



Trends in Drug Use and Related Harms in Australia, 2001 to 2013

Medicine National Drug and Alcohol Research Centre

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EXECUTIVE SUMMARY

Global trends

- Although tobacco use is stable or declining in many high income countries, it continues to rise in many lower income countries and those that are developing economically (World Health Organisation, 2013).
- In 2012 there was continued expansion in the seizure of new psychoactive substances (e.g. synthetic cannabinoids – ‘Spice’, ‘Kronic’, cathinones – mephedrone, and phenethylamines – 2C compounds) in Europe. There have been a total of 236 substances notified to the European early warning system during the period 2005 to 2012. For the first time the number of these substances has exceeded the total number of substances under international control (United Nations Office on Drugs and Crime, 2013).
- In 2012, levels of opium production in Afghanistan dropped due to a combination of disease and adverse weather conditions. This followed a relatively high yield in 2011 (United Nations Office on Drugs and Crime, 2013).
- There has been an overall decline in the global cocaine market, with decreases in cultivation occurring in Bolivia in 2011 compared to 2010. Cocaine use continues to decline in North America, while it has stabilised across Western and Central Europe after many years of growth (United Nations Office on Drugs and Crime, 2013).
- There are continued signs of a recovery in the European ecstasy market, with further increases in seizures of ecstasy-related substances documented in 2011.
- Other countries such as the United States and Canada recorded declines in ecstasy seizures between 2010 and 2011.
- Global trends on the prevalence of people with drug dependence appear to be stable, while there is evidence to suggest a decline in the global number of people who inject drugs.
- However, the emergence of an increasingly large number of psychoactive substances presents unique issues for both law enforcement and treatment services.
- There have been increasing reports of non-medical use of prescription drugs across different regions worldwide (United Nations Office on Drugs and Crime, 2013).

Australian trends

- Tobacco continues to cause more ill health and premature death than any other drug.
- Proportions of Australian reporting risky patterns of alcohol consumption for short term harm at least once in the past 12 months declined significantly between 2007 and 2010, while those reporting more frequent consumption at this level remained stable.
- Daily drinking declined significantly between 2007 and 2010 (from 8.1% to 7.2%) which was primarily due to a decline among older males.
- Illicit drug use declined in Australia between 1998 and 2007, while 2010 has shown a significant increase in use. This increase is primarily driven by an increase in cannabis use (from 9.1% in 2007 to 10.3% in 2010) and non-medical pharmaceutical use (0.2% to 0.4%).
- Looking at other illicit drugs, population surveys conducted in 2007 and 2010 show an increase in cocaine use in Australia, although still at an overall low prevalence (2.1% of general population in 2010). Patterns of use among those surveyed however remain sporadic.
- Ecstasy use declined significantly among the general population in 2010 for the first time since 1995.
- Increases have been recorded in the prescription of pharmaceutical opioids, and prescriptions are most prevalent among older Australians. This may reflect appropriate prescribing patterns for pain conditions among an ageing population.
- Harms related to pharmaceutical opioids (in particular hospital presentations) have increased over time.

TOBACCO

Prevalence

- In Australia, between 1991 and 2010 daily tobacco smoking rates declined from 24.3% to 15.1%. This is the lowest level recorded during the 19 year period.
- In 2010 it was estimated that Australian smokers numbered around 3.3 million. There were 4.4m ex-smokers and 10.6m who had never smoked.
- Females aged between 12 and 17 years (3.2%) were more likely than males aged 12 -17 years (1.8%) to be daily smokers. For all other ages males had higher smoking rates than females.
- The majority of people who inject drugs in Australia also report smoking tobacco.

Harms

- In 2010, tobacco smoking was the second leading risk factor for global disease burden (Lim, 2012)
- Tobacco smoking remains the leading preventable cause of death and disease in Australia.
- Lung cancer was the leading cause of cancer mortality in both males and females in Australia in 2010 (Australian Institute of Health and Welfare & Australasian Association of Cancer Registries, 2012).

ALCOHOL

Prevalence

- The majority of Australians in the general population consume alcohol, with the 2010 figure of past year alcohol use (80.5%) representing a significant decline from 82.9% in 2007.
- Analysis by the Australian Institute of Health and Welfare shows that the proportions of Australians reporting risky patterns of alcohol consumption for short term harm (in accordance with 2001 guidelines) at least once in the past 12 months declined significantly between 2007 and 2010, while those reporting more frequent consumption at this level remained stable.
- Daily drinking declined significantly between 2007 and 2010 (from 8.1% to 7.2%) which was primarily due to a decline among older males.

Treatment seeking

- Alcohol-related hospital separations have increased over time and outnumber hospital separations for the other major illicit drug classes. Alcohol-related separations are higher among older Australians.
- The number of treatment episodes for alcohol has steadily increased over the past six years and represent a greater proportion of all treatment episodes (from 37% of all treatment episodes in 2001 to 45.8% of all treatment episodes in 2011/12).

Deaths

- Overall, alcohol-attributable deaths in Australia have declined between 1996 and 2005.
- Across all jurisdictions death rates were approximately 3 deaths per 10,000 population in 2005 (with the exception of the NT, where they were 8 per 10,000 population).
- In 2005, the most common cause of alcohol-attributable death was alcoholic liver cirrhosis.

CANNABIS

Prevalence

General population

- The prevalence of last year cannabis use in Australia declined between 1998 and 2007 (from 17.9% to 9.1), with 2010 recording a significant increase to 10.3%.
- The increase in 2010 was driven by higher prevalence among Australians aged 50 to 59 years.
- Data from the survey of secondary school students showed a decline in cannabis use from 32.4% in 1996 to 12.7% in 2011.
- Daily cannabis use among those who continue to use has remained relatively stable over time (13% of cannabis users in 2010).
- The highest proportion reporting daily cannabis use were Australians aged 40 years and over.

Sentinel Groups

- Among PWID, past 6 month cannabis use has declined significantly from 86% in 2001 to 72% in 2013.
- Daily cannabis use among current users has remained stable (46% in 2013).
- Among regular ecstasy users cannabis use has remained stable at 85% (in 2003 and 2013), while daily use among this group has decreased significantly from 30% in 2003 to 18% in 2013.

Treatment seeking

- There have been increases (particularly among older age groups) in numbers presenting to hospital for problems associated with cannabis use between 2001 and 2013. Cannabis related presentations remain highest among 20 to 29 year olds.
- There was an increase in outpatient treatment episodes for problems associated with cannabis from 23,826 in 2001/02 to 32,321 in 2011/12. Cannabis treatment episodes accounted for 22% of all drug treatment episodes in 2011/12.

Law enforcement

- Two thirds of all drug-related arrests in 2011/12 were for cannabis which represents a drop from 75% of all drug arrests in 2001/02. Numbers of cannabis arrests have increased slightly over time.

Market indicators

- Increases were reported in the price for larger amounts of cannabis (ounces), while prices for a gram remained stable. Both bush cannabis and hydroponic cannabis have remained readily available in Australia over time.

ECSTASY

Prevalence

General population

- Use of ecstasy in the general population has declined for the first time since 1995. The decline from 3.5% in 2007 to 3% in 2010 was statistically significant, and was driven by a significant decline in use among males over 14 (from 4.4% in 2007 to 3.6% in 2010), and young Australians aged 14 to 19 (particularly among females where use declined from 6% in 2007 to 2.5% in 2010).
- The decline in recent ecstasy use in Australia mirrors a downward trend in ecstasy markets recorded internationally around 2010.
- In 2010 the majority of Australians who used ecstasy reported using once every few months or less.

Sentinel Groups

- Among injecting drug users, prevalence of 6 month ecstasy use declined significantly from 29% in 2002 to 9% in 2013.
- Among regular ecstasy users there has been a significant decline in proportions reporting weekly ecstasy use between 2003 and 2013.

Treatment seeking

- There has been a decline in outpatient treatment episodes for problems associated with ecstasy use from a peak of 1,397 in 2008/09 to 550 in 2011/12.

Deaths

- Ecstasy-related deaths in Australia are low in comparison to methamphetamine and heroin-related deaths. During the period 2000 to 2005, 82 deaths that were ecstasy related were identified. Ecstasy was considered a direct antecedent or cause in 67 of these deaths, with only 19 considered to be due to ecstasy toxicity alone.

