 0.9               | 26.3   |
| Meth/amphetamine                            | 3.9               | 53.8   |
| Cocaine                                     | 4.4               | 49.1   |
| Hallucinogens                               | 3.7               | 37.1   |
| Ecstasy                                     | 7.2               | 42.2   |
| Ketamine                                    | 1.1               | 22.6   |
| GHB   | 1.0               | 15.7   |
| Steroids                                    | 1.0               | 14.2   |
| Kava <sup>(b)</sup>                         | 1.9               | —  |

(a) Used for non-medical purposes.

(b) Respondents who had the opportunity to use kava were not asked whether they had used it.

Source: AIHW 2011a.

## 6.4 Reported consumption

### 6.4.1 Any illicit drug, excluding cannabis

People aged 20–29 years were the most likely to have used an illicit drug in the previous 12 months (Table 6.2). Males were more likely than females to have used an illicit drug other than cannabis in the previous 12 months and in their lifetime (Table 6.3).

**Table 6.2: Use of any illicit drug, except cannabis, people aged 14 years or older, by age, 2010 (per cent)**

|                                      | 14–17 | 18–19 | 20–29 | 30–39 | 40+  | Total (14+) | 14–19 | 18+         |
|--------------------------------------|-------|-------|-------|-------|------|-------------|-------|-------------|
| In lifetime <sup>(a)</sup>           | 7.1   | 18.1  | 32.3  | 33.5  | 14.0 | <b>20.4</b> | 10.9  | <b>21.3</b> |
| In the last 12 months <sup>(a)</sup> | 4.0   | 12.4  | 17.6  | 10.5  | 4.8  | <b>8.3</b>  | 6.9   | <b>8.6</b>  |
| In the last month <sup>(b)</sup>     | 1.8   | 6.8   | 6.9   | 4.0   | 2.5  | <b>3.7</b>  | 3.6   | <b>3.8</b>  |
| In the last week <sup>(b)</sup>      | **0.3 | *2.8  | 2.7   | 2.0   | 1.4  | <b>1.7</b>  | *1.2  | <b>1.8</b>  |

(a) Used at least 1 of 14 illicit drugs (ecstasy, meth/amphetamine, cocaine, hallucinogens, inhalants, heroin, ketamine, GHB, injectable drugs, pain-killers/analgesics, tranquilisers/sleeping pills, steroids, methadone/buprenorphine, other opiates/opioids).

(b) Used at least 1 of 12 illicit drugs (ecstasy, meth/amphetamine, cocaine, hallucinogens, inhalants, heroin, ketamine, GHB, pain-killers/analgesics, tranquilisers/sleeping pills, steroids, methadone/buprenorphine).

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

\*\* Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Source: AIHW 2011b. unpublished analysis of 2010 NDSHS.

**Table 6.3: Use of any illicit drug, except cannabis, people aged 14 years or older, by sex, 2010 (per cent)**

| Period                                   | Males | Females | Persons |
|--|-------|---------|---------|
| In lifetime <sup>(a)</sup>               | 22.3  | 18.4    | 20.4    |
| In the previous 12 months <sup>(a)</sup> | 9.2   | 7.3     | 8.3     |
| In the previous month <sup>(b)</sup>     | 4.0   | 3.3     | 3.7     |
| In the previous week <sup>(b)</sup>      | 1.9   | 1.5     | 1.7     |

(a) Used at least 1 of 14 illicit drugs (ecstasy, meth/amphetamine, cocaine, hallucinogens, inhalants, heroin, ketamine, GHB, injectable drugs, painkillers/analgesics, tranquilisers/sleeping pills, steroids, methadone/Buprenorphine, other opiates/opioids).

(b) Used at least 1 of 12 illicit drugs (ecstasy, meth/amphetamine, cocaine, hallucinogens, inhalants, heroin, ketamine, GHB, painkillers/analgesics, tranquilisers/sleeping pills, steroids, methadone/Buprenorphine).

Source: AIHW 2011b. unpublished analysis of 2010 NDSHS.

### 6.4.2 Ecstasy use

In 2010, the 20–29-year-old age group was the most likely to have used ecstasy, with about one in four (24.2%) ever using ecstasy and one in 10 (9.9%) using it in the previous 12 months (Table 6.4).

Males were more likely than females to have ever used ecstasy (11.6% and 9.1%, respectively). The proportion of males who had used ecstasy in the previous 12 months was also slightly higher than females (3.6% and 2.3%, respectively), but there was little difference in more recent use, by month or week (Table 6.5).

**Table 6.4: Ecstasy use, people aged 12 years and older, by age, 2010 (per cent)**

|                           | 12–17  | 18–19 | 20–29 | 30–39 | 40+    | Total (12+) | 14–19        | 14+         | 18+         |
|---------------------------|--------|-------|-------|-------|--------|-------------|--------------|-------------|-------------|
| In lifetime               | 1.4    | 9.8   | 24.2  | 22.0  | 3.2    | <b>10.0</b> | <b>4.7</b>   | <b>10.3</b> | <b>10.9</b> |
| In the previous 12 months | *0.8   | 6.0   | 9.9   | 3.9   | 0.5    | <b>2.9</b>  | <b>2.8</b>   | <b>3.0</b>  | <b>3.1</b>  |
| In the previous month     | **0.1  | 3.0   | 2.4   | 0.5   | *0.1   | <b>0.7</b>  | <b>1.2</b>   | <b>0.7</b>  | <b>0.7</b>  |
| In the previous week      | **<0.1 | **0.7 | *0.5  | *0.2  | **<0.1 | <b>0.2</b>  | <b>**0.3</b> | <b>0.2</b>  | <b>0.2</b>  |

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

\*\* Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Source: AIHW 2011a.

**Table 6.5: Ecstasy use, people aged 14 years or older, by sex, 2010 (per cent)**

| Period                    | Males | Females | Persons |
|---------------------------|-------|---------|---------|
| In lifetime               | 11.6  | 9.1     | 10.3    |
| In the previous 12 months | 3.6   | 2.3     | 3.0     |
| In the previous month     | 0.8   | 0.6     | 0.7     |
| In the previous week      | *0.2  | *0.2    | 0.2     |

Source: AIHW 2011a.

### 6.3.1 Meth/amphetamine use

In 2010, people aged 20–29 and 30–39 years were more likely than those in other age groups to have ever used meth/amphetamines (14.5% and 14.7%, respectively), while people aged 20–29 years were more likely to have recently done so (5.9%).

Males aged 14 years or older were more likely than females to have used meth/amphetamines in their lifetime (8.2% and 5.9%, respectively) or in the last 12 months (2.5% and 1.7%, respectively) (Table 6.7).

**Table 6.6: Meth/amphetamines use, people aged 14 years or older, by age, 2010 (per cent)**

| Period                | 14–17  | 18–19 | 20–29 | 30–39 | 40+   | Total (14+) | 14–19        | 18+        |
|-----------------------|--------|-------|-------|-------|-------|-------------|--------------|------------|
| In lifetime           | *0.5   | 5.9   | 14.5  | 14.7  | 3.0   | <b>7.0</b>  | <b>2.4</b>   | <b>7.5</b> |
| In the last 12 months | **0.3  | 4.0   | 5.9   | 3.4   | 0.5   | <b>2.1</b>  | <b>1.6</b>   | <b>2.2</b> |
| In the last month     | **<0.1 | *1.8  | 2.0   | 1.3   | 0.1   | <b>0.7</b>  | <b>*0.6</b>  | <b>0.8</b> |
| In the last week      | **<0.1 | **0.2 | *0.7  | 0.5   | *<0.1 | <b>0.2</b>  | <b>**0.1</b> | <b>0.3</b> |

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

\*\* Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Source: AIHW 2011a.

**Table 6.7: Meth/amphetamines use, people aged 14 years or older, by sex, 2010 (per cent)**

| Period                | Males | Females | Persons |
|-----------------------|-------|---------|---------|
| In lifetime           | 8.2   | 5.9     | 7.0     |
| In the last 12 months | 2.5   | 1.7     | 2.1     |
| In the last month     | 0.9   | 0.6     | 0.7     |
| In the last week      | 0.3   | 0.2     | 0.2     |

Source: AIHW 2011a.

### 6.3.2 Cocaine use

Of people aged 14 years or older, just over 7.3% had used cocaine in their lifetime, and just over 2.1% had used it in the previous 12 months (Table 6.8). Recent cocaine use was highest among those aged 20–29 years (6.5%) and among males (almost 2.7%). Use of cocaine in the previous month was low, at less than 1%.

**Table 6.8: Cocaine use, people aged 14 years or older, by age, 2010 (per cent)**

| Period                | 14–19 | 20–29 | 30–39 | 40+   | Total (14+) | 18+ |
|-----------------------|-------|-------|-------|-------|-------------|-----|
| In lifetime           | 2.1   | 14.1  | 14.4  | 3.9   | 7.3         | 7.8 |
| In the last 12 months | 1.3   | 6.5   | 3.7   | 0.4   | 2.1         | 2.3 |
| In the last month     | *0.7  | 1.5   | 1.1   | 0.1   | 0.6         | 0.6 |
| In the last week      | **0.1 | *0.3  | *0.4  | *<0.1 | 0.1         | 0.1 |

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

\*\* Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Source: AIHW 2011a.

**Table 6.9: Cocaine use, people aged 14 years or older, by sex, 2010 (per cent)**

| Period                | Males | Females | Persons |
|-----------------------|-------|---------|---------|
| In lifetime           | 8.7   | 6.0     | 7.3     |
| In the last 12 months | 2.7   | 1.5     | 2.1     |
| In the last month     | 0.8   | 0.4     | 0.6     |
| In the last week      | 0.2   | *0.1    | 0.1     |

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

Source: AIHW 2011a.

### 6.3.3 Use of other illicit drugs

Of other illicit drugs, hallucinogens were the most likely to have ever been used (8.8%). In addition, in 2010, 3.8% of people aged 14 years or older had used inhalants in their lifetime. Recent use of other illicit drugs was low, with 1.4% having used hallucinogens in the previous 12 months and less than 1% having used heroin, ketamine, GHB, inhalants or injectable drugs (Table 6.10).

**Table 6.10: Lifetime and recent other illicit drug use, people aged 14 years or older, by sex, 2010 (per cent)**

| Drug                            | Ever used <sup>(a)</sup> |         |         | Recent use <sup>(b)</sup> |         |         |
|---------------------------------|--------------------------|---------|---------|---------------------------|---------|---------|
|                                 | Males                    | Females | Persons | Males                     | Females | Persons |
| Heroin                          | 1.9                      | 0.9     | 1.4     | 0.3                       | 0.2     | 0.2     |
| Hallucinogens                   | 10.7                     | 7.0     | 8.8     | 2.0                       | 0.7     | 1.4     |
| Ketamine                        | 1.8                      | 0.9     | 1.4     | 0.3                       | 0.2     | 0.2     |
| GHB                             | 1.0                      | 0.6     | 0.8     | *0.2                      | *0.1    | 0.1     |
| Inhalants                       | 4.4                      | 3.1     | 3.8     | 0.7                       | 0.5     | 0.6     |
| Injectable drugs <sup>(c)</sup> | 2.3                      | 1.2     | 1.8     | 0.6                       | 0.3     | 0.4     |

(a) Used at least once in lifetime.

(b) Used in the previous 12 months.

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

Source: AIHW 2011a.

### 6.3.4 Frequency of use

Among recent users of selected illicit drugs, those who used pharmaceuticals for non-medical purposes had the highest frequency of use, with almost half (47.0%) using pharmaceuticals once a month or more (Table 6.11). Around one-quarter of meth/amphetamine, cocaine and hallucinogen users used their drug of choice every few months, with the proportion slightly higher for ecstasy users (31.4%). Users of cocaine and hallucinogens were the most likely to use these drugs only once or twice a year.

**Table 6.11: Frequency of other illicit drug use, recent users<sup>(a)</sup> aged 14 years or older, 2010 (per cent)**

| Frequency            | Ecstasy | Meth/amphetamine | Cocaine | Pharmaceuticals <sup>(b)</sup> | Hallucinogens | Inhalants | Injectable drugs |
|----------------------|---------|------------------|---------|--------------------------------|---------------|-----------|------------------|
| Once a month or more | 15.5    | 24.9             | 12.8    | 47.0                           | 8.2           | 34.7      | 27.1             |
| Every few months     | 31.4    | 26.3             | 26.4    | 21.9                           | 23.3          | *12.6     | *12.3            |
| Once or twice a year | 53.1    | 48.8             | 60.8    | 31.0                           | 68.6          | 52.7      | 60.6             |

(a) Used in the previous 12 months.

(b) Includes pain-killers/analgesics, tranquilisers/sleeping pills and steroids used for non-medical purposes. Does not include methadone or other opiates.

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

Source: AIHW 2011a.

## 6.5 Social characteristics

There is some variation in the use of illicit drugs according to social and demographic characteristics of people in Australia aged 14 years and older. For example, those who were unemployed (13.2%) were more likely than those who were employed (8.9%) to have recently used any illicit drug other than cannabis. This pattern was also found for meth/amphetamine, but not for ecstasy or cocaine (Table 6.12).

People who identified as homosexual or bisexual were three times as likely as heterosexual people to have used ecstasy, meth/amphetamine or any illicit drug in the previous 12 months and twice as likely to have used cocaine.

**Table 6.12: Characteristics of recent users<sup>(a)</sup> of any illicit drug except cannabis and other selected drugs, people aged 14 years or older, 2010 (per cent)**

|                                     | Any illicit (exc. cannabis) <sup>(b)</sup> | Ecstasy    | Meth/amphetamine | Cocaine    |
|-------------------------------------|--|------------|------------------|------------|
| <b>All persons (aged 14+)</b>       | <b>8.3</b>                                 | <b>3.0</b> | <b>2.1</b>       | <b>2.1</b> |
| <b>Education</b>                    |  |            |                  |            |
| Without post-school qualifications  | 8.4  | 2.8        | 2.0              | 1.6        |
| With post-school qualifications     | 8.2  | 3.1        | 2.1              | 2.6        |
| <b>Labour force status</b>          |  |            |                  |            |
| Currently employed                  | 8.9  | 3.8        | 2.6              | 3.0        |
| Student                             | 9.5  | 5.1        | 1.5              | 2.3        |
| Unemployed                          | 13.2                                       | 4.1        | 4.8              | 2.2        |
| Engaged in home duties              | 5.5  | 1.0        | *1.0             | *0.6       |
| Retired or on a pension             | 4.5  | *0.1       | *0.2             | **<0.1     |
| Volunteer/charity work              | 5.3  | —          | **0.3            | —          |
| Unable to work                      | 11.0                                       | *1.7       | *3.8             | **0.8      |
| Other                               | 11.0                                       | *2.4       | *2.4             | *1.8       |
| <b>Main language spoken at home</b> |  |            |                  |            |
| English                             | 8.5  | 3.2        | 2.2              | 2.3        |
| Other                               | 5.1  | *1.0       | *0.5             | *0.4       |
| <b>Socioeconomic status</b>         |  |            |                  |            |
| 1st quintile (most disadvantaged)   | 8.1  | 1.9        | 2.4              | 1.0        |
| 2nd quintile                        | 8.4  | 2.5        | 2.1              | 1.4        |
| 3rd quintile                        | 7.1  | 2.7        | 2.1              | 1.5        |
| 4th quintile                        | 8.2  | 3.1        | 1.8              | 2.2        |
| 5th quintile (most advantaged)      | 9.5  | 4.4        | 2.0              | 4.3        |
| <b>Geography</b>                    |  |            |                  |            |
| Major cities                        | 8.6  | 3.3        | 2.0              | 2.6        |
| Inner regional                      | 7.2  | 2.0        | 2.0              | 1.0        |
| Outer regional                      | 7.4  | 2.2        | 1.5              | *0.9       |
| Remote and Very remote              | 11.1                                       | *4.1       | *4.0             | *2.0       |
| <b>Marital status</b>               |  |            |                  |            |
| Never married                       | 13.5                                       | 6.9        | 3.8              | 4.5        |
| Divorced/separated/widowed          | 7.1  | 1.1        | 1.4              | 0.9        |
| Married/de facto                    | 6.0  | 1.6        | 1.3              | 1.3        |

(continued)

**Table 6.12 (continued): Characteristics of recent users<sup>(a)</sup> of any illicit drug except cannabis and other selected drugs, persons aged 14 years or older, 2010 (per cent)**

| Characteristic                     | Any illicit (exc. cannabis) <sup>(b)</sup> | Ecstasy | Meth/amphetamine | Cocaine |
|------------------------------------|--|---------|------------------|---------|
| <b>Household composition</b>       |  |         |                  |         |
| Single with dependent children     | 10.1                                       | 2.7     | 2.7              | 1.8     |
| Couple with dependent children     | 5.2  | 1.4     | 1.4              | 1.3     |
| Parent with non-dependent children | 5.4  | *0.5    | *0.8             | *0.5    |
| Single without children            | 14.4                                       | 6.5     | 3.4              | 4.4     |
| Couple without children            | 6.8  | 2.3     | 1.5              | 1.8     |
| Other <sup>(c)</sup>               | 10.9                                       | 5.0     | 3.1              | 2.9     |
| <b>Sexual orientation</b>          |  |         |                  |         |
| Heterosexual                       | 7.7  | 2.8     | 1.9              | 2.1     |
| Homosexual/bisexual                | 23.9                                       | 10.8    | 7.1              | 4.4     |
| Not sure/other                     | 12.1                                       | *4.7    | *2.4             | *2.4    |

(a) Used in the previous 12 months.

(b) Used at least 1 of 14 illicit drugs (ecstasy, meth/amphetamine, cocaine, hallucinogens, inhalants, heroin, ketamine, GHB, injectable drugs, pain-killers/analgesics, tranquilisers/sleeping pills, steroids, methadone/buprenorphine, other opiates/opioids).

(c) People who live in a household with children but are not the parent/guardian; younger people living with their parents; or respondents who selected 'other household type'.

Source: AIHW 2011b. unpublished analysis of 2010 NDSHS.

## 6.6 State and territory comparisons

Recent illicit drug use other than cannabis is reported by a higher proportion of people in the Northern Territory and Western Australia than in other states or territories. In Western Australia, 25–39 year-olds were the most likely age group to have used an illicit drug other than cannabis in the previous 12 months (17.2%). In other jurisdictions, and for Australia overall, use is similar between 25–39 year-olds and 14–24 year-olds.

**Table 6.13: Recent<sup>(a)</sup> use of any illicit drug except cannabis<sup>(b)</sup>: by age and states and territories, 2010 (per cent)**

| Age group (years) | NSW        | Vic        | Qld        | WA          | SA         | Tas        | ACT        | NT          | Total      |
|-------------------|------------|------------|------------|-------------|------------|------------|------------|-------------|------------|
| 14–24             | 12.1       | 12.2       | 12.9       | 13.4        | 12.1       | 12.4       | 10.0       | 12.4        | 12.4       |
| 25–39             | 12.1       | 13.4       | 10.5       | 17.2        | 13.5       | 8.3        | 9.8        | 13.5        | 12.6       |
| 40+               | 4.8        | 4.8        | 4.6        | 5.2         | 4.5        | 3.9        | 4.8        | 6.4         | 4.8        |
| <b>All 14+</b>    | <b>8.1</b> | <b>8.5</b> | <b>7.7</b> | <b>10.0</b> | <b>8.0</b> | <b>6.4</b> | <b>7.3</b> | <b>10.0</b> | <b>8.3</b> |

(a) Used in the past 12 months.

(b) Used at least 1 of 14 illicit drugs (ecstasy, meth/amphetamine, cocaine, hallucinogens, inhalants, heroin, ketamine, GHB, injectable drugs, pain-killers/analgesics, tranquilisers/sleeping pills, steroids, methadone/buprenorphine, other opiates/opioids).

Source: AIHW 2011b. unpublished analysis of 2010 NDSHS.

## 6.7 Illicit drugs and health

A 2007 Australian burden of disease study found that 1.3% of deaths were attributable to illicit drug use (Begg et al. 2007). The deaths attributed to illicit drugs included those from hepatitis C, self-inflicted injuries, heroin use and benzodiazepine abuse. None of the deaths were attributable to cannabis abuse. An estimated 46,257 disability-adjusted-life-years (lost years of healthy life) were attributable to illicit drugs, apart from cannabis abuse, in 2003.

### 6.3.5 Mortality

In 2007, there were 976 drug-induced deaths among Australians of all ages in which illicit drugs were determined to be the underlying cause of death. Drug-induced deaths include deaths from accidental or intentional overdose, assault and disorders due to drug use. Of the 512 accidental drug-induced deaths in 2007, over half (58%) were accidental opioid deaths (Roxburgh & Burns 2009). This study expanded the focus of an earlier series of reports that focused solely on accidental opioid deaths. The results of the earlier series are not directly comparable with those from the latest study.

### 6.3.6 Non-fatal overdoses

Non-fatal overdose is a health risk for illicit drug users. Data from the Illicit Drug Reporting System (IDRS) show that almost half of injecting drug users surveyed had overdosed on heroin at some time in the past, and one in five had overdosed in the last 12 months (Table 6.14).

**Table 6.14: Proportion of injecting drug users<sup>(a)</sup> reporting non-fatal heroin overdose, selected risk behaviours and protective factors for overdose, Australia, 2010 (per cent)**

| Measure  | NSW | Vic | Qld | WA | SA | Tas | ACT | NT | Australia |
|--|-----|-----|-----|----|----|-----|-----|----|-----------|
| Ever overdosed on heroin                             | 62  | 60  | 36  | 47 | 38 | 17  | 48  | 25 | 44        |
| Overdosed on heroin in last 12 months <sup>(b)</sup> | 22  | 24  | 24  | 17 | 14 | —   | 19  | 8  | 19        |
| Last injection was in a public space <sup>(c)</sup>  | 15  | 31  | 10  | 9  | 6  | 9   | 4   | 4  | 13        |
| Currently in treatment                               | 68  | 55  | 40  | 47 | 38 | 40  | 55  | 12 | 47        |
| Consumed alcohol on the day before interview         | 24  | 28  | 24  | 22 | 22 | 27  | 29  | 21 | 25        |
| Consumed heroin on the day before interview          | 53  | 36  | 35  | 27 | 18 | —   | 27  | 1  | 27        |
| Total respondents (number)                           | 62  | 60  | 36  | 47 | 38 | 17  | 48  | 25 | 44        |

(a) Injecting drug users surveyed for the IDRS.

(b) Among those who had ever overdosed

(c) 'Public space' includes street, park, beach, car, public toilet only.

Source: National Drug and Alcohol Research Centre (NDARC) 2011 unpublished analysis of 2010 Illicit Drug Reporting System.

### 6.3.7 Self-reported health status

Among people aged 18 years or older who had used an illicit drug in the past 12 months, self-assessed health data suggest that around 1 in 7 (14.0%) rated their health as fair or poor, compared with 12.3% of the overall population (Table 6.15). Those who had used ecstasy or cocaine in the previous 12 months rated their health as better (a higher proportion rated it excellent or very good) than that of the population overall. This may be a reflection of the age profile of the users of these drugs.

**Table 6.15: Self-assessed health status<sup>(a)</sup>, 18 years or over, by recent use<sup>(b)</sup> of any illicit except cannabis and other selected drugs, 2010 (per cent)**

| Health status | Any illicit | Ecstasy | Meth/amphet-amine | Cocaine | All 18+ |
|---------------|-------------|---------|-------------------|---------|---------|
| Excellent     | 15.4        | 20.2    | 15.3              | 20.6    | 16.0    |
| Very good     | 37.6        | 41.5    | 36.9              | 42.4    | 37.6    |
| Good          | 33.0        | 30.6    | 34.2              | 27.6    | 34.1    |
| Fair          | 12.0        | 6.9     | 11.7              | 8.1     | 10.5    |
| Poor          | 2.0         | **0.8   | *1.9              | *1.3    | 1.8     |

(a) In response to the question: 'In general, would you say your health is...?'

(b) Used in the last 12 months.

Source:AIHW 2011b. unpublished analysis of 2010 NDSHS.

### Health conditions including mental illness

Diagnosis or treatment for a number of health conditions was collected in the 2010 NDSHS. Diagnosis or treatment in the last 12 months was reported for diabetes (5.4%), heart disease (19.1%), asthma (8.6%), cancer (2.8%) and mental illness (12.0%) (Table 6.16). Reported diagnosis or treatment varied by recent drug use status – those who had used any illicit drug other than cannabis in the previous 12 months were more likely to have suffered a mental illness or asthma than the general population; however, the relationship between drug use and mental illness is complex.

**Table 6.16: Self-reported health conditions<sup>(a)</sup> by selected recent drug use, persons aged 18 years or older, 2010 (per cent)**

| Health condition | Recent use  |         |                   |         | All 18+ |
|------------------|-------------|---------|-------------------|---------|---------|
|                  | Any illicit | Ecstasy | Meth/amphet-amine | Cocaine |         |
| Diabetes         | 4.1         | **1.0   | *1.5              | **0.5   | 5.4     |
| Heart disease    | 12.1        | *1.2    | 4.5               | *2.3    | 19.1    |
| Asthma           | 11.1        | 11.0    | 11.2              | 6.7     | 8.6     |
| Cancer           | 1.6         | **0.2   | *0.7              | **0.4   | 2.8     |
| Mental illness   | 20.9        | 16.2    | 25.6              | 17.4    | 12.0    |

(a) Respondents could select more than one condition in response to the question: 'In the last 12 months, have you been diagnosed or treated for...?'

(b) Includes heart diseases and hypertension (high blood pressure).

(c) Includes depression, anxiety disorder, schizophrenia, bi-polar disorder, an eating disorder and other form of psychosis.

\*\* Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Source:AIHW 2011b. unpublished analysis of 2010 NDSHS.

More information about mental health and illicit drug use (including cannabis) is provided in Chapter 4.

### 6.3.8 Injecting drug use and health

Three of the focus drugs for this chapter – heroin, meth/amphetamine and cocaine – are the drugs of choice for some of the injecting drug users surveyed through the Illicit Drug Reporting System (IDRS) (Table 6.17). In 2010, the majority of injecting drug users (IDUs) injected heroin (54%); 16% preferred meth/amphetamine and 10%, morphine. Findings from

the Ecstasy and Related Drug Trends Study (EDRS) also showed that some ecstasy users were injectors (Matthews & Bruno 2008). For more information about IDRS and EDRS methodology, refer to relevant NDARC publications.

**Table 6.17: Drug of choice, proportion of IDRS respondents, by state and territory, 2010 (per cent)**

| Drug of choice                     | NSW | Vic | Qld | WA | SA | Tas | ACT | NT | Australia |
|------------------------------------|-----|-----|-----|----|----|-----|-----|----|-----------|
| Heroin                             | 71  | 68  | 59  | 60 | 49 | 29  | 57  | 26 | 54        |
| Meth/amphetamine <sup>(a)</sup>    | 10  | 15  | 14  | 17 | 26 | 18  | 22  | 8  | 16        |
| Morphine                           | 1   | 3   | 7   | 4  | 4  | 25  | —   | 44 | 10        |
| Cocaine                            | 11  | 1   | 1   | —  | 2  | 1   | 1   | 5  | 3         |
| Methadone                          | —   | —   | 2   | —  | 1  | 7   | 2   | 5  | 2         |
| Buprenorphine <sup>(b)</sup>       | —   | 2   | —   | —  | 1  | —   | 2   | 1  | 1         |
| Other illicit drugs <sup>(c)</sup> | 7   | 11  | 17  | 19 | 17 | 20  | 16  | 12 | 14        |

(a) Includes speed powder, base, ice/crystal and liquid meth/amphetamine.

(b) Excludes buprenorphine-naloxone (Suboxone®).

(c) Includes oxycodone, cannabis and other drugs.

Source: Stafford & Burns 2011.

The injecting practices of some users place them at increased health risk, such as contracting viruses by sharing needles. One in ten injecting drug users reported sharing needles in 2010 and almost four in ten had shared other injecting equipment (Table 6.18). Sharing needles is linked to communicable diseases such as hepatitis C (HCV).

**Table 6.18: Proportion of injecting drug users (IDRS respondents) who had shared needles or other injecting equipment in last month, by state and territory, Australia, 2010 (per cent)**

|   | NSW | Vic | Qld | WA | SA | Tas | ACT | NT | Australia |
|---|-----|-----|-----|----|----|-----|-----|----|-----------|
| Needle sharing                                |     |     |     |    |    |     |     |    |           |
| Borrowed a needle                             | 13  | 15  | 16  | 7  | 7  | 3   | 11  | 3  | 10        |
| Lent a needle                                 | 18  | 21  | 25  | 15 | 7  | 12  | 16  | 4  | 16        |
| Shared any injecting equipment <sup>(a)</sup> | 41  | 48  | 66  | 36 | 36 | 29  | 32  | 14 | 39        |

(a) Includes spoons, water, tourniquets and filters; excludes needles/syringes

Source: Stafford & Burns 2011.

Data about communicable diseases among injecting drug users are gathered through the annual Needle and Syringe Program (NSP) survey, conducted by the National Centre in HIV Epidemiology and Clinical Research. In previous years, data were collected about both hepatitis B (HBV) and HCV. Previous results showed that, while a much smaller proportion of injecting drug users reported HBV than HCV infection, prevalence of HBV was higher for long-term injecting drug users than it was for those with a shorter history of injecting drug use.

In 2009, 36% of respondents to the NSP survey tested positive for HCV (Table 6.19). The prevalence of HCV generally increased with a longer duration of injecting drug use for both males and females. Females tested positive for HCV more frequently than males, particularly among those injecting for less than 3 years (23% and 7%, respectively). After 10 years of

injecting drug use, the majority of users (57%) had contracted HCV. This compares with an estimated general population rate of HCV of around 2% (Amin et al. 2004).

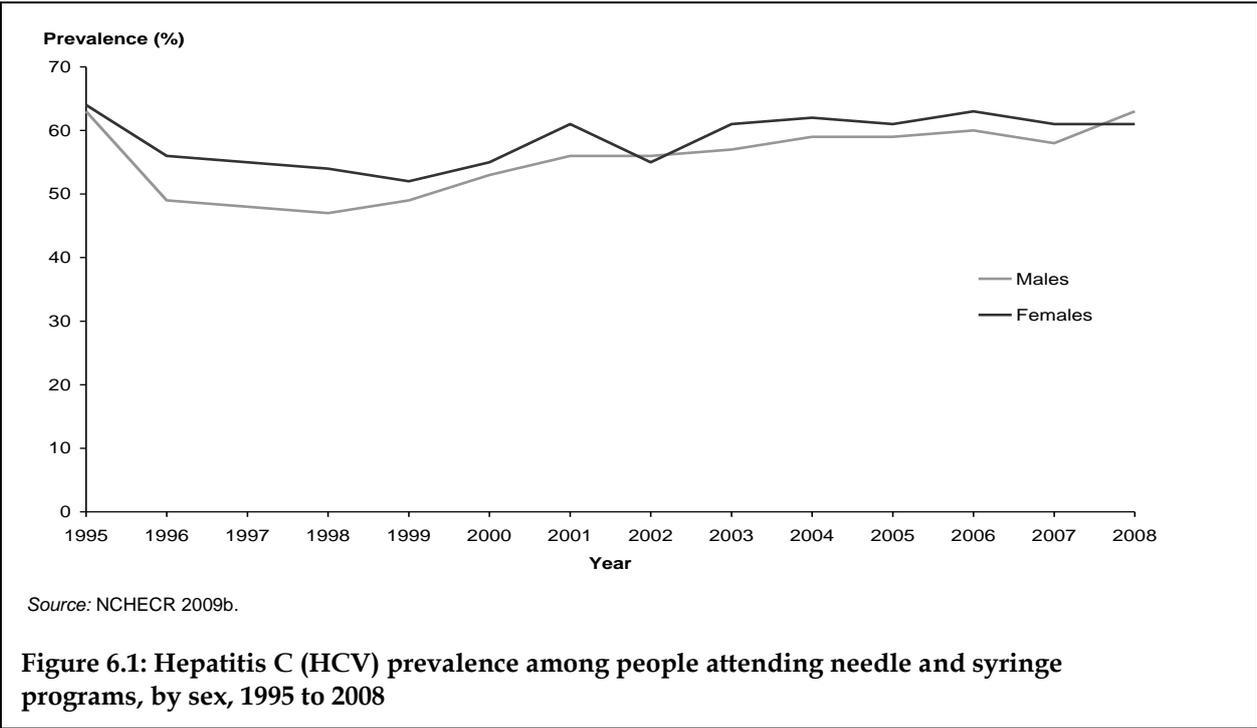
**Table 6.19: Prevalence of hepatitis C (HCV) among injecting drug users, by duration of injecting drug use, 2009 (per cent)**

| Duration of injecting drug use | Tested positive to HCV antibody |           |                        |
|--------------------------------|---------------------------------|-----------|------------------------|
|                                | Males                           | Females   | Persons <sup>(a)</sup> |
| Less than 3 years              | 7                               | 23        | 13                     |
| 3–5 years                      | 26                              | 28        | 27                     |
| 6–10 years                     | 36                              | 49        | 42                     |
| 10 or more years               | 56                              | 59        | 57                     |
| <b>Total</b>                   | <b>49</b>                       | <b>52</b> | <b>50</b>              |

(a) Includes persons whose sex was reported as transgender.  
 (b) Self-reported prevalence of hepatitis B data were presented in this table in previous versions of *Statistics on drug use in Australia* but are not presented in this table because those data are not collected anymore, from 2008 on.

Source: National Centre in HIV Epidemiology and Clinical Research (NCHECR) 2011 unpublished data.