Law enforcement

- The number ecstasy seizures detected at the Australian border increased markedly from 110 in 2010/11 to 964 in 2011/12, while total weight of all seizures was only 12 kg.

Market indicators

- The price of ecstasy tablets has declined over time (to \$25 in 2013), while reports of ecstasy being of 'medium' purity have increased. Availability of ecstasy has also increased over the past few years, with higher proportions reporting it as 'very easy' to obtain in 2012 (40% compared to 24% in 2010).
- The ecstasy market in Australia appears to be stabilising after a downward trend in 2010.

HEROIN

Prevalence

General population

- Past year heroin use remains low among the broader Australian population at less than 1% in 2010.

Sentinel Groups

- Among people who inject drugs there has been a decline in the prevalence of past 6 month heroin use over time (from 79% 2000 to 58% in 2013), however daily heroin among heroin users in this group has increased to one quarter (25%) in 2013.
- Very small proportions of regular ecstasy users (4% in 2013) reported recent heroin use.

Treatment seeking

- Opioid-related hospital presentations remain higher than other illicit drug presentations.
- Hospital presentations declined substantially in 2001/02 and remained stable to 2005/06. Since this time they have increased across all age groups except the 20 to 29 year age group. Opioid-related presentations have remained low and stable since 2001/02. The 30 to 39 year age group accounted for the largest proportion (37%) of presentations in 2010/11.
- Numbers of people in opioid substitution treatment have increased between 2001 and 2012, particularly among older Australians (50 years and over), with a decline in clients aged 30 years and under.

Deaths

- Opioid-related deaths continue to outnumber deaths for other illicit drugs.
- Since 2007 there has been an upward trend in opioid-related deaths among Australians aged 35 years and over. Deaths among Australians aged 15 to 24 have remained low and stable since 2004.

Law Enforcement

- The weight of heroin seizures detected at the Australian border has increased over the past few years (400kg in 2010/11 and 256 kg in 2011/12), however the number of seizures has declined (179 in 2011/12) from a peak of 389 in 2006/07.
- The number of heroin-related arrests has remained relatively stable since 2008/09.

Market indicators

- The price of small amounts of heroin ('caps') has remained unchanged between 2000 and 2012 at \$50, while there has been a decline in the price of a gram from \$450 in 2001 to \$300 in 2013, the lowest price recorded during the 14-year period.
- While heroin remains readily available according to IDRS participants, half (50%) of the sample in 2013 report that it is 'low' in purity. This may partly explain the decrease in price for a gram of heroin.
- While heroin remains readily available according to IDRS participants, a larger proportion of this group (42% in 2011) report that it is 'low' in purity.



PHARMACEUTICAL OPIOIDS

Prevalence

General population

- Past year non-medical use of pharmaceutical opioids (such as oxycodone and morphine) among the general population increased significantly between 2007 and 2010 (from 0.2% to 0.4%). However, prevalence still remains relatively low in Australia.
- There has been a decrease in morphine prescribing in Australia. Prescriptions are most prevalent among older Australians.
- There has been an increase in oxycodone prescribing, particularly among older Australians. This increase may in part be due to legitimate prescribing given the ageing population in Australia however, it is not possible to differentiate non-medical use from legitimate prescribing in these data.
- Fentanyl prescribing has also increased, and again is predominantly prescribed to older Australians.

Sentinel groups

- Among IDRS participants, injecting use of morphine increased between 2001 and 2007 (from 40% to 50%), however this figure has since declined to 35% in 2013.
- There has been an increase in oxycodone injecting use among IDRS participants, from 17% in 2005 to 31% in 2013.
- Six percent of IDRS participants reported injecting fentanyl in the past six months in 2013.

Treatment seeking

- Treatment episodes for problems associated with opioids other than heroin have steadily increased over time from 4,779 in 2001/02 to 7,527 in 2011/12. A quarter of these episodes are for morphine related problems. These treatment episodes remain much lower in number than those for heroin (12,918 in 2013).

Deaths

Oxycodone

- During the period 2001 to 2009, 465 oxycodone related deaths were recorded.
- Approximately one-quarter (27%) of these decedents had a recorded history of injecting drug use.
- Approximately half (53%) of the decedents had been prescribed oxycodone prior to their death.
- Multiple drugs (in particular alcohol and benzodiazepines) were recorded in the majority (82%) of oxycodone-related deaths.
- Deaths due to heroin outnumber oxycodone-related deaths.
- Mortality related to oxycodone is currently relatively low in Australia, and is not comparable to numbers of oxycodone deaths seen in the United States, where they outnumber heroin and cocaine deaths.

Fentanyl

- During the period 2000 to 2011, 136 fentanyl related deaths were recorded.
- More than half (54%) of the decedents had a recorded history of injecting drug use.
- Approximately one third (36%) of the decedents had been prescribed fentanyl prior to their death.
- Two-thirds (66%) of the deaths recorded multiple drug toxicity and other drugs present were most notably benzodiazepines, antidepressants and morphine.
- Fentanyl related mortality is currently relatively low in Australia compared to the United States and parts of Europe, however a large proportion of these deaths are occurring among at risk groups who inject drugs.

METHAMPHETAMINE

Prevalence

General population

- Prevalence of past year methamphetamine use remains stable in Australia at 2.1% in 2010.
- Weekly methamphetamine use has remained stable between 2001 and 2010 (9.3% reported weekly or more use in 2010, with the majority of Australians across all age groups reporting use every few months or less frequently).
- Powder methamphetamine continues to be the form most used in the general population.

Sentinel groups

- Among IDRS respondents, prevalence of past 6 month methamphetamine use overall remained stable between 2001 and 2011, however a decline was recorded between 2009 and 2010.
- Among regular ecstasy users there was a decline in past 6 month methamphetamine use between 2003 (84%) and 2009 (54%) and a decline in frequency of use. This decline is across all forms of methamphetamine but most marked for crystal methamphetamine. Use has stabilised at a lower level in 2010 and 2011.
- Shorter term trends show that crystal methamphetamine use in particular increased significantly between 2010 and 2011 among both IDRS and EDRS respondents.

Treatment seeking

- There was a slight increase in outpatient treatment episodes for meth/amphetamine from 12,211 in 2001/02 (10.8% of all treatment episodes) to 16,588 in 2007/08 (11.2%). This figure declined to 12,739 (9.2% of all treatment episodes) in 2008/09, and is consistent with the decline in methamphetamine use seen across sentinel groups and in the general population.
- Hospital presentations for meth/amphetamine problems are second highest after opioids. These have stabilised over the past five years after steady increases during the 1990s. The 20 to 39 year old Australians account for the largest proportion of these presentations.

Deaths

- Methamphetamine-related deaths remain lower than those for opioids, and have been decreasing since 2000. Much of this decline is driven by the decline in heroin-related deaths, as the majority of methamphetamine deaths are due to multiple drug (often heroin) toxicity.

Law enforcement

- Numbers of amphetamine-type stimulant seizures detected at the border have fluctuated between 2006/07 and 2009/10 after steady increases between 2001/02 to 2006/07. The weight of seizures has also fluctuated across this time period.
- Arrests for amphetamine-type stimulants have steadily increased since 1999/00, with the 2008/09 figure of 16,407 being the highest on record.
- The number of clandestine laboratories detected in 2009/10 (694) represents the highest on record.

Market indicators

- There were mixed trends for the median price of a gram of powder base and crystal methamphetamine, with IDRS respondents reporting increases for base and crystal methamphetamine and a decrease for powder methamphetamine. Among EDRS respondents the only change was a decrease in the median price for a gram of crystal methamphetamine.

- Trends in median prices for points of each form were also mixed. Prices for powder and base methamphetamine declined according to EDRS respondents, and remained stable according to IDRS respondents. Both groups reported an increase in the median price for a point of crystal methamphetamine.
- Purity of all three forms appears to have increased between 2008 and 2011, with crystal methamphetamine generally being reported as 'high' in purity among both EDRS and IDRS respondents. Both powder and base methamphetamine were reported as being 'medium' to 'high' in purity.
- With the exception of base methamphetamine, the majority of IDRS and EDRS respondents report methamphetamine as 'easy' or 'very easy' to obtain. Both powder and crystal methamphetamine forms have become increasingly more available according to EDRS respondents between 2009 and 2011. In contrast, approximately one third (38%), and one quarter (25%) of EDRS and IDRS respondents respectively reported base methamphetamine as being 'difficult' to obtain in 2011.

COCAINE

Prevalence

General population

- There was a slight increase in cocaine use among the general population in 2007 (from 1% in 2004 to 1.6% in 2007) and again in 2010 to 2.1%. However cocaine use in the broader population remains relatively low. The rise in 2010 was mainly accounted for by 20 to 29 year olds.
- Frequency of cocaine use in the general population remains sporadic, with the majority of Australians reporting monthly or less frequent use in 2010.

Sentinel groups

- Among IDRS respondents there has been a decline in prevalence of 6 month cocaine use between 2001 and 2008, and prevalence has remained at this lower level between 2009 and 2011. Frequency of cocaine use (weekly or more) has remained relatively stable between 2001 and 2011.
- Conversely, among regular ecstasy users there has been an increase in prevalence of past 6 month cocaine use (from 23% in 2003 to 46% in 2011), however use among this group is relatively infrequent at 2 occasions over the past 6 months in 2011. Frequency of cocaine use has remained stable among this group.

Treatment seeking

- An increase in cocaine-related harms in 2001 (treatment and hospital presentations) mirrored high levels of use among injecting drug users in NSW. These indicators have since declined with hospital and treatment presentations for problems relating to cocaine remaining relatively low.

Law enforcement

- Cocaine seizures declined in number (291) and weight (386kg) in 2009/10, however, there was one particularly large detection of 240kg seized through the cargo stream, coming in from Mexico.
- Cocaine-related arrests increased from 689 in 2007/08 to 848 in 2008/09. Over 50% of these arrests occurred in NSW.

Deaths

- Cocaine-related deaths remain relatively low in Australia. In 2005 there were 10 deaths where cocaine was determined to be the underlying cause and a total of 15 deaths where cocaine was mentioned as either the underlying or contributory cause.

Market indicators

- There has been an increase in the price of a gram of cocaine between 2001 and 2010, while purity is reported as being low to medium.
- There have been increasing proportions of both EDRS and IDRS respondents reporting that cocaine is 'low' in purity between 2008 and 2011.
- Availability of cocaine is reported by EDRS respondents as difficult (44% in 2011), and these proportions have increased since 2008 (from 37%). Just under half (43%) of the IDRS respondents reported cocaine as 'easy' to obtain in 2011 however this proportion has declined from 54% in 2008. Approximately one-quarter (27%) of IDRS respondents reported cocaine as 'difficult' to obtain in 2011, increasing from just 18% in 2008.

NEW PSYCHOACTIVE SUBSTANCES

Prevalence

General Population

- There is currently no data available on use of new psychoactive substances (NPS) (such as mephedrone, MDPV and synthetic cannabinoids) among the general population in Australia. This data is scheduled to be collected in the 2013 National Drug Strategy Household Survey.

Sentinel groups

- The use of various NPS among EDRS respondents has been collected at a national level since 2010.
- The types of substances used among this group have changed over time, highlighting the dynamic nature of the NPS market.
- Approximately half (44%) of the EDRS respondents in 2013 reported past 6 month use of any NPS. This proportion represents a slight increase from 40% in 2012.
- In 2013, the most commonly used NPS among EDRS respondents were synthetic cannabinoids (16%), DMT (14%), and 2CB (14%).
- Frequency of use of these substances is very sporadic at a median of 2 to 4 days in the past 6 months.
- It appears that many of these substances have become established within Australian illicit drug markets and continued monitoring of prevalence and frequency of use is important.
- Given the low frequency of use of NPS among EDRS respondents, it is anticipated that prevalence and frequency of NPS use among the general population is likely to be low.

1. INTRODUCTION

The purpose of this resource document is to collate various data sources that document trends in alcohol and other drug use and harms in Australia. We hope that it will be a useful resource document.

We have provided data on the following drug classes:

- Alcohol
- Cannabis
- Ecstasy
- Methamphetamine
- Heroin
- Cocaine
- Pharmaceutical opioids

The main data sources used for this report are:

1. National Drug Strategy Household Survey (NDSHS)
2. Australian Secondary Students Survey of Alcohol and other Drugs (ASSAD)
3. Illicit Drug Reporting System (IDRS)
4. Ecstasy and related Drugs Reporting System (EDRS)
5. Illicit Drug Data Report (IDDR)
6. National Minimum Data Set – Alcohol and other drug treatment services in Australia (NMDS – AODTS)
7. National Hospital Morbidity Database (NHMD)
8. The Australian Bureau of Statistics Causes of Death database
9. Seizure data from the Australian Customs and Border Protection Service

There is an important distinction between the general population surveys (data source 1 and 2, for example) and those surveys of sentinel groups (such as 3 and 4). Interpretation of the general population data is different from the sentinel group data. Sentinel groups are chosen precisely because they engage in illicit drug use, and are likely to have knowledge about market characteristics. Sentinel groups cannot tell us about general population prevalence, but are vital in describing harms and changing patterns of consumption within the drug using population itself.

Within each drug we provide data (where available) on:

- Prevalence of past year use over time among the general population;
- Prevalence of past six month use over time among sentinel groups of drug users in Australia that are monitored by the Illicit Drug Reporting System (IDRS) and the Ecstasy and related Drugs Reporting System (EDRS);
- Trends in frequency of use among the general population and among sentinel groups;
- Numbers seeking treatment;
- Indicators of drug-related harm using mortality and hospital admissions;
- Law enforcement activity (arrests and seizures) for illicit drugs;

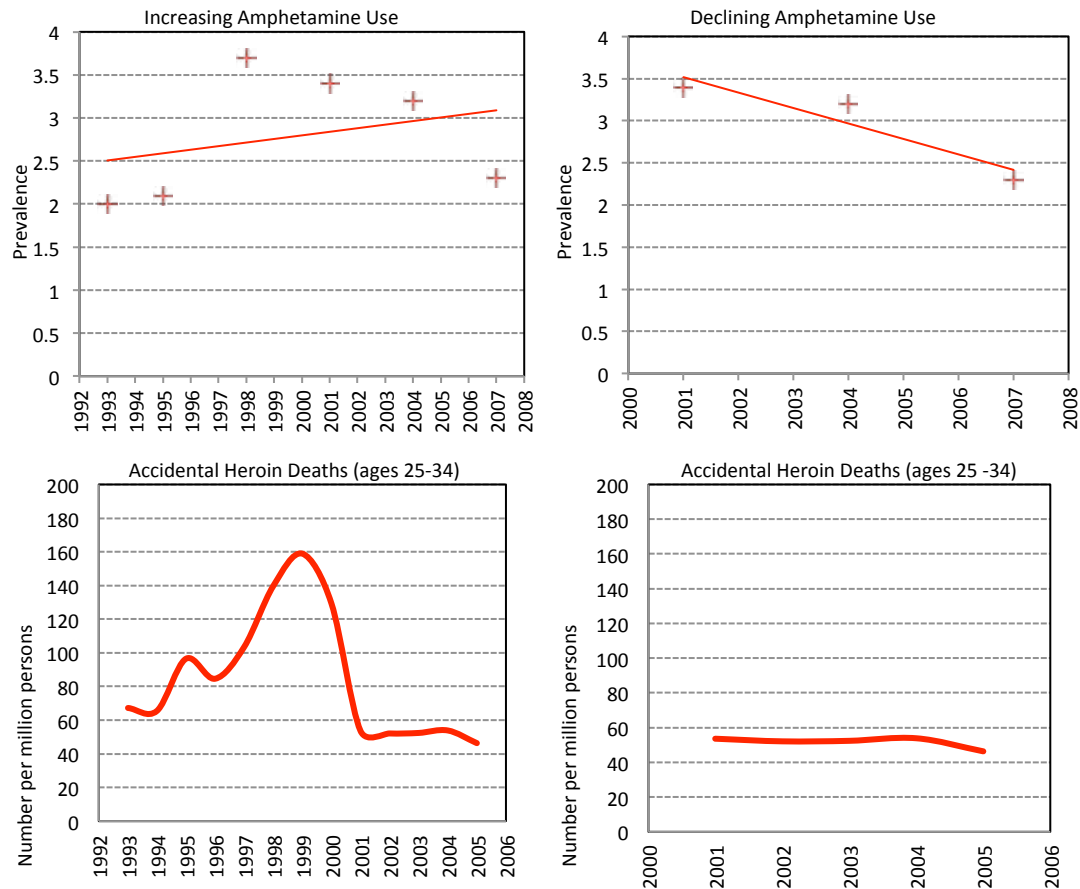
Market indicators including user reports of availability, price and purity.