Over time, HCV prevalence among IDUs has remained relatively stable (Figure 6.1), especially since 2003. In 2008, prevalence of HCV among males surpassed that among females for only the second time since 1995.



Human immunodeficiency virus (HIV) can also be contracted by sharing needles with an infected person. Data about the HIV-related syndrome, AIDS, show that the number of new AIDS diagnoses has been declining in Australia for some time, from 396 in 1997 to 161 in 2007. Available data also show a drop in the number of AIDS diagnoses among injecting drug users. The proportion of AIDS diagnoses related to injecting drug use has fallen over time, both in terms of numbers and as a proportion of all diagnoses by exposure category (Table 6.20). Similarly, the number of deaths following AIDS diagnosis has been decreasing over the last decade or so from 245 in 1997 to 25 in 2008 (excluding New South Wales).

**Table 6.20: AIDS diagnoses, by HIV exposure category, 1997 to 2008<sup>(a)</sup>**

| Exposure category                                 | Year of AIDS diagnosis |            |            |            |            |            |            |            |            |            |                     |                     |                     |
|---|------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|---------------------|---------------------|---------------------|
|   | 1997                   | 1998       | 1999       | 2000       | 2001       | 2002       | 2003       | 2004       | 2005       | 2006       | 2007 <sup>(b)</sup> | 2008 <sup>(c)</sup> | 2009 <sup>(c)</sup> |
|   | (number)               |            |            |            |            |            |            |            |            |            |                     |                     |                     |
| Men who have sex with men                         | 285                    | 212        | 131        | 171        | 140        | 168        | 150        | 118        | 136        | 118        | 98                  | 57                  | 47                  |
| Men who have sex with men, and injecting drug use | 13                     | 11         | 12         | 16         | 9          | 15         | 16         | 18         | 20         | 16         | 10                  | n.p.                | 6                   |
| Injecting drug use <sup>(d)</sup>                 | 18                     | 23         | 11         | 15         | 8          | 9          | 15         | 12         | 15         | 11         | n.p.                | n.p.                | n.p.                |
| Heterosexual contact                              | 52                     | 57         | 42         | 42         | 40         | 38         | 43         | 37         | 44         | 56         | 32                  | 30                  | 22                  |
| Other/undetermined <sup>(e)</sup>                 | 27                     | 26         | 21         | 21         | 15         | 14         | 20         | 15         | 18         | 17         | 20                  | 14                  | 13                  |
| <b>Total<sup>(f)</sup></b>                        | <b>396</b>             | <b>330</b> | <b>218</b> | <b>265</b> | <b>210</b> | <b>246</b> | <b>244</b> | <b>202</b> | <b>233</b> | <b>222</b> | <b>161</b>          | <b>101</b>          | <b>88</b>           |
|   | (per cent)             |            |            |            |            |            |            |            |            |            |                     |                     |                     |
| Men who have sex with men                         | 72.0                   | 64.2       | 60.1       | 64.5       | 65.7       | 68.3       | 61.2       | 58.4       | 58.4       | 53.4       | 60.9                | 56.4                | 53.4                |
| Men who have sex with men, and injecting drug use | 3.3                    | 3.3        | 5.5        | 6.0        | 4.2        | 6.1        | 6.5        | 8.9        | 8.6        | 7.2        | 6.2                 | n.p.                | 6.8                 |
| Injecting drug use <sup>(d)</sup>                 | 4.5                    | 7.0        | 5.0        | 5.7        | 3.8        | 3.7        | 6.1        | 5.9        | 6.4        | 5.0        | n.p.                | n.p.                | n.p.                |
| Heterosexual contact                              | 13.1                   | 17.3       | 19.3       | 15.8       | 18.8       | 15.4       | 17.6       | 18.3       | 18.9       | 25.3       | 19.9                | 29.7                | 25.0                |
| Other/undetermined <sup>(e)</sup>                 | 6.8                    | 7.9        | 9.6        | 7.9        | 7.0        | 5.7        | 8.2        | 7.4        | 7.7        | 7.7        | 11.2                | 11.9                | 14.8                |

(a) This time series has been updated from *Statistics on Drug Use in Australia 2006*.

(b) AIDS diagnoses for 'Injecting drug use' in 2007 are included in 'Other/undetermined' due to small cell sizes.

(c) AIDS diagnoses in NSW in 2008 not included. 'Other/undetermined' includes 2 diagnoses for 'men who have sex with men and injecting drug use' and 'injecting drug use'.

(d) Excludes males who also reported a history of homosexual contact.

(e) Includes diagnoses related to haemophilia/coagulation disorder and receipt of blood tissue.

(f) Includes 13 people whose sex was reported as transgender.

Source: NCHECR 2011 unpublished data.

# 7 Pharmaceuticals

## 7.1 Key findings

- In 2008, approximately 262 million prescriptions were dispensed through pharmacies. This equates to about 12 prescriptions per person. Most commonly these were cholesterol-lowering drugs, antibiotics and drugs to treat high blood pressure.
- Prescriptions written by general practitioners (GPs) in 2009–10 were most commonly for the nervous system, including analgesics (pain-killers) and antidepressants, accounting for one in five prescriptions (21.6%).
- In 2010, about one in 24 people in Australia aged 14 years or older (4.2%) had used pharmaceuticals for non-medical purposes in the previous 12 months. Usage was higher among those in police watch-houses and among prison entrants than in the general community. In 2010, just over one-fifth (22%) of prison entrants had used pharmaceutical drugs for non-medical purposes in the previous 12 months.

## 7.2 Introduction

This chapter presents information on patterns of pharmaceutical drug prescription and use in Australia. It also explores data relating to pharmaceutical misuse. A medicine is any substance used in treating disease, a medicament, or a remedy (Butler S 2009). The terms 'medicine' and 'pharmaceutical' are used interchangeably in this chapter.

Medicines are mostly obtained by prescription, or purchased over the counter without a prescription (AIHW 2010b). However, the potential exists for these drugs to be misused in the population.

**A number of strategies** have been employed over time to prevent pharmaceutical misuse. Project STOP is an online, decision-making tool supporting pharmacists who need to establish whether requests for products containing pseudoephedrine are legitimate. It also assists pharmacists in meeting their state regulatory recording requirements where they exist (The Pharmacy Guild of Australia 2011). A National Pharmaceutical Misuse Strategy is also currently under development.

The *Therapeutic Goods Act 1989 (Cwlth)*, which came into effect on 15 February 1991, provides a national framework for regulating therapeutic goods in Australia to ensure the quality, safety and efficacy of medicines and the quality, safety and performance of medical devices (DoHA 2005).

### **Box 7.1: Scheduling and the Pharmaceutical Benefits Scheme**

Scheduling refers to a national classification system that controls how medicines and chemicals are made available to the public. Medicines and chemicals are classified into Schedules according to the level of regulatory control over their availability required to protect public health and safety (DoHA 2005).

The Schedules are published in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP). They are given legal effect through state and territory legislation. The SUSDP is legally referred to as the Poisons Standard (DoHA 2005).

Drugs and poisons are classified according to the Schedules in which they are included (DoHA 2009d). (See Appendix A for additional information on Schedule categories.)

The Pharmaceutical Benefits Scheme (PBS) subsidises the cost of a wide range of prescription medications. It provides Australians with access to necessary and cost-effective medicines at an affordable price. At December 2009, the scheme covered 874 drug substances (generic drugs), available in 2,168 forms and strengths, and marketed as 3,949 products (brands) (AIHW 2010b).

The Repatriation Pharmaceutical Benefits Scheme (RPBS) assists eligible war veterans and their dependants. It is generally similar to the PBS for concessional beneficiaries, but covers a somewhat broader range of pharmaceuticals.

Before a medicine can be subsidised by the PBS, it is assessed by the Pharmaceutical Benefits Advisory Committee, which includes medical practitioners, other health professionals and a consumer representative. The committee takes into account the medical conditions for which the medicine has been approved for use in Australia by the Therapeutic Goods Administration, its clinical effectiveness, its safety and its cost-effectiveness compared with that of other treatments. Once the committee has recommended a medicine, it is considered by the Pharmaceutical Benefits Pricing Authority. The price is negotiated between the manufacturer and the Australian Government Department of Health and Ageing. The Australian Government then considers the listing (AIHW 2010b; DoHA 2009a).

In 1988, the PBAC convened the Drug Utilization Sub-Committee (DUSC) to assist it in recommending listings on the PBS (DoHA 2009a).

Since 1989, DUSC has commissioned the Pharmacy Guild of Australia to conduct an annual survey to estimate the prescription volumes for drugs in the non-subsidised categories (that is, private prescriptions and PBS prescriptions priced under the general patient co-payment (DoHA 2009c)).

## **7.2.1 Data sources**

Australian data on the use of pharmaceutical products are derived from two main sources:

- Medicare Australia records of prescriptions submitted for payment of a subsidy under the Pharmaceutical Benefits and Repatriation Pharmaceutical Benefits Schemes (PBS/RPBS)
- Pharmacy Guild Survey, an ongoing survey of community pharmacies conducted by the Pharmacy Guild of Australia.

The information in this chapter sourced from the PBS/RPBS and the Pharmacy Guild Survey describes only pharmaceutical products that are dispensed in community pharmacies. It does not include medications issued from public hospitals. The Pharmacy Guild Survey

estimates the number of prescriptions issued from community pharmacies that are not covered by the PBS/RPBS.

Some data in this chapter were also drawn from the Bettering the Evaluation and Care of Health (BEACH) survey of Australian general practitioners (GPs).

Differentiating between use of pharmaceuticals for legitimate medical purposes and for non-medical or illicit purposes at a population level is complex. Information on pharmaceutical misuse in this chapter has been drawn from two main sources:

- the National Drug Strategy Household Survey (NDSHS), which captures information about illicit drug use (including pharmaceutical misuse) among people in households
- the Drug Use Monitoring in Australia (DUMA) program, which is a quarterly collection of information from police detainees at several sites (police stations or watch-houses) across Australia.

Some data has also been drawn from the 2010 National Prisoner Health Census (NPHC). The census collected information from prison entrants, prisoners who visited a clinic, prisoners who were taking prescribed medication while in custody, prison clinic services and staffing levels (AIHW 2011d).

## **7.3 Prescription medicines**

In 2008, approximately 262 million prescriptions were dispensed through community pharmacies. This represented an increase of 24% over the number of prescriptions dispensed in 2001, and an increase of 4% over the number dispensed in 2007.

### **7.3.1 Prescribing patterns of general practitioners**

The BEACH survey of general practice activity collects information on drugs prescribed by general practitioners (GPs). In 2009–10, GPs wrote an estimated 108,001 prescriptions, at a rate of 107 per 100 encounters. Medications for the nervous system, including analgesics (pain-killers) and antidepressants, were the most commonly prescribed group, accounting for 21.6% of all prescriptions. The next most common were cardiovascular medications (19.8%), followed by antibiotics (19.5%), alimentary tract and metabolism medications (9.8%), and respiratory medications (6.3%) (Britt et al. 2010).

In 2009–10, of the top 10 most commonly prescribed medications, 3.9% were amoxicillin, a form of antibiotic, 3.2% were paracetamol, a form of pain-killer and 3.2% were cephalexin, another form of antibiotic (Table 7.1). Other medications commonly prescribed were cholesterol lowering drugs, drugs to lower blood pressure, drugs to treat diabetes and drugs to treat asthma.

**Table 7.1: Medications most frequently prescribed by GPs, 2009–10**

| Drug <sup>(a)</sup>                    | Action                   | Proportion of prescriptions (per cent) | Prescriptions per 100 encounters |
|--|--------------------------|--|----------------------------------|
| Amoxicillin                            | Antibiotic               | 3.9                                    | 3.2                              |
| Paracetamol                            | Pain-killer              | 3.2                                    | 2.7                              |
| Cephalexin                             | Antibiotic               | 3.2                                    | 2.6                              |
| Paracetamol with codeine               | Pain-killer              | 2.0                                    | 1.7                              |
| Amoxicillin with potassium clavulanate | Antibiotic               | 2.0                                    | 1.6                              |
| Atorvastatin                           | Lowers blood cholesterol | 1.9                                    | 1.6                              |
| Salbutamol                             | Opens airways            | 1.7                                    | 1.4                              |
| Roxithromycin                          | Antibiotic               | 1.6                                    | 1.3                              |
| Oxycodone                              | Pain-killer              | 1.6                                    | 1.3                              |
| Metformin                              | Lowers blood glucose     | 1.5                                    | 1.3                              |

(a) Generic name.

*Note:* These data refer to prescriptions written by GPs. Actual prescriptions filled per 100 encounters may be higher than the numbers in this table, because many prescriptions have 'repeats'—drugs for chronic disorders frequently have 5 repeats.

*Source:* Britt et al. 2010.

### 7.3.2 Volume

The top 10 medicines by number of prescriptions issued from community pharmacies accounted for approximately 56 million prescriptions in 2008. This represented 21% of all community prescriptions issued that year (Table 7.2). The majority (76%) of the top 10 prescription medicines dispensed at community pharmacies were prescriptions covered by the PBS/RPBS.

In 2008, two of the top three ranked prescription medicines distributed through community pharmacies were the cholesterol-lowering drugs atorvastatin and simvastatin. These drugs were the two most frequently subsidised through the PBS/RPBS. Drugs to treat high blood pressure (perindopril, irbesartan and atenolol) also appeared in the top 10 prescription medicines distributed through community pharmacies.

**Table 7.2: Top 10 prescription medicines distributed through community pharmacies, 2008**

| <b>Drug (action)</b>  | <b>PBS/RPBS</b> | <b>Pharmacy Guild Survey</b> | <b>Total community use</b> |
|---|-----------------|------------------------------|----------------------------|
|   |                 | <b>(number)</b>              |                            |
| Atorvastatin (blood lipid-reducing/lowers blood cholesterol)  | 10,842,897      | 31,796                       | <b>10,874,693</b>          |
| Amoxicillin (antibiotic)                                      | 2,558,758       | 4,018,255                    | <b>6,577,013</b>           |
| Simvastatin (blood lipid-reducing/lowers blood cholesterol)   | 5,564,032       | 117,021                      | <b>5,681,053</b>           |
| Esomeprazole (lowers stomach acid) <sup>(b)</sup>             | 5,624,891       | 16,193                       | <b>5,641,084</b>           |
| Perindopril (lowers blood pressure)                           | 3,804,845       | 1,519,398                    | <b>5,324,243</b>           |
| Cefalexin (antibiotic)  | 2,392,966       | 2,178,465                    | <b>4,571,431</b>           |
| Irbesartan (lowers blood pressure)                            | 3,128,170       | 1,232,485                    | <b>4,360,655</b>           |
| Atenolol (lowers blood pressure)                              | 3,262,786       | 1,017,373                    | <b>4,280,159</b>           |
| Metformin Hydrochloride (lowers blood glucose) <sup>(c)</sup> | 3,105,911       | 1,086,583                    | <b>4,192,494</b>           |
| Amoxicillin with clavulanic acid (strong antibiotic)          | 1,737,478       | 2,378,481                    | <b>4,115,959</b>           |

(a) PBS – Pharmaceutical Benefits Scheme; RPBS – Repatriation Pharmaceutical Benefits Scheme.

(b) For treatment of gastroesophageal reflux disease and stomach and duodenal ulcers.

(c) For the treatment of type 2 diabetes.

Source: DoHA 2009a.

### 7.3.3 Cost to the Australian Government

The top three drugs ranked by cost to the Australian Government in 2008 were also the three drugs with the highest volume of prescriptions: the cholesterol-lowering drug atorvastatin, the anti-ulcer drug esomeprazole and another cholesterol-lowering drug, simvastatin. In 2008, these three drugs cost the Australian Government \$740 million, \$263 million and \$253 million, respectively (Table 7.3). The sum of the 10 drugs ranked in Table 7.3 cost the Australian Government nearly \$2.5 billion in 2008. The schizophrenia treatment drug olanzapine was ranked seventh in cost to the government, yet had a relatively small number of prescriptions compared with other drugs in the top 10. Similarly, about 60,000 prescriptions of the drug ranibizumab used to treat age-related macular degeneration, cost the Australian Government almost \$125 million.

**Table 7.3: Top 10 prescription drugs by cost to the Australian Government (PBS and RPBS)<sup>(a)</sup>, 2008**

| <b>Drug (action)</b>   | <b>Number of prescriptions</b> | <b>Cost to Australian Government (\$)</b> |
|--|--------------------------------|---|
| Atorvastatin (blood lipid-reducing/lowers blood cholesterol) | 10,842,897                     | 740,245,262                               |
| Esomeprazole (lowers stomach acid) <sup>(a)</sup>            | 5,624,891                      | 263,145,251                               |
| Simvastatin (blood lipid-reducing/lowers blood cholesterol)  | 5,564,032                      | 252,826,406                               |
| Clopidogrel (anti-coagulant)                                 | 2,770,798                      | 228,454,045                               |
| Salmeterol and fluticasone (bronchodilator – opens airways)  | 2,923,581                      | 203,549,689                               |
| Rosuvastatin (blood lipid-reducing/lowers blood cholesterol) | 2,402,346                      | 187,311,404                               |
| Olanzapine (antipsychotic)                                   | 904,136                        | 168,368,858                               |
| Venlafaxine (antidepressant)                                 | 2,789,985                      | 153,425,682                               |
| Pantoprazole (anti-ulcer)                                    | 3,319,865                      | 130,412,386                               |
| Rosuvastatin (treats macular degeneration)                   | 60,201                         | 124,702,552                               |

(a) For treatment of gastroesophageal reflux disease and stomach and duodenal ulcers.

Source: DoHA 2009a.

### 7.3.4 Defined daily dose

The most accurate way to express the consumption of prescription drugs is through the defined daily dose per thousand population per day (DDD). The DDD is the amount necessary to treat one adult for one day. The use of DDD allows comparisons to be made irrespective of the price, preparation or the quantity of the prescription.

Cholesterol lowering and anti-hypertensive drugs comprised the top five drugs in terms of DDD rates of all prescription medicines in 2008 (Table 7.4). Many of the top 10 medicines ranked by DDD did not appear in the top 10 ranked by number of prescriptions (Table 7.2) or the top 10 ranked by cost to government (Table 7.3). These included a drug normally prescribed as a bronchodilator (salbutamol) and the analgesic/anticoagulant aspirin.

**Table 7.4: Top 10 prescription medicines issued through community pharmacies by defined daily dose<sup>(a)</sup>, 2008**

| <b>Drug (action)</b>                | <b>PBS/RPBS</b> | <b>Pharmacy Guild Survey</b> | <b>Total community use</b> |
|-------------------------------------|-----------------|------------------------------|----------------------------|
| Atorvastatin (blood lipid-reducing) | 67.9            | 0.2                          | <b>68.1</b>                |
| Ramipril (anti-hypertensive)        | 28.5            | 11.5                         | <b>40.0</b>                |
| Perindopril (anti-hypertensive)     | 21.8            | 9.1                          | <b>30.9</b>                |
| Simvastatin (blood lipid-reducing)  | 24.8            | 0.2                          | <b>25.0</b>                |
| Irbesartan (anti-hypertensive)      | 16.9            | 6.7                          | <b>23.6</b>                |
| Salbutamol (bronchodilator)         | 16.2            | 5.1                          | <b>21.3</b>                |
| Esomeprazole (anti-ulcer)           | 20.5            | 0.1                          | <b>20.5</b>                |
| Sertraline (antidepressant)         | 12.6            | 7.2                          | <b>19.8</b>                |
| Aspirin (analgesic, anti-coagulant) | 18.2            | 1.4                          | <b>19.7</b>                |
| Frusemide (diuretic)                | 17.8            | 1.3                          | <b>19.1</b>                |

(a) Defined daily dose per 1,000 population per day.

Source: DoHA 2009a.

## 7.4 Community prescriptions for major drug groups

Medicines are classified into Anatomical Therapeutic Chemical (ATC) groups, generally according to the target organ of individual drugs. In 2008, the most widely prescribed class of drug was for the cardiovascular system (78 million prescriptions), followed by drugs that affect the central nervous system (49 million prescriptions) (Table 7.5). As a proportion of all prescriptions, those for the cardiovascular system increased from 25% in 2001 to 30% in 2008. There was very little proportional change among the other ATC groups in this period.

**Table 7.5: Number of community prescriptions issued for selected ATC groups, 2001 to 2008**

| ATC group                               | 2001         | 2002         | 2003         | 2004         | 2005         | 2006         | 2007         | 2008         |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>PBS/RPBS (millions)</b>              |              |              |              |              |              |              |              |              |
| Alimentary <sup>(a)</sup>               | 19.4         | 21.5         | 22.7         | 24.4         | 25.0         | 25.0         | 26.3         | 27.5         |
| Cardio <sup>(b)</sup>                   | 49.3         | 52.8         | 55.6         | 59.7         | 59.8         | 60.5         | 62.5         | 65.6         |
| Anti-infectives <sup>(c)</sup>          | 13.2         | 12.8         | 12.6         | 13.0         | 12.8         | 12.6         | 12.9         | 13.4         |
| Central nervous <sup>(d)</sup>          | 33.3         | 34.2         | 35.2         | 36.8         | 36.3         | 35.8         | 35.6         | 37.3         |
| Respiratory <sup>(e)</sup>              | 11.4         | 11.2         | 10.8         | 10.8         | 10.5         | 10.0         | 10.2         | 10.5         |
| Other <sup>(f)</sup>                    | 38.0         | 40.5         | 41.1         | 42.3         | 39.3         | 38.8         | 38.7         | 39.3         |
| <b>Total source</b>                     | <b>164.5</b> | <b>173.0</b> | <b>178.1</b> | <b>187.0</b> | <b>183.8</b> | <b>182.7</b> | <b>186.1</b> | <b>193.4</b> |
| <b>Pharmacy Guild Survey (millions)</b> |              |              |              |              |              |              |              |              |
| Alimentary <sup>(a)</sup>               | 3.2          | 3.1          | 2.9          | 3.0          | 3.1          | 3.2          | 3.7          | 4.9          |
| Cardio <sup>(b)</sup>                   | 3.4          | 3.4          | 3.6          | 4.2          | 6.6          | 8.4          | 11.7         | 12.8         |
| Anti-infectives <sup>(c)</sup>          | 11.0         | 10.0         | 9.2          | 10.7         | 11.4         | 11.4         | 14.2         | 15.9         |
| Central nervous <sup>(d)</sup>          | 7.6          | 7.5          | 7.2          | 7.9          | 8.6          | 9.4          | 12.0         | 12.1         |
| Respiratory <sup>(e)</sup>              | 3.2          | 3.5          | 3.3          | 3.3          | 3.2          | 4.0          | 3.2          | 2.7          |
| Other <sup>(f)</sup>                    | 17.5         | 16.3         | 15.9         | 17.2         | 17.4         | 17.5         | 19.8         | 19.9         |
| <b>Total source</b>                     | <b>46.0</b>  | <b>43.6</b>  | <b>42.0</b>  | <b>46.3</b>  | <b>50.3</b>  | <b>53.9</b>  | <b>64.7</b>  | <b>68.3</b>  |
| <b>Total community (millions)</b>       |              |              |              |              |              |              |              |              |
| Alimentary <sup>(a)</sup>               | 22.6         | 24.6         | 25.6         | 27.5         | 28.1         | 28.2         | 30.1         | 32.4         |
| Cardio <sup>(b)</sup>                   | 52.7         | 56.1         | 59.2         | 64.0         | 66.4         | 68.9         | 74.2         | 78.4         |
| Anti-infectives <sup>(c)</sup>          | 24.2         | 22.8         | 21.8         | 23.7         | 24.2         | 24.1         | 27.1         | 29.3         |
| Central nervous <sup>(d)</sup>          | 40.9         | 41.7         | 42.4         | 44.7         | 44.9         | 45.1         | 47.6         | 49.3         |
| Respiratory <sup>(e)</sup>              | 14.6         | 14.6         | 14.2         | 14.1         | 13.7         | 14.0         | 13.3         | 13.1         |
| Other <sup>(f)</sup>                    | 55.5         | 56.7         | 56.9         | 59.5         | 56.7         | 56.3         | 58.5         | 59.2         |
| <b>Total source</b>                     | <b>210.5</b> | <b>216.6</b> | <b>220.1</b> | <b>233.4</b> | <b>234.0</b> | <b>236.7</b> | <b>250.8</b> | <b>261.7</b> |

(a) Alimentary includes drugs for peptic ulcers/reflux.

(b) Cardio includes drugs that lower blood pressure and lipids.

(c) Anti-infectives includes antibiotics.

(d) Central nervous includes analgesics, tranquillisers and antidepressants.

(e) Respiratory includes anti-asthmatic drugs.

(f) Other includes all other drugs listed for use in Australia.

Source: DoHA 2009a.

## 7.5 Pharmaceutical misuse

Misuse of pharmaceutical products in Australia is a challenging issue for both health and law enforcement bodies. There are a limited number of data sources available that provide information on this issue.

### 7.5.1 How are pharmaceuticals diverted?

In December 2007, the Drugs and Crime Prevention Committee of the Parliament of Victoria tabled an inquiry report into the misuse/abuse of benzodiazepines and other pharmaceutical drugs in Victoria (Drugs and Crime Prevention Committee 2007). The committee identified a number of ways by which an individual may obtain pharmaceuticals for misuse. These included:

- stealing, forging or altering prescriptions, which are then used to unlawfully obtain the drugs
- burglary of surgeries and pharmacies
- 'doctor shopping' (presenting to several doctors and obtaining prescriptions for imaginary or exaggerated symptoms)
- poor prescribing practices, such as prescribing larger quantities than are needed to manage the patient's condition/s, providing an opportunity for the patient to sell the excess to others
- purchasing on the black market
- purchasing over the Internet
- self-prescribing by health workers, or their otherwise misappropriating pharmaceuticals through their work
- opportunistic means (for example, from family members or friends who have been legitimately prescribed these medications).

### 7.5.2 Pharmaceutical misuse among the general population

The NDSHS series collects information on use for non-medical purposes of selected pharmaceuticals including pain-killers/analgesics, tranquillisers/sleeping pills, steroids, methadone/buprenorphine and other opiates in ways not medically intended, whether under prescription or available 'over the counter'. The NDSHS asks only about these specific drug types and so does not cover the full spectrum of pharmaceutical drugs that may be misused in the community.

#### Use of pharmaceuticals for non-medical purposes

In 2010, 7.4% of people in Australia aged 14 years and over had used pharmaceuticals for non-medical purposes in their lifetime. About half of these (4.2%) had done so in the previous 12 months (AIHW 2011a).

People aged 20–29 years were more likely than those in other age groups to have used pharmaceuticals for non-medical purposes in their lifetime (10.3%) and in the previous 12 months (5.6%) (Table 7.6).

Whereas males were slightly more likely than females to have used pharmaceuticals for non-medical purposes in their lifetime (7.9% versus 6.9%), equal proportions of males and

females (4.1% and 4.2%, respectively) had used these drugs in the 12 months before the survey (Table 7.7).

**Table 7.6: Use of pharmaceuticals for non-medical purposes, persons aged 14 years or older, by age, 2010 (per cent)**

| Period            | Age group (years) |       |       |       |     |              | 14–19 | 18+ |
|-------------------|-------------------|-------|-------|-------|-----|--------------|-------|-----|
|                   | 14–17             | 18–19 | 20–29 | 30–39 | 40+ | Total (14 +) |       |     |
| In lifetime       | 3.2               | 6.8   | 10.3  | 9.7   | 6.2 | 7.4          | 4.5   | 7.7 |
| In last 12 months | 2.3               | 5.0   | 5.6   | 4.5   | 3.8 | 4.2          | 3.2   | 4.3 |
| In last month     | *0.9              | *2.9  | 2.1   | 1.8   | 2.1 | 2.0          | 1.6   | 2.0 |
| In last week      | **0.1             | *1.0  | 0.9   | 1.0   | 1.1 | 1.0          | *0.4  | 1.1 |

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

\*\* Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Note: Includes pain-killers/analgesics, tranquillisers/sleeping pills, methadone, other opiates and steroids used for non-medical purposes.

Source: AIHW 2011a.

**Table 7.7: Use of pharmaceuticals for non-medical purposes, people aged 14 years or older, by sex, 2010 (per cent)**

| Period            | Males | Females | Persons |
|-------------------|-------|---------|---------|
| In lifetime       | 7.9   | 6.9     | 7.4     |
| In last 12 months | 4.1   | 4.2     | 4.2     |
| In last month     | 1.9   | 2.0     | 2.0     |
| In last week      | 1.0   | 1.0     | 1.0     |

Note: Includes pain-killers/analgesics, tranquillisers/sleeping pills, methadone, other opiates and steroids used for non-medical purposes.

Source: AIHW 2011a.

## Frequency of use

Roughly equal proportions of recent users of pharmaceuticals for non-medical purposes used these drugs daily or weekly (27.6%) or once or twice a year (31.0%) (Table 7.8). By age group, those aged 40+ years were most likely to use pharmaceuticals for non-medical purposes daily or weekly (33.8%).

**Table 7.8: Frequency of pharmaceuticals for non-medical purposes use, recent users aged 14 years or older, by age, by sex, 2010 (per cent)**

| Frequency            | Age group |       |       |      | Sex   |         | Persons |
|----------------------|-----------|-------|-------|------|-------|---------|---------|
|                      | 14–19     | 20–29 | 30–39 | 40+  | Males | Females |         |
| Daily or weekly      | *9.6      | 22.3  | 25.3  | 33.8 | 24.2  | 31.0    | 27.6    |
| About once a month   | *18.0     | 18.0  | 18.5  | 20.7 | 20.7  | 18.2    | 19.4    |
| Every few months     | 33.1      | 22.7  | 18.9  | 20.9 | 21.2  | 22.7    | 21.9    |
| Once or twice a year | 39.3      | 37.0  | 37.2  | 24.6 | 33.9  | 28.1    | 31.0    |

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

Note: Base is recent users.

Source: AIHW 2011a.

## **Source of supply**

Of people who had used pain-killers for non-medical purposes in the previous 12 months, three in five (59.2%) usually obtained them from a shop/retail outlet. 'Friend or acquaintance' (32.4%) or 'prescription for medical condition' (30.1%) were the most commonly nominated sources of supply for recent users of tranquillisers/sleeping pills (AIHW 2011a).

### **7.5.3 Use among police watch-house detainees**

The Drug Use Monitoring in Australia (DUMA) program is a quarterly collection of information from police detainees at several sites (police stations or watch-houses) across Australia. There are two parts to the information collected: a questionnaire, which is conducted with a trained interviewer independent of the police; and a urine sample that is tested for seven different classes of drug.

Urinalysis does not differentiate between illegal and legal use of prescription drugs. Hence it is plausible that some detainees testing positive to drugs such as benzodiazepines or opioids may be legitimately using such drugs as prescribed by a medical practitioner, including as part of a treatment program. To overcome this limitation, detainees are asked to report whether they have taken any medication prescribed to them by a doctor or medical professional.

In 2009, 5% of detainees reported that they had taken prescription benzodiazepines in the 30 days before being detained by the police. In 2010, 19% of detainees reported that they had taken prescription benzodiazepines in the past 30 days (AIC 2010).

### **7.5.4 Use among prisoners**

The National Prisoner Health Census was conducted in 44 of the 45 public and private prisons throughout in all states and territories in Australia, except New South Wales and Victoria, during October and November 2010. Data were collected over a two-week period on all prison entrants, all prisoners who visited a clinic, prison clinic services and staffing levels, and for one day on all prisoners taking prescribed medication while in custody (AIHW 2010d).

In 2010, just over one-fifth (22%) of prison entrants had used pharmaceutical drugs for non-medical purposes in the previous 12 months (Table 7.9). Female prison entrants were more likely (47%) than male prison entrants (18%) to have used these drugs.

**Table 7.9: Use of pharmaceuticals for non-medical purposes, prison entrants aged 18 years or older, by age and sex, 2010, (per cent)**

|                         | Age group |       |       |     | Sex   |         |         |
|-------------------------|-----------|-------|-------|-----|-------|---------|---------|
|                         | 18–19     | 20–29 | 30–39 | 40+ | Males | Females | Persons |
| Proportion of prisoners | 20        | 29    | 19    | 12  | 18    | 47      | 22      |
| Number of prisoners     | 8         | 68    | 36    | 16  | 94    | 40      | 134     |

*Notes*

1. Excludes New South Wales and Victoria, which did not participate in the 2010 Census.
2. Totals include 1 entrant whose sex was unknown, and 11 entrants whose age was unknown.
3. Pharmaceuticals defined as pain-killers/analgesics, tranquilisers/sleeping pills, steroids and barbiturates.

*Sources:* AIHW 2011e unpublished analysis of NPHC 2010.

# 8 Aboriginal and Torres Strait Islander people

## 8.1 Key findings

- The use of tobacco, alcohol and other drugs by Aboriginal and Torres Strait Islander people differs from that of non-Indigenous Australians in a number of ways.
- Almost half of Aboriginal and Torres Strait Islander people aged 15 years or over were current smokers in 2008, a much larger proportion than for other Australians. Over 60% of Aboriginal and Torres Strait Islander current daily smokers had tried to quit or reduce smoking in the last 12 months.
- Tobacco smoking accounted for 12% of the total burden of disease for Aboriginal and Torres Strait Islander people in 2003. There are a range of health effects for Aboriginal and Torres Strait Islander smokers as there are for other smokers.
- More than one-third of Aboriginal and Torres Strait Islander people aged 15 years or over did not drink in 2008, and another 46.3% drank at levels of low risk for harm. Indigenous males and younger people were more likely to drink at high-risk levels.
- Alcohol use accounted for 5% of the burden of disease among Aboriginal and Torres Strait Islander people in 2003. Aboriginal and Torres Strait Islander people who drank at risky or high-risk levels reported poorer health and had higher levels of psychological distress. Around 13% of Indigenous children aged 4–14 had a family member or friend with alcohol-related problems in the past 12 months.
- In 2008, around 21% of Aboriginal and Torres Strait Islander people had used an illicit drug in the past 12 months, mostly cannabis. Around 3.4% of the Aboriginal and Torres Strait Islander population's burden of disease in 2003 was attributable to illicit drug use.
- Around one-fifth of Aboriginal and Torres Strait Islander people who were diagnosed with HIV in 2004–2008 were exposed to the virus through injecting drug use. Other harms associated with recent illicit drug use included a greater likelihood of stress related to trouble with the police, abuse or violent crime.

## 8.2 Introduction

The Council of Australian Governments made a commitment in November 2008 to significantly reduce the gap between Aboriginal and Torres Strait Islander people and non-Indigenous people in terms of life expectancy and opportunities. Tobacco has been identified as the leading risk factor contributing to the health gap, accounting for 17% of the gap; alcohol was identified as accounting for 4% of the gap (Commonwealth of Australia 2010a).

The National Aboriginal and Torres Strait Islander Peoples Drug Strategy will be developed to address specific priorities under the National Drug Strategy 2010–2015. It will provide guidance to implement drug policies in a culturally appropriate way.

Measuring progress against targets and general improvements to data about alcohol and drug use among Indigenous Australians are acknowledged as priorities in the Closing the Gap in Indigenous Disadvantage reform activities. The 2010 inaugural National Indigenous

Drug and Alcohol Conference supported this focus – one of its resolutions was an urgent need for accessible and up-to-date information on drug use issues specific to Aboriginal and Torres Strait Islander people (NIDAC 2010).

This chapter presents recent information about tobacco, alcohol and illicit drugs. However, it is acknowledged that, just as for the Australian population, many Aboriginal and Torres Strait Islander people use more than one drug. In some areas, this leads to a concentration of risks for individuals. For example, Aboriginal and Torres Strait Islander daily smokers were twice as likely as those who did not smoke daily to consume risky/high-risk amounts of alcohol (25% compared with 11%) and to have used illicit drugs in the last 12 months (31% compared with 11%) (AIHW 2011f).

### 8.3 Data sources

There is more than one data source for information about tobacco, alcohol and other drug use among Aboriginal and Torres Strait Islander people.

The chapter uses the National Aboriginal and Torres Strait Islander Social Survey (NATSISS) 2008 as its primary data source. The NATSISS 2008 provides the most comprehensive recent data available about the use of alcohol and other drugs by Aboriginal and Torres Strait Islander people. Information from the NATSISS is supported by data from other surveys and data sources such as the National Drug Strategy Household Survey (NDSHS) and the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) 2004–05.

There are numerous challenges in estimating the prevalence of drug use in the whole Australian Aboriginal and Torres Strait Islander population. For example, Aboriginal and Torres Strait Islander people are much more likely to live in remote areas compared with non-Indigenous people (25% compared with less than 2% in 2006) (ABS 2010a). This poses difficulties for gathering representative data about drug use for Indigenous people at the national level. Surveying in remote areas poses practical difficulties, such as increased costs and the need to ensure methods that are culturally appropriate. Remote areas are therefore under-represented in many household survey samples. It becomes difficult to generalise results from *Major cities* and *Regional areas* to the whole Aboriginal and Torres Strait Islander population.

It is possible to address some of these issues by sampling from the Aboriginal and Torres Strait Islander population only, including both discrete Aboriginal and Torres Strait Islander communities and other regions. However, difficulties can also arise in this methodology if households expected to include Aboriginal and Torres Strait Islander residents report no Aboriginal and Torres Strait Islander residents when approached to participate in the survey. The 2008 NATSISS encountered this difficulty and it contributed substantially to the 53% under-coverage (the shortfall between the population represented by the achieved sample and the in-scope population) (ABS 2010b). The 2004–05 NATSIHS collected information only about illicit drug use in non-remote communities.

In March 2009, the National Health and Medical Research Council (NHMRC) released new guidelines about alcohol consumption and health risk. These guidelines moved away from previous threshold-based definitions of 'risky' or 'high-risk' drinking, recognising that the lifetime risk of harm from consuming alcohol increases progressively with the amount consumed (NHMRC 2009). In this report, results from the 2010 NDSHS were analysed using the 2009 guidelines, as these were current during the collection period.

The older guidelines were released by the NHMRC in 2001, and were expressed in terms of short-term and long-term risk of harm (injury, ill-health and death). Some data collections, such as the NATSISS and NATSIHS, use these 2001 guidelines to report on alcohol risk.

Some key features of the main data sources used in this chapter are summarised in Table 8.1. Differences between the surveys include the extent to which remote areas were surveyed, the age groups included and the sample sizes. The questions asked in the surveys also differ considerably. The results from the surveys are therefore not directly comparable. It is important to keep this in mind when considering data from each of the surveys – results which may initially seem to contradict one another may be simply applicable to different groups within the population.

**Table 8.1: Key features of the three most recent national surveys that collected data on Aboriginal and Torres Strait Islander people’s tobacco, alcohol and other drug use**

| Survey   | Sample frame  | Sample size and response rate   | How often                          | Age range   | Limitations  |
|--|---|---|------------------------------------|---|--|
| ABS NATSISS National Aboriginal and Torres Strait Islander Social Survey 2008    | Private dwellings in areas identified from 2006 Census as having an Indigenous population     | 13,300 (82% response rate)  | Every six years                    | 15 years +  | Relatively large rate of under-coverage compared with other ABS surveys                                  |
| National Drug Strategy Household Survey 2007                                     | Private dwellings—general random population household survey                                  | 23,000 (49.3% response rate for all respondents)<br>Indigenous sample 345 | Every three years                  | 12 years +  | Small Indigenous Australian sample size. Estimates should be interpreted with caution.                   |
| ABS NATSIHS National Aboriginal and Torres Strait Islander Health Survey 2004–05 | Private dwellings in areas identified from the 2001 Census as having an Indigenous population | 10,044 (78% for the drug use questionnaire)                               | Next Australian Health Survey 2011 | 15 years + (illicit drugs)<br>18 years+ (tobacco and alcohol) | Data about illicit drug use was collected in non-remote areas only; not collected in remote communities. |

Sources: ABS 2006; ABS 2009b; ABS 2010a; AIHW 2008b.

## 8.4 Tobacco

### 8.4.1 Attitudes

Around one-quarter of Aboriginal and Torres Strait Islander people (23.6%) approved of the regular use of tobacco by an adult in 2010. Around one in seven (13.6%) felt that tobacco was the most serious concern for the community out of all legal and illicit drugs (AIHW 2011a).

### 8.4.2 Current use

A distinction is made in ABS surveys between daily smokers and current smokers. Daily smokers are those who smoked every day when surveyed, and current smokers are those who have smoked in the last 12 months, including daily smokers, weekly smokers and those who smoke less often.

It was estimated that around 45% of Aboriginal and Torres Strait Islander people aged 15 years or older in 2008 were daily smokers (AIHW 2011f). Another 2% of Aboriginal and Torres Strait Islander people were current smokers on a less than daily basis, bringing the total current smokers to almost half the population (47%). A little more than one-third of Aboriginal and Torres Strait Islander people aged 15 years or older had never smoked (34%) and around 20% were ex-smokers (ABS 2009a).

### 8.4.3 Trends

Data from the three major national surveys show that smoking among Aboriginal and Torres Strait Islander people has remained stable or decreased over time.

Rates of *daily* smoking among Aboriginal and Torres Strait Islander people aged 15 years or over were stable between 1994 and 2002 at almost half the population. Between 2002 and 2008, however, there was a statistically significant drop in daily smoking from 49% to 45% and a corresponding increase in ex-smokers (AIHW 2011f).

There was a slight, but not statistically significant, decrease in estimated *current* smoking rates based on responses to the 1994 National Aboriginal and Torres Strait Islander Survey (the predecessor to the NATSISS) and the 2002 NATSISS, followed by a small decrease between the 2002 and 2008 waves of the NATSISS (from 51% to 47% current smokers) (ABS 2002, 2009b).

### 8.4.4 Age and sex

In 2008, Aboriginal and Torres Strait Islander people aged 25–44 years were the most likely to be current smokers (daily, weekly or less often) – 56% of 25–34-year-olds and 53% of 35–44-year-olds were current smokers (NATSISS age group health tables). Those aged 55 years and older were the least likely to smoke, but still around one-third of that group were current smokers.

Indigenous males were more likely than Indigenous females to be current daily smokers in most age brackets across the lifespan in 2008 (Table 8.2). The gap between male and female rates of daily smoking is largest in the 35–44 years age group.

**Table 8.2: Current daily smokers, Aboriginal and Torres Strait Islander people aged 15 years or over, 2008 (per cent)**

| Age group (years) | Males | Females |
|-------------------|-------|---------|
| 15–24             | 38.7  | 39.7    |
| 25–34             | 56.0  | 50.1    |
| 35–44             | 55.5  | 47.3    |
| 45–54             | 47.9  | 46.1    |
| 55 and over       | 32.8  | 30.6    |

Source: ABS 2010a.

### **8.4.5 Indigenous and non-Indigenous comparisons**

Comparisons of smoking between non-Indigenous Australians and Aboriginal and Torres Strait Islander people can be made by comparing NATSISS results with those of the 2007–08 National Health Survey. The surveys, taking into account the differences in the age structures of the two populations, show that Aboriginal and Torres Strait Islander people aged 15 years or over are much more likely to be current smokers than non-Indigenous Australians (45% compared with 20%, respectively) (ABS 2009b). Correspondingly, a smaller proportion of Aboriginal and Torres Strait Islander people had never smoked (31%) compared with non-Indigenous people (52%).

Comparisons between Aboriginal and Torres Strait Islander people and non-Indigenous Australians can also be made using data from the 2010 NDSHS. These data confirm the general trends described above. More specifically, Indigenous Australians aged 14 years or older (after adjusting for differences in age structure) were 2.2 times as likely as non-Indigenous Australians to smoke tobacco (AIHW 2011a).

### **8.4.6 Cessation behaviour**

The 2008 NATSISS showed that a majority (62%) of Aboriginal and Torres Strait Islander daily smokers had tried to quit or reduce smoking in the previous 12 months, mainly because of health or cost-related reasons, or at the urging of family/friends (Table 8.3).

Among current daily smokers, the most common action was to try to quit (27%) rather than try to reduce smoking (18%) (Table 8.3). Aboriginal and Torres Strait Islander people who smoked daily were more likely to try to quit smoking than those who smoked less often.

**Table 8.3: Aboriginal and Torres Strait Islander smokers aged 15 years or over by whether they tried to quit or reduce the amount smoked in last 12 months, 2008 (per cent)**

| Smoking status   | Tried to quit | Tried to reduce smoking | Tried both | Not tried to quit or reduce smoking | Not applicable <sup>(a)</sup> | Not stated | Total |
|--|---------------|-------------------------|------------|-------------------------------------|-------------------------------|------------|-------|
| Current smoker daily                                       | 26.5          | 17.5                    | 18.0       | 38.0                                | —                             | —          | 100.0 |
| Current smoker weekly (at least once a week but not daily) | 17.2          | *15.3                   | *17.8      | 30.7                                | —                             | *19.0      | 100.0 |

(a) Not applicable; comprises those who do not smoke at least once a week.

\* Estimate has a relative standard error of 25% to 50% and should be used with caution

Source: ABS 2010e unpublished analysis of National Aboriginal and Torres Strait Islander Social Survey (NATSISS) 2008.

## 8.5 Alcohol

Less than half (43.9%) of Aboriginal and Torres Strait Islander people aged 14 years or over approved of the regular use of alcohol by an adult in 2010. Just over one-third of Aboriginal and Torres Strait Islander people (35.3%) identified excess consumption of alcohol as the most serious concern for the community out of all drug types (AIHW 2008a).

### 8.5.1 Current use

Eight in ten Aboriginal and Torres Strait Islander people were non-drinkers or drank at levels that did not place them at risk in 2008 (Table 8.4). More than one-third (35%) had never consumed alcohol or had not done so in the 12 months before the 2008 survey, and almost half drank at levels defined as low risk. Around 11% drank at medium-risk levels and just over 6% at high-risk levels.

**Table 8.4: Alcohol consumption risk level for Aboriginal and Torres Strait Islander people in the last 12 months, 2002 and 2008, per cent**

| Alcohol consumption risk level                        | Total 2002 | Total 2008 |
|---|------------|------------|
| Low risk  | 46.1       | 46.3       |
| Medium risk   | 9.6        | 10.9       |
| High risk   | 5.6        | 6.3        |
| Never consumed/has not consumed in the last 12 months | 38.0       | 35.1       |

Sources: ABS 2002, 2009b.

Risk levels were based on the reported amount of alcohol consumed on a usual drinking day together with consumption frequency during the year before the survey (ABS 2009b). These risk levels are often described as long-term risk and differ from risk results presented in Chapter 3 of this report.

When drinking behaviour in the past two weeks (or short-term risk) is the focus, almost two-fifths of people aged 15 years or over drank risky or high-risk amounts in the two-week period before the 2008 NATSISS survey interview (ABS 2009b).

### 8.5.2 Trends

Between 2002 and 2008, there was a small decrease in the proportion of Aboriginal and Torres Strait Islander people who had either never consumed alcohol or had not consumed alcohol in the 12 months before the surveys (Table 8.4). There was a corresponding small

increase in the proportion of people drinking at medium or high levels of risk for long-term harm.

### 8.5.3 Age and sex

Among all age groups for both sexes, Aboriginal and Torres Strait Islander people aged 35–44 years were most likely to drink at long-term risky/high risk levels (22%) (ABS 2010a). The age group most commonly drinking at those levels was 25–34 years.

Indigenous men were more likely than Indigenous women to drink at chronic risky/high-risk levels (20% compared with 14%) in 2008. Furthermore, this pattern was observed in all 10-year age groups from 15–24 years to 55 years and over (ABS 2010a). Similarly, Indigenous men were more likely to drink at risky and high-risk levels (46%) than Indigenous women (28%) (AIHW 2011f).

More detail about risky and high-risk drinking is provided in Table 8.5. More than half of Indigenous males aged 25–44 years drank at risky or high-risk levels in 2008. For females in the same age group, the proportion was closer to one-third.

**Table 8.5: Short-term risky and high-risk consumption of alcohol, Aboriginal and Torres Strait Islander people aged 15 years or older, 2008 (per cent)**

| Age group (years) | Males | Females |
|-------------------|-------|---------|
| 15–24             | 43.1  | 31.9    |
| 25–34             | 53.8  | 32.4    |
| 35–44             | 53.2  | 32.8    |
| 45–54             | 45.5  | 24.3    |
| 55 and over       | 30.8  | 10.9    |

Source: ABS 2009a.

### 8.5.4 Indigenous and non-Indigenous comparisons

When differences in the age structures of the Aboriginal and Torres Strait Islander people and non-Indigenous populations are taken into account, the proportions of people drinking at risky or high-risk levels for long-term harm was similar for both groups. It was estimated for non-Indigenous people (drawn from the 2004–05 National Health Survey) that 14% were drinking at risky or high-risk levels for long-term harm (compared with 15% of Aboriginal and Torres Strait Islander people) (AIHW 2009a).

Twice as many Aboriginal and Torres Strait Islander people as non-Indigenous people drank at risky/high-risk levels for short-term harm in 2004–05 (AIHW 2009a). (These data are different from those in Table 8.4 due to different data sources.)

### 8.5.5 Cessation behaviours

In 2010, many Aboriginal and Torres Strait Islander people took steps to moderate or reduce their drinking. For example, just over one-third limited the amount of alcohol consumed at any one time (38.0%) and/or reduced the number of times they drank (36.1%). Lifestyle and health reasons were the most common reasons cited for a reduction in drinking (46.9% and 35.1%, respectively).

For information about the treatment provided to Indigenous people with alcohol and other drug problems see Chapter 10.

## 8.6 Illicit drugs

Only a small proportion (13.4%) of Aboriginal and Torres Strait Islander people approved of the regular use of cannabis in 2010 but this was higher than among other non-Indigenous people (7.8%). A similar proportion approved of the use of pain-killers/analgesics for non-medical purposes but smaller proportions approved of the regular use of other illicit drug types.

Almost half of Aboriginal and Torres Strait Islander people (43.7%) identified cannabis as a drug associated with a 'drug problem'. Heroin (15.8%) and meth/amphetamine (17.4%) were also associated with a 'drug problem' by substantial proportions of Aboriginal and Torres Strait Islander people (AIHW 2008a).

### 8.6.1 Current use

In 2008, around 21% of Aboriginal and Torres Strait Islander people had used an illicit drug of some kind in the previous 12 months (Table 8.7). This is similar to the 2002 NATSISS results. The most commonly used illicit drug among Aboriginal and Torres Strait Islander people was cannabis (Table 8.6). One-third of Aboriginal and Torres Strait Islander people aged 15 years or older had ever used cannabis; 16% had used cannabis in the last year.

Other illicit drug types were used by smaller proportions of the Aboriginal and Torres Strait Islander population (relative to use of cannabis). Less than 10% of Aboriginal and Torres Strait Islander people had used amphetamines at some time in their life, with less than 4% in the last 12 months.

**Table 8.6: Use of illicit drugs by Aboriginal and Torres Strait Islander people, 2008, per cent**

| Type of drug                              | Ever used | Used in the last 12 months |
|---|-----------|----------------------------|
| Marijuana, hashish or cannabis resin      | 32.5      | 15.5                       |
| Amphetamines or speed                     | 9.9       | 3.6                        |
| Pain-killers or analgesics <sup>(a)</sup> | 6.7       | 4.1                        |
| Ecstasy or designer drugs                 | 6.9       | 3.0                        |

(a) For non-medical purposes.

Source: ABS 2010a.

### 8.6.2 Age and sex

Younger Aboriginal and Torres Strait Islander people were more likely to use drugs than older people in 2008, with 25% of 15–34 years olds having used drugs in the last 12 months compared with 15% of Aboriginal and Torres Strait Islander people aged over 35 years (ABS 2009b). Table 8.7 provides more detail about use by age groups. It shows that the proportion of people using cannabis was lower in older age groups while the use of amphetamines was most common among people aged 25–34 years.

**Table 8.7: Types of drugs used by Aboriginal and Torres Strait Islander people in last 12 months by age, 2008 (per cent)**

| Type of drug use                                    | 15–24 | 25–34 | 35–44 | 45–54 | 55+   | All ages    |
|---|-------|-------|-------|-------|-------|-------------|
| Marijuana, hashish or cannabis resin                | 19.9  | 19.9  | 15.3  | 11.4  | *2.8  | <b>15.5</b> |
| Amphetamines or speed                               | 4.4   | 6.1   | 3.4   | *1.4  | **0.4 | <b>3.6</b>  |
| Pain-killers or analgesics for non-medical purposes | 4.0   | 4.6   | 4.5   | 4.8   | *2.1  | <b>4.1</b>  |
| Ecstasy or designer drugs                           | 4.3   | 5.1   | *1.9  | *0.8  | 0.0   | <b>3.0</b>  |
| Other drugs <sup>(a)</sup>                          | 6.0   | 4.8   | 3.5   | *2.9  | **0.4 | <b>4.1</b>  |
| Has not used drugs in last 12 months                | 65.5  | 65.7  | 70.7  | 74.5  | 81.5  | <b>69.9</b> |
| Not stated  | 9.5   | 9.2   | 8.6   | 8.6   | 13.4  | <b>9.6</b>  |

(a) 'Other drugs' comprises tranquilisers or sleeping pills for non-medical purposes, heroin, methadone for non-medical purposes, cocaine, LSD or synthetic hallucinogens, naturally occurring hallucinogens, petrol, other inhalants and kava.

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

\*\* Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Source: ABS 2010e unpublished analysis of National Aboriginal and Torres Strait Islander Social Survey (NATSISS) 2008.

One-quarter of Indigenous men had used an illicit drug in the last 12 months compared with 16% of Indigenous women (Table 8.8). Table 8.8 shows other differences in recent use between males and females. Notably, proportionately twice as many males had used cannabis in the last 12 months compared with females.

**Table 8.8: Types of drugs used by Aboriginal and Torres Strait Islander people aged 15 years or over in the last 12 months by sex, 2008 (per cent)**

| Type of drug use                                    | Male | Female | Persons     |
|---|------|--------|-------------|
| Marijuana, hashish or cannabis resin                | 20.9 | 10.7   | <b>15.5</b> |
| Amphetamines or speed                               | 4.9  | 2.4    | <b>3.6</b>  |
| Pain-killers or analgesics for non-medical purposes | 4.4  | 3.8    | <b>4.1</b>  |
| Ecstasy or designer drugs                           | 3.9  | 2.1    | <b>3.0</b>  |
| Other drugs <sup>(a)</sup>                          | 5.7  | 2.6    | <b>4.1</b>  |
| Has not used drugs in last 12 months                | 64.6 | 74.9   | <b>69.9</b> |
| Not stated  | 10.0 | 9.4    | <b>9.6</b>  |

(a) 'Other drugs' comprises tranquilisers and sleeping pills for non-medical purposes, heroin, methadone for non-medical purposes, cocaine, LSD or synthetic hallucinogens, naturally occurring hallucinogens, petrol, other inhalants and kava.

Source: ABS 2010e unpublished analysis of NATSISS 2008.

### 8.6.3 Comparisons with other Australians

Compared with non-Indigenous people surveyed in the NDSHS, Aboriginal and Torres Strait Islander people were more likely to have used illicit drugs in the last 12 months and were less likely to have never used illicit drugs (AIHW 2011a).

### 8.6.4 Cessation behaviours

Few data are available about the attempts of Aboriginal and Torres Strait Islander peoples to stop using illicit drugs. See Chapter 10 for information about alcohol and other drug treatment provided to Aboriginal and Torres Strait Islander people.

## 8.7 Health and harms

### 8.7.1 Morbidity and mortality

As for the general population, smoking was the leading risk factor associated with chronic disease among Aboriginal and Torres Strait Islander people in 2003 (Vos et al. 2007). It contributes to a range of diseases including cancer and cardiovascular disease. Smoking accounted for 12% of the total burden of disease for Aboriginal and Torres Strait Islander people in Australia (compared with 8% of the burden of disease for all Australians) in 2003.

Alcohol use accounted for 5% of the burden of disease and injury of Aboriginal and Torres Strait Islander people (compared with 2% for all Australians). The health issues related to alcohol use include physical illness, mental disorders, suicide and injury.

Illicit drug use accounted for 3% of the Indigenous burden of disease and injury compared with 2% for the whole Australian population.

There are limited national data related to Aboriginal and Torres Strait Islander people and mortality attributed to (or associated with) drug use due to inconsistent identification of Indigenous status by state and territory data providers in the National Mortality Database (AIHW 2011f). Queensland, Western Australia, South Australia and the Northern Territory have adequate identification of Indigenous deaths. Between 2003 and 2007, there were 255 Aboriginal and Torres Strait Islander deaths with an underlying or associated cause of tobacco use. In the same period, there were 236 deaths related to alcohol use and 30 deaths related to illicit drug use (AIHW 2011f).

Trends in deaths attributable to alcohol among Aboriginal and Torres Strait Islander people have also been explored by the National Drug Research Institute. Between 2000 and 2004, it was estimated that 1,145 Aboriginal and Torres Strait Islander people died from injury and disease related to drinking alcohol. The rate of deaths among Aboriginal and Torres Strait Islander people varied substantially between jurisdictions used for the study (NDRI 2007).

### 8.7.2 Self-reported health status

Among Aboriginal and Torres Strait Islander people, 44% of people aged 15 years or over rated their health as excellent or very good, 34% as good and 22% as fair/poor (ABS 2009b).

Aboriginal and Torres Strait Islander people who smoked reported slightly poorer health (25% of current smokers rated their health as fair/poor) compared with all Indigenous people (22% overall rated their health as fair/poor). Around 16% of those who had never smoked rated their health as fair/poor and 53% rated their health as excellent/very good (compared with 25% and 39%, respectively, for current smokers).

The poorest health was reported by people who drank at risky or high-risk levels for long-term harm. Those drinkers were less likely to report excellent/very good health (35%), compared with all Aboriginal and Torres Strait Islander people (44%) and with those who drank at low-risk levels or did not drink (46%).

The self-assessed health status of Aboriginal and Torres Strait Islander people who had used illicit drugs was broadly similar to that for those who had never used illicit drugs. There was a small difference in the proportion of recent illicit drug users who rated their health as excellent/very good (41%) compared with those who had never used illicit drugs (44%).

### 8.7.3 Drug use issues managed by general practitioners

Between 2004–05 and 2008–09, alcohol misuse, drug abuse and tobacco misuse were managed at general practitioner (GP) encounters with Aboriginal and Torres Strait Islander patients at around two-and-a-half to three times the rate of encounters with other patients (AIHW 2011f).

Tobacco smoking accounted for 0.7% of all problems managed by GPs for Aboriginal and Torres Strait Islander patients. Alcohol and illicit drug use each accounted for about 1% of all problems managed at GP encounters.

### 8.7.4 Passive smoking

Exposure to environmental smoke is another source of harm from the use of drugs. This type of harm is of particular interest in relation to children exposed to tobacco smoke. In 2008, most Aboriginal and Torres Strait Islander people did not smoke inside their houses (Table 8.9). Smokers with dependent children were more likely to report that they did not smoke inside the house (75%) compared with those without dependents (63%). The relatively high proportion (16%) of 'not stated' responses where households are without dependent children should be noted.

**Table 8.9: Households with and without dependent children by whether smokers smoked inside or outside the house, 2008 (per cent)**

| Smoking status                                       | Smokes inside the house | Does not smoke inside the house | Not stated |
|--|-------------------------|---------------------------------|------------|
| Households with dependent children <sup>(a)</sup>    | 20.8                    | 75.4                            | 3.7        |
| Households without dependent children <sup>(b)</sup> | 21.1                    | 62.6                            | 16.3       |
| <b>Total</b>   | <b>21.0</b>             | <b>69.6</b>                     | <b>9.4</b> |

(a) Households with dependent children comprise couple families with dependent children only, couple families with dependent children and other persons, one-parent families with dependent children only, one-parent families with dependent children and other person, multiple family households with dependents.

(b) Households without dependent children comprise couples only, other one-family households, multiple family households with no dependent children, lone person households and group households.

Source: ABS 2010e unpublished analysis of NATSISS 2008.

### 8.7.5 Mental health

Around 69% of Aboriginal and Torres Strait Islander people surveyed for the NATSISS 2008 reported either no, low or moderate levels of psychological distress; 31% had high or very high levels of psychological distress in the previous 12 months (Table 8.10).

There were some differences in levels of psychological distress by type and frequency of drug use. Current smokers, people who drank at medium or high-risk levels in the previous 12 months and those who had used illicit drugs in the previous 12 months were all more likely to report high or very high levels of psychological distress than the general Indigenous population.

**Table 8.10: Level of psychological distress<sup>(a)</sup> by drug use status, Aboriginal and Torres Strait Islander people aged 15 years or over, 2008 (per cent)**

|                                       |  | Low / moderate | High / very high |
|---------------------------------------|--|----------------|------------------|
| Smokers                               | Current smoker daily                                       | 62.6           | 37.4             |
|                                       | Current smoker weekly (at least once a week but not daily) | 54.2           | 45.8             |
|                                       | Current smoker less than weekly                            | 57.5           | 42.5             |
|                                       | Non-smoker <sup>(c)</sup>                                  | 74.7           | 25.3             |
| Risky alcohol consumption — 2 weeks   | Medium/high risk   | 67.1           | 32.9             |
|                                       | Low risk   | 72.7           | 27.3             |
|                                       | Has not consumed in last 2 weeks /never consumed           | 69.2           | 30.8             |
|                                       | Not stated   | 62.7           | *37.3            |
| Risky alcohol consumption — 12 months | Medium/high risk   | 62.3           | 37.7             |
|                                       | Low risk   | 70.4           | 29.6             |
|                                       | Has not consumed in last 12 months / never consumed        | 69.8           | 30.2             |
|                                       | Not stated   | 74.3           | *25.7            |
| Whether used drugs in last 12 months  | Has used drugs in last 12 months                           | 60.0           | 40.0             |
|                                       | Has not used drugs in last 12 months                       | 71.2           | 28.8             |
|                                       | Not stated   | 70.6           | 29.4             |
| <b>All Indigenous people</b>          |  | <b>68.8</b>    | <b>31.2</b>      |

(a) Based on the Kessler K5 score.

(b) Total excludes 'not stated'.

(c) 'Non-smoker' comprises 'ex-smokers' and 'never smoked'.

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

Source: ABS 2010e unpublished analysis of NATSISS 2008.

### 8.7.6 Injecting drug use

Some injecting drug users share equipment with other users, increasing the risk of contracting viruses including HIV. The rate of diagnosis of HIV infection per 100,000 population for Aboriginal and Torres Strait Islander people was similar to that for other Australians from 2005–2009 (NCHECR 2009a). Injecting drug use was the attributed exposure category for 20% of diagnosed Aboriginal and Torres Strait Islander people in 2005–2009 (compared with 3% for non-Indigenous people) (NCHECR 2009a).

### 8.7.7 Other harms

The NATSISS 2008 collected data about stressors experienced in the last 12 months. Around 10% of all Aboriginal and Torres Strait Islander people surveyed reported that they experienced stress due to their own or someone else's alcohol or drug-related problem in the last 12 months (Table 8.11).

People who used illicit drugs were more likely to have experienced stressors than the whole Aboriginal and Torres Strait Islander population. For example, around 12% of recent drug users had been stressed by trouble with the police in the last year, whereas about 6% of all Aboriginal and Torres Strait Islander people had been stressed by trouble with the police. Similarly, recent drug users were around twice as likely to have experienced stress related to abuse or violent crime as all Aboriginal and Torres Strait Islander people. Drug use was not necessarily the cause of the stressors experienced – these data simply suggest an association.

**Table 8.11: Stressors personally experienced by Aboriginal and Torres Strait Islander people in the last 12 months by drug use status, 2008 (per cent)**

| <b>Selected stressors</b>                 | <b>Current smoker<sup>(a)</sup></b> | <b>Has consumed alcohol in last 12 months</b> | <b>Has used other drugs<sup>(b)</sup> in last 12 months</b> | <b>Total</b> |
|---|-------------------------------------|---|---|--------------|
| Alcohol-related problems                  | 9.1                                 | 7.8   | 11.6  | <b>6.6</b>   |
| Drug-related problems                     | 5.1                                 | 3.9   | 7.6   | <b>3.5</b>   |
| Gambling problems                         | 3.3                                 | 2.7   | 4.8   | <b>2.4</b>   |
| Witness to violence                       | 5.2                                 | 4.1   | 6.3   | <b>3.7</b>   |
| Abuse or violent crime                    | 4.1                                 | 3.3   | 5.9   | <b>3.0</b>   |
| Trouble with the police                   | 8.1                                 | 6.0   | 12.2  | <b>5.5</b>   |
| Really bad accident                       | 4.0                                 | 3.9   | 4.3   | <b>3.5</b>   |
| Other stressor experienced <sup>(c)</sup> | 59.5                                | 55.6  | 64.3  | <b>54.3</b>  |
| None of the above                         | 36.4                                | 40.7  | 30.4  | <b>42.5</b>  |

(a) 'Current smoker' comprises daily, weekly (at least once a week but not daily) and less than weekly smoking.

(b) 'Other drugs' include cannabis, amphetamines, pain-killers or analgesics for non-medical purposes, ecstasy or designer drugs, tranquillisers and sleeping pills for non-medical purposes, heroin, methadone for non-medical purposes, cocaine, LSD or synthetic hallucinogens, naturally occurring hallucinogens, petrol, other inhalants and kava.

(c) 'Other stressors experienced' comprises really bad illness, mental illness, really bad disability, getting married/marriage, pregnancy, new family member, overcrowding at home, getting back together with a spouse, divorce or separation, death of a family member or close friend, not able to get a job/made redundant/sacked/retired, starting a new job/changing jobs, pressure to fulfil cultural responsibilities, respondent's family member or friend spending time in jail, being treated badly/discrimination and being made unwelcome at child's school.

Source: ABS 2010e unpublished analysis of NATSISS 2008.

The NATSISS 2008 also collected information on stressors experienced by children, including those aged 0–3 years and those aged 4–14 years. Around 14% of children aged up to 3 years had someone close to them with alcohol or drug-related problems in the year before the survey (Table 8.12). For children aged 4–14 years, almost one-quarter (23%) had a family friend or family member with alcohol or drug related problems.

**Table 8.12: Proportion of Aboriginal and Torres Strait Islander people aged 0–3 years and 4–14 years in Australia by types of selected stressors experienced in last 12 months, 2008 (per cent)**

| Types of selected stressors experienced in last 12 months    | Types of selected stressors experienced by child aged 0–3 in last 12 months | Types of selected stressors experienced by child aged 4–14 in last 12 months |
|--|---|--|
| A family friend / family member had alcohol related problems | 7.8   | 13.6   |
| A family friend / family member had drug related problems    | 6.6   | 9.8  |
| Other stressors <sup>(a)</sup>                               | 43.0  | 63.2   |
| None of the above  | 55.9  | 35.2   |
| <b>Total<sup>(b)</sup></b>                                   | <b>100.0</b>  | <b>100.0</b>   |

(a) Other stressors for 0–3 years include: had a really bad illness, had a really bad accident, was saved from an almost serious injury/accident/illness, scared or upset by an argument or someone's behaviour, was physically hurt by someone, a new baby was born into the household, death of a close family friend/family member, parent in prison, another family member in prison, member of family arrested or in trouble with police. Other stressors for 4–14 years include: had nothing fun to do, got in trouble with the police, had problems keeping up with schoolwork, had a really bad illness, had a really bad accident, was saved from an almost serious injury/accident/illness, scared or upset by an argument or someone's behaviour, was physically hurt by someone, a new baby was born into the household, death of a close family friend/family member, parent in prison, another family member in prison, member of family arrested or in trouble with police.