We sought consistent high quality indicators that had reliable data over a number of years. In addition, we used national data wherever possible. Some indicators such as ambulance call-outs are available but not in a nationally consistent manner. Therefore we did not include these.

Understanding trends

The ways in which trends are interpreted depends on the time horizon that is chosen. The interpretation of a trend will depend on the artificial commencement and endpoint of the trend being examined. This is demonstrated in the below two examples (Figure 1). Amphetamine use in the last year rose in Australia between 1993 and 1998 and then declined. Examination of the 2001 to 2007 trend line only demonstrates the decline. Accidental heroin deaths peaked in Australia in 1999 and 2000, but have remained stable in most recent years. Examination of the trend line from 2001 demonstrates stable accidental heroin deaths.

Figure 1: Examples of the trend lines with the inclusion of different years



Thus, we have foreshortened the horizon in these trends analyses, by limiting ourselves to those trends from 2001 onwards. The end point of analysis depends on the availability of data. If we chose to use an earlier data than 2001 in the analyses, the interpretations may have been different. Despite a focus on 2001 onwards, in some places we do provide reference to trends prior to 2001.

In addition to the time horizon issue, it is also important to note the difference between a linear and a non-linear trend. Linear trends are relationships that can be represented by a straight line (i.e. the prevalence of drug use is consistently increasing or consistently decreasing over time). Non-linear trends account for variable patterns in the trends (i.e. the prevalence both increasing and decreasing at different time points). We chose to restrict our statistical analyses to linear trends only.

Finally, when we update this resource document with new data, the trend lines may change.

Language

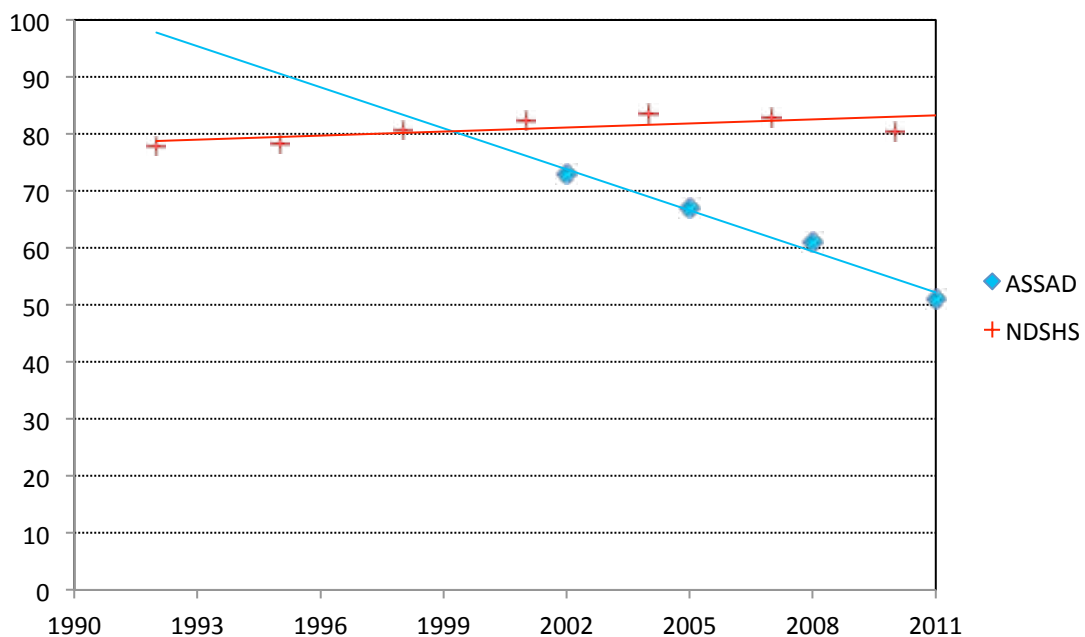
We use standard language to describe the trends. For example, downward movement is described using terms such as decline, decrease, drop, and fall; upward movement is described using terms such as climb, rise and increase; and stability is described using terms such as remain stable and level off. Where possible we have used the terms "significant" or "statistically significant" to indicate when the interpretation of trends is based on statistical hypothesis testing. Where we have not used these terms, it means either that the change is not significant, or it hasn't been tested for significance.

2. ALCOHOL

2.1 Patterns of alcohol use

The figure below (Figure 2) provides past year prevalence of alcohol use in the Australian population and among Australian secondary students surveyed about their alcohol and other drug use. In 2010, 80.5% of the population aged 14 years and over reported consuming alcohol in the past year, representing a significant decline from 82.9% in 2007 (Australian Institute of Health and Welfare, 2011). The latest ASSAD survey shows that in 2011, 51% of students reported past year use of alcohol, representing a steady decline from 73% of students in the 2002 survey reporting past year alcohol use (White et al., 2012b).

Figure 2: Alcohol use across multiple surveys¹



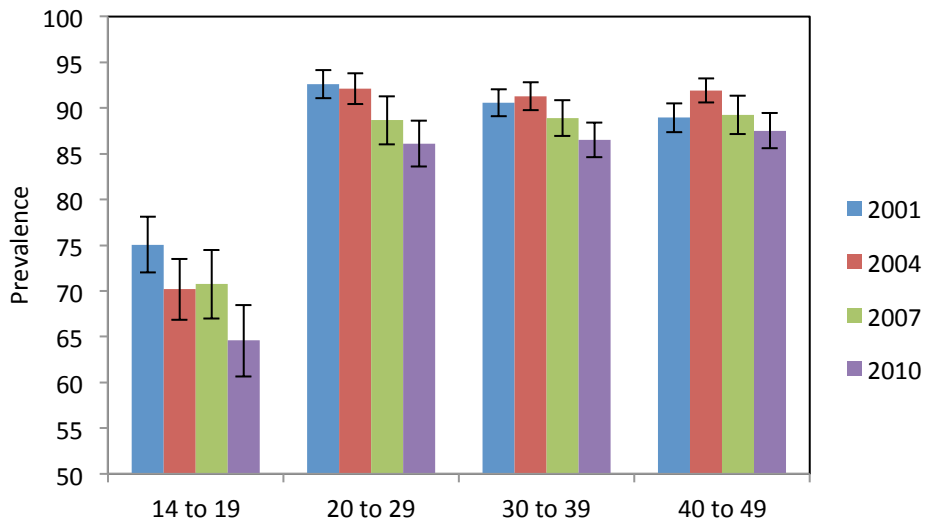
Source: National Drug Strategy Household Surveys, AIHW. Australian secondary school students' use of over-the-counter and illicit substances, DoHA.

We now examine general patterns of alcohol consumption among different age groups and by gender.

Looking at past year prevalence of alcohol use by 10 year age group among males surveyed for the NDSHS, there are no significant differences over time in the prevalence across any of the age groups (Figure 3).

¹ For Figures 2, 12, 34, 45, 63, and 93, we have fitted a linear regression trend line through the available data, but have not tested for statistical significance.