(b) Total excludes 'not stated'.

Source: ABS 2010e unpublished analysis of NATSISS 2008.

# 9 Life stages

## 9.1 Key findings

- Alcohol, tobacco and illicit drug use may change through life stages. There is a relationship between an individual's employment status, personal relationships and family life and drug use patterns.
- Between 2002 and 2008, smoking prevalence and alcohol consumption declined among secondary students aged 12–17. The use of various illicit drugs by this population group either declined or remained generally stable during this time.
- In 2010, unemployed people or those looking for work were the most likely group to smoke daily, drink more than two drinks on average and use an illicit drug in the last 12 months. Students were the least likely to smoke daily and consume alcohol at levels considered high risk for lifetime harm. Among employed people, patterns of alcohol consumption were closely linked to the prevalence of negative work-related behaviours and absenteeism.
- Alcohol, tobacco and illicit drug use was significantly lower among pregnant women than women who were not pregnant. The proportion of pregnant women smoking has declined from 2001 to 2010.
- In 2010, people who were divorced/separated/widowed were more likely to be daily smokers (20.7%) than other people (14.9%). Single people with dependent children living at home were the most likely group to smoke tobacco daily and about one in 12 children under the age of 15 were exposed to smoking inside the home on a daily basis.

## 9.2 Introduction

Personal and social problems from drug use are substantial and cut across all domains of functioning including personal relationships, family life, employment and psychological health (NCETA 2004). Previous chapters in this report highlight patterns of tobacco, alcohol and other drug use among the general population. This chapter profiles differences in patterns of use for groups at various life stages.

Improved understanding across the life stages of youth, families, within the workplace and among those not currently in the workforce allows for the development of effective responses in the areas of service delivery, education, law enforcement and social policy.

Data in this chapter are drawn predominantly from the Australian Secondary Students' Alcohol and Drug (ASSAD) survey and the National Drug Strategy Household Survey (NDSHS).

## 9.3 School students

Adolescence is a period of maturation and change and is often characterised by rapid physical and psychological transition, experimentation and risk-taking (ABS 2008b). 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).

### 9.3.1 Tobacco use

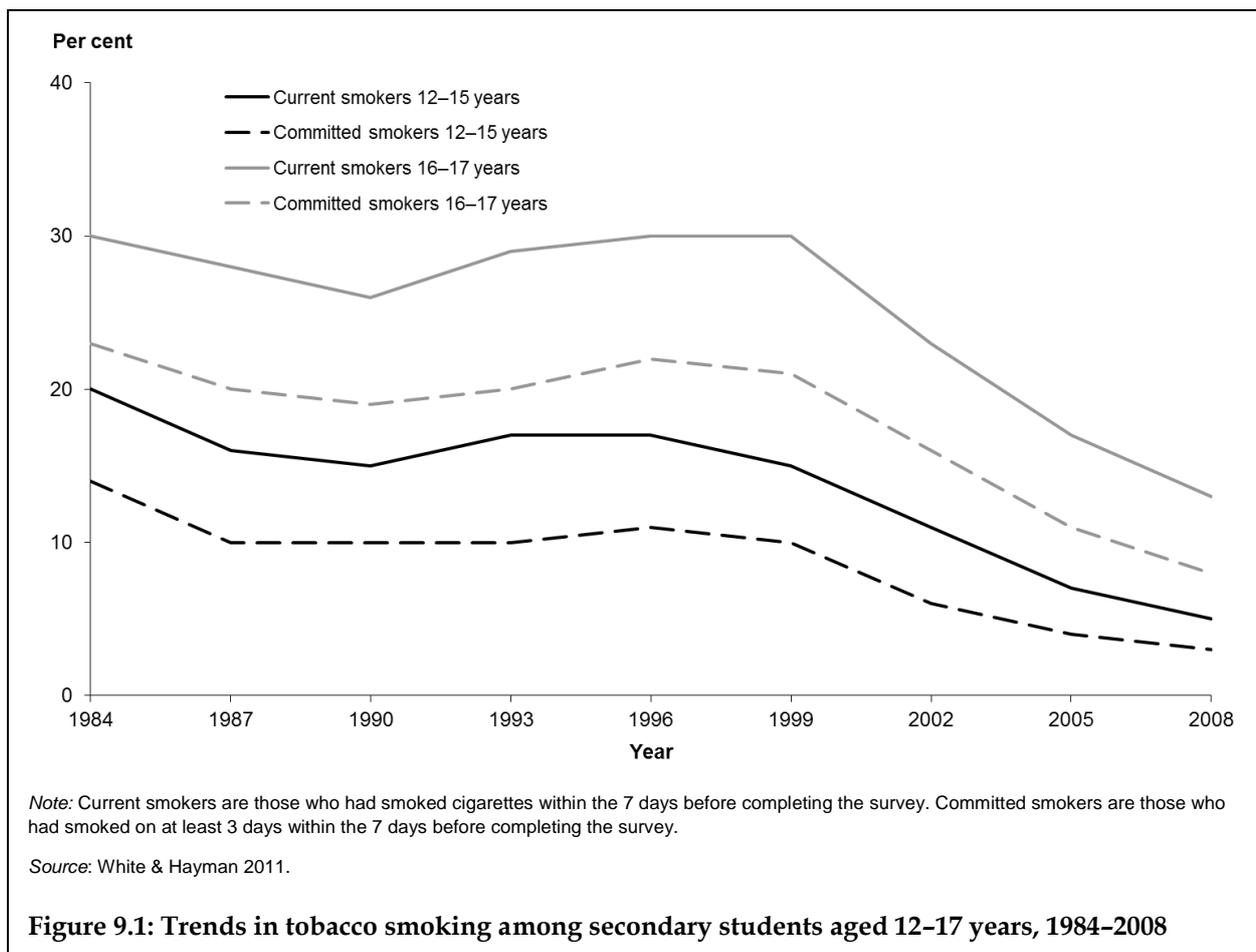
Most adult tobacco users tried smoking tobacco during adolescence (AIHW 2008b). Those people who begin smoking early are more likely to continue smoking; thus, tobacco use among young people is a key predictor of adult smoking (Tyas & Pederson 1998).

The 2008 Australian Secondary Students' Alcohol and Drug (ASSAD) survey was the ninth in a series of secondary school-based surveys monitoring the use of tobacco, alcohol and other drugs among secondary students throughout Australia (White & Hayman 2011). The 2008 survey collected data from 24,408 students aged 12–17 from 419 secondary schools across Australia. It is important to note that there are limitations to this school-based study. Schools were used as the basis for surveying adolescents. Therefore students who did not remain in school past the age of 15 were excluded from the study, and estimates for those aged 16–17 relate only to the student population rather than to all adolescents aged 16–17 years. As adolescents who do not complete secondary school are more likely to use drugs, this study is likely to underestimate the prevalence of drug use among the population of those aged 16–17 (White & Hayman 2006).

From 1984 to 1990, smoking prevalence among secondary students aged 12–15 and 16–17 declined (Figure 9.1). The decline ceased during the 1990s and smoking prevalence began to increase, especially among those aged 16–17. From 1999 to 2008, smoking prevalence declined again among secondary students aged 12–15 and 16–17.

In 2008, 5% of secondary students aged 12–15 were current smokers and 13% of secondary students aged 16–17 were current smokers. The proportions of committed smokers – those who had smoked on at least 3 days in 7 before completing the survey – followed the same trends over time as current smokers, albeit with lower prevalence. In 2008, 3% of those aged 12–15 and 8% of those aged 16–17 were committed smokers.

Results from the NDSHS showed a similar trend among 15–17-year-olds with the daily smoking rates declining from 9.2% in 2004 to 4.5% in 2010.



### 9.3.2 Alcohol use

Consumption of alcohol by young people is of concern due to negative social outcomes associated with 'high-risk' drinking (Toumbourou et al. 2005; Lubman et al. 2007). In 2005-06, for example, teenagers aged 15-19 had the highest hospitalisation rates for acute intoxication from alcohol among all age groups (124 per 100,000 for males and 126 per 100,000 for females) (ABS 2008b).

Although it is illegal to sell alcohol to people aged under 18, many young people have access to alcohol before they turn 18. Results from the 2002, 2005 and 2008 ASSAD surveys (Table 9.1) show that:

- more than four in five secondary students aged 12-17 had consumed alcohol at least once in their lifetime in 2008
- around one-third had consumed alcohol in the last month
- around one-quarter had consumed alcohol in the last week.

Although alcohol consumption by young people is of community concern, the amount of alcohol consumed by young people is decreasing. In 2008, the proportion of those aged 12-17 who had consumed alcohol in their lifetime (82%), in the last month (37%) and in the last week (23%) had significantly decreased from respective proportions in 2005 and 2002 (White & Hayman 2011).

**Table 9.1: Alcohol consumption among secondary students aged 12–17, by age group and sex, 2002, 2005 and 2008 (per cent)**

| Age group          | Lifetime   |            |           | Last month |            |           | Last week  |            |           |
|--------------------|------------|------------|-----------|------------|------------|-----------|------------|------------|-----------|
|                    | 2002       | 2005       | 2008      | 2002       | 2005       | 2008      | 2002       | 2005       | 2008      |
| <b>Males</b>       |            |            |           |            |            |           |            |            |           |
| 12–15              | #88        | #83        | 79        | #46        | #36        | 29        | #32        | #23        | 17        |
| 16–17              | 94         | 95         | 91        | #70        | #70        | 62        | #51        | #50        | 41        |
| <b>Total 12–17</b> | <b>#90</b> | <b>#87</b> | <b>82</b> | <b>#52</b> | <b>45</b>  | <b>38</b> | <b>#37</b> | <b>#30</b> | <b>24</b> |
| <b>Females</b>     |            |            |           |            |            |           |            |            |           |
| 12–15              | #84        | #81        | 78        | #40        | #33        | 28        | #26        | #20        | 16        |
| 16–17              | 94         | 94         | 92        | #66        | #66        | 59        | #45        | #45        | 35        |
| <b>Total 12–17</b> | <b>87</b>  | <b>#85</b> | <b>82</b> | <b>#47</b> | <b>#42</b> | <b>36</b> | <b>#31</b> | <b>#27</b> | <b>22</b> |
| <b>Persons</b>     |            |            |           |            |            |           |            |            |           |
| 12–15              | #86        | #82        | 78        | #43        | #34        | 28        | #29        | #22        | 17        |
| 16–17              | 94         | 95         | 92        | #68        | #68        | 60        | #48        | #47        | 38        |
| <b>Total 12–17</b> | <b>#88</b> | <b>#86</b> | <b>82</b> | <b>#49</b> | <b>#43</b> | <b>37</b> | <b>#34</b> | <b>#29</b> | <b>23</b> |

# Statistically significant difference from 2008 at  $p < .01$ .

Source: White & Hayman 2011.

Results from the NDSHS showed that, in 2010, 19% of those aged 16–17 and 4% of those aged 12–15 had consumed alcohol at levels that put them at risk of harm from a single occasion of drinking at least once a month (that is, drinking more than 4 standard drinks in one drinking session at least once a month).

### 9.3.3 Illicit drug use

Results from the 2008 ASSAD indicated that 6% of secondary students had used cannabis in the last month. Tranquillisers were used by 4% of those aged 12–17 in the past month and amphetamines and ecstasy by 2%.

Use of all illicit drugs included in the ASSAD surveys either declined or remained stable between 2002 and 2008 for those aged 12–17 with the exception of ecstasy use by those aged 16–17 which increased significantly (Table 9.2).

**Table 9.2: Recent<sup>(a)</sup> use of illicit drugs by secondary students aged 12–17, 2002, 2005 and 2008 (per cent)**

| Substance used                  | 12–15 years |      |      | 16–17 years |      |      | Total 12–17 years |      |      |
|---------------------------------|-------------|------|------|-------------|------|------|-------------------|------|------|
|                                 | 2002        | 2005 | 2008 | 2002        | 2005 | 2008 | 2002              | 2005 | 2008 |
| Cannabis                        | #9          | #6   | 4    | #17         | 12   | 11   | #11               | 7    | 6    |
| Tranquillisers <sup>(b)</sup>   | 4           | 4    | 4    | 5           | 4    | 4    | 4                 | 4    | 4    |
| Amphetamine <sup>(b)</sup>      | #2          | #2   | 1    | 3           | 3    | 2    | #3                | #2   | 2    |
| Cocaine                         | 1           | 1    | 1    | 1           | 1    | 1    | 1                 | 1    | 1    |
| Hallucinogens                   | 2           | 1    | 1    | 2           | 1    | 2    | 2                 | 1    | 1    |
| Ecstasy                         | 2           | 2    | 1    | #2          | #2   | 3    | 2                 | 2    | 2    |
| Opiates                         | 1           | 1    | 1    | 1           | 1    | 1    | 1                 | 1    | 1    |
| Any illicit drug <sup>(c)</sup> | #10         | #7   | 5    | #19         | 13   | 12   | #13               | 8    | 7    |

(a) Used in the last month.

(b) For non-medical purposes.

(c) Any one of the following illicit drugs: cannabis, hallucinogens, amphetamine, cocaine, opiates or ecstasy.

# Statistically significant difference from 2008 at  $p < .01$ .

Source: White & Hayman 2011.

## 9.4 Employment and workforce participation

Drug abuse causes a loss of national productive capacity in the paid workforce as a result of drug-attributable death and sickness. Losses are also experienced in the unpaid workforce; that is, in the household sector, from the same causes (Collins & Lapsley 2008b).

Examination of drug use patterns of the workforce allows for more effective preventive and early intervention strategies to be planned, and for more efficient assistance with target high-risk groups. It also opens up opportunities for new and different partnerships in this area (Roche A 2007).

Problematic alcohol and drug use is strongly associated with difficulties in gaining and retaining full employment. There is consistent evidence to show that unemployed people are more likely to smoke cigarettes (Royal Australian College of Physicians 2001). Genetic factors, unemployment and boredom have been linked to the harmful use of drugs and alcohol. Stressors at home and at work can also contribute to the extent to which drugs and alcohol are used (WorkCover Corporation of South Australia 2001).

In 2006, 61% of Australians were currently employed, 3% were unemployed and a further 35% were not currently in the labour force (ABS 2006).

### 9.4.1 Smoking status

In 2010, 15.1% of the population aged 14 and over smoked daily. However, the proportion of the population smoking daily varies considerably according to people's current workforce participation (Table 9.3). Unemployed people or those looking for work were more likely to be daily smokers (23.8%) than those who were employed (16.1%). Only 6.9% of students smoked daily.

**Table 9.3: Daily smokers by employment status and sex, people aged 14 years or older, 2010 (per cent)**

| Daily smokers | Employed | Unemployed /looking for work | Engaged in home duties | Student | Retired | Other | Total (14+) |
|---------------|----------|------------------------------|------------------------|---------|---------|-------|-------------|
| Males         | 17.2     | 26.8                         | *22.6                  | 7.0     | 11.8    | 30.7  | 16.4        |
| Females       | 14.7     | 20.6                         | 17.5                   | 6.9     | 8.9     | 21.6  | 13.9        |
| Persons       | 16.1     | 23.8                         | 17.7                   | 6.9     | 10.2    | 25.0  | 15.1        |

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

Source: AIHW analysis of the 2010 NDSHS.

## 9.4.2 Alcohol use patterns

Overall, those people who were retired were more likely to be daily drinkers (13.5%) than those who were employed (7.1%). Employed people were more likely to be daily drinkers than those who were unemployed (7.1% compared with 4.6%) (Table 9.4).

**Table 9.4: Drinking status by employment status, people aged 14 years or older, 2010 (per cent)**

|                                   | Employed | Unemployed /looking for work | Engaged in home duties | Student | Retired | Other | Total |
|-----------------------------------|----------|------------------------------|------------------------|---------|---------|-------|-------|
| Daily                             | 7.1      | 4.6                          | 4.2                    | *1.2    | 13.5    | 6.5   | 7.2   |
| Weekly                            | 48.4     | 31.7                         | 32.6                   | 21.5    | 33.3    | 25.4  | 39.5  |
| Less than weekly                  | 33.4     | 37.7                         | 40.5                   | 40.6    | 27.6    | 37.3  | 33.8  |
| Ex-drinker <sup>(a)</sup>         | 4.9      | 8.7                          | 11.1                   | 3.8     | 12.8    | 17.2  | 7.4   |
| Never had a full serve of alcohol | 6.2      | 17.2                         | 11.7                   | 32.9    | 12.8    | 13.6  | 12.1  |

(a) An ex-drinker is a person who has consumed a full drink of alcohol in their lifetime, but not in the previous 12 months.

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

Source: AIHW analysis of the 2010 NDSHS.

## Alcohol risk

Students (36.7%) were more likely to abstain from alcohol than those people who were employed (11.1%), or engaged in home duties (22.7%). Table 9.5 details the risk of harm from alcohol by employment status.

Males were more likely than their female counterparts to drink at levels considered high risk for lifetime harm and at levels that would put them at risk of harm from a single drinking occasion in all employment status groups.

**Table 9.5: Risk of harm of alcohol by employment status and sex, people aged 14 years or older, 2010 (per cent)**

|                                      | Employed | Unemployed/<br>looking for<br>work | Engaged<br>in home<br>duties | Student | Retired | Other | Total       |
|--------------------------------------|----------|------------------------------------|------------------------------|---------|---------|-------|-------------|
| <b>Males</b>                         |          |                                    |                              |         |         |       |             |
| Abstainer                            | 10.3     | 20.1                               | *24.6                        | 36.6    | 18.7    | 28.7  | <b>16.4</b> |
| <b>Lifetime risk</b>                 |          |                                    |                              |         |         |       |             |
| Low (2 or less drinks on average)    | 56.9     | 48.2                               | 49.5                         | 44.7    | 58.4    | 44.5  | <b>54.6</b> |
| High (more than 2 drinks on average) | 32.8     | 31.7                               | *25.9                        | 18.8    | 22.9    | 26.8  | <b>29.0</b> |
| <b>Single-occasion risk</b>          |          |                                    |                              |         |         |       |             |
| Less than once a year                | 30.6     | 23.9                               | 21.9                         | 22.9    | 55.8    | 30.3  | <b>33.7</b> |
| At least yearly but not weekly       | 32.3     | 27.8                               | 37.6                         | 22.8    | 12.3    | 17.6  | <b>26.7</b> |
| At least weekly                      | 26.8     | 28.2                               | *15.9                        | 17.7    | 13.1    | 23.5  | <b>23.2</b> |
| <b>Females</b>                       |          |                                    |                              |         |         |       |             |
| Abstainer                            | 12.1     | 32.4                               | 22.6                         | 36.8    | 31.4    | 32.1  | <b>22.5</b> |
| <b>Lifetime risk</b>                 |          |                                    |                              |         |         |       |             |
| Low (2 or less drinks on average)    | 73.3     | 56.8                               | 67.9                         | 53.7    | 61.6    | 59.1  | <b>66.1</b> |
| High (more than 2 drinks on average) | 14.5     | 10.8                               | 9.5                          | 9.5     | 6.9     | 8.8   | <b>11.3</b> |
| <b>Single-occasion risk</b>          |          |                                    |                              |         |         |       |             |
| Less than once a year                | 48.4     | 36.4                               | 49.8                         | 26.6    | 60.5    | 48.5  | <b>47.7</b> |
| At least yearly but not weekly       | 27.9     | 21.2                               | 20.9                         | 25.8    | 5.6     | 12.8  | <b>21.0</b> |
| At least weekly                      | 11.5     | 10.0                               | 6.7                          | 10.8    | 2.5     | 6.6   | <b>8.8</b>  |
| <b>Persons</b>                       |          |                                    |                              |         |         |       |             |
| Abstainer                            | 11.1     | 25.9                               | 22.7                         | 36.7    | 25.6    | 30.8  | <b>19.5</b> |
| <b>Lifetime risk</b>                 |          |                                    |                              |         |         |       |             |
| Low (2 or less drinks on average)    | 64.1     | 52.3                               | 67.2                         | 49.3    | 60.1    | 53.7  | <b>60.4</b> |
| High (more than 2 drinks on average) | 24.8     | 21.7                               | 10.1                         | 14.0    | 14.3    | 15.4  | <b>20.1</b> |
| <b>Single-occasion risk</b>          |          |                                    |                              |         |         |       |             |
| Less than once a year                | 38.4     | 29.9                               | 48.7                         | 24.8    | 58.3    | 41.8  | <b>40.7</b> |
| At least yearly but not weekly       | 30.4     | 24.6                               | 21.5                         | 24.3    | 8.7     | 14.6  | <b>23.9</b> |
| At least weekly                      | 20.1     | 19.5                               | 7.0                          | 14.1    | 7.4     | 12.8  | <b>15.9</b> |

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

Source: AIHW analysis of the 2010 NDSHS.

### 9.4.3 Illicit drug use

In 2010, 14.7% of the population aged 14 years or over had used any illicit drug in the last 12 months, with use being highest among the unemployed (24.9%), and lowest among retirees (6.1%) (Table 9.6). Employed people were above the population average, with 15.8% using any illicit in the last 12 months. Males were more likely than females to report recent use of any illicit drug across all employment status groups.

Ecstasy use was highest among students, while cocaine use was highest among employed people. For all other drugs mentioned, unemployed people or those looking for work reported the highest usage.

**Table 9.6: Recent illicit drug use by employment status, persons aged 14 years or older, 2010 (per cent)**

|   | Employed | Unemployed/<br>looking for<br>work | Engaged in<br>home<br>duties | Student | Retired | Other | Total       |
|---|----------|------------------------------------|------------------------------|---------|---------|-------|-------------|
| <b>Males</b>                            |          |                                    |                              |         |         |       |             |
| Any illicit                             | 17.7     | 29.2                               | *26.2                        | 21.3    | 6.7     | 21.2  | <b>17.0</b> |
| Any illicit excluding cannabis          | 9.6      | 15.3                               | *14.4                        | 9.9     | 4.9     | 11.1  | <b>9.2</b>  |
| Cannabis                                | 13.7     | 25.1                               | *15.6                        | 19.1    | 2.1     | 16.3  | <b>12.9</b> |
| Pain-killers/analgesics <sup>(a)</sup>  | 2.5      | *3.6                               | *9.4                         | *1.8    | 3.5     | 4.1   | <b>2.8</b>  |
| Meth/amphetamine (speed) <sup>(a)</sup> | 2.9      | 6.1                                | **2.6                        | *1.4    | **0.2   | *3.9  | <b>2.5</b>  |
| Cocaine                                 | 3.5      | *2.6                               | —                            | *2.5    | —       | **1.2 | <b>2.7</b>  |
| Ecstasy                                 | 4.3      | *4.1                               | **2.5                        | 6.0     | **0.1   | *2.1  | <b>3.6</b>  |
| <b>Females</b>                          |          |                                    |                              |         |         |       |             |
| Any illicit                             | 13.4     | 20.2                               | 9.7                          | 17.6    | 5.6     | 13.0  | <b>12.3</b> |
| Any illicit excluding cannabis          | 8.0      | 11.0                               | 5.1                          | 9.1     | 4.1     | 8.3   | <b>7.2</b>  |
| Cannabis                                | 8.8      | 14.7                               | 5.9                          | 13.2    | *1.6    | 7.0   | <b>7.7</b>  |
| Pain-killers/analgesics <sup>(a)</sup>  | 2.9      | 5.9                                | 2.5                          | 3.8     | 3.0     | 4.9   | <b>3.3</b>  |
| Meth/amphetamine (speed) <sup>(a)</sup> | 2.2      | 3.4                                | *0.9                         | *1.7    | *0.2    | *1.5  | <b>1.7</b>  |
| Cocaine                                 | 2.4      | *1.8                               | *0.7                         | *2.0    | **0.1   | **0.6 | <b>1.5</b>  |
| Ecstasy                                 | 3.1      | 4.0                                | 1.0                          | 4.2     | **0.1   | *1.0  | <b>2.3</b>  |
| <b>Persons</b>                          |          |                                    |                              |         |         |       |             |
| Any illicit                             | 15.8     | 24.9                               | 10.3                         | 19.4    | 6.1     | 16.1  | <b>14.7</b> |
| Any illicit excluding cannabis          | 8.9      | 13.2                               | 5.5                          | 9.5     | 4.5     | 9.4   | <b>8.2</b>  |
| Cannabis                                | 11.5     | 20.1                               | 6.2                          | 16.1    | 1.8     | 10.5  | <b>10.3</b> |
| Pain-killers/analgesics <sup>(a)</sup>  | 2.7      | 4.7                                | 2.8                          | 2.8     | 3.2     | 4.6   | <b>3.0</b>  |
| Meth/amphetamine (speed) <sup>(a)</sup> | 2.6      | 4.8                                | *1.0                         | 1.5     | *0.2    | 2.4   | <b>2.1</b>  |
| Cocaine                                 | 3.0      | 2.2                                | *0.6                         | 2.3     | **<0.1  | 0.8   | <b>2.1</b>  |
| Ecstasy                                 | 3.8      | 4.1                                | 1.0                          | 5.1     | *0.1    | *1.4  | <b>3.0</b>  |

(a) For non-medical purposes.

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

\*\* Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Source: AIHW analysis of the National Drug Strategy Household Survey 2010.

## 9.4.4 Drug use among employed people

It is estimated that in Australia in 2004–05, alcohol, tobacco and illicit drug use caused a loss of \$13.2 billion in the paid workforce as a result of drug-attributable death and sickness. Tobacco accounted for the largest share (61% or \$8.0 billion), followed by alcohol with 27% (\$3.5 billion) and illicit drugs 12% (\$1.6 billion) (Collins & Lapsley 2008b). Misuse of alcohol and other drugs is associated with a range of negative human resource and productivity effects such as absenteeism, turnover, decreased output/performance and lower levels of job satisfaction (ACCI 2007).

Table 9.7 shows the proportions of employed recent drinkers by their drinking status risk against the following categories: missing work due to alcohol-related illness or injury, going to work after drinking, or drinking at work.

Patterns of alcohol consumption by employed recent drinkers were closely linked to the prevalence of negative work-related behaviours and absenteeism in the workforce (Pidd et al. 2006). In 2010, employed people who consumed alcohol at risky levels on a regular basis were more likely to report missing days of work in the last three months due to alcohol use, to attend work under the influence of alcohol in the last 12 months, and to drink at work (Table 9.7).

**Table 9.7: Proportion of employed recent drinkers where workforce participation was affected by alcohol use, by risk category, 2010 (per cent)**

| Risk category                 | Work days missed because of alcohol use in last 3 months |                | Went to work under the influence in last 12 months |             | Usually drinks at work |             | Work days missed due to illness/injury in last 3 months |                |
|-------------------------------|--|----------------|--|-------------|------------------------|-------------|---|----------------|
|                               | 0 days missed  | ≥ 1 day missed | Yes  | No          | Yes                    | No          | 0 days missed   | ≥ 1 day missed |
|                               | <b>Single-occasion risk</b>                              |                |  |             |                        |             |   |                |
| Low risk                      | 99.5   | 0.5            | 1.5  | 98.5        | 3.0                    | 97.0        | 66.5  | 33.5           |
| At least yearly               | 95.3   | 4.7            | 9.3  | 90.7        | 7.0                    | 93.0        | 60.2  | 39.8           |
| At least monthly              | 93.7   | 6.3            | 11.7   | 88.3        | 7.4                    | 92.6        | 60.4  | 39.6           |
| At least weekly               | 92.0   | 8.0            | 15.7   | 84.3        | 7.8                    | 92.2        | 61.8  | 38.2           |
| Every day or most days        | 92.1   | 7.9            | 20.1   | 79.9        | 8.3                    | 91.7        | 67.1  | 32.9           |
| <b>Total</b>                  | <b>97.3</b>  | <b>2.7</b>     | <b>5.6</b>   | <b>94.4</b> | <b>5.3</b>             | <b>94.7</b> | <b>63.3</b>   | <b>36.7</b>    |
| <b>Lifetime risk</b>          |  |                |  |             |                        |             |   |                |
| 2 or less drinks on average   | 98.7   | 1.3            | 2.9  | 97.1        | 4.3                    | 95.7        | 63.0  | 37.0           |
| More than 2 drinks on average | 92.9   | 7.1            | 14.0   | 86.0        | 7.9                    | 92.1        | 62.5  | 37.5           |
| <b>Total</b>                  | <b>97.3</b>  | <b>2.7</b>     | <b>5.6</b>   | <b>94.4</b> | <b>5.3</b>             | <b>94.7</b> | <b>63.3</b>   | <b>36.7</b>    |

Source: AIHW analysis of the 2010 NDSHS.

## 9.5 Pregnancy

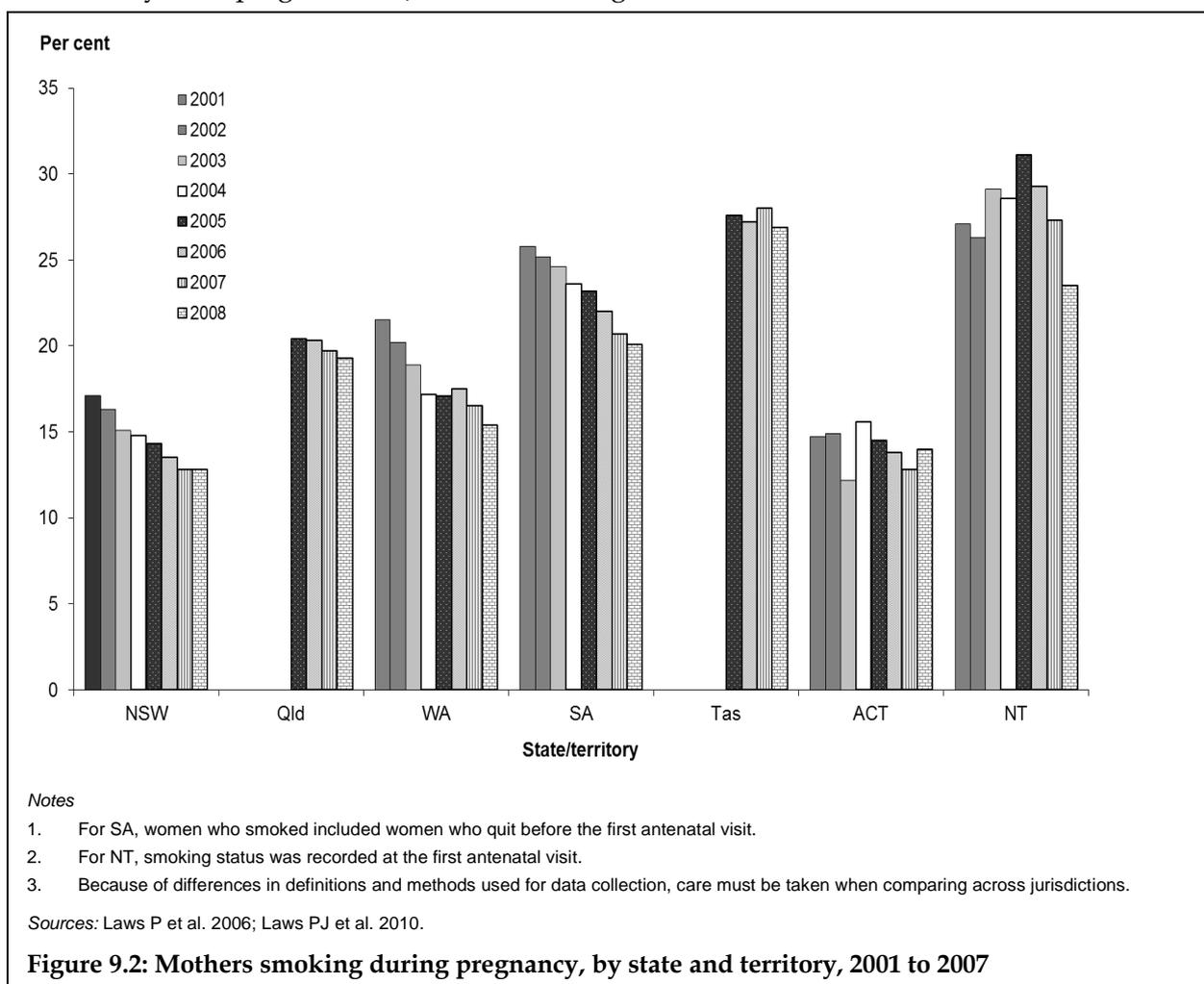
Substance use among pregnant women is a particular concern as drugs can cross into the placenta and therefore lead to a range of health problems, including abnormal fetal growth and development (Advisory Council on the Misuse of Drugs 2006).

### 9.5.1 Smoking during pregnancy

Smoking is a risk factor for pregnancy complications, and is associated with poorer perinatal outcomes such as low birth weight, pre-term birth, babies who are small for gestational age and perinatal death (Laws P et al. 2006). The National Perinatal Data Collection (NPDC) collects annual data from each state and territory on mothers and babies for all births in Australia in hospitals, birth centres and the community. Data from 2001–2004 on smoking during pregnancy are available for five states and territories: New South Wales, Western Australia, South Australia, the Australian Capital Territory and the Northern Territory. From 2005, data from Queensland and Tasmania are also available.

In 2008, 292,156 women gave birth to 296,925 babies in Australia. This included 294,737 live births and 2,188 fetal deaths (Laws PJ et al. 2010). It is difficult to determine the number of pregnant women in Australia at any one point in time due to the difficulty in collecting data on pregnancies that end before 20 weeks gestation. The proportion of women who reported smoking while pregnant was 16.2% in all states and territories excluding Victoria (Laws PJ et al. 2010). The proportion ranged from 12.8% in New South Wales to 26.9% in Tasmania (Figure 9.2). This proportion has changed little over the previous five years.

Analysis of the 2010 NDSHS showed a slightly lower proportion of women (11.7%) smoking while they were pregnant and/or breastfeeding.



**Figure 9.2: Mothers smoking during pregnancy, by state and territory, 2001 to 2007**

## 9.5.2 Other drug use during pregnancy

The National Health and Medical Research Council (NHMRC) released guidelines about alcohol consumption during pregnancy in 2009, which recommended that pregnant women abstain completely from alcohol during pregnancy (NHMRC 2009).

Exposure to alcohol during the prenatal period remains the leading cause of preventable birth defects and developmental problems in Australia and as such has generated increased attention from policy, research and health practitioners (McBride et al. 2008). A large proportion of women reduce or stop alcohol use when they find out that they are pregnant; however, a proportion of women continue to drink in moderation, and an additional group continue to drink at risky levels while pregnant (McBride et al. 2008). Drinking alcohol during pregnancy also increases the risk of learning difficulties and behavioural problems (ADF 2005).

The 2010 NDSHS asked female respondents who had been pregnant and/or breastfeeding in the last 12 months whether they drank more, less or about the same amount of alcohol while they were pregnant and/or breastfeeding than beforehand. A large majority (more than 90%) reported that they either did not drink alcohol or drank less alcohol when they were pregnant and/or breastfeeding than when they were not pregnant or not breastfeeding (Table 9.8).

**Table 9.8: Alcohol consumption among women who were pregnant and/or breastfeeding in the last 12 months, 2010 (per cent)**

|  | Pregnant in last 12 months |           |       | Breastfeeding in last 12 months |           |       |
|--|----------------------------|-----------|-------|---------------------------------|-----------|-------|
|  | Under 35 years             | 35+ years | Total | Under 35 years                  | 35+ years | Total |
| Drank less alcohol than when not pregnant or not breastfeeding                   | 45.7                       | 56.5      | 48.7  | 60.7                            | 64.4      | 62.0  |
| Drank about the same amount of alcohol as when not pregnant or not breastfeeding | *1.8                       | *2.6      | *2.0  | *1.8                            | *6.8      | 3.5   |
| Drank more alcohol than when not pregnant or not breastfeeding                   | **0.5                      | —         | **0.4 | **0.2                           | —         | **0.1 |
| Do not drink alcohol   | 52.0                       | 40.9      | 48.9  | 37.4                            | 28.8      | 34.4  |

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

\*\* Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Source: Analysis of the National Drug Strategy Household Survey, AIHW unpublished.

In 2010, less than one in 20 women who were pregnant and/or breastfeeding in the past 12 months used any illicit drug while they were pregnant (Table 9.9), with cannabis and pharmaceuticals for non-medical purposes being the most commonly used. The proportions include those who used illicit drugs in the time before they knew they were pregnant. The proportions using any illicit and cannabis are significantly lower than for other women in the community of child-bearing age.

**Table 9.9: Proportion of women aged 14 years or older who used illicit drugs while pregnant and not pregnant, 2010 (per cent)**

|                                   | Pregnant and/or breastfeeding in last 12 months | Recent use by women under 50 years <sup>(a)</sup> |
|-----------------------------------|---|---|
| Any illicit                       | 4.2   | 16.8  |
| Cannabis                          | *1.7  | 12.4  |
| Any pharmaceutical <sup>(b)</sup> | *2.4  | 4.0   |

(a) Used in the last 12 months and were not pregnant or breastfeeding in the last 12 months.

(b) Includes pain-killers/analgesics, tranquillisers/sleeping pills, methadone, other opiates and steroids used for non-medical purposes.

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

Source: AIHW 2011b unpublished analysis of National Drug Strategy Household Survey 2010.

## 9.6 Families

This section looks at differences in tobacco, alcohol and illicit drug use depending on peoples' relationship status (that is, whether they are married, divorced, never married, in a de facto relationship, widowed, and whether they consider themselves to be single or part of a couple). It also looks at drug use by those whose have children and those who do not.

In 2006, 50% of Australians were married, 33% had never been married, 11% were separated or divorced and 6% were widowed. A further 45% were living in households with children (33% in coupled households and 11% in single-parent households), 51% had no children living in the household (27% coupled, and 24% alone) and 4% lived in a group household. Three in ten (29%) households contained children under the age of 15 (ABS 2006).

Research shows that parents are their children's most influential role models when it comes to drinking alcohol (ADF 2005). Teenagers aged 11–15 tend to follow their parents' behaviour when deciding whether to smoke, drink or use cannabis. This influence is strongest before the teenager has tried any of these drugs, so parents are an important factor in helping to prevent their children's alcohol or other drug use (ADF 2005).

While parental drug misuse can affect many aspects of a child's life, it is generally difficult to disentangle the effects of parental drug use from broader social and economic factors that contribute to and maintain the misuse of either drugs or alcohol (Dawe et al. 2006).

### 9.6.1 Smoking status

In 2010, people who were divorced/separated/widowed were more likely to be daily smokers (20.7%) than those never marries (15.4%) or those married or de facto (13.6%) (Table 9.10). Daily smoking was particularly high among males in this group (27.0% compared to 17.7% for females).

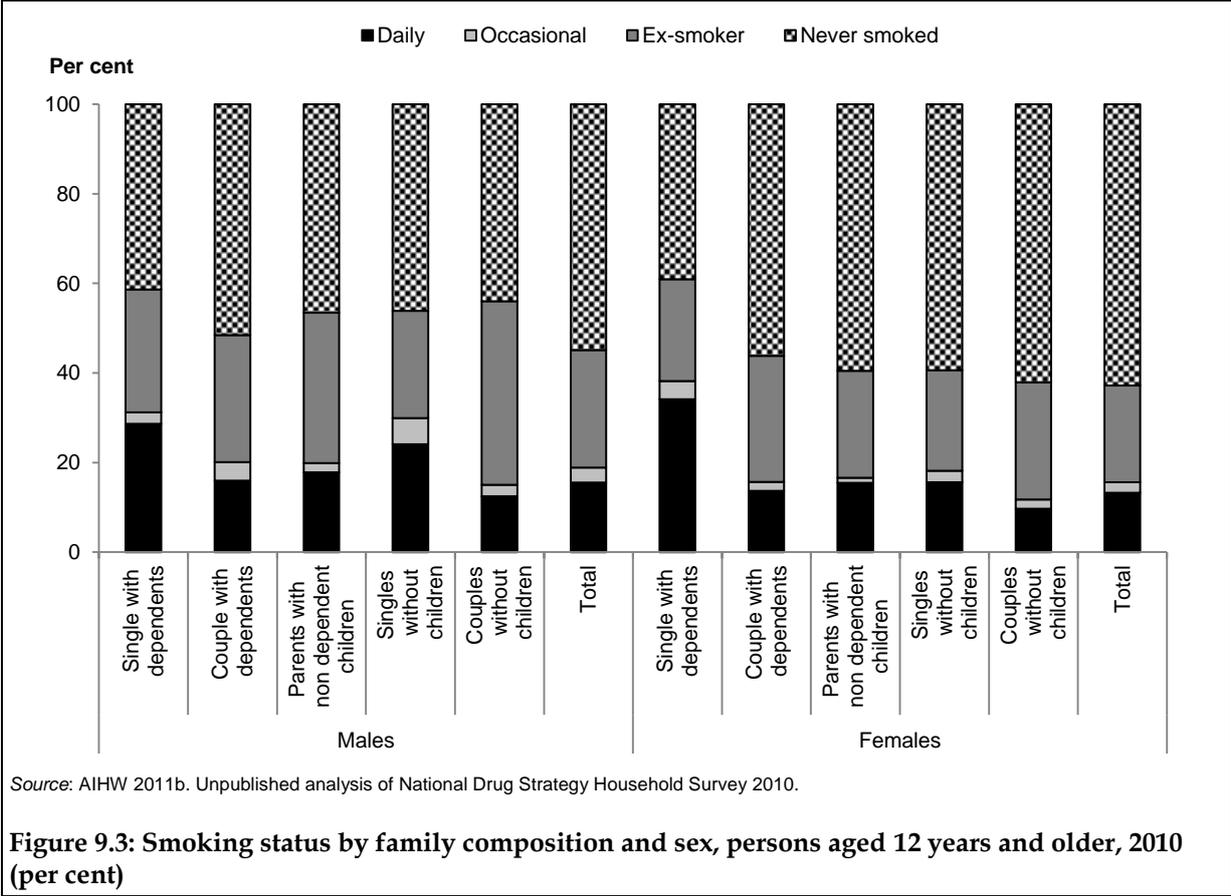
**Table 9.10: Daily smoking by marital status and sex, persons aged 14 years or older, 2010 (per cent)**

| Daily Smokers | Never married | Divorced/separated/widowed | Married/de facto | Total |
|---------------|---------------|----------------------------|------------------|-------|
| Males         | 16.6          | 27.0                       | 14.7             | 16.4  |
| Females       | 14.1          | 17.7                       | 12.5             | 13.9  |
| Persons       | 15.4          | 20.7                       | 13.6             | 15.1  |

Source: AIHW 2011b. unpublished analysis of National Drug Strategy Household Survey 2010.

In 2010, 16.6% of people living in households with dependent children smoked daily. Singles with dependent children were more likely to be daily smokers than those in a couple relationship with dependents (33.1% and 14.8%, respectively). The highest levels of daily smoking were found among female single parents (34.1%) (Figure 9.3).

As shown in Figure 9.3, single females with dependent children living at home were the most likely group to smoke tobacco on a daily basis (34.1%). They were also the only group in which the proportion of daily smokers was higher than that for males in the equivalent category. Couples with children were also more likely to smoke daily than couples without children (14.8% compared to 11.2%, respectively).



### 9.6.2 Exposure to environmental tobacco smoke

Exposure to second-hand smoke occurs at home, in the workplace, and in other public places such as bars, restaurants and recreation venues. Expanding workplace restrictions now protect the majority of adults, while homes remain the most important source of exposure for children (United States Department of Health and Human Services 2006). Second hand smoke is harmful and hazardous to the health of the general public and particularly dangerous to children. It increases the risk of serious respiratory problems in children (such as more frequent and more severe asthma attacks and lower respiratory tract infections) and increases the risk for middle ear infections (United States Department of Health and Human Services 2006). Compared with adults, children are particularly susceptible to the effects of second-hand smoke due to their higher breathing rates per body weight, their greater lung surface area relative to their body mass (compared with the corresponding ratio in adults),

and the comparative immaturity of their lungs (Office for Environmental Health Hazard Assessment 2005).

In 2010, about 1 in 12 children (8.7%) under the age of 15 years were exposed to smoking inside the home and 11.7% of parents with non-dependent children smoked inside the home (Table 9.11). Parents with dependent children were less likely to smoke in the home than other people.

**Table 9.11: Exposure to environmental tobacco smoke in the home by family status, 2010 (per cent)**

|                                 | Parents with dependents | Parents with non-dependent children | Singles and couples without children | Total |
|---------------------------------|-------------------------|-------------------------------------|--------------------------------------|-------|
| Yes, inside the home            | 5.7                     | 11.7                                | 10.7                                 | 8.7   |
| No, only smoke outside the home | 28.1                    | 27.3                                | 17.7                                 | 23.4  |
| No-one smokes at home regularly | 66.2                    | 60.9                                | 71.6                                 | 67.9  |

Source: AIHW analysis of the 2010 NDSHS.

### 9.6.3 Alcohol risk and families

The results from the 2010 NDSHS indicated that across all age groups, people in a relationship tended to drink at lower risk levels than those who were single. Those who were divorced, separated or widowed were more likely to abstain from alcohol (24.6%) than those who had either never been married (22.7%), or who were married or living in a de facto relationship (16%).

In 2010, single people, with and without dependent children, were more likely to drink at risky levels for single-occasion harm at least weekly. While single people without children were also the most likely group to drink at levels that put them at risk of lifetime harm (24.2%), couples without children were almost as likely to do so (21.4%) and more likely to do so than singles with dependents (18.6%) (Table 9.12).

**Table 9.12: Risk of harm from alcohol by family composition and sex, persons aged 12 years and older, 2010 (per cent)**

| Alcohol risk  | Single with dependents | Couple with dependents | Parents with non-dependent children | Singles without children | Couples without children | Other | Total |
|---|------------------------|------------------------|-------------------------------------|--------------------------|--------------------------|-------|-------|
| <b>Males</b>  |                        |                        |                                     |                          |                          |       |       |
| Abstainer   | 15.0                   | 13.0                   | 15.8                                | 15.8                     | 11.8                     | 31.5  | 18.8  |
| Single-occasion risk— low risk                      | 28.1                   | 30.7                   | 42.2                                | 30.4                     | 44.2                     | 22.6  | 32.8  |
| Single-occasion risk—at least yearly but not weekly | 27.1                   | 34.4                   | 21.6                                | 23.1                     | 24.1                     | 23.0  | 25.9  |
| Single-occasion risk—at least weekly                | 29.8                   | 22.0                   | 20.4                                | 30.7                     | 20.0                     | 22.9  | 22.5  |
| Lifetime risk low—2 or less drinks on average       | 51.7                   | 57.8                   | 56.1                                | 48.2                     | 58.3                     | 45.3  | 53.1  |
| Lifetime risk high—more than 2 drinks on average    | 33.4                   | 29.3                   | 28.1                                | 36.0                     | 30.0                     | 23.2  | 28.1  |
| <b>Females</b>                                      |                        |                        |                                     |                          |                          |       |       |
| Abstainer   | 20.1                   | 17.9                   | 25.2                                | 24.3                     | 19.4                     | 34.4  | 24.5  |
| Single-occasion risk— low risk                      | 39.3                   | 49.5                   | 57.6                                | 47.6                     | 56.8                     | 31.7  | 46.5  |
| Single-occasion risk—at least yearly but not weekly | 26.7                   | 25.8                   | 12.5                                | 16.9                     | 16.8                     | 23.1  | 20.5  |
| Single-occasion risk—at least weekly                | 13.9                   | 6.8                    | 4.6                                 | 11.2                     | 7.1                      | 10.8  | 8.5   |
| Lifetime risk low—2 or less drinks on average       | 64.9                   | 72.2                   | 66.1                                | 62.6                     | 68.3                     | 54.9  | 64.4  |
| Lifetime risk high—more than 2 drinks on average    | 15.1                   | 9.9                    | 8.7                                 | 13.1                     | 12.3                     | 10.7  | 11.0  |
| <b>Persons</b>                                      |                        |                        |                                     |                          |                          |       |       |
| Abstainer   | 19.1                   | 15.4                   | 20.7                                | 20.2                     | 15.5                     | 32.9  | 21.7  |
| Single-occasion risk—low risk                       | 37.2                   | 40.2                   | 50.2                                | 39.3                     | 50.3                     | 27.0  | 39.7  |
| Single-occasion risk—at least yearly but not weekly | 26.8                   | 30.1                   | 16.9                                | 19.9                     | 20.5                     | 23.1  | 23.2  |
| Single-occasion risk—at least weekly                | 16.9                   | 14.3                   | 12.3                                | 20.6                     | 13.7                     | 17.0  | 15.4  |
| Lifetime risk low—2 or less drinks on average       | 62.3                   | 65.1                   | 61.3                                | 55.6                     | 63.1                     | 50.0  | 59.8  |
| Lifetime risk high—more than 2 drinks on average    | 18.6                   | 19.5                   | 18.1                                | 24.2                     | 21.4                     | 17.1  | 19.5  |

Source: AIHW 2011b unpublished analysis of the 2010 NDSHS.

### 9.6.4 Illicit drug use

Illicit drug use varies depending on a person's relationship status. Broadly, people who have never been married were more likely to have used an illicit drug in the last 12 months (24.4%) than those who were in a relationship (10.4%) or who were divorced/separated/widowed (12.5%). This finding is influenced by age, however, since younger people were more likely than older people to have used illicit drugs.

Children in the care of illicit drug users may also be exposed to unsafe practices in the home environment, including poor hazard detection by parents and exposure to illicit drugs and drug equipment (NDARC 2006).

As shown in Table 9.13, in 2010, singles with dependent children were twice as likely as couples with dependent children to have used illicit drugs in the previous 12 months, a similar pattern to that for singles and couples without children (Table 9.13).

**Table 9.13: Recent illicit drug use by family composition, persons aged 12 years and older, 2010 (per cent)**

| <b>Illicit drugs</b>                    | <b>Single with dependents</b> | <b>Couple with dependents</b> | <b>Parents with non-dependent children</b> | <b>Singles without children</b> | <b>Couple without children</b> | <b>Other</b> | <b>Total</b> |
|---|-------------------------------|-------------------------------|--|---------------------------------|--------------------------------|--------------|--------------|
| Used any illicit                        | 20.9                          | 10.8                          | 9.3  | 22.6                            | 10.3                           | 18.1         | <b>14.3</b>  |
| Used any illicit excluding marijuana    | 10.1                          | 5.2                           | 5.4  | 14.4                            | 6.8                            | 9.8          | <b>7.9</b>   |
| Marijuana/cannabis                      | 15.5                          | 7.6                           | 5.1  | 16.3                            | 6.0                            | 14.2         | <b>10.0</b>  |
| Pain-killers/analgesics <sup>(a)</sup>  | 4.1                           | 1.9                           | 3.5  | 4.4                             | 2.8                            | 2.8          | <b>2.7</b>   |
| Meth/amphetamine (speed) <sup>(a)</sup> | 2.7                           | 1.4                           | *0.8                                       | 3.4                             | 1.5                            | 2.7          | <b>2.0</b>   |
| Cocaine                                 | 1.8                           | 1.3                           | *0.5                                       | 4.4                             | 1.8                            | 2.6          | <b>2.1</b>   |
| Ecstasy                                 | 2.7                           | 1.4                           | *0.5                                       | 6.5                             | 2.3                            | 4.4          | <b>2.9</b>   |

(a) For non-medical purposes.

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

Source: AIHW 2011b. unpublished analysis of 2010 NDSHS.

# 10 Services

## 10.1 Key findings

- In 2009–10, 671 alcohol and other drug treatment agencies across Australia provided 146,786 episodes of treatment to people who were concerned about their own or someone else's alcohol or other drug use. Alcohol continued to be the most common principal drug of concern for those seeking treatment, and counselling remained the most common main treatment type provided. Most clients referred themselves to treatment and ceased treatment because it was completed.
- At 30 June 2010, there were 46,078 pharmacotherapy clients in Australia. This total represented an increase of 2,633 from June 2009 and an overall increase of 21,421 since 1998. Around seven in ten (69%) clients were receiving methadone and the remainder received buprenorphine or buprenorphine/naloxone. This finding has remained consistent since 2006.
- In 2009–10, there were about 104,617 hospital separations with a drug-related principal diagnosis, including drug use disorders or harm. Alcohol made up the majority of these separations (58%).
- In 2009–10, around 15% of the total support periods provided to people by homelessness services were related to the use of alcohol or other drugs. Around one-third of people who received this support also had mental health issues.

## 10.2 Introduction

This chapter provides information about services for people with alcohol and other drug use issues in Australia. In September 2009, the Australian Government announced a new National Preventative Health Strategy. The strategy provides a blueprint for tackling the burden of chronic disease currently caused by obesity, tobacco, and excessive consumption of alcohol. In regards to alcohol, the strategy focuses on increasing the role of primary health care in assisting individuals (DoHA 2009b). While some data about the role of GPs in managing alcohol and other drug issues are currently available, more comprehensive data are available about specialist alcohol and other drug treatment agencies.

The three immediate priority areas identified in the National Drug Strategy 2001–2015 are the development of the Aboriginal and Torres Strait Islander Peoples Drug Strategy, a national drug research and data strategy and a national workforce development strategy (MCDS 2011). One of the structural priorities for 2010–2015 is to use the Internet as an opportunity to provide information, and potentially treatment, to audiences who may not be reached through the media. Another priority is to provide planning and quality frameworks for treatment services that incorporate evidence into successful drug treatment (MCDS 2011). A range of data is available to inform these priorities, as presented below. Current data gaps include the mental health status of people in alcohol and other drugs (AOD) treatment, information about demand for treatment and the outcomes from treatment provided.

This chapter firstly looks at treatment services for people who are concerned about their alcohol and other drug use. It then explores other types of services sometimes used by people with problematic alcohol or other drug use, including services for the homeless and mental health services.

## 10.3 Alcohol and other drug treatment

The aim of specialist alcohol and other drug treatment is to help individuals address aspects of their drug and/or alcohol use that are affecting their health or wellbeing. Treatments may address physical, psychological, emotional and social issues. Goals of treatment can include reduction of drug use and/or improvements to social and personal functioning.

There are many different types of treatment available in Australia, many of which are based on a harm reduction philosophy. The defining feature of harm reduction is the focus on the prevention of harm, rather than on the prevention of drug use itself, and the focus on people who continue to use drugs (International Harm Reduction Association 2006).

Abstinence-based treatment is another treatment philosophy. It is usually based around a structured drug-free setting with abstinence-oriented interventions that help provide clients with relapse prevention and the development of skills and attitudes for making changes towards drug-free lifestyles (WHO 2004). Abstinence-based treatment normally comprises 'talking therapies' including counselling and education. Harm reduction and abstinence-based treatment can be integrated to encourage client engagement and retention.

The data presented below have been collected under the Alcohol and Other Drug Treatment Services National Minimum Data Set (AODTS-NMDS). The AODTS-NMDS collects and reports on information provided by alcohol and other drug treatment agencies in Australia and their clients. These agencies include most publicly funded specialist AOD treatment services; accommodation services, sobering up shelters, opioid pharmacotherapy only services, and prison-based services are excluded. For more details about the scope of the collection, refer to *Alcohol and other drug treatment services in Australia 2009-10* (AIHW 2011).

Treatment service provision varies somewhat between states. Nonetheless, the AODTS-NMDS provides national information on treatment agencies together with client demographics, treatments received and drugs of concern. The unit of measurement in this collection is closed (or completed) treatment episodes. A 'closed treatment episode' refers to a period of contact between the client and a treatment agency.

## 10.4 Treatment agencies

Treatment services are provided by government, non-government sector and private agencies. Private agencies are not captured in the AODTS-NMDS. Treatment agencies are located in geographically diverse areas, from *Major cities* to *Very remote* regions. Some agencies have more than one service outlet or place where services are delivered but report only under the main administrative centre of the agency. As a result, the number of treatment agencies may be under-counted.

In 2009-10, there was a total of 671 alcohol and other drug treatment agencies across Australia. There were more in the government sector (364) than in the non-government sector (307).

Just over half of treatment services in 2009-10 were located in *Major cities* (51%) followed by *Inner regional* (28%), *Outer regional* (13%), *Remote* (3%) and *Very remote* (4%). The Northern Territory recorded the largest proportion of services located in *Outer regional* (45%) and *Remote* areas (40%) due to its geographical profile. Similarly, Tasmania had a large proportion of services in *Inner regional* (75%) as there are no areas in Tasmania that meet the definition of *Major cities* (Table 10.1).

**Table 10.1: Treatment agencies by geographical location<sup>(a)</sup> and jurisdiction, 2009–10**

| Location       | NSW          | Vic          | Qld          | WA           | SA           | Tas          | ACT          | NT           | Australia    |
|----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                | (number)     |              |              |              |              |              |              |              |              |
| Major cities   | 128          | 89           | 47           | 30           | 38           | —            | 10           | —            | 342          |
| Inner regional | 95           | 40           | 24           | 9            | 8            | 12           | —            | —            | 188          |
| Outer regional | 33           | 9            | 22           | 5            | 8            | 4            | —            | 9            | 90           |
| Remote         | 2            | —            | 12           | —            | 1            | —            | —            | 8            | 23           |
| Very remote    | —            | —            | 13           | 8            | 4            | —            | —            | 3            | 28           |
| <b>Total</b>   | <b>258</b>   | <b>138</b>   | <b>118</b>   | <b>52</b>    | <b>59</b>    | <b>16</b>    | <b>10</b>    | <b>20</b>    | <b>671</b>   |
|                | (per cent)   |              |              |              |              |              |              |              |              |
| Major cities   | 49.6         | 64.5         | 39.8         | 57.7         | 64.4         | —            | 100.0        | —            | 51.0         |
| Inner regional | 36.8         | 29.0         | 20.3         | 17.3         | 13.6         | 75.0         | —            | —            | 28.0         |
| Outer regional | 12.8         | 6.5          | 18.6         | 9.6          | 13.6         | 25.0         | —            | 45.0         | 13.4         |
| Remote         | 0.8          | —            | 10.2         | —            | 1.7          | —            | —            | 40.0         | 3.4          |
| Very remote    | —            | —            | 11.0         | 15.4         | 6.8          | —            | —            | 15.0         | 4.2          |
| <b>Total</b>   | <b>100.0</b> |

(a) The geographical location of treatment agencies in the 2008–09 AODTS–NMDS has been analysed using the Remoteness Areas of the Australian Bureau of Statistics Australian Standard Geographical Classification.

Source: AIHW 2011g.

## 10.5 Treatment clients

A ‘client’ in the AODTS–NMDS is a person seeking treatment for their own or someone else’s drug use. In 2009–10, there were 146,786 closed treatment episodes of which some may have been provided to the same client.

Of the total treatment episodes, 140,769 (96%) were for clients accessing treatment for their own drug use, with the remaining 6,017 treatment episodes provided to people seeking assistance related to someone else’s drug use.

Around two-thirds of clients seeking treatment were male. The median age for men and women in treatment was 32 and 33 years, respectively.

Clients born in Australia made up the majority of AODTS–NMDS episodes (87%), with English being the most common preferred language (95%).

In 2009–10, 13% of clients identified as being of Aboriginal or Torres Strait Islander origin. (It is important to note that many treatment services provided to Indigenous people are not captured by the AODTS–NMDS. More information about services to Indigenous people is provided later in the chapter.) Among Indigenous clients in the AODTS–NMDS, the most common age was between 20–29 (also the case for non-Indigenous clients). Treatment for alcohol was more likely to be nominated by Indigenous clients (55%) compared with 47% for non-Indigenous clients.

## 10.6 What drugs are clients concerned about?

In the AODTS–NMDS, the ‘principal drug of concern’ is the main drug for which clients seek treatment through an alcohol and drug treatment agency. The information in this section relates to closed treatment episodes for clients who sought treatment for their own drug use.

In 2009–10, alcohol was the most common principal drug of concern for Australia as a whole (Table 10.2). Alcohol was the most common principal drug of concern in all jurisdictions, except Tasmania where cannabis was most common. The Northern Territory reported the highest proportion of episodes where alcohol was the principal drug of concern (69%, compared with the national proportion of 48%). Other variations in principal drug of concern by state/territory are evident in Table 10.2. For example, the ACT and Victoria had the largest proportions of episodes for heroin (both 14%).

**Table 10.2: Principal drug of concern<sup>(a)</sup> by jurisdiction, 2009–10 (per cent)**

| Principal drug                 | NSW <sup>(b)</sup> | Vic           | Qld <sup>(c)</sup> | WA            | SA           | Tas <sup>(d)</sup> | ACT          | NT           | Australia  | Total (no.)    |
|--------------------------------|--------------------|---------------|--------------------|---------------|--------------|--------------------|--------------|--------------|------------|----------------|
| Alcohol                        | 53.9               | 46.2          | 37.6               | 49.3          | 56.4         | 19.2               | 54.8         | 69.0         | 47.9       | 67,450         |
| Amphetamines <sup>(e)</sup>    | 6.8                | 5.4           | 5.9                | 14.2          | 11.2         | 3.8                | 6.2          | 2.5          | 7.1        | 10,038         |
| Benzodiazepines                | 2.1                | 1.9           | 1.0                | 0.9           | 1.6          | 0.7                | 0.9          | 0.5          | 1.6        | 2,238          |
| Cannabis                       | 18.4               | 23.4          | 36.4               | 18.6          | 10.0         | 67.5               | 16.7         | 9.2          | 23.2       | 32,676         |
| Ecstasy                        | 0.4                | 0.6           | 1.7                | 0.8           | 1.1          | 1.2                | 0.5          | 0.2          | 0.8        | 1,107          |
| Nicotine                       | 1.1                | 1.2           | 6.0                | 0.7           | 0.8          | 0.2                | 0.4          | 1.4          | 1.8        | 2,553          |
| Opioids                        |                    |               |                    |               |              |                    |              |              |            |                |
| Heroin                         | 9.6                | 14.4          | 3.6                | 8.7           | 8.9          | 0.3                | 14.1         | 0.6          | 9.9        | 13,882         |
| Methadone                      | 2.0                | 1.1           | 0.6                | 1.4           | 2.8          | 0.7                | 1.6          | 0.5          | 1.4        | 1,907          |
| Morphine                       | 1.1                | 0.9           | 1.3                | 0.4           | 2.2          | 4.1                | 0.6          | 7.7          | 1.2        | 1,751          |
| Total opioids <sup>(f)</sup>   | 16.0               | 18.3          | 7.7                | 11.1          | 17.3         | 6.1                | 19.8         | 8.8          | 14.7       | 20,709         |
| All other drugs <sup>(g)</sup> | 1.2                | 3.1           | 3.8                | 4.4           | 1.7          | 1.3                | 0.6          | 8.3          | 2.8        | 3,998          |
| <b>Total (per cent)</b>        | <b>100</b>         | <b>100</b>    | <b>100</b>         | <b>100</b>    | <b>100</b>   | <b>100</b>         | <b>100</b>   | <b>100</b>   | <b>100</b> | <b>..</b>      |
| <b>Total (number)</b>          | <b>34,469</b>      | <b>49,156</b> | <b>22,835</b>      | <b>16,048</b> | <b>8,847</b> | <b>2,607</b>       | <b>3,421</b> | <b>3,386</b> | <b>..</b>  | <b>140,769</b> |

(a) Excludes treatment episodes for clients seeking treatment in relation to the drug use of others.

(b) The total number of episodes for New South Wales has been under-reported due to system issues for the reporting period of 2008–09.

(c) The total number of closed treatment episodes for Queensland may be under-counted because of the exclusion of a number of non-government agencies.

(d) The total number of closed treatment episodes for Tasmania may be under-counted because two agencies supplied drug diversion data only.

(e) Amphetamines proportion in New South Wales will be under-reported as other sources indicate a relatively high incidence of meth/amphetamine clients in the agencies affected by under-reporting due to system issues.

(f) 'Total opioids' includes the balance of opioid drugs coded according to ASCDC.

(g) Includes balance of principal drugs of concern coded according to ASCDC.

Source: AIHW 2011g.

## 10.6.1 Trends

In 2009–10, alcohol continued to be the most common principal drug of concern in Australia, as it has been since 2002–03 (Table 10.3). The proportion of treatment episodes for alcohol has increased from 39% in 2005–06 to 48% in 2009–10.

Cannabis has remained the second most common principal drug of concern and has accounted for close to one-quarter of treatment episodes since the beginning of the collection. Treatment for heroin has decreased since 2002–03, from 18% to 10% in 2009–10.

**Table 10.3: Trends in principal drug of concern<sup>(a)</sup>, 2002–03 to 2009–10 (per cent)**

|                                | 2002–03      | 2003–04      | 2004–05      | 2005–06      | 2006–07      | 2007–08      | 2008–09      | 2009–10      |
|--------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Alcohol                        | 38.0         | 37.5         | 37.2         | 38.7         | 42.3         | 44.5         | 45.8         | 47.9         |
| Amphetamines                   | 10.7         | 11.0         | 10.9         | 11.0         | 12.3         | 11.2         | 9.2          | 7.1          |
| Benzodiazepines                | 2.1          | 2.1          | 1.9          | 1.8          | 1.6          | 1.7          | 1.5          | 1.6          |
| Cannabis                       | 22.0         | 22.0         | 23.0         | 24.6         | 22.8         | 21.6         | 22.5         | 23.2         |
| Cocaine                        | 0.3          | 0.2          | 0.3          | 0.3          | 0.3          | 0.3          | 0.3          | 0.4          |
| Ecstasy                        | 0.3          | 0.4          | 0.4          | 0.6          | 0.7          | 0.9          | 1.0          | 0.8          |
| Heroin                         | 18.4         | 18.0         | 17.2         | 13.6         | 10.6         | 10.5         | 10.3         | 9.9          |
| Methadone                      | 1.8          | 1.9          | 1.8          | 1.7          | 1.6          | 1.6          | 1.5          | 1.4          |
| Other opioids                  | 1.8          | 1.9          | 2.0          | 2.0          | 2.2          | 2.4          | 3.3          | 3.5          |
| All other drugs <sup>(b)</sup> | 3.9          | 4.6          | 5.3          | 5.7          | 5.5          | 5.4          | 4.4          | 4.2          |
| Not stated                     | 0.5          | 0.5          | —            | —            | —            | —            | —            | —            |
| <b>Total</b>                   | <b>100.0</b> |

(a) Excludes treatment episodes for clients seeking treatment for the drug use of others.