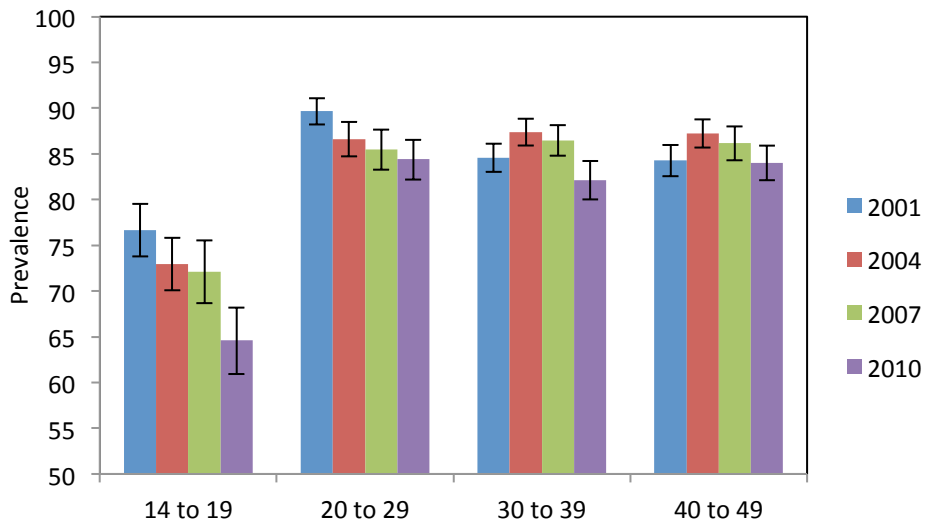
Figure 3: Past year alcohol use among males by age group



Source: National Drug Strategy Household Surveys, AIHW

This same age-trend is also evident among females surveyed for the NDSHS (Figure 4).

Figure 4: Past year alcohol use among females by age group



Source: National Drug Strategy Household Surveys, AIHW

Comparing past year alcohol use between males and females, by 10 year age group in 2010 (Table 1), there are slightly higher proportions of males across all age groups reporting past year use (with the exception of the 14 to 19 year olds).

Table 1: Past year alcohol use by age and gender, 2010

Age group	Males	Females
14 to 19	65	65
20 to 29	86	84
30 to 39	87	82
40 to 49	88	84

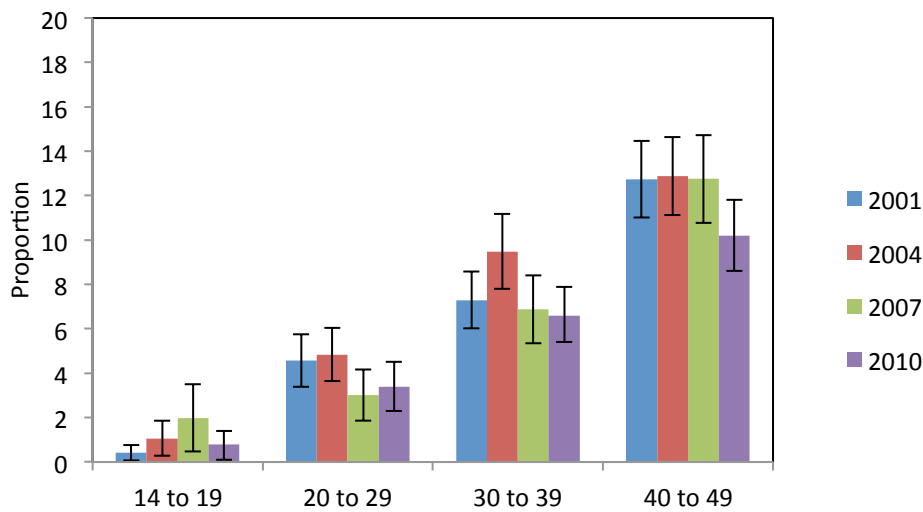
Graph

Looking at these trends over time, there have been consistently higher proportions of males aged 30 to 39 years reporting past year alcohol use than females of the same age.

More important than last year consumption (as shown in the above data) are patterns of daily use of alcohol between age groups and gender. Daily use of alcohol is indicative of a harmful pattern of consumption.

Figure 5 shows the proportion of males reporting daily alcohol use (among those who consumed alcohol in the past year) by age group over time. Despite higher proportions of males aged 14 to 19 reporting daily alcohol consumption in 2007 compared to 2001, this is not a significant change. Likewise, although lower proportions of 20 to 29 year old males reported daily alcohol use in 2007 compared to 2001, this is also not significant. In 2010, males aged 40 to 49 years were significantly more likely than males from the younger age groups to report daily drinking. The 2010 figures also show that there has been a significant decline in the overall proportion of males of all ages reporting daily drinking (Australian Institute of Health and Welfare, 2011), which was largely driven by males aged 70 years and over.

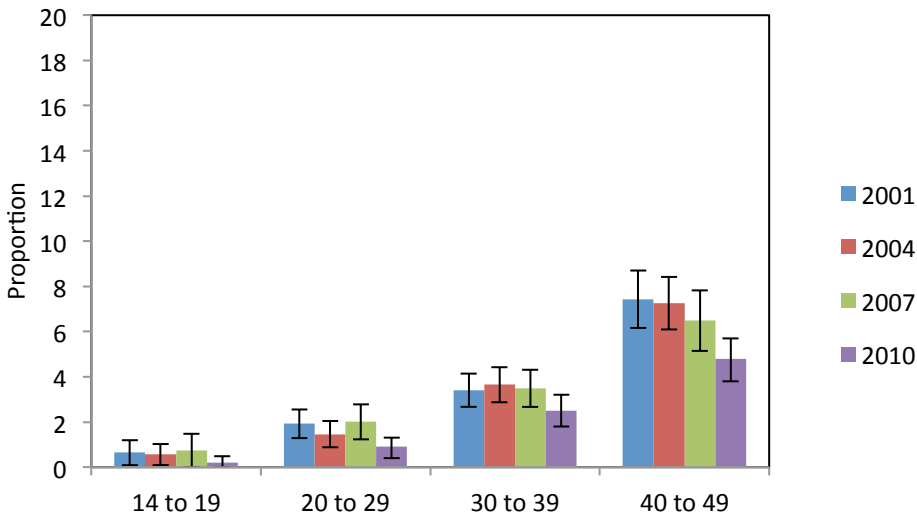
Figure 5: Proportion of male recent drinkers reporting daily alcohol use in the past 12 months by age group



Source: National Drug Strategy Household Surveys, AIHW

The proportion of females reporting daily alcohol use remained stable between 2001 and 2007 (Figure 6). The 2010 figures show lower proportions of females across all age groups reported daily drinking however, these changes were not significant (Australian Institute of Health and Welfare, 2011).

Figure 6: Proportion of female recent drinkers reporting daily alcohol use in the past 12 months by age group

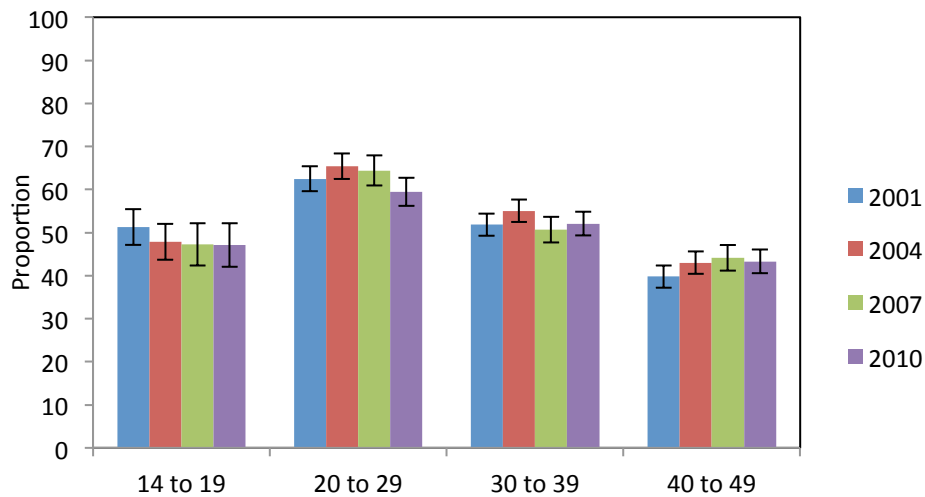


Source: National Drug Strategy Household Surveys, AIHW

In 2009, the National Health and Medical Research Council (NHMRC) released new guidelines about alcohol consumption and health risk (National Health and Medical Research Council, 2009). The new guidelines moved away from previous threshold-based definitions of 'risky' or 'high risk' drinking in recognition that the lifetime risk of harm from consuming alcohol increases progressively with the amount of alcohol consumed (Australian Institute of Health and Welfare, 2011). Trends are presented for the period 2001 to 2010 in accordance with the 2001 alcohol guidelines where 'risky' drinking for short term harm was defined as 7 or more drinks consumed per occasion for males and 5 or more drinks per occasion for females. Data for 2010 on the prevalence of Australians placing themselves at risk of alcohol-related harm on a single occasion of drinking is presented in accordance with the 2009 guidelines (where this risk is defined for both men and women as consuming more than 4 drinks on a single occasion).