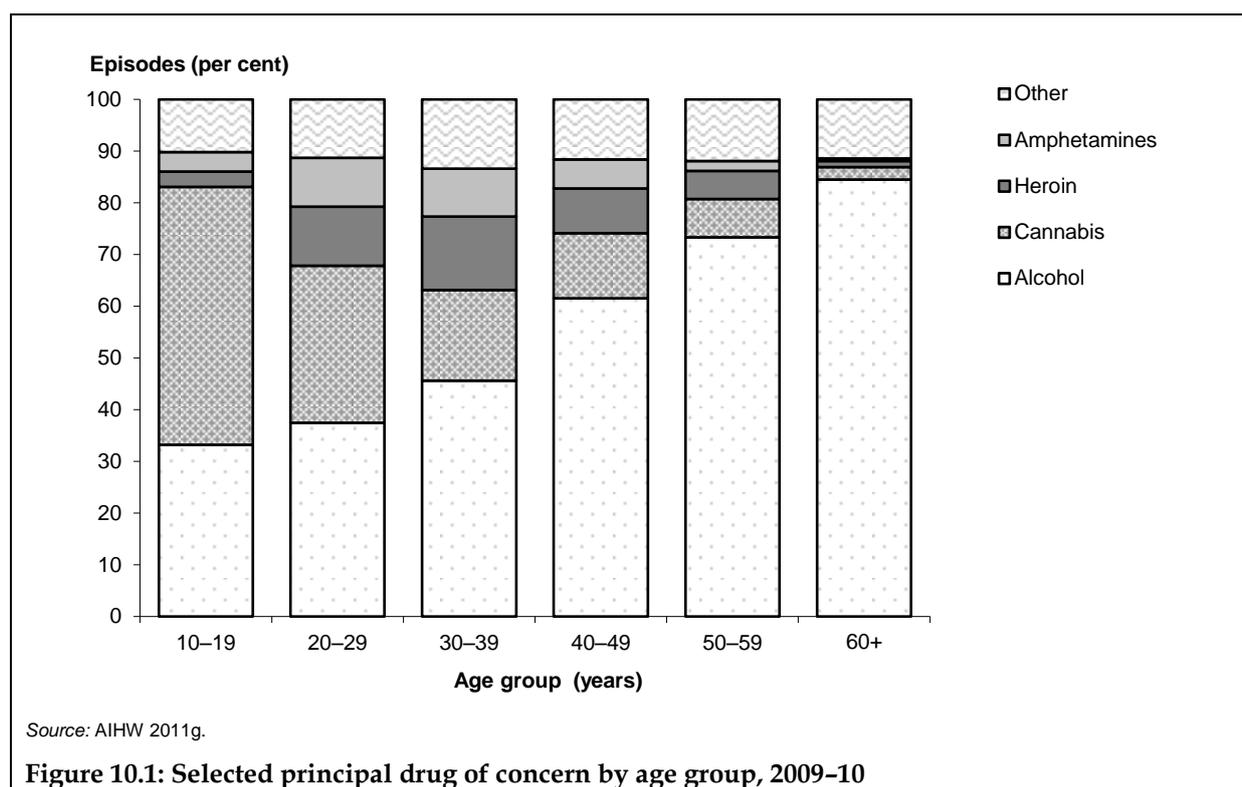
(b) Includes balance of principal drugs of concern coded according to ASCDC.

Source: AIHW 2011g.

## 10.6.2 Age and sex

For most drug types, males made up the majority of clients in treatment episodes. Only for benzodiazepines was treatment provided to the same number of females and males.

The principal drug of concern reported by clients varied across different age groups as shown in Figure 10.1. Older clients were more likely to receive treatment for alcohol than younger clients. This was the reverse for cannabis, with younger clients more likely to receive treatment for cannabis than older clients.



### 10.6.3 Injecting drug use

Around one in six (16%) closed treatment episodes involved clients who identified as being current injectors (that is, they injected within the previous 3 months). A further 18% of clients indicated that they had injected drugs in the past (3 or more months ago). Current injectors were most common among morphine and heroin users (65% and 62%, respectively), followed by amphetamines (45%), other opioids (35%), methadone (34%), cocaine (21%) and benzodiazepines (19%). Overall, 34% of closed treatment episodes were for clients who were current or past injectors.

## 10.7 What treatment do clients receive?

There are six main categories of drug and alcohol treatment that are reported by agencies to the AODTS-NMDS. These categories are broad in nature with varying levels of client contact and resources expended. The categories are intended to group similar treatments rather than represent in detail the large variety of treatment programs available across Australia. It is important to note that some jurisdictions 'map' their treatment data into the treatment types presented below. For example, a jurisdiction's treatment agencies may report specific types of counselling to their state health authority, which are then aggregated into 'counselling' for reporting to the AIHW.

### Counselling

The most common treatment provided is counselling, whether provided to individuals, groups or families. Counselling can be provided in a variety of ways including at an agency, the client's home or over the phone. The number of sessions can vary considerably among

clients and may be provided by a doctor, social worker, psychologist, specialist drug and alcohol worker, generalist welfare worker or other worker.

## **Withdrawal management (detoxification)**

Withdrawal management (detoxification) is a process that supports people through detoxification of alcohol or other drugs in the body. Detoxification can incorporate medications or not depending on the drugs for which the client is being treated. Withdrawal management can take place in a home-based setting or an inpatient or outpatient clinic.

## **Rehabilitation**

Rehabilitation focuses on supporting clients to stop their drug use and to help prevent any psychological, legal, financial, social and physical consequences of problematic drug use. Rehabilitation can be delivered in a number of ways including residential treatment services, therapeutic communities and community-based rehabilitation services.

## **Assessment only**

Assessment forms part of most treatments in alcohol and other drug treatment programs. Part of the process of assessment is to identify the nature of the drug issue, the needs of the client (which form the basis of the treatment plan) and the type of treatment that would be the most appropriate for the client.

'Assessment only' in the AODTS-NMDS captures treatment episodes where no service apart from assessment is provided to the client. This includes services provided by centralised agencies whose role is to make assessments and referrals to appropriate treatment agencies; it also includes episodes reported by alcohol and other drug treatment agencies when only the assessment part of a longer treatment plan has been completed.

## **Information and education only**

'Information and education only' is another category of treatment in the AODTS-NMDS. Education can be used in a variety of settings and with a wide range of people. It can sometimes have a focus on preventing drug use in young people. 'Information and education only' can be delivered to an individual or to groups. Group information and education is included in the AODTS-NMDS data if individuals involved are registered clients of a treatment agency.

## Support and case management only

'Support and case management' can be delivered in a number of ways. 'Support' generally encompasses activities that do not fall into other treatment types. An example of supportive contact is when a client occasionally calls into an agency for emotional support.

'Case management' is usually more structured than 'support'. It can assume a more holistic approach, taking into account all client needs including any general welfare needs. The functions of case management have been described as assessment, planning, linking, monitoring and advocacy (Vanderplaschen et al. 2007).

## Other

'Other' main treatment types are types of treatment that do not fit any of the previous descriptions of treatment. This category can incorporate treatment such as relapse prevention, living skills classes, and safer using or use reduction education and support. This can include aspects of the more common main treatment types but not coded as such. An example of this is when a service offers a brief intervention involving an assessment and an educational fact sheet in one episode; this treatment may be more appropriately coded as 'other', than as 'counselling', 'information and education only' or 'assessment only'.

## 10.8 Current treatment and trends

Counselling has been the most common main treatment type nationally each year since the 2002–03 reporting period. It has accounted for more than 37% of episodes each year (Table 10.4), and was at its highest level yet in 2009–10 (42%). Withdrawal management (detoxification) has consistently been the second most common treatment type since 2002–03, although the proportions have been slowly declining over time to 15% of episodes in 2009–10. 'Assessment only' has remained the third most common main treatment type reported since 2002–03 at between 12–15% of episodes. In 2009–10, 'assessment only' accounted for 14% of all closed treatment episodes. The remaining treatment types each made up less than 10% of treatments provided each year.

**Table 10.4: Trends in main treatment type, 2002–03 to 2009–10 (per cent)**

|  | 2002–03      | 2003–04      | 2004–05      | 2005–06      | 2006–07      | 2007–08      | 2008–09      | 2009–10      |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Withdrawal management (detoxification) | 18.9         | 18.4         | 17.9         | 17.1         | 16.6         | 16.2         | 16.4         | 15.4         |
| Counselling                            | 41.5         | 37.6         | 40.2         | 37.8         | 38.7         | 37.3         | 37.4         | 42.2         |
| Rehabilitation                         | 7.5          | 8.6          | 7.7          | 7.5          | 7.4          | 7.2          | 6.7          | 5.1          |
| Support and case management only       | 6.9          | 8.4          | 7.9          | 8.2          | 8.3          | 8.0          | 8.9          | 8.7          |
| Information and education only         | 8.0          | 7.6          | 8.9          | 9.7          | 9.3          | 9.8          | 9.2          | 8.9          |
| Assessment only                        | 12.7         | 14.9         | 12.4         | 15.3         | 15.1         | 14.3         | 14.7         | 13.5         |
| Other <sup>(b)</sup>                   | 4.4          | 4.5          | 5.0          | 4.4          | 4.5          | 7.2          | 6.6          | 6.3          |
| <b>Total</b>                           | <b>100.0</b> |

(a) Excludes South Australia.

(b) 'Other' includes closed treatment episodes where the main treatment was reported as pharmacotherapy.

Source: AIHW 2011g.

### **10.8.1 Age and sex**

In 2009–10, around two-thirds or more of treatment episodes for all treatment types were provided to males.

Persons aged 20–29 accounted for the greatest proportion of treatment episodes (29%) in 2009–10, followed by those aged 30–39 (28%) and 40–49 (19%). There was some variation between treatment types. Clients accessing withdrawal management were more often aged between 30 and 39 (30%) than between 20 and 29 (23%). For rehabilitation, the proportions of these age groups were similar (32% for those aged 30–39 and 31% for those aged 20–29), while for counselling the 20–29 and 30–39 age groups both made up 29% of episodes.

## **10.9 Referral sources and cessation reasons**

### **10.9.1 Referral**

The majority of treatment episodes are initiated by individuals concerned about their own or another person's drug use, since self-referral is the most common source of referral (35% in 2009–10). Police and court diversion programs were the source of 19% of referrals in 2009–10. These programs divert certain types of offenders into drug treatment rather than pursuing traditional criminal justice processes. Correctional services were the referral source in 9% of episodes in 2009–10.

### **10.9.2 Reasons for cessation**

There is no direct indicator of treatment outcomes in the AODTS–NMDS. It is possible, however, to group cessation reasons into categories that can be defined as expected/compliant completions, unexpected/non-compliant completions, and administrative cessations (Table 10.5).

**Table 10.5: Reason for cessation of treatment episodes by year 2002–03 to 2009–10**

| <b>Cessation reason</b>                                   | <b>2002–03</b> | <b>2003–04</b> | <b>2004–05</b> | <b>2005–06</b> | <b>2006–07</b> | <b>2007–08</b> | <b>2008–09</b> | <b>2009–10</b> |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| <b>Expected/compliant completions</b>                     |                |                |                |                |                |                |                |                |
| Treatment completed                                       | 67,892         | 73,001         | 75,680         | 83,861         | 79,881         | 85,092         | 80,093         | 84,650         |
| Ceased to participate at expiation                        | 7,454          | 9,940          | 9,280          | 12,288         | 12,708         | 12,642         | 11,094         | 11,759         |
| Ceased to participate by mutual agreement                 | 3,995          | 4,001          | 3,754          | 3,877          | 4,334          | 3,940          | 3,721          | 3,945          |
| <i>Per cent</i>   | 60.7           | 63.5           | 62.3           | 66.1           | 65.7           | 66.1           | 66.1           | 68.4           |
| <b>Unexpected or non-compliance reasons for cessation</b> |                |                |                |                |                |                |                |                |
| Ceased to participate against advice                      | 6,314          | 6,214          | 5,827          | 6,171          | 5,756          | 6,114          | 6,048          | 5,178          |
| Ceased to participate without notice                      | 20,654         | 22,145         | 24,275         | 25,116         | 25,318         | 24,872         | 21,724         | 20,611         |
| Ceased to participate involuntarily (non-compliance)      | 2,956          | 2,869          | 2,931          | 2,978          | 2,901          | 2,999          | 2,921          | 2,817          |
| Drug court/and or sanctioned by court diversion service   | 351            | 239            | 326            | 357            | 371            | 361            | 612            | 440            |
| Imprisoned, other than drug court sanctioned              | 886            | 633            | 1,081          | 1,124          | 1,198          | 1,220          | 1,423          | 1,549          |
| Died  | 188            | 147            | 195            | 187            | 223            | 237            | 251            | 286            |
| <i>Per cent</i>   | 24.0           | 23.6           | 24.4           | 23.7           | 24.4           | 23.3           | 22.9           | 21.0           |
| <b>Administrative cessation reasons</b>                   |                |                |                |                |                |                |                |                |
| Change in treatment type                                  | 2,171          | 2,992          | 1,824          | 987            | 885            | 907            | 755            | 763            |
| Change in delivery setting                                | 1,054          | 1,247          | 1,337          | 1,067          | 1,050          | 1,065          | 1,020          | 1,118          |
| Change in principal drug of concern                       | 277            | 212            | 168            | 67             | 43             | 13             | 19             | —              |
| Transferred to another service provider                   | 9,144          | 9,581          | 8,501          | 7,366          | 7,415          | 8,628          | 7,289          | 6,655          |
| <i>Per cent</i>   | 9.7            | 10.3           | 8.3            | 6.3            | 6.3            | 6.9            | 6.3            | 5.8            |
| <b>Other<sup>(a)</sup></b>                                | 5,240          | 2,811          | 4,911          | 4,547          | 4,450          | 4,972          | 4,784          | 5,279          |
| <i>Per cent</i>   | 4.0            | 2.1            | 3.5            | 3.0            | 3.0            | 3.2            | 3.3            | 3.6            |
| <b>Not stated</b>   | 2,354          | 837            | 2,054          | 1,369          | 792            | 936            | 1,918          | 1,736          |
| <i>Per cent</i>   | 1.8            | 0.6            | 1.4            | 0.9            | 0.5            | 0.6            | 1.3            | 1.2            |
| <b>Total</b>  | <b>130,930</b> | <b>136,869</b> | <b>142,144</b> | <b>151,362</b> | <b>147,325</b> | <b>153,998</b> | <b>143,672</b> | <b>146,786</b> |
| <i>Total</i>  | 100.0          | 100.0          | 100.0          | 100.0          | 100.0          | 100.0          | 100.0          | 100.0          |

(a) 'Other' is any cessation reason not outlined above.

Source: AIHW 2011h. unpublished analysis of Alcohol and other Drugs Treatment Services National Minimum Data Set 2002–03 to 2009–10.

When considered by indicative outcome type categories, expected/compliant completions were more common in 2009–10 than in previous years, reaching 68%. At the same time, unexpected/non-compliant cessations have been gradually decreasing, to 21% in 2009–10. Changes to treatment mode (administrative cessations) have accounted for between 6% and 10% of episodes over time.

Since 2002–03, the specific reasons for treatment episodes ending have also remained consistent. 'Treatment completed' has always been the most common cessation reason reported, accounting for 52–58% of closed treatment episodes in each year. The second most common cessation reason has consistently been 'ceased to participate without notice' (between 15–17 % of treatment episodes).

## **10.10 Other alcohol and drug treatment data**

Not all treatment services in Australia are in scope for the AODTS–NMDS. For example, agencies whose sole activity is to prescribe and/or dose for opioid pharmacotherapy treatment do not report their activities to the AODTS–NMDS. The following section presents results from other treatment collections to build a more complete picture of treatment services in Australia.

### **10.10.1 Opioid substitute pharmacotherapy**

Opioid substitute pharmacotherapy is one treatment option for people who are dependent on opioid drugs. Pharmacotherapy is also available for people who are dependent on other drugs, but these treatments are not included in the following data. Opioid pharmacotherapy is administered according to the law of the relevant state or territory. It is funded by the Australian Government via the pharmaceutical benefits arrangements, through clinics and pharmacies approved by state and territory governments.

The National Opioid Pharmacotherapy Statistics Annual Data (NOPSAD) collection provides a picture of opioid pharmacotherapy treatment in Australia. The collection provides national data on the provision of opioid pharmacotherapy treatment, the practitioners who prescribe treatment, the dosing sites where pharmacotherapy drugs are dispensed and the clients receiving opioid pharmacotherapy treatment.

At 30 June 2010, there were 46,078 pharmacotherapy clients in Australia. This total represented an increase of 2,633 from that in June 2009 and an overall increase of 21,421 since 1998 (AIHW 2010i).

In 2010, around seven in ten (69%) clients were receiving methadone and the remainder received buprenorphine or buprenorphine/naloxone. This proportion has remained stable since 2006 (AIHW 2010i).

The proportions of clients prescribed methadone, buprenorphine or buprenorphine/naloxone varied across jurisdictions (Table 10.6), although the majority of clients in most jurisdictions were prescribed methadone in 2010. The Northern Territory was the exception, with 55% of clients being prescribed buprenorphine/naloxone and 32% being prescribed methadone.

**Table 10.6: Total number of pharmacotherapy clients receiving pharmacotherapy treatment on a 'snapshot/specified' day<sup>(a)</sup>, by type of pharmacotherapy provided and jurisdiction, 2010**

|   | NSW               | Vic           | Qld          | WA           | SA           | Tas        | ACT        | NT         | Australia     |
|---|-------------------|---------------|--------------|--------------|--------------|------------|------------|------------|---------------|
|   | <b>(Number)</b>   |               |              |              |              |            |            |            |               |
| Methadone                               | 15,048            | 8,476         | 3,052        | 2,269        | 1,946        | 432        | 632        | 34         | 31,889        |
| Buprenorphine                           | 4,066             | 817           | 796          | 126          | 430          | 51         | 60         | 15         | 6,361         |
| Buprenorphine/naloxone <sup>(b)</sup>   | n.a.              | 3,892         | 1,840        | 947          | 834          | 137        | 119        | 59         | 7,828         |
| <b>Total</b>                            | <b>19,114</b>     | <b>13,185</b> | <b>5,688</b> | <b>3,342</b> | <b>3,210</b> | <b>620</b> | <b>811</b> | <b>108</b> | <b>46,078</b> |
|   | <b>(Per cent)</b> |               |              |              |              |            |            |            |               |
| Methadone                               | 78.7              | 64.3          | 53.7         | 67.9         | 60.6         | 69.7       | 77.9       | 31.5       | 69.2          |
| Buprenorphine                           | 21.3              | 6.2           | 14.0         | 3.8          | 13.4         | 8.2        | 7.4        | 13.9       | 13.8          |
| Buprenorphine/naloxone <sup>(b)</sup>   | n.a.              | 29.5          | 32.3         | 28.3         | 26.0         | 22.1       | 14.7       | 54.6       | 17.0          |
| Total                                   | 100.0             | 100.0         | 100.0        | 100.0        | 100.0        | 100.0      | 100.0      | 100.0      | 100.0         |
| <b>Total clients by state/territory</b> | <b>41.5</b>       | <b>28.6</b>   | <b>12.3</b>  | <b>7.3</b>   | <b>7.0</b>   | <b>1.3</b> | <b>1.8</b> | <b>0.2</b> | <b>100.0</b>  |

(a) The number of clients on the program on a 'snapshot/specified' day in June, except for Western Australia, where the number of clients treated through the month of June is reported.

(b) In New South Wales, clients prescribed buprenorphine/naloxone are counted under 'buprenorphine'.

Note: Each state and territory uses a different method to collect data on pharmacotherapy prescription and dosing. These differences may result in minor discrepancies if directly comparing one jurisdiction with another.

Source: AIHW 2011i.

In the 2009–10 financial year, there were 1,449 practitioners nationally that were authorised to prescribe pharmacotherapy drugs for clients (though not all of these practitioners were actively prescribing). The average number of clients per prescriber has remained relatively stable nationally between 2005 and 2010 at around 30 to 33 clients.

On the 'snapshot/specified' day in 2010, there were 2,200 pharmacotherapy dosing point sites with the majority (86%) being located in pharmacies. Other dosing point sites were located in public clinics (3%), correctional settings (2%), private clinics (1%) and other locations (10%).

## 10.10.2 Indigenous services

In 2009–10, Indigenous substance use-specific services and primary health care services reported to the OATSIH Services Reporting (OSR) data collection. It is important to note that definitions of care episodes in the OSR differ from the AODTS–NMDS definition of 'treatment episode'.

During 2009–10, these Australian Government-funded Aboriginal and Torres Strait Islander substance use-specific services (agencies) reported only a slightly higher percentage of provided treatment from 2008–09, from 91% to 92%. The treatment was specifically targeted programs for client alcohol use. Other common substance/drugs for which services provided treatment or assistance included cannabis (77%), multiple drug use (54%) and tobacco/nicotine (52%).

There was an overall increase between 2008–09 and 2009–10 in the percentage of services that reported providing specifically targeted substance programs as treatment. The largest increases were for other solvent/inhalant (an increase of 13 percentage points to 44%), steroids/anabolic agents and amphetamines (12% and 46%, respectively; both increased by 10 percentage points respectively).

For most substances in 2009–10, there was an overall decrease from 2008–09 in the percentage of services that provided treatment/assistance on an individual client basis. The largest decreases were for other barbiturates (decrease from 42% to 25%), cocaine (33% to 21%) and morphine (42% to 31%).

The number of Indigenous clients who accessed primary health-care services in 2009–10 for alcohol or other drug treatment is not known. However, the drug types for which treatment was provided are known. In 2009–10, most services covered issues relating to alcohol (90%), cannabis (88%) and tobacco/nicotine (73%).

### **10.10.3 Needle and syringe programs**

Needle and syringe programs (NSPs) are a public health initiative that aims to minimise the spread of blood-borne viral infections such as HIV and hepatitis C among injecting drug users and the wider community. NSPs contribute to the National Drug Strategy's harm reduction priorities.

NSPs provide a range of services that include providing injecting equipment and disposal facilities, education and information on reducing drug-related harms, referral to drug treatment, medical care, legal and other social services.

There are four main NSP models in Australia:

- Primary NSPs are stand-alone services established and funded for the specific purpose of ensuring that sterile needles and syringes are made available to injecting drug users.
- Enhanced Secondary NSPs are funded programs operating within existing organisations, such as community health services and hospitals. In these cases, the NSP is supplementary to the primary service objectives of that organisation
- Secondary NSPs are unfunded programs operating within existing organisations, such as community health services, hospitals and pharmacies. In these cases, the NSP is supplementary to the primary service objectives of that organisation
- An NSP vending machine site is a self-service device that vends sterile needles and syringes (NCHECR 2009b).

The annual number of NSPs in Australia since 2000–01 is shown in Table 10.7. Vending machine sites have doubled since 2000–01 from 56 to 118 in 2007–08. Secondary NSP programs have also increased by 108 from 2000–01 to 2007–08. Enhanced secondary programs remained relatively stable between 16 and 17 from 2001–02 to 2005–06, with an increase to 22 programs in 2007–08.

**Table 10.7: Number of national NSP outlets, 2000–2001 to 2007–08**

| Year    | Primary | Secondary | Enhanced secondary | Vending machine site |
|---------|---------|-----------|--------------------|----------------------|
| 2000–01 | 71      | 624       | 16                 | 56                   |
| 2001–02 | 75      | 654       | 16                 | 57                   |
| 2002–03 | 76      | 667       | 16                 | 57                   |
| 2003–04 | 77      | 697       | 17                 | 57                   |
| 2004–05 | 82      | 706       | 17                 | 64                   |
| 2005–06 | 83      | 714       | 17                 | 64                   |
| 2006–07 | 86      | 710       | 20                 | 114                  |
| 2007–08 | 85      | 732       | 22                 | 118                  |

Note: The number of sites in NSW before 2006–07 was taken as the number in 2002 since data were not provided.

Source: NCHECR 2009b. Distribution of needles/syringes

The overall total of needles and syringes distributed in Australia has fluctuated slightly over time with a peak of 33,387 in 2004–05. In 2007–08, Victoria accounted for the highest number of needles and syringes distributed in Australia (9,350) (Table 10.8). This was an increase of 1,378 since 1999–2000. New South Wales recorded the largest decrease in the number of needle and syringes distributed (3,227) from the 1999–2001 period.

**Table 10.8: Number of needles/syringes ('000) distributed in Australia during financial years, 1999–2000 to 2007–08**

|                  | 1999–2000     | 2000–01       | 2001–02       | 2002–03       | 2003–04       | 2004–05       | 2005–06       | 2006–07       | 2007–08       |
|------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| NSW              | 11,517        | 12,434        | 10,343        | 9,116         | 9,001         | 8,916         | 8,813         | 8,558         | 8,290         |
| Vic              | 7,972         | 7,829         | 7,100         | 7,379         | 8,165         | 8,593         | 8,241         | 8,464         | 9,350         |
| Qld              | 5,820         | 5,554         | 5,239         | 5,887         | 6,368         | 6,216         | 6,739         | 7,231         | 7,069         |
| WA               | 3,040         | 3,184         | 3,601         | 3,563         | 3,496         | 3,788         | 4,196         | 4,273         | 4,039         |
| SA               | 2,821         | 3,018         | 2,999         | 3,443         | 3,611         | 3,676         | 3,566         | 2,915         | 2,763         |
| Tas              | 756           | 756           | 756           | 756           | 1,031         | 1,326         | 777           | 823           | 692           |
| ACT              | 502           | 664           | 424           | 468           | 504           | 484           | 457           | 467           | 517           |
| NT               | 460           | 397           | 396           | 398           | 399           | 388           | 407           | 407           | 379           |
| <b>Australia</b> | <b>32,888</b> | <b>33,836</b> | <b>30,858</b> | <b>31,010</b> | <b>32,575</b> | <b>33,387</b> | <b>33,196</b> | <b>33,138</b> | <b>33,099</b> |

Source: NCHECR 2009b.

### 10.10.4 Survey data

In 2010, 5% of Australians aged 14 years or older had accessed treatment for smoking (for example, Quit) at some time in their lives. Around one in 50 (2%) had accessed counselling, and a similar proportion had participated in an alcohol treatment program (2%) (Table 10.9).

**Table 10.9: Proportion of Australians aged 14 years or older who had ever participated in alcohol or other drug treatment programs, 2010**

| Treatment program  | Proportion of people ever participating in a treatment program |
|--|--|
| Telephone helplines (e.g. Quit, Lifeline)                        | 2.1  |
| Peer group community-based support (e.g. AA, NA, Smart Recovery) | 1.0  |
| Withdrawal management (detoxification—naltrexone)                | 0.6  |
| Methadone maintenance  | 0.2  |
| Buprenorphine (e.g. Subutex®)                                    | *0.1   |
| Buprenorphine/naloxone (e.g. Suboxone®)                          | *0.1   |
| Other pharmacotherapy (e.g. Zyban®, Champix®)                    | 2.6  |
| Counselling  | 1.7  |
| Therapeutic community  | 0.3  |
| Online/Internet support  | 0.6  |
| Residential rehabilitation                                       | 0.4  |
| Information and education  | 2.0  |
| Other  | 1.4  |

\* Estimate has a relative standard error of 25% to 50% and should be used with caution.

Source: AIHW 2011b. unpublished analysis of National Drug Strategy Household Survey 2010.

## 10.11 Other services that may assist people with alcohol and other drug issues

There are a number of other services, not specific to the drug and alcohol sector, which assist clients who experience difficulty with alcohol and/or other drugs. This section presents information from GP visits, hospital treatment, homelessness services and mental health services data collections.

### 10.11.1 GP visits

Information from the Bettering the Evaluation and Care of Health (BEACH) study indicated that, in 2008–09, there were a total of 32,867 clinical treatments recorded. Clinical treatments included general and specific advice, counselling or education, family planning, and administrative processes. General advice and education was the most frequently recorded clinical treatment (18%), with preventative activities such as counselling/advice for smoking (2%) and counselling/advice for alcohol less than 1%.

### 10.11.2 Hospital treatment (morbidity)

In 2009–10, there were 104,614 hospital separations reported with a drug-related principal diagnosis; this represented 1% of all hospital separations for that period (Table 10.10). Drug-related hospital separations refer to hospital care with selected principal diagnoses of drug use disorder or harm (accidental, intended or self-inflicted) due to selected drugs. Some of the drugs identified in the principal diagnosis as shown in Table 10.10 are available by prescription or can be legally purchased, including alcohol and tobacco. Therefore, a

proportion of the separations reported here may result from harm arising from the therapeutic use of drugs. The inclusion of therapeutic use may mean the burden of drugs and alcohol on the hospital system appears larger than might be expected.

**Table 10.10: Hospital separations by drug-related principal diagnosis and duration<sup>(a)(b)</sup>, 2009–10 (number and per cent)**

|   | Same-day separations |             | Overnight separations |             | Total separations |             |
|---|----------------------|-------------|-----------------------|-------------|-------------------|-------------|
|   | No.                  | Per cent    | No.                   | Per cent    | No.               | Per cent    |
| <b>Analgesics</b>   |                      |             |                       |             |                   |             |
| Opioids (includes heroin, opium and methadone)  | 2,662                | 6.2         | 4,863                 | 7.9         | 7,525             | 7.2         |
| Non-opioid analgesics (includes paracetamol)  | 1,839                | 4.3         | 4,842                 | 7.8         | 6,681             | 6.4         |
| <i>Total analgesics</i>   | <i>4,501</i>         | <i>10.5</i> | <i>9,705</i>          | <i>15.7</i> | <i>14,206</i>     | <i>13.6</i> |
| <b>Sedatives and hypnotics</b>  |                      |             |                       |             |                   |             |
| Alcohol   | 28,606               | 67.0        | 32,519                | 52.5        | 61,125            | 58.4        |
| Other sedatives and hypnotics (includes barbiturates and benzodiazepines; excludes alcohol) | 3,364                | 7.9         | 7,038                 | 11.4        | 10,402            | 9.9         |
| <i>Total sedatives and hypnotics</i>  | <i>31,970</i>        | <i>74.8</i> | <i>39,557</i>         | <i>63.9</i> | <i>71,527</i>     | <i>68.4</i> |
| <b>Stimulants and hallucinogens</b>   |                      |             |                       |             |                   |             |
| Cannabinoids (includes cannabis)  | 1,071                | 2.5         | 2,293                 | 3.7         | 3,364             | 3.2         |
| Hallucinogens (includes LSD and ecstasy)  | 86                   | 0.2         | 83                    | 0.1         | 169               | 0.2         |
| Cocaine   | 131                  | 0.3         | 159                   | 0.3         | 290               | 0.3         |
| Tobacco and nicotine  | 27                   | 0.1         | 23                    | 0.0         | 50                | 0.0         |
| Other stimulants (includes amphetamines, volatile nitrates and caffeine)                    | 1,110                | 2.6         | 2,072                 | 3.3         | 3,182             | 3.0         |
| <i>Total stimulants and hallucinogens</i>   | <i>2,425</i>         | <i>5.7</i>  | <i>4,630</i>          | <i>7.5</i>  | <i>7,055</i>      | <i>6.7</i>  |
| <b>Antidepressants and antipsychotics</b>   | 1,982                | 4.6         | 5,558                 | 9.0         | 7,540             | 7.2         |
| <b>Volatile solvents</b>  | 326                  | 0.8         | 454                   | 0.7         | 780               | 0.7         |
| <b>Other drugs of concern and conditions</b>  |                      |             |                       |             |                   |             |
| Multiple drug use   | 1,479                | 3.5         | 1,854                 | 3.0         | 3,333             | 3.2         |
| Unspecified drug use and other drugs not elsewhere classified                               | 36                   | 0.1         | 107                   | 0.2         | 143               | 0.1         |
| Fetal and perinatal related conditions  | –                    | –           | 30                    | <0.1        | 30                | <0.1        |
| <i>Total other drugs of concern and conditions</i>  | <i>3,823</i>         | <i>8.9</i>  | <i>8,003</i>          | <i>12.9</i> | <i>11,826</i>     | <i>11.3</i> |
| <b>Total</b>  | <b>42,719</b>        | <b>100</b>  | <b>61,895</b>         | <b>100</b>  | <b>104,614</b>    | <b>100</b>  |

(a) Drug of concern codes based on Australian Standard Classification of Drugs of Concern (ASDCDC) which are mapped to ICD-10-AM codes.

(b) Refers to total drug-related separations, including drug use disorders and instances of harm for selected drugs.

Sources: AIHW 2011g.

Three in five drug-related separations (58%) were related to alcohol use (Table 6.1). This proportion was higher among same-day separations (67%) than overnight separations (53%). For same-day separations, the next most common drug-related separations were related to other sedatives and hypnotics (including barbiturates and benzodiazepines) and opioids (8% and 6%, respectively). After alcohol, antidepressants and antipsychotics (9%) were the drug

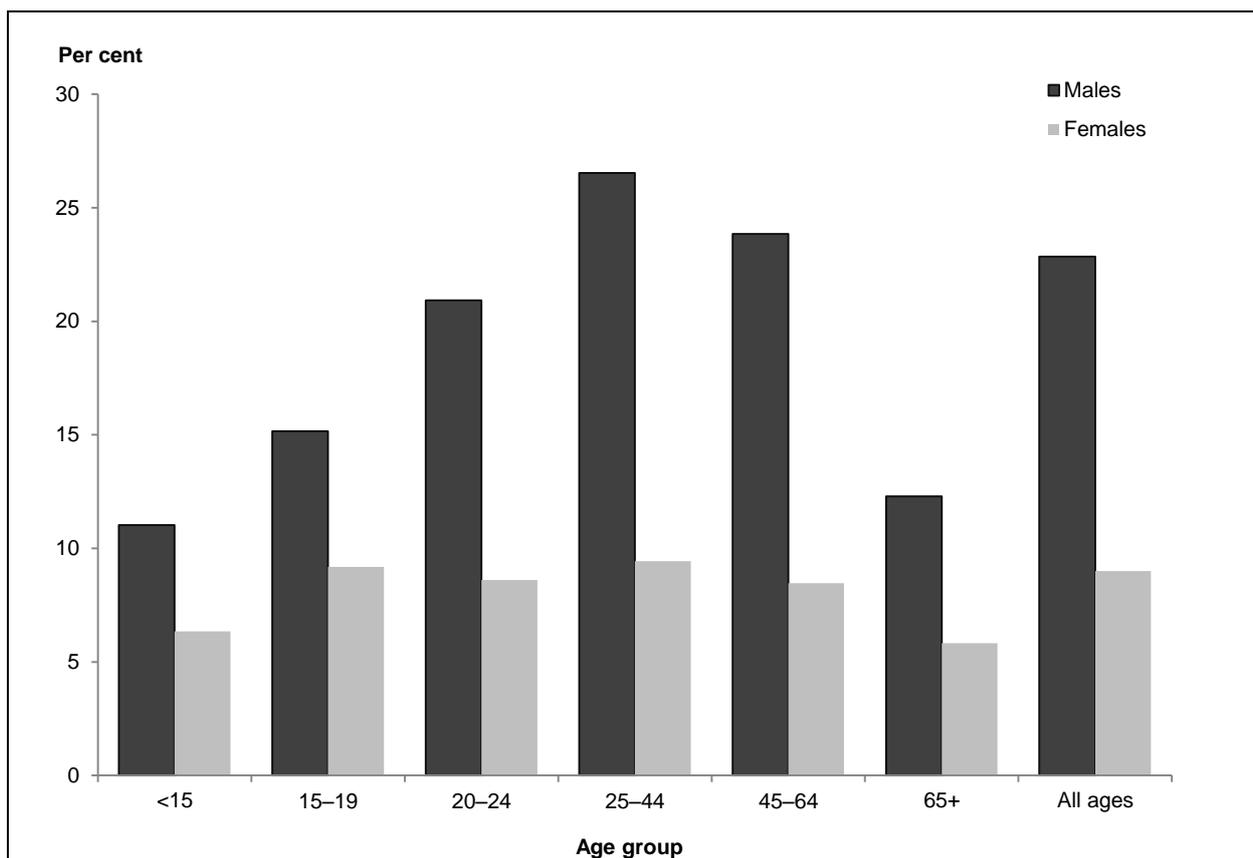
categories most commonly associated with overnight separations , closely followed by opioids and non-opioid analgesics (both 8%).

Overall, three in five drug-related separations (59%) were overnight separations. For most drug-related principal diagnosis categories, overnight separations were more common than same-day separations, ranging from 53% for alcohol to 72% for non-opioid analgesics (including paracetamol). The exceptions were hallucinogens and tobacco and nicotine, where hospital separations were more likely to be same-day separations (51% and 54%, respectively).

### **10.11.3 Homelessness services**

The Supported Accommodation Assistance Program (SAAP) funds a range of support and services for people who are homeless or at risk of becoming homeless. Data from the SAAP collection indicate that a substantial proportion of support periods involve people who have difficulty with alcohol and other drugs, either as a reason for seeking housing support or as an issue with which they need or are referred for support. Around 15% of the total support periods provided in 2009–10 involved drug use issues in these ways. It is important to note that the causal direction of the link between homelessness and alcohol or other drug use is often unknown. That is, problematic use may precede homelessness or arise after a person becomes homeless (AIHW 2007a).

In 2009–10, the SAAP clients most likely to seek assistance or require support for drug use were males aged 25–44 (27%) followed by males aged 45–64 (24%). When all the age groups are combined, the proportion of males (23%) is higher than for females (9%) (Figure 10.2). Caution should be taken when interpreting these results as clients may under-report drug use issues.

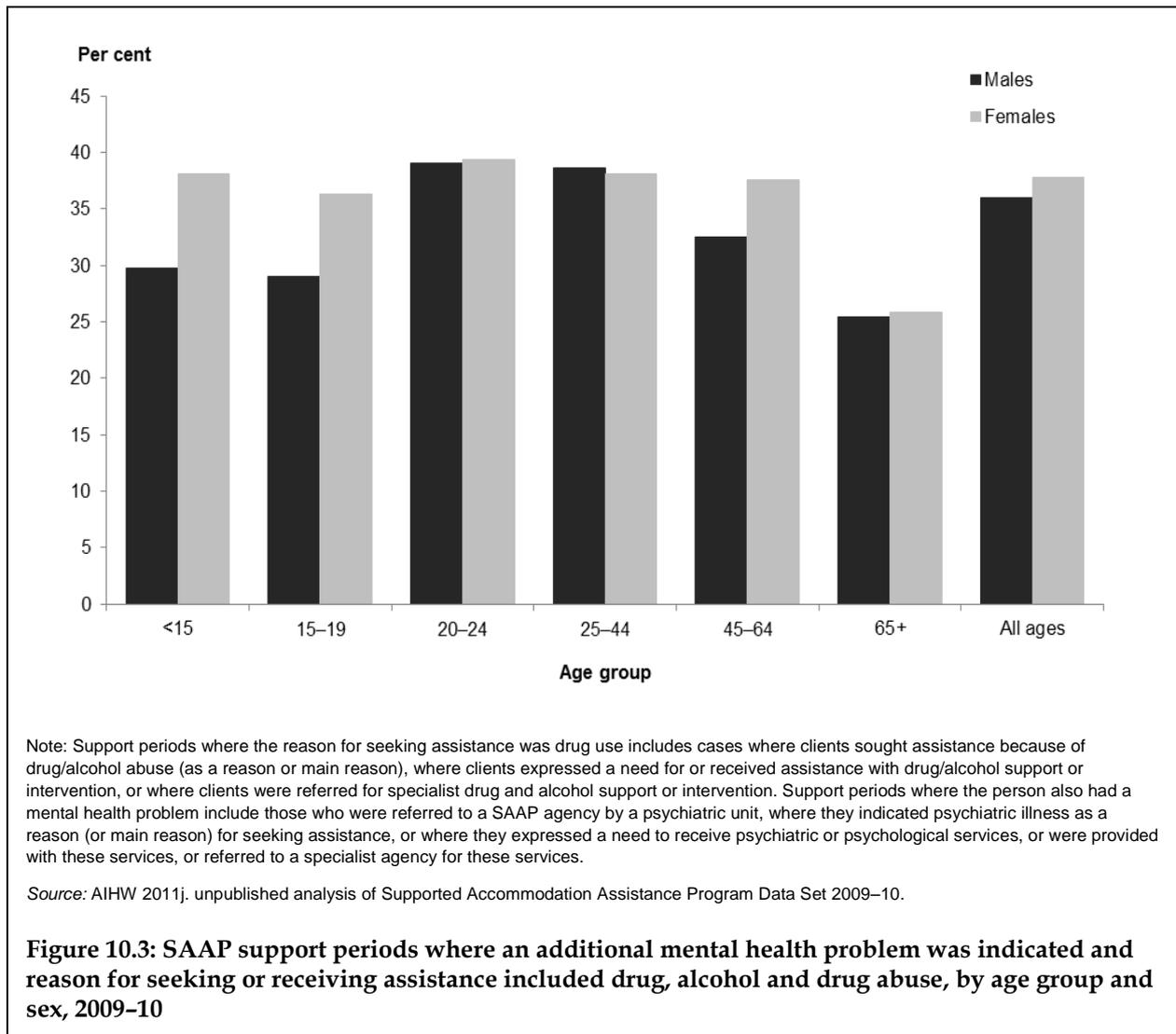


Source: AIHW 2011j, unpublished analysis of Supported Accommodation Assistance Program Data Set 2009-10.

**Figure 10.2: Proportion of SAAP support periods where reason for seeking assistance and/or support to the client was for drug use, by age group and sex, 2009-10**

Mental health problems are common among the group of SAAP clients who seek assistance or receive support for drug use. In 2009-10, 36% of males and 38% of females seeking assistance/support for drug use also sought assistance or were referred for an additional mental health problem. Males and females aged 20-24, and males aged 25-44, were most likely to have a co-morbid mental health problem (all 39%) (Figure 10.3).

Again, it is important to note that caution should be taken when interpreting these results. As is the case with support periods for drug use, there may be an under-reporting of periods where a mental health problem was identified as a reason for seeking assistance.



### 10.11.4 Mental health services

Clients with mental or behavioural disorders due to the use of alcohol or other psychoactive drugs can receive treatment in mental health-care settings. These include psychiatric hospitals and public acute hospitals with specialised psychiatric units, community-based mental health-care services, and residential services (Table 10.11). However, some clients with drug and alcohol-related mental illnesses are also cared for in a hospital setting but without specialised psychiatric care.

In 2007-08, of all the mental health-related overnight hospital separations with or without specialised psychiatric care, over 16% were due to the use of alcohol or other psychoactive drugs. The proportion was higher for same-day separations related to mental health, where 19% were alcohol or drug related.

Specialised mental health-care is provided in community mental health-care settings, including hospital outpatient services and day clinics. Less than 3% of service contacts were recorded for clients with mental and behavioural disorders due to the use of alcohol or other psychoactive drug use.

Specialised mental health-care is also available in a residential setting where rehabilitation, treatment and extended care are provided for clients. In 2007–08, nearly 1% of residential care episodes were alcohol or drug related.

It is important to note that the number of services provided in hospitals, community and residential mental health-care services are not directly comparable because the nature of the services is different.

**Table 10.11: Summary of mental health-related services<sup>(a)</sup> provided to people with alcohol and other drug-related mental illnesses, Australia, 2007–08**

| Principal diagnosis   | Mental health-related admitted patient separations <sup>(b)</sup> | Ambulatory-equivalent mental health-related separations <sup>(c)</sup> | Community mental health-care service contacts <sup>(d)</sup> | Residential mental health-care episodes <sup>(e)</sup> |
|---|---|--|--|--|
|   | (number)  |  |  |  |
| Mental and behavioural disorders due to use of alcohol              | 23,687  | 19,518   | 53,824   | 10   |
| Mental and behavioural disorders due to other psychoactive drug use | 11,138  | 3,734  | 117,379  | 19   |
| <b>All diagnoses</b>  | <b>212,890</b>  | <b>121,651</b>   | <b>6,374,267</b>   | <b>3,222</b>   |
|   | (per cent)  |  |  |  |
| Mental and behavioural disorders due to use of alcohol              | 11.1  | 16.0   | 0.8  | 0.3  |
| Mental and behavioural disorders due to other psychoactive drug use | 5.2   | 3.1  | 1.8  | 0.6  |
| <b>All diagnoses</b>  | <b>100.0</b>  | <b>100.0</b>   | <b>100.0</b>   | <b>100.0</b>   |

(a) The statistical counting units in this table (*separations, contacts and episodes*) are different and cannot be directly compared.

(b) Includes all *separations* with or without specialised psychiatric care.

(c) Includes all same-day admitted patient *separations* with or without specialised psychiatric care.

(d) Community mental health-care service *contacts* are defined as the provision of a clinically significant service which would normally warrant a dated entry in the clinical record of the client in question. Contacts are not restricted to face-to-face communication. Service contacts can also be with the patient or a third party, such as a carer or family member, and/or other professional or mental health worker, or other service provider.

(e) Residential mental health-care *episodes* are defined as a period of care between the start and end of residential care.

Source: AIHW 2010c.

# 11 Crime and law enforcement

## 11.1 Key findings

- There were 85,252 arrests in 2009–10 for illicit drug offences. This number has fluctuated over time, varying between a high of 85,252 arrests in 2009–10 and a low of 73,959 in 2001–02. The largest proportion of all illicit drug arrests was for cannabis offences. As a proportion of all illicit drug arrests, cannabis arrests have decreased from 70% in 2001–02 to 67% in 2009–10.
- The majority of illicit drug arrests are related to consumption rather than the provision or sale of drugs. For example, in 2009–10, more than eight in ten arrests for cannabis (86%) and over seven in ten arrests (71%) for amphetamines were related to consumption.
- In 2010, the most common drug-related offence for which people were imprisoned was dealing/trafficking drugs (as opposed to using/possessing, manufacturing or importing/exporting drugs).
- The proportion of women who were sentenced for an illicit drug offence has risen over time, varying between 12% in 1998 and 17% in 2010.
- Around six in ten (62%) male detainees and just over two-thirds (68%) of female detainees tested positive to any illicit drug.
- Customs data on drug seizures at the Australian border show an increase between 2008–09 and 2009–10 in the total weight of detections for amphetamines. Mature cannabis plants are not imported in large quantities, with almost nine in ten (86%) seizures being for importation of cannabis seeds.
- The number of clandestine drug laboratories detected by police in Australia increased between 1996–97 and 2009–10, from 58 to 694. These were largely in residential areas. The most common drugs manufactured are amphetamine-type stimulants.

## 11.2 Introduction

The National Drug Strategy 2010–15 includes a supply reduction arm. That policy supports law enforcement and encourages partnerships between criminal intelligence agencies, police, the Australian Customs and Border Protection Service and other sectors to reduce the supply of illicit drugs in the community. The National Drug Strategy 2010–15 is an umbrella strategy that supports other policies including the Illicit Drug Diversion Initiative (IDDI) of the Council of Australian Governments. The IDDI supports diversion from the criminal justice system for those people who commit minor illicit drug offences that include possession of small amounts of illicit drugs, particularly for possession of small amounts of cannabis. Each state and territory has a different approach to its illicit drug diversion programs.

This chapter focuses on associations between drugs, crime and law enforcement. The first section presents information on illicit drug offences and arrests in Australia. It also presents data on those people who are incarcerated, and what proportion of people in prison in Australia are categorised as having an illicit drug offence as their most serious offence.

Then research is described that highlights the relationship between drug use and criminal offending. Data are presented on the proportion of incarcerated offenders who report drug

use, and drug use among police detainees and injecting drug users are examined. The chapter concludes with information on illicit drug detections, such as median purity of heroin seizures, border detections of heroin and ecstasy, and clandestine laboratories.

## 11.3 Illicit drug offences

### 11.3.1 Illicit drug arrests

Arrests for offences that involve illicit drugs are reported using two categories: consumer arrests and provider arrests. Broadly, those arrests categorised as consumer arrests involve offences related to self-administration, the possession of illicit drugs for personal use and the possession of drug using paraphernalia. Provider arrests involve offences related to the growing or making of drugs and/or the supplying of drugs to other people (ACC 2011).

Information on consumer and provider arrests is collated by the Australian Crime Commission (ACC) from data provided by state and territory police services and by the Australian Federal Police. There are some jurisdictional differences in measuring and coding arrests. The category 'consumer arrests', as reported by the ACC, also includes infringement notices available in some states and territories for offences such as minor cannabis drug possession, self-administration and possession of paraphernalia. For an explanation of the counting methodology and quality of arrests data, see the *Illicit Drug Data Report 2009–10* (ACC 2010). Recent data from 2000–01 to 2009–10 are presented in Table 11.1.

In Australia, cannabis is the most common illicit drug for which people are arrested or come into contact with police. These consumer arrests, including some infringement notices, accounted for two-thirds (67%) of arrests relating to illicit drugs in 2009–10 (Table 11.1). In all, there were 48,883 incidents coded as cannabis arrests by the ACC. The proportion of illicit drug arrests attributed to cannabis has fluctuated over time, with the lowest proportion over the past 10 years being recorded in 2009–10 (67%). The proportion of arrests for amphetamine-type stimulants increased from 11% in 2000–01 to 16% in 2009–10. In absolute terms, the number of consumer and provider arrests for amphetamine-type stimulants increased from 8,846 in 2000–01 to 13,982 in 2009–10.

The majority of illicit drug arrests are related to the consumption rather than to the provision or sale of drugs (Table 11.1). For example, in 2009–10, more than eight in ten arrests for cannabis (86%) and over seven in ten arrests (71%) for amphetamines were related to consumption.

**Table 11.1: All illicit drug arrests by type of drug and proportion of consumer arrests<sup>(a)</sup>, 2000–01 to 2009–10**

| Substance                             | 2000–01       | 2001–02       | 2002–03       | 2003–04       | 2004–05       | 2005–06       | 2006–07       | 2007–08       | 2008–09       | 2009–10       |
|---------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| <b>(number of arrests)</b>            |               |               |               |               |               |               |               |               |               |               |
| Cannabis                              | 54,044        | 55,585        | 55,689        | 56,747        | 54,936        | 55,732        | 56,862        | 52,465        | 55,638        | 57,170        |
| Heroin/ opioids                       | 7,391         | 3,259         | 3,824         | 3,691         | 3,304         | 2,249         | 2,164         | 2,279         | 2,693         | 2,767         |
| Amphetamine-type stimulants           | 8,846         | 7,953         | 8,313         | 9,593         | 10,068        | 11,848        | 15,216        | 16,047        | 16,452        | 13,982        |
| Cocaine                               | 651           | 612           | 250           | 328           | 425           | 396           | 699           | 669           | 848           | 1,244         |
| Hallucinogens                         | 199           | 131           | 124           | 124           | 119           | 143           | 243           | 325           | 369           | 512           |
| Steroids                              | 90            | 112           | 113           | 99            | 124           | 67            | 142           | 163           | 214           | 314           |
| Other/unknown                         | 6,400         | 6,307         | 6,660         | 8,444         | 8,357         | 8,098         | 7,063         | 6,727         | 7,659         | 9,263         |
| <b>Total</b>                          | <b>77,621</b> | <b>73,959</b> | <b>74,973</b> | <b>79,026</b> | <b>77,333</b> | <b>78,533</b> | <b>82,389</b> | <b>78,675</b> | <b>83,873</b> | <b>85,252</b> |
| <b>(per cent)</b>                     |               |               |               |               |               |               |               |               |               |               |
| Cannabis                              | 70            | 75            | 74            | 72            | 71            | 71            | 69            | 67            | 66            | 67            |
| Heroin                                | 10            | 4             | 5             | 5             | 4             | 3             | 3             | 3             | 3             | 3             |
| Amphetamine-type stimulants           | 11            | 11            | 11            | 12            | 13            | 15            | 18            | 20            | 20            | 16            |
| Cocaine                               | 1             | 1             | —             | —             | 1             | 1             | 1             | 1             | 1             | 1             |
| Hallucinogens                         | —             | —             | —             | —             | —             | —             | —             | —             | —             | 1             |
| Steroids                              | —             | —             | —             | —             | —             | —             | —             | —             | —             | —             |
| Other                                 | 8             | 9             | 9             | 11            | 11            | 10            | 9             | 9             | 9             | 11            |
| <b>Total</b>                          | <b>100</b>    |
| <b>Consumer arrests<sup>(a)</sup></b> |               |               |               |               |               |               |               |               |               |               |
| <b>(per cent)</b>                     |               |               |               |               |               |               |               |               |               |               |
| Cannabis                              | 85            | 83            | 83            | 84            | 84            | 85            | 85            | 86            | 86            | 86            |
| Heroin                                | 70            | 62            | 66            | 65            | 62            | 65            | 66            | 70            | 66            | 68            |
| Amphetamine-type stimulants           | 76            | 73            | 72            | 71            | 72            | 69            | 72            | 73            | 72            | 71            |
| Hallucinogens                         | 70            | 82            | 70            | 66            | 75            | 69            | 69            | 69            | 73            | 71            |
| Cocaine                               | 62            | 62            | 58            | 47            | 60            | 61            | 54            | 64            | 65            | 68            |
| Steroids                              | 90            | 85            | 89            | 87            | 73            | 79            | 84            | 83            | 78            | 70            |
| Other                                 | 80            | 76            | 73            | 78            | 74            | 76            | 74            | 77            | 77            | 71            |
| <b>Total</b>                          | <b>82</b>     | <b>80</b>     | <b>80</b>     | <b>80</b>     | <b>80</b>     | <b>81</b>     | <b>81</b>     | <b>82</b>     | <b>82</b>     | <b>81</b>     |

(a) As a proportion of total illicit drug arrests for each drug.

*Notes*

1. These figures cannot be taken directly as a measure of the number of illegal drug users or of the extent of illegal drug use for a variety of reasons. For instance, the number of arrests may depend upon the level of activity and effectiveness of law enforcement activities and not reflect an increase/decrease in the number of users. Refer to ACC (2011) for further information on counting methodology and data quality issues.
2. Amphetamine-type stimulants include meth/amphetamines and MDMA (ecstasy).
3. Consumers are defined as those arrested for use/possession type of offences, while providers are defined as those arrested for dealing/trafficking type of offences. Caution should be exercised when making comparisons between years due to variations in consumer/provider counting methodologies used.

Sources: ACC 2010, ACC 2011, AIHW 2007a.

### 11.3.2 Prison census statistics

The information presented in this section was sourced from the Australian Bureau of Statistics (ABS) annual census of prisoners. It relates to the proportion of prisoners categorised by the 'most serious offence', and whether this was recorded as drug related.

People whose most serious offence was one of the categories rated as more serious than drug offences may also have been found guilty of drug offences; therefore, the information below does not include every prisoner found guilty of a drug offence. For more information on how offences are classified in ABS data collections see the Australian Standard Offence Classification (ASOC) (ABS 2008a).

In 2009–10, 17% of female prisoners had an illicit drug offence as their most serious offence, compared with 10% of male prisoners. However, less than one in ten (7%) prisoners were female. Of the 2,386 prisoners whose most serious offence was an illicit drug offence in 2009–10, 88% (2,092 prisoners) were male and 12% (294 prisoners) were female.

The proportion of women who were sentenced for an illicit drug offence has risen over time from 12% in 1998 to 17% in 2010. This proportion has stayed relatively stable for men, varying between 9% in 1998 and 10% in 2010.

**Table 11.2: Sentenced prisoners' most serious offence an illicit drug offence as a proportion of total sentenced prisoners, by sex, 1998 to 2010**

| Year | Illicit drug |         |         | Total prisoners |         |         |
|------|--------------|---------|---------|-----------------|---------|---------|
|      | Males        | Females | Persons | Males           | Females | Persons |
|      | (per cent)   |         |         | (number)        |         |         |
| 1998 | 8.5          | 11.7    | 9.2     | 16,179          | 939     | 17,118  |
| 1999 | 8.9          | 11.7    | 9.1     | 17,208          | 1,124   | 18,332  |
| 2000 | 9.7          | 13.1    | 9.9     | 16,846          | 1,083   | 17,929  |
| 2001 | 9.9          | 10.6    | 10.2    | 16,978          | 1,145   | 18,123  |
| 2002 | 9.9          | 14.8    | 10.2    | 16,958          | 1,120   | 18,078  |
| 2003 | 9.5          | 13.8    | 9.7     | 17,540          | 1,198   | 18,738  |
| 2004 | 9.7          | 14.6    | 10.0    | 17,959          | 1,277   | 19,236  |
| 2005 | 9.8          | 13.4    | 10.0    | 18,920          | 1,300   | 20,220  |
| 2006 | 9.9          | 14.2    | 10.2    | 18,847          | 1,361   | 20,208  |
| 2007 | 9.9          | 14.7    | 10.3    | 19,688          | 1,440   | 21,128  |
| 2008 | 9.4          | 14.5    | 9.8     | 19,861          | 1,409   | 21,276  |
| 2009 | 9.8          | 16.2    | 10.2    | 21,330          | 1,594   | 22,924  |
| 2010 | 9.7          | 17.0    | 10.2    | 21,605          | 1,728   | 23,333  |

Sources: ABS 2008a, 2009d, 2010c.

The most common drug-related offence for which people were imprisoned was dealing/trafficking drugs (as opposed to using/possessing, manufacturing or importing/exporting drugs). In 2008, the most recent year for which totals are available, 1,432 persons were imprisoned for dealing/trafficking drugs (69% of the total drug-related offences for which people were sentenced) (ABS 2008a).

## 11.4 Drug use and criminal offending

### 11.4.1 Drug use among police detainees

The Drug Use Monitoring in Australia (DUMA) project measures drug use among people who have been recently apprehended by police, at selected sites through interviews and analysis of voluntary urine samples taken within 48 hours of arrest (AIC 2010).

In 2010, around six in ten (62%) male detainees and just over two-thirds (68%) of female detainees tested positive to any illicit drug. Male detainees aged 40 and over were less likely to test positive for illicit drugs than younger males. Female detainees aged 18–24 were more likely to test positive to any illicit drug than older female detainees, with nearly three-quarters doing so (71%). In 2010, marijuana/cannabis was the most common illicit drug for which police detainees tested positive (46% of males and 43% of females). These results were lower than those in 2005, when 55% of male detainees and 54% of female detainees tested positive to cannabis.

**Table 11.3: Proportion of adult detainees testing positive to illicit drugs<sup>(a)</sup> in the last 12 months, by age, sex and type of illicit drug, 2010 (per cent)**

| Drug type                        | Age group  |              |            | Total        |
|----------------------------------|------------|--------------|------------|--------------|
|                                  | 18–24      | 25–39        | 40+        |              |
| <b>Males</b>                     |            |              |            |              |
| Marijuana/cannabis               | 53.5       | 47.2         | 32.6       | 45.9         |
| Opiates <sup>(b)</sup>           | 6.4        | 20.5         | 15.7       | 15.0         |
| Heroin                           | 4.5        | 15.5         | 10.6       | 10.9         |
| Amphetamines <sup>(c)</sup>      | 12.7       | 21.4         | 13.6       | 16.9         |
| Meth/amphetamines <sup>(d)</sup> | 11.0       | 20.0         | 12.6       | 15.5         |
| Cocaine                          | 1.4        | 2.3          | 0.4        | 1.6          |
| Any illicit drug <sup>(e)</sup>  | 61.8       | 66.2         | 54.0       | 62.1         |
| <b>Total (number)</b>            | <b>736</b> | <b>1,086</b> | <b>530</b> | <b>2,352</b> |
| <b>Females</b>                   |            |              |            |              |
| Marijuana/cannabis               | 58.6       | 38.0         | 35.2       | 43.3         |
| Opiates <sup>(b)</sup>           | 22.7       | 21.8         | 30.8       | 23.9         |
| Heroin                           | 18.8       | 20.5         | 19.8       | 19.9         |
| Amphetamines <sup>(c)</sup>      | 24.2       | 24.2         | 15.4       | 22.4         |
| Meth/amphetamines <sup>(d)</sup> | 22.1       | 21.8         | 15.4       | 20.6         |
| Cocaine                          | 1.6        | 3.5          | 3.3        | 2.9          |
| Any illicit drug <sup>(e)</sup>  | 71.1       | 69.0         | 60.4       | 67.9         |
| <b>Total (number)</b>            | <b>128</b> | <b>229</b>   | <b>91</b>  | <b>448</b>   |

(a) These data are based on quarterly monitoring conducted in nine sites around Australia (Adelaide, Brisbane, Darwin, Footscray, Parramatta, Kings Cross, Bankstown, Southport and East Perth).

(b) Includes heroin; however, detainee may not have taken heroin.

(c) Amphetamines may or may not be legally prescribed. Police detainees who tested positive to amphetamines may have also tested positive to meth/amphetamine.

(d) The presence of meth/amphetamine confirms illegal use.

(e) Any illicit drug includes marijuana/cannabis, benzodiazepines, cocaine, heroin, and methamphetamines.

Source: AIC 2010b unpublished analysis of Drug use monitoring in Australia data.

## 11.5 Prisoners' self-reported drug use

### 11.5.1 Tobacco

In 2010, information collected from prison entrants indicated that three-quarters of prisoners (74%) were daily smokers (Table 11.4). As was noted in Chapter 1, around one in six males in the general population were daily smokers in 2010 compared with over seven in ten male

prison entrants (AIHW 2010b; AIHW 2011a). The numbers of female prison entrants was higher than the number for males in the proportion who reported daily smoking (78%), and was also much higher than the number among women in the general population (14%).

**Table 11.4: Prison entrants, smoking status by sex, age group and Indigenous status, 2010**

|                          | Daily smoker |           | Weekly and irregular smoker |          | Ex-smoker |          | Never smoked |           | Total      |            |
|--------------------------|--------------|-----------|-----------------------------|----------|-----------|----------|--------------|-----------|------------|------------|
|                          | No.          | Per cent  | No.                         | Per cent | No.       | Per cent | No.          | Per cent  | No.        | Per cent   |
| <b>Sex</b>               |              |           |                             |          |           |          |              |           |            |            |
| Male                     | 386          | 74        | 50                          | 10       | 28        | 5        | 54           | 10        | 524        | 100        |
| Female                   | 66           | 78        | 4                           | 5        | 5         | 6        | 10           | 12        | 85         | 100        |
| <b>Age group</b>         |              |           |                             |          |           |          |              |           |            |            |
| 18–24 years              | 123          | 75        | 17                          | 10       | 9         | 5        | 15           | 9         | 164        | 100        |
| 25–34 years              | 166          | 79        | 18                          | 9        | 5         | 2        | 18           | 9         | 210        | 100        |
| 35–44 years              | 111          | 76        | 11                          | 8        | 8         | 5        | 13           | 9         | 146        | 100        |
| 45+ years                | 46           | 58        | 7                           | 9        | 8         | 10       | 17           | 22        | 79         | 100        |
| <b>Indigenous status</b> |              |           |                             |          |           |          |              |           |            |            |
| Indigenous               | 193          | 74        | 40                          | 15       | 8         | 3        | 19           | 7         | 262        | 100        |
| Non-Indigenous           | 244          | 75        | 12                          | 4        | 22        | 7        | 45           | 14        | 327        | 100        |
| <b>Total</b>             | <b>452</b>   | <b>74</b> | <b>54</b>                   | <b>9</b> | <b>33</b> | <b>5</b> | <b>64</b>    | <b>10</b> | <b>610</b> | <b>100</b> |

*Notes*

1. Excludes New South Wales and Victoria who did not participate in the 2010 Census.
2. Totals include 1 entrant whose sex was unknown, 11 entrants whose age was unknown, 21 entrants whose Indigenous status was unknown and 7 entrants whose smoking status was unknown or invalid.

Source: AIHW 2011d.

Prison entrants were also likely to have been at risk of alcohol-related harm before prison entry (Table 11.5). Overall, 58% of the prison entrants for whom valid data are available (males 59% and females 54%) reported drinking at levels that placed them at high risk of alcohol-related harm before they entered the prison system. Indigenous prison entrants were at a higher risk of alcohol-related harm than their non-Indigenous counterparts (73% and 48%, respectively). The measure of alcohol-related harm among prison entrants has been derived by different methods from those used for other survey data presented in Chapter 2. It is therefore difficult to compare these data with that for the levels of alcohol-related risk in the general population.

**Table 11.5: Prison entrants, risk of alcohol-related harm, by sex, age group and Indigenous status, 2010**

|                          | High risk of alcohol-related harm |           | Low risk of alcohol-related harm |           | Does not drink |           | Total      |            |
|--------------------------|-----------------------------------|-----------|----------------------------------|-----------|----------------|-----------|------------|------------|
|                          | Number                            | Per cent  | Number                           | Per cent  | Number         | Per cent  | Number     | Per cent   |
| <b>Sex</b>               |                                   |           |                                  |           |                |           |            |            |
| Male                     | 309                               | 59        | 133                              | 25        | 80             | 15        | 524        | 100        |
| Female                   | 46                                | 54        | 23                               | 27        | 16             | 19        | 85         | 100        |
| <b>Age group</b>         |                                   |           |                                  |           |                |           |            |            |
| 18–24 years              | 105                               | 64        | 38                               | 23        | 21             | 13        | 164        | 100        |
| 25–34 years              | 140                               | 67        | 40                               | 19        | 30             | 14        | 210        | 100        |
| 35–44 years              | 72                                | 49        | 44                               | 30        | 28             | 19        | 146        | 100        |
| 45+ years                | 36                                | 46        | 27                               | 34        | 16             | 20        | 79         | 100        |
| <b>Indigenous status</b> |                                   |           |                                  |           |                |           |            |            |
| Indigenous               | 192                               | 73        | 43                               | 16        | 26             | 10        | 262        | 100        |
| Non-Indigenous           | 157                               | 48        | 104                              | 32        | 65             | 20        | 327        | 100        |
| <b>Total</b>             | <b>355</b>                        | <b>58</b> | <b>156</b>                       | <b>26</b> | <b>97</b>      | <b>16</b> | <b>610</b> | <b>100</b> |

*Notes*

1. Excludes New South Wales and Victoria which did not participate in the 2010 Census.
2. Risk of alcohol-related harm is indicated by a score of 6 or more on the three consumption questions from the Alcohol Use Disorder Identification Test. (AUDIT).
3. Totals include 1 entrant whose sex was unknown, 11 entrants whose age was unknown, 21 entrants whose Indigenous status was unknown, and 2 entrants for whom risk status was invalid or unknown.

Source: AIHW 2011d.

The majority of prison entrants (66%) reported using illicit drugs in the 12 months before incarceration (males 65%, females 78%) (Table 11.6) and there was little difference between the proportion of Indigenous and non-Indigenous prison entrants. Illicit drug use in the past 12 months was high (over 70%) for age groups under 35 years. Only a small number of prison entrants were aged over 45 and this group were the least likely to report illicit drug use in the last 12 months (38%). The proportion of prison entrants reporting illicit drug use in the last 12 months was much higher than the proportion in the general population aged 14 and over reporting illicit drug use (14.7%) (AIHW 2011d). For more information on illicit drug use among the general population see chapters 4 and 6.