Looking at 'risky' drinking for short term harm (in accordance with 2001 guidelines), there has been no change (since 2001) in the proportions of 14 to 19 year old males reporting 'risky drinking' for short term harm. Likewise, there have been no changes over time among any of the other age groups in proportions reporting 'risky drinking'. The proportion of 20 to 29 year olds reporting 'risky drinking' remains highest over time, and is significantly higher compared to any of the other age groups across all four survey years (Figure 7).

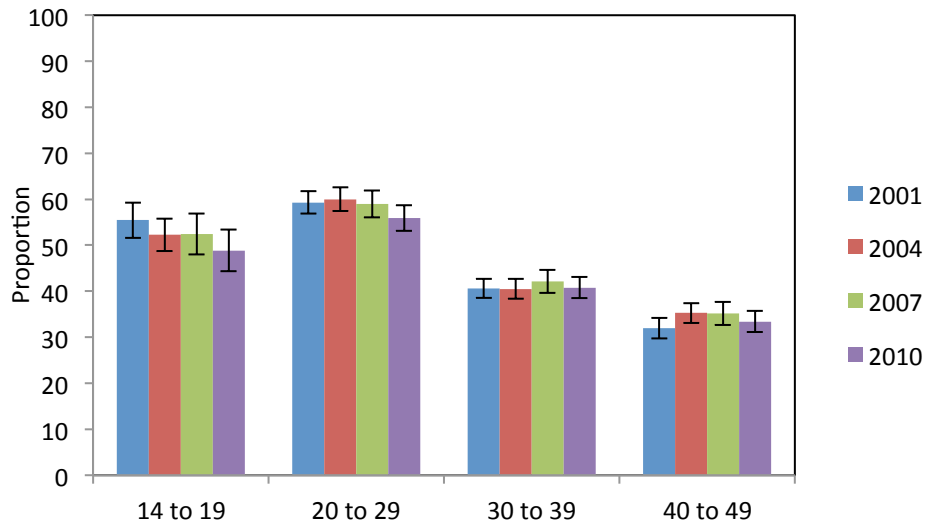
Figure 7: Proportion of recent male drinkers reporting more than 6 drinks per occasion (risky drinking – 2001 guidelines) by age group



Source: National Drug Strategy Household Surveys, AIHW

There have been no changes over time in proportions of females reporting 'risky drinking' among any of the age groups. As with the males, the highest proportion of females reporting 'risky drinking' were aged 20 to 29 years, and were significantly higher than the proportion of 30 to 39 and 40 to 49 year olds. There was no difference in proportions of 14 to 19 year old and 20 to 29 old females reporting 'risky drinking' (Figure 8).

Figure 8: Proportion of recent female drinkers reporting more than 4 drinks per occasion (risky drinking – 2001 guidelines) by age group



Source: National Drug Strategy Household Surveys, AIHW

Table 2 shows the prevalence of males and females by age group placing themselves at risk of alcohol-related harm (specifically injury) on a single occasion of drinking (in accordance with the 2009 guidelines). Proportions were highest among both males and females aged 20 to 29 years of age. With the exception of the 14 to 19 year age group, males were significantly more likely than females to report risky alcohol consumption patterns on a single occasion of use.

Table 2: Prevalence of past year alcohol consumption that places individuals at risk of alcohol-related injury on a single occasion, by age and gender, 2010 (2009 guidelines)

Age group	Males	Females
14 to 19	51.3	48.9
20 to 29	65.1	55.9
30 to 39	62.9	40.8
40 to 49	53.7	33.4

[Graph](#)

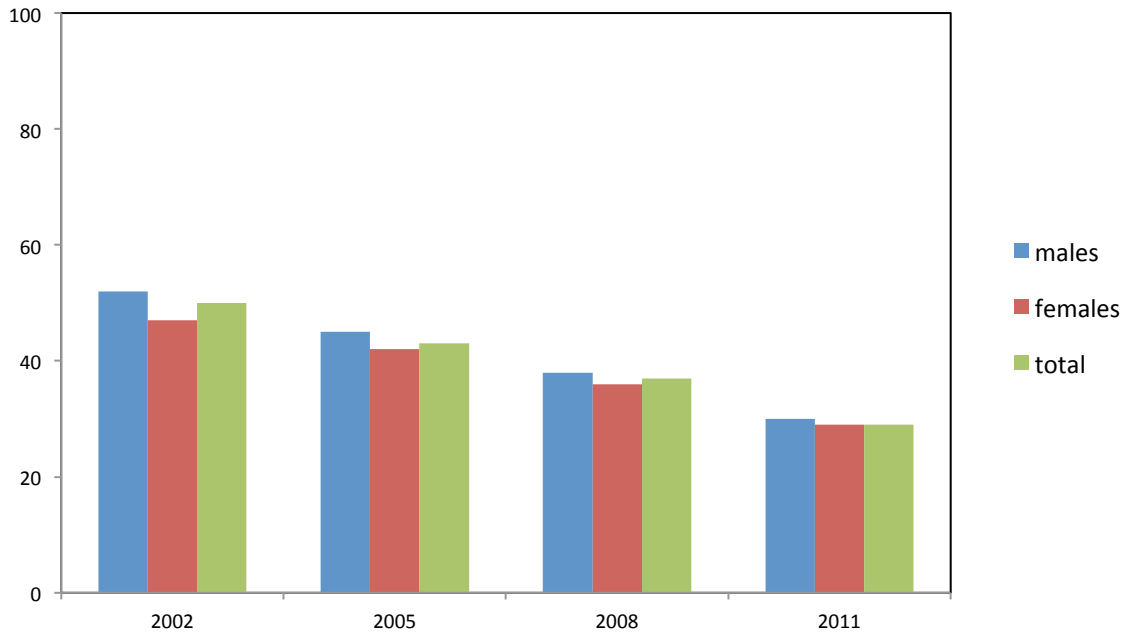
Young people

In 2001 55% of 14 to 19 year old female drinkers reported drinking at harmful levels on at least one occasion in the last year, compared to 48% in 2010 (Figure 8 above). There has been no change over time in the proportion of 20 to 29 year old female drinkers drinking harmfully (56% in 2010 on at least one occasion in the last year; stable between 2001 and 2010). Similar patterns are seen among young males in the general population aged between 14 and 29 years (Figure 7 above).

Students

The Australian Secondary School Students Survey (ASSAD) is administered every three years and the figure below shows findings from 2002, 2005, 2008 and 2011 (White, 2001; White et al., 2004, 2006; White et al., 2009) (White & Bariola, 2012b). The proportion of students reporting past month alcohol use over time has decreased from 50% in 2002 to 29% in 2011 (White & Bariola, 2012b) (Figure 9). Slightly higher proportions of males across the surveys reported past month alcohol use compared to females, however in 2011 this gap had almost closed with equal proportions of females reporting past month alcohol use.