**Table 11.6: Prison entrants, illicit drug use in last 12 months by sex, age group and Indigenous status, 2010**

|                          | Illicit drug use in last 12 months |           | Total      |            |
|--------------------------|------------------------------------|-----------|------------|------------|
|                          | Number                             | Per cent  | Number     | Per cent   |
| <b>Sex</b>               |                                    |           |            |            |
| Male                     | 339                                | 65        | 524        | 100        |
| Female                   | 66                                 | 78        | 85         | 100        |
| <b>Age group</b>         |                                    |           |            |            |
| 18–24 years              | 117                                | 71        | 164        | 100        |
| 25–34 years              | 156                                | 74        | 210        | 100        |
| 35–44 years              | 92                                 | 63        | 146        | 100        |
| 45+ years                | 30                                 | 38        | 79         | 100        |
| <b>Indigenous status</b> |                                    |           |            |            |
| Indigenous               | 177                                | 68        | 262        | 100        |
| Non-Indigenous           | 212                                | 65        | 327        | 100        |
| <b>Total</b>             | <b>405</b>                         | <b>66</b> | <b>610</b> | <b>100</b> |

*Notes*

1. Excludes New South Wales and Victoria which did not participate in the 2010 Census.
2. Totals include 1 entrant whose sex was unknown, 11 entrants whose age was unknown, 21 entrants whose Indigenous status was unknown and 7 whose recent drug use was unknown.

Source: AIHW 2011d.

The illicit drug most likely to have been used by prison entrants in the last 12 months was cannabis (51%). Meth/amphetamine use was also reported by 30% of prison entrants. Use of analgesics/pain-killers for non-medical purposes was reported by almost one in five prison entrants in the last 12 months (16%). Tranquilisers/sleeping pills, heroin and ecstasy were used by around one in ten prison entrants in 2010. The use of these drugs in the general population aged 18 and over is much lower. For example, in 2009, among prison entrants aged 18–24, 28% reported having used meth/amphetamine compared with 5% of the general population the same age (as estimated from 2010 NDSHS data).

**Table 11.7: Number and proportion of prison entrants who used drugs for non-medical purposes in the last 12 months, 2009**

| Substance used                                | Number     | Per cent    |
|---|------------|-------------|
| Cannabis/marijuana                            | 313        | 51          |
| Meth/amphetamine                              | 182        | 30          |
| Analgesics/pain-killers                       | 97         | 16          |
| Tranquillisers/sleeping pills                 | 75         | 12          |
| Other analgesics                              | 65         | 11          |
| Heroin  | 60         | 10          |
| Ecstasy                                       | 58         | 10          |
| Methadone/buprenorphine/Suboxone®             | 49         | 8           |
| Cocaine                                       | 45         | 7           |
| Hallucinogens                                 | 22         | 4           |
| GHB   | 14         | 2           |
| Ketamine                                      | 12         | 2           |
| Barbiturates                                  | 10         | 2           |
| Steroids                                      | 7          | 1           |
| Inhalants—petrol/volatile solvents            | 6          | 1           |
| Inhalants—anaesthetic, nitrates, butyl, other | 1          | <1%         |
| <b>Total</b>                                  | <b>610</b> | <b>100%</b> |

*Notes*

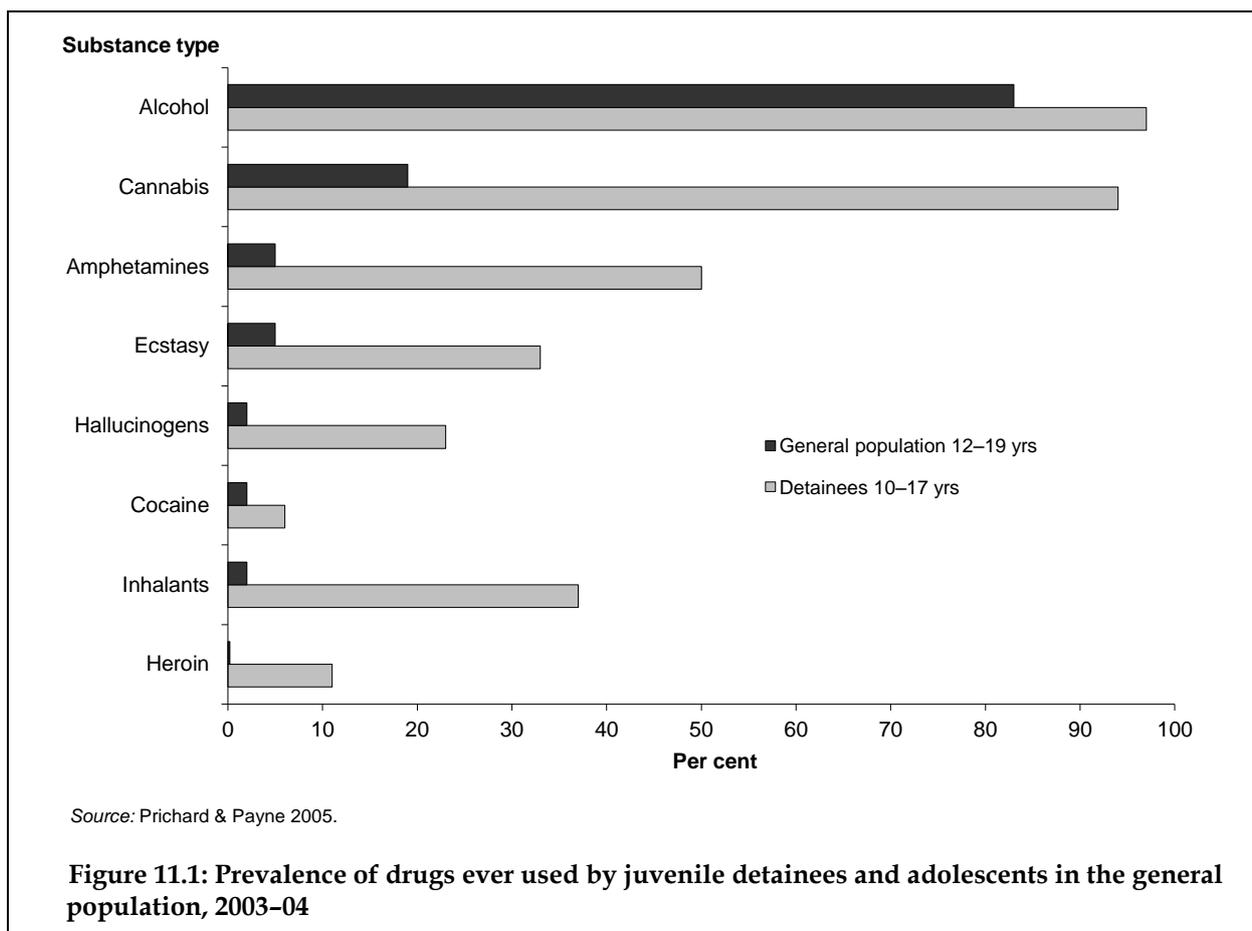
1. Excludes New South Wales and Victoria which did not participate in the 2010 Census
2. Percentages are of all prison entrants. Percentages do not add to 100% as prisoners may have used more than one type of drug.

Source: AIHW 2011d.

## 11.5.2 Drug use among juvenile detainees

### Prevalence of drug use

Survey research conducted in Australia in 2003–04 with juvenile detainees aged 10–17 about their use of alcohol, illicit drugs and their criminal behaviour (Prichard & Payne 2005) estimated prevalence of drug use in this group. Figure 11.1 compares the prevalence of drug use reported by the 371 juvenile detainees surveyed with prevalence estimates for the general population aged 12–19. While the methods used to estimate the prevalence for both groups were different, Figure 11.1 shows that self-reported use of drugs among incarcerated detainees aged 10–17 is higher than corresponding estimates for the general population of a similar age. Juvenile detainees were 10 times more likely to use amphetamine (50%) and hallucinogens (23%) and 16 times more likely to use inhalants (37%) than adolescents in the general population. Eleven per cent (11%) of juvenile detainees had used heroin in their lifetime compared with only 0.2% in the general population aged 12–19 (Prichard & Payne 2005).



### Frequency of drug use

In 2003-04, 95% of juvenile detainees reported having ever used a drug and 67% reported using more than one type of drug (Table 11.8). Alcohol had been used at least once by 97% and marijuana by 94% of juvenile detainees. Of those who reported being current regular users, 71% had used one drug and 29% had used more than one drug. Cannabis use was reported most frequently among those who reported regular use (63%), followed by alcohol (46%) and amphetamines (20%).

**Table 11.8: Prevalence of drug use among juvenile detainees, 2005 (per cent)**

| Frequency of use                                   | Alcohol | Cannabis | Amphetamines <sup>(a)</sup> | Inhalants | Ecstasy | Other <sup>(b)</sup> | Any  | More than one |
|--|---------|----------|-----------------------------|-----------|---------|----------------------|------|---------------|
| <b>Frequency of use for all juvenile detainees</b> |         |          |                             |           |         |                      |      |               |
| Ever used  | 97      | 94       | 50                          | 37        | 33      | 43                   | 95   | 67            |
| Used in six months prior to arrest                 | 87      | 84       | 40                          | 16        | 24      | 33                   | 88   | 56            |
| Current regular user <sup>(c)</sup>                | 46      | 63       | 20                          | 7         | 8       | 17                   | 71   | 29            |
| Escalation <sup>(d)</sup>                          | 47      | 67       | 40                          | 19        | 24      | 30                   | 75   | 43            |
| <b>Frequency of use for current regular users</b>  |         |          |                             |           |         |                      |      |               |
| Less than monthly                                  | 1       | 1        | —                           | —         | —       | n.a.                 | n.a. | n.a.          |
| One to several times a month                       | 8       | 3        | 5                           | 12        | 33      | n.a.                 | n.a. | n.a.          |
| One to several times a week                        | 53      | 10       | 37                          | 27        | 60      | n.a.                 | n.a. | n.a.          |
| Once a day   | 15      | 13       | 23                          | 8         | 7       | n.a.                 | n.a. | n.a.          |
| Several times a day                                | 22      | 74       | 35                          | 54        | —       | n.a.                 | n.a. | n.a.          |

(a) Excludes legal use of these drugs.

(b) Includes heroin, cocaine/crack, street methadone, and morphine as well as illicit use of dexamphetamine and benzodiazepines.

(c) Those who used the drug during the 6 months before arrest, and who said they had been regular users.

(d) Escalation is the percentage of those who ever used the drug who became current regular users.

Source: AIC 2005.

## Substance use and crime

The 2003–04 survey of juvenile detainees found an association between drug use and crime. Seventy per cent (70%) of juvenile offenders reported being under the influence of alcohol (22%), drugs (24%) or both alcohol and drugs (24%) at the time of offence (Table 11.9). Over one-fifth of juvenile offenders (21%) also reported being sick or hurting due to lack of drugs at the time of offence.

**Table 11.9: Intoxication at the time of current offence, 2003–04**

| Intoxication              | Number     | Per cent   |
|---------------------------|------------|------------|
| Drugs                     | 85         | 24         |
| Alcohol                   | 77         | 22         |
| Both drugs and alcohol    | 84         | 24         |
| <i>Total intoxication</i> | <i>246</i> | <i>70</i>  |
| Non-intoxicated           | 108        | 31         |
| <b>Total</b>              | <b>354</b> | <b>100</b> |

Source: Pritchard & Payne 2005.

Cannabis was the most frequently reported illicit drug used by juveniles who were intoxicated at the time of offence (75%), followed by amphetamine (39%) (Table 11.10). Over one-third (35%) of juveniles who reported being intoxicated at the time of offence had used two or more drugs.

**Table 11.10: Type of drug used by drug-intoxicated juvenile offenders at time of current offence, 2003–04**

| Type of drug at time of current offence    | Number     | Per cent  |
|--|------------|-----------|
| Cannabis                                   | 127        | 75        |
| Amphetamine                                | 66         | 39        |
| Inhalants                                  | 15         | 9         |
| Ecstasy                                    | 18         | 11        |
| Hallucinogens                              | 5          | 3         |
| Dexamphetamine (including on prescription) | 12         | 7         |
| Other                                      | 24         | 14        |
| Intoxicated by two or more drugs           | 64         | 35        |
| <b>Total<sup>(a)</sup></b>                 | <b>170</b> | <b>..</b> |

(a) Multiple responses were permitted. Percentages are based on the number of juveniles under the influence of drugs at the time of offence.

Source: Prichard & Payne 2005.

Among juveniles, regular violent and property offenders were more likely to report engaging in regular drug use (86% and 84%, respectively) than non-regular offenders (49%) (Table 11.11). Cannabis was the most frequently used drug among both types of offenders, followed by alcohol.

**Table 11.11: Regular drug use in six months before arrest, by type of juvenile regular offender, 2003–04**

| Substance                    | Regular violent offenders | Regular property offenders | Non-regular offenders |
|------------------------------|---------------------------|----------------------------|-----------------------|
|                              |                           | (per cent)                 |                       |
| Alcohol                      | 57                        | 45                         | 18                    |
| Cannabis                     | 65                        | 68                         | 31                    |
| Amphetamine                  | 29                        | 17                         | 5                     |
| Inhalants                    | 8                         | 7                          | 3                     |
| Ecstasy                      | 14                        | 5                          | 8                     |
| Other drugs                  | 22                        | 15                         | 10                    |
| Any current regular drug use | 86                        | 84                         | 49                    |
|                              |                           | (number)                   |                       |
| Mean no. of drugs used       | 2.0                       | 1.6                        | 0.7                   |

Source: Prichard & Payne 2005.

Juvenile violent offenders were more likely to report having used alcohol at the time of offence (51%) than other drugs, whereas property offenders were more likely to have used both alcohol (36%) and cannabis (36%) (Table 11.12).

**Table 11.12: Proportion of juveniles in detention by type of offence<sup>(a)</sup> and type of drug used at the time of offence, 2004 (per cent)**

| Substance             | Property offences | Violent offences | Other offences | All offences |
|-----------------------|-------------------|------------------|----------------|--------------|
| Alcohol               | 51.0              | 36.0             | 15.0           | 43.8         |
| Cannabis              | 35.4              | 36.0             | 15.0           | 34.5         |
| Amphetamine/cocaine   | 25.5              | 8.1              | 20.0           | 18.8         |
| Hallucinogens/ecstasy | 2.4               | —                | —              | 1.4          |
| Heroin                | 4.7               | 2.2              | —              | 3.5          |

(a) Juveniles are allocated according to their most serious charge.

Note: Columns do not total 100 because detainees may report intoxication on multiple drug types.

Source: AIC 2005.

## 11.6 Self-reported crime by injecting drug users

In 2007, approximately 2% of Australians had ever injected illicit drugs (for more information about injecting drug use see chapters 4 and 6). As part of the Illicit Drug Reporting System (IDRS), injecting drug users were asked about the types of crime they had committed in the month before their interview (Stafford & Burns 2010). Table 11.13 shows that, in 2008, 41% and, in 2009, 45% of injecting drug users reported they had been involved in some type of criminal activity in the previous month. Self-reported crime then reduced to 39% in 2010. The overall proportion reporting crime in 2009 was about the same as in 2005 when 46% of injecting drug users reported having been involved in some type of criminal activity in the month before the interview (AIHW 2007a). The most common criminal activity reported by injecting drug users in 2008 and 2009 was drug dealing (about 30% in both years), although this proportion reduced notably to 25% in 2010. The next most commonly reported crime type was property crime, which reduced from 24% in 2009 to 21% in 2010.

**Table 11.13: Proportion of self-reported crime among injecting drug users<sup>(a)</sup> in the last year, by type of crime, 2008–2010**

| Type of crime  | 2008 | 2009 | 2010 |
|----------------|------|------|------|
| Drug dealing   | 30   | 29   | 25   |
| Property crime | 18   | 24   | 21   |
| Fraud          | 4    | 4    | 4    |
| Violent crime  | 4    | 6    | 6    |
| Any crime      | 41   | 45   | 39   |

(a) Injecting drugs users surveyed for the Illicit Drug Reporting System.

Sources: Stafford & Burns 2010, Stafford & Burns 2011, NDARC 2011 unpublished analysis of 2010 Illicit Drug Reporting System.

## 11.7 Illicit drug purity and detections

### 11.7.1 Purity of illicit drugs

Information on the purity of heroin and cocaine analysed from police seizures is provided by the Australian Federal Police (AFP) and state/territory police agencies as an example of available data on illicit drug purity. AFP seizures of heroin and cocaine are generally of higher median purity than state/territory police seizures. AFP seizures are more likely to result from targeted, higher level operations than those of state and territory police agencies (Stafford et al. 2006).

Illicit drug purity is often related to availability: when a drug is in short supply, its purity tends to decrease. Reduced availability and purity have been associated with decreases in drug use, expenditure and overdoses, increases in treatment seeking, and use of other more available drugs (Weatherburn et al. 2001).

State, territory and federal police had samples from 453 cases of heroin seizures of two grams or above analysed for purity in 2009–10 (ACC 2010). Heroin seized by the AFP tended to have higher purity but state and territory police were responsible for 84% of the seizures analysed (ACC 2010). Heroin seizures over two grams varied in purity from 1% heroin to 79% (ACC 2010).

In 2009–10, state, territory and federal police had samples from 380 cases of cocaine seizures of two grams or above analysed for purity (ACC 2010). State and territory police were responsible for 91% of these seizures but cocaine purity tended to be higher when seized by the AFP (ACC 2010). Purity of cocaine seizures over two grams varied greatly, from less than 1% cocaine to 97% (ACC 2010).

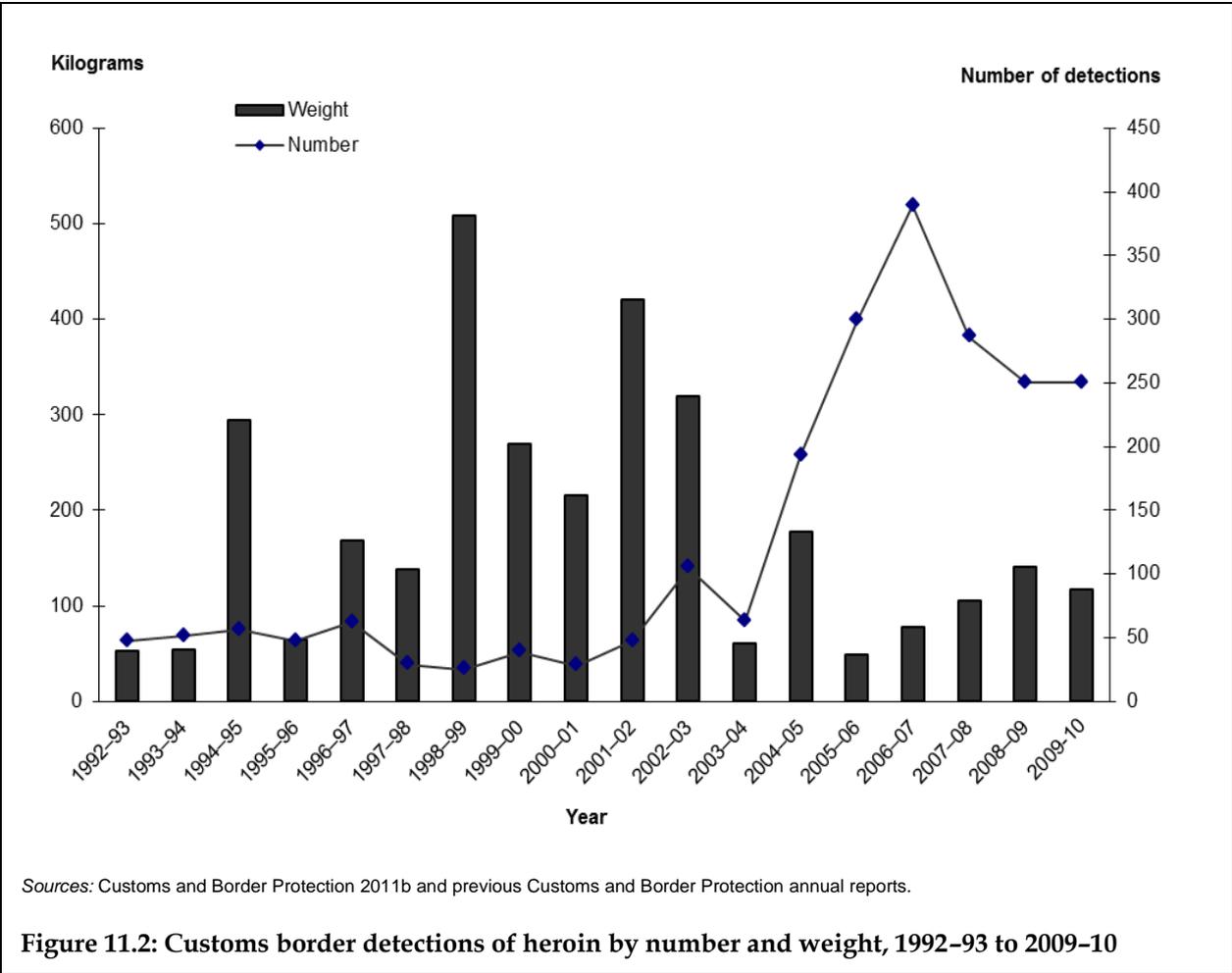
Self-report data provided by participants in the Illicit Drug Reporting System (IDRS) add to the picture provided by detections by criminal justice agencies (Stafford & Burns 2010). The majority of participants reported heroin purity as being either 'low' or 'medium'. There was, however, a higher proportion of participants in 2010 – (13%) compared with 10% in 2008 – who reported the current purity of heroin as 'fluctuates' (NDARC 2011). The purity of meth/amphetamine in the form of speed, base and ice/crystal reported in 2010 was 'low' for speed, 'medium' for base and 'high' for ice/crystal. New South Wales was the only state where a significant number of IDRS respondents reported cocaine use, and 13% of this cohort reported that cocaine purity fluctuates (NDARC 2011).

### 11.7.2 Australian border detections of illicit drugs

This section looks at detections of illicit drugs between 1992–93 and 2009–10 by the Australian Customs and Border Protection Service (formerly the Australian Customs Service). Border detections of heroin and amphetamine-type stimulants are highlighted below to show variations in such detections over time.

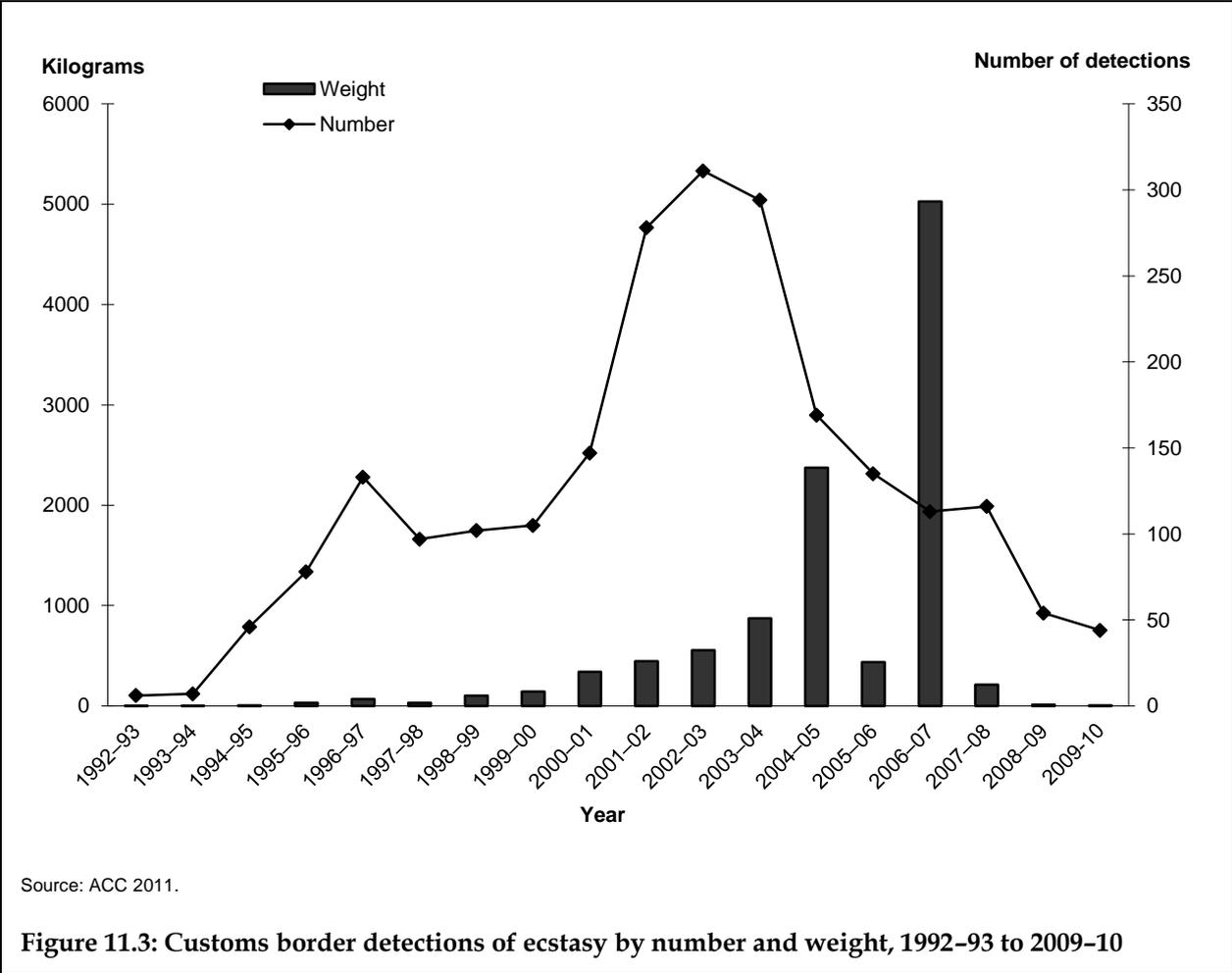
#### Border detections of heroin

The number of heroin border detections per year by the Australian Customs and Border Protection Service between 1992–93 and 2009–10 ranged between 25 and 389 detections (Figure 11.2). The total weight of heroin border detections fluctuated between 49 kilograms in 2005–06 and 508 kilograms in 1998–99. In 2009–10, the total weight of heroin detected was relatively low (117.5 kilograms), yet the number of detections was relatively high (250 detections).



### Border detections of amphetamine-type stimulants

Border detections of amphetamine-type stimulants (ATSs) are broken down in their reporting into meth/amphetamine and ecstasy (MDMA). In 2009–10, the number of detections for meth/amphetamine increased from 2008–09, but declined for ecstasy (see Figure 11.3 for ecstasy detections over time). The number of border detections of MDMA and the total weight of these detections, like those of other illicit drugs, fluctuates (Customs and Border Protection 2011b). The number of border detections increased from 6 in 1992–93 to a high of 311 in 2002–03. In 2009–10, the number of detections had declined to 44. The total weight of detections has also fluctuated considerably, from less than one kilogram in 1992–93 to a high of 5,026 kilograms in 2006–07, and then a dramatic decline to 6.1 kilograms in 2009–10. The decline in MDMA detections in 2009–10 has been attributed to production in regions that do not require movement across borders (ACC 2011).



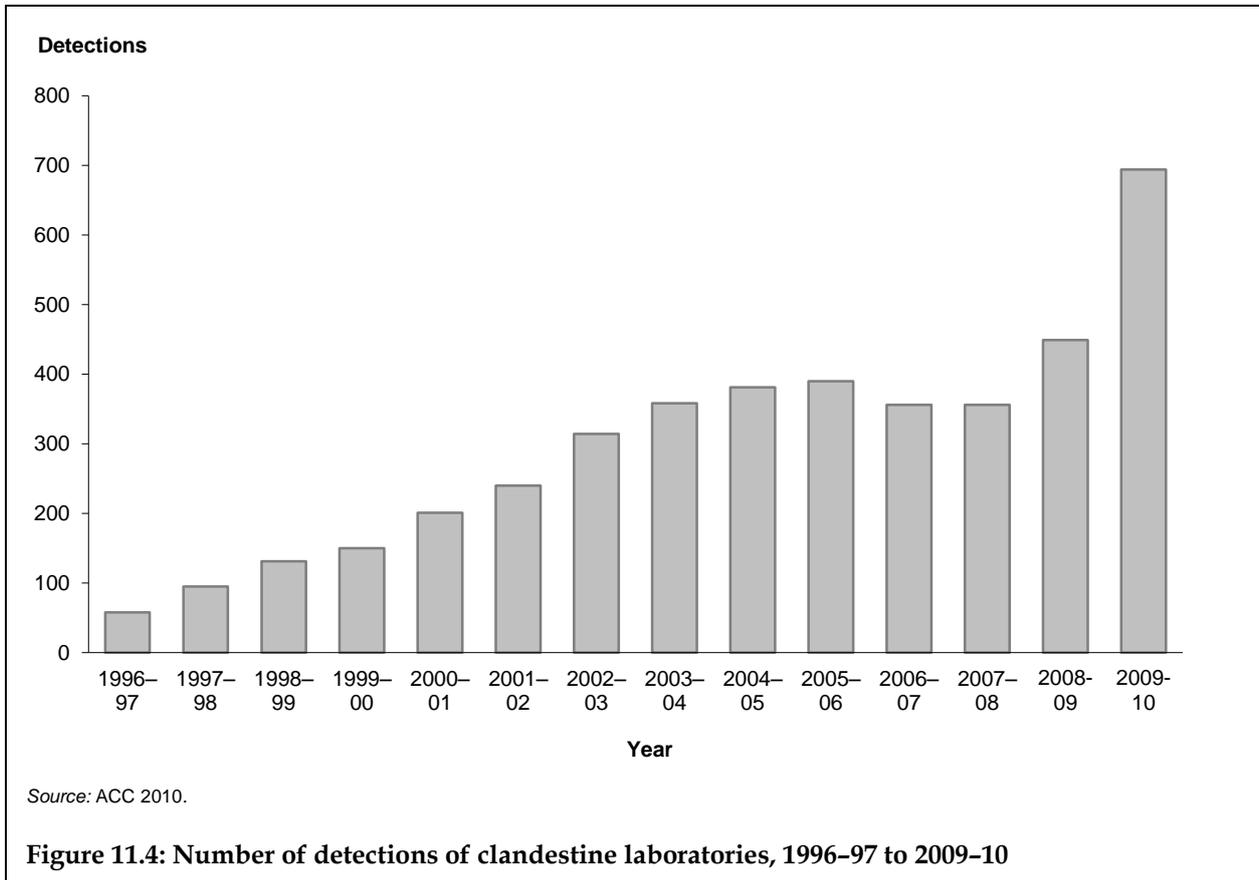
### Cannabis border detections

Most cannabis detections are confined to domestic production. There were some importations that were detected in 2009–10 and the number increased by 39% from 2008–09 (1,044 to 1,454 detections). Of the 1,454 detections in 2009–10, 26 were over 100 grams and only 6 were over one kilogram. Almost nine in ten (86%) seizures were of importations of cannabis seeds. Most detections contained only a small number of seeds intended for home cultivation (ACC 2011).

### 11.7.3 Australian domestic drug detection

#### Detection of drug laboratories

The number of clandestine drug laboratories detected in Australia increased between 1996–97 and 2009–10, from 58 to 694. The most common drugs manufactured were amphetamine-type stimulants. The majority of laboratories continue to be detected in residential areas (ACC 2011).



#### Cannabis detections

Within Australia, cannabis seizures accounted for the largest proportion of illicit drug detections with nearly 44,000 seizures. The weight of cannabis seized increased by nearly 8% compared with that for 2008–09. In 2009–10, three clandestine laboratories were detected that were set up to extract cannabis oil; three were also detected in 2008–09 (ACC 2010).

# Appendix A - Poisons Standard Schedule categories

The following is a general description of the Schedules. For the legal definitions, however, it is necessary to check with the relevant state or territory authority (DoHA 2009c).

- Schedule 1 This Schedule not currently in use.
- Schedule 2 Pharmacy Medicine – Substances, the safe use of which may require advice from a pharmacist and which should be available from a pharmacy or, where a pharmacy service is not available, from a licensed person.
- Schedule 3 Pharmacist Only Medicine – Substances, the safe use of which requires professional advice but which should be available to the public from a pharmacist without a prescription.
- Schedule 4 Prescription Only Medicine, or Prescription Animal Remedy – Substances, the use or supply of which should be by or on the order of persons permitted by state or territory legislation to prescribe, and should be available from a pharmacist on prescription.
- Schedule 5 Caution – Substances with a low potential for causing harm, the extent of which can be reduced by using appropriate packaging with simple warnings and safety directions on the label.
- Schedule 6 Poison – Substances with a moderate potential for causing harm, the extent of which can be reduced by using distinctive packaging with strong warnings and safety directions on the label.
- Schedule 7 Dangerous Poison – Substances with a high potential for causing harm at low exposure and which require special precautions during manufacture, handling or use. These poisons should be available only to specialised or authorised users who have the necessary skills to handle them safely. Special regulations restricting their availability, possession, storage or use may apply.
- Schedule 8 Controlled Drug – Substances, which should be available for use but require restriction of manufacture, supply, distribution, possession and use to reduce abuse, misuse and physical or psychological dependence.
- Schedule 9 Prohibited Substance – Substances which may be abused or misused, the manufacture, possession, sale or use of which should be prohibited by law except when required for medical or scientific research, or for analytical, teaching or training purposes with approval of Commonwealth and/or state or territory health authorities.

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