Figure 9: Past month alcohol use among secondary school students aged 12-17 years



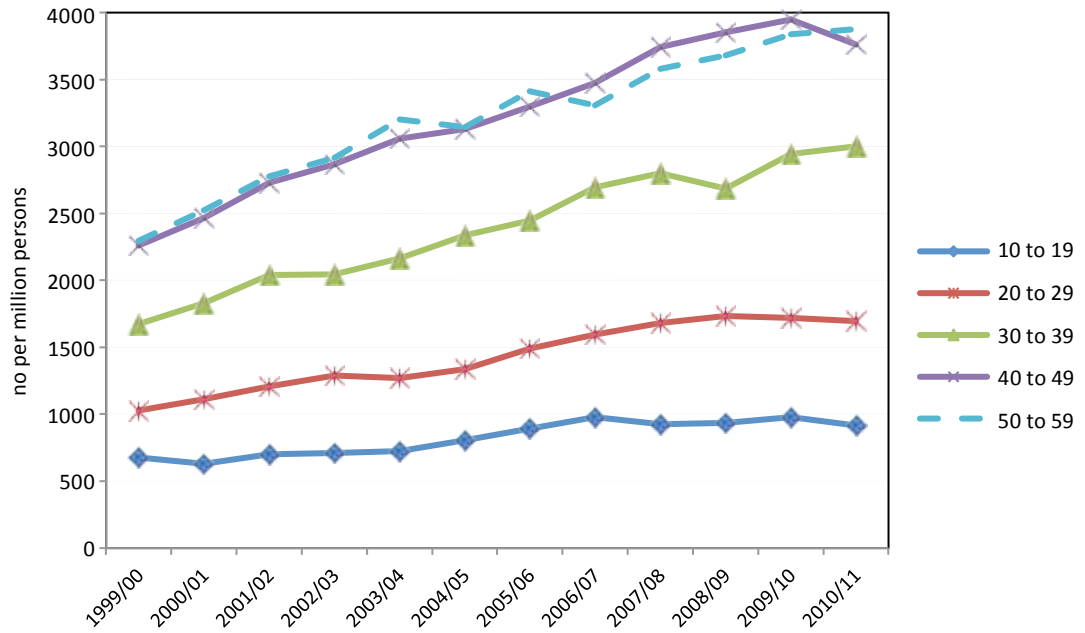
2.2 Patterns of alcohol-related harms

Hospital separations

The National Drug Research Institute’s National Alcohol Indicators Project (NAIP) publishes bulletins on alcohol-related hospitalisations. Bulletin No. 12 reported that rates of alcohol-attributable hospitalisations increased in all jurisdictions during the period 1993/94 to 2004/05, particularly Victoria (VIC), Tasmania (TAS), the Australian Capital Territory (ACT) and the Northern Territory (NT) (National Drug Research Institute, 2009). Dependence, falls, assaults and alcohol abuse were the most common causes of hospitalisations in 2004/05. These hospitalisations are higher for males compared to females.

Hospital presentations for conditions related to alcohol dependence, abuse and poisoning are higher than those for similar conditions related to the major illicit drug classes of heroin, cannabis, methamphetamines and cocaine (A. Roxburgh, and Burns, L., 2013b). They are also highest among those aged 40 to 49, and 50 to 59 years (Figure 10). It should be noted however, that the numbers presented in Figure 10 are likely to be an underestimate of alcohol-attributable hospital presentations, as they do not include admissions for falls, assaults, or motor vehicle accidents where alcohol has played a role.

Figure 10: Hospital presentations for alcohol dependence, abuse and poisoning, 2000 to 2011



Source: National Hospital Morbidity Database, AIHW

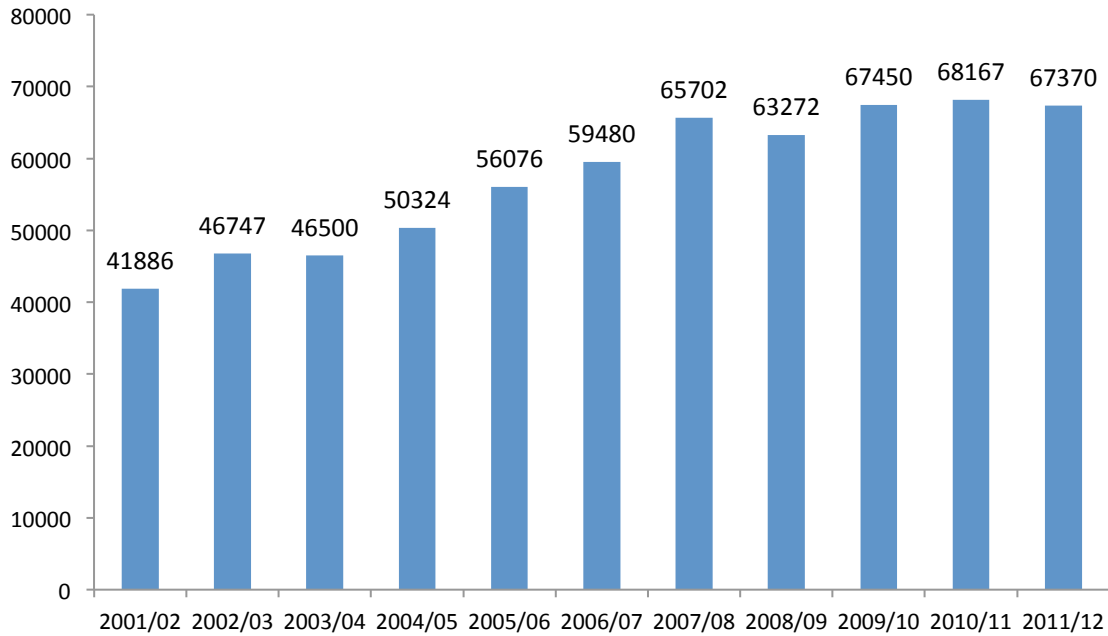
Deaths

Data from the latest NAIP bulletin on alcohol-attributable deaths show that there has been a declining trend among males across all jurisdictions except for in TAS and the ACT. There has also been a downward trend among females, although this trend was not as consistent in the NT, ACT or TAS (National Drug Research Institute, 2009). In 2005 the most common cause of death in Australia was alcoholic liver cirrhosis.

2.3 Patterns of alcohol treatment seeking

There have been higher numbers of treatment episodes recorded for alcohol over time, and a higher proportion of all treatment episodes have been attributable to alcohol (37% in 2001/02 compared to 45.8% in 2011/12) (Australian Institute of Health and Welfare, 2013a).

Figure 11: Number of closed treatment episodes where alcohol was the principal drug of concern



Source: Alcohol and Other Drug Treatment Services National Minimum Data Set, AIHW

2.4 Alcohol: summary

Prevalence

- The majority of Australians in the general population consume alcohol, with the 2010 figure of past year alcohol use (80.5%) representing a significant decline from 82.9% in 2007.
- Analysis by the Australian Institute of Health and Welfare shows that the proportions of Australians reporting risky patterns of alcohol consumption for short term harm (in accordance with 2001 guidelines) at least once in the past 12 months declined significantly between 2007 and 2010, while those reporting more frequent consumption at this level remained stable.
- Daily drinking declined significantly between 2007 and 2010 (from 8.1% to 7.2%) which was primarily due to a decline among older males.

Treatment seeking

- Alcohol-related hospital separations have increased over time and outnumber hospital separations for the other major illicit drug classes. Alcohol-related separations are higher among older Australians.
- The number of treatment episodes for alcohol has steadily increased over the past six years and represent a greater proportion of all treatment episodes (from 37% of all treatment episodes in 2001 to 45.8% of all treatment episodes in 2011/12).

Deaths

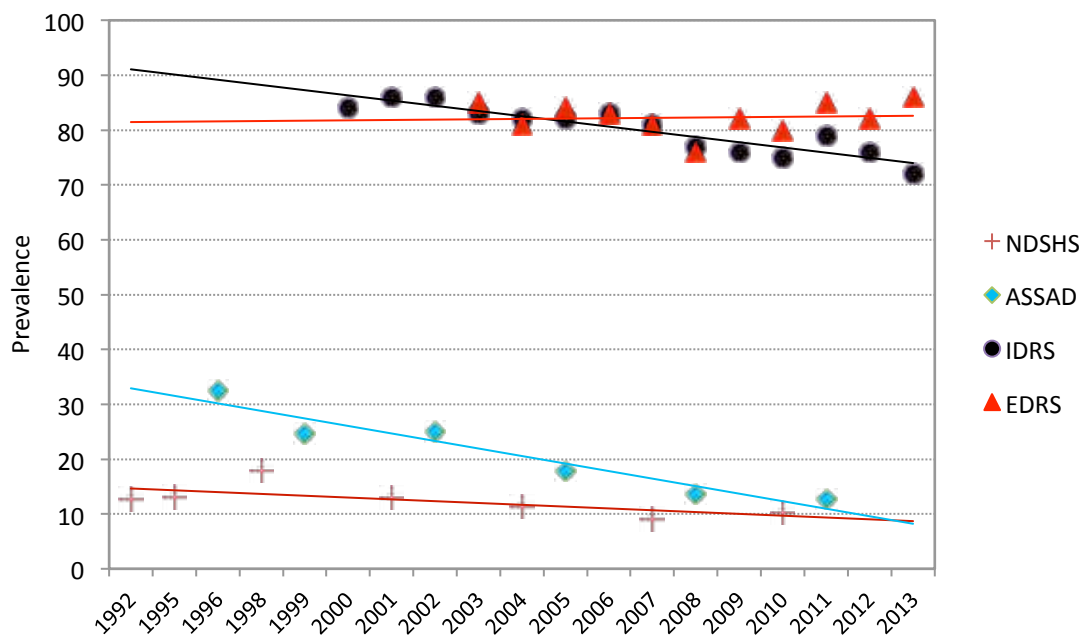
- Overall, alcohol-attributable deaths in Australia have declined between 1996 and 2005.
- Across all jurisdictions death rates were approximately 3 deaths per 10,000 population in 2005 (with the exception of the NT, where they were 8 per 10,000 population).
- In 2005, the most common cause of alcohol-attributable death was alcoholic liver cirrhosis.

3. CANNABIS

3.1 Patterns of cannabis use

Cannabis is the most commonly “tried” and “ever used” illicit drug in Australia, as in all other Western nations, with around 35% of Australians having consumed cannabis at some point in their lives (Australian Institute of Health and Welfare, 2011). Past year prevalence of cannabis use decreased significantly in the general population from 11.3% in 2004 to 9.1% in 2007 (the lowest prevalence since 1993) (Figure 12), with 2010 data showing a significant increase to 10.3%. A downward trend is seen among school students, where past year use has gone from 32.4% in 1996 to 12.7% in 2011 (White et al., 2012a). A decline in past 6 month cannabis use is seen among people who inject drugs (interviewed for the IDRS), while cannabis use among regular ecstasy users (interviewed for the EDRS) has remained stable.

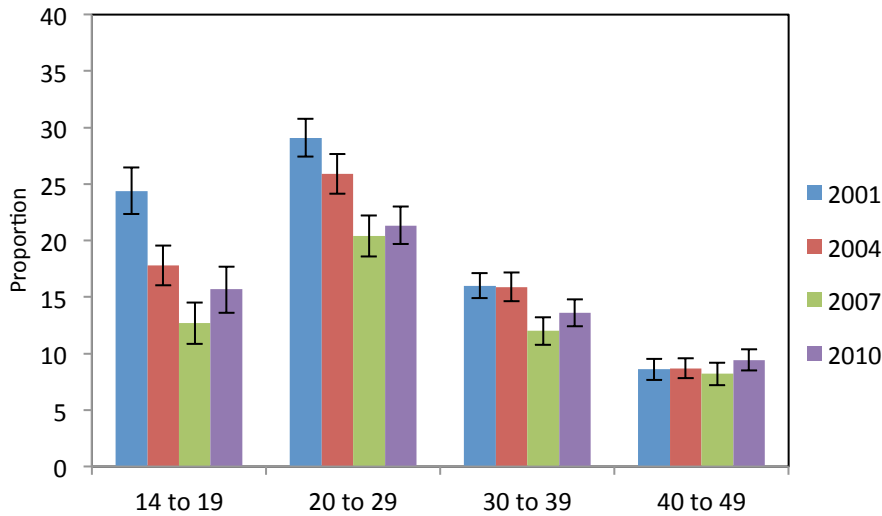
Figure 12: Cannabis use across multiple surveys



Source: National Drug Strategy Household Surveys, AIHW. Australian secondary school students’ use of over-the-counter and illicit substances, DoHA. Drug use monitoring in Australia: annual reports on drug use among police detainees, AIC. Findings from the Ecstasy and related Drugs Reporting System, NDARC. Findings from the Illicit Drug Reporting System, NDARC.

Age-related trends from the NDSHS show that past 12 month cannabis use is most prevalent among the 20 to 29 year age group, and least prevalent among the 40 to 49 year age group. There were significant decreases over time among the 14 to 19 year olds between 2001 and 2007, and a significant decrease among the 20 to 29 and the 30 to 39 year olds between 2004 and 2007. Past year cannabis use has remained stable among 40 to 49 year olds (Figure 13). Although 2010 figures show an increase in past year cannabis use across these age groups, none of these increases were significant (Australian Institute of Health and Welfare, 2011).

Figure 13: Proportion of the general population reporting past year cannabis use



Source: National Drug Strategy Household Surveys, AIHW.

Table 3 shows the proportion of males compared to females reporting past year cannabis use between 2001 and 2010. The decline in past year cannabis use between 2001 and 2007 appears to be driven by both males and females, with 2010 figures showing a slight increase across both genders

Table 3: Past year cannabis use by gender

	2001	2004	2007	2010
Males	15.8	14.4	11.6	12.9
Females	10	8.3	6.6	7.7

Source: National Drug Strategy Household Surveys, AIHW

[Graph](#)

Looking at analysis of 10 year age group by gender, data from the NDSHS show that past year cannabis use is highest among the 20 to 29 year age group for both males and females, and lowest among the 40 to 49 year age group (Table 4). Across all age groups, cannabis use declined among both females and males (with the exception of males aged 40 to 49 years) between 2001 and 2007. Interestingly, the greatest decline for both women and men during this period occurred among the 14 to 19 year olds. As with the overall prevalence of cannabis use, analysis of the 2010 data by 10 year age group and gender shows a slight (but not significant) increase across all age groups for both men and women.

Table 4: Past year cannabis use by gender and age group

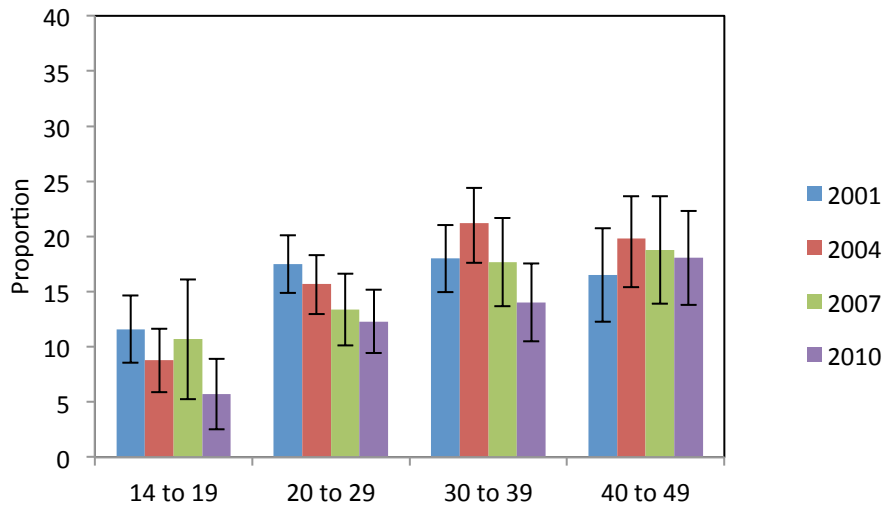
Males	14-19	20-29	30-39	40-49
2001	26.6	35.1	20.8	10.7
2004	18.4	32.4	21.4	11.9
2007	13.1	25.7	15.9	11.6
2010	15.9	25	18.2	12.7
Females	14-19	20-29	30-39	40-49
2001	22.6	23.2	11.7	6.6
2004	17.4	19.5	10.6	5.7
2007	12.7	15.9	8.4	5.1
2010	15.5	17.5	9	6.2

Source: National Drug Strategy Household Surveys, AIHW

[Graph](#)

Despite the prevalence of cannabis use in the general population decreasing significantly between 2004 and 2007, daily use (indicative of a harmful pattern of consumption) among past year users has remained stable between 2001 and 2007. In 2001 the proportion of past year cannabis users using daily was 16%, in 2004 it was 16.4% and in 2007 14.9% (A. Roxburgh et al., 2010). Data from 2010 shows that daily cannabis use across age groups remains unchanged (Australian Institute of Health and Welfare, 2011).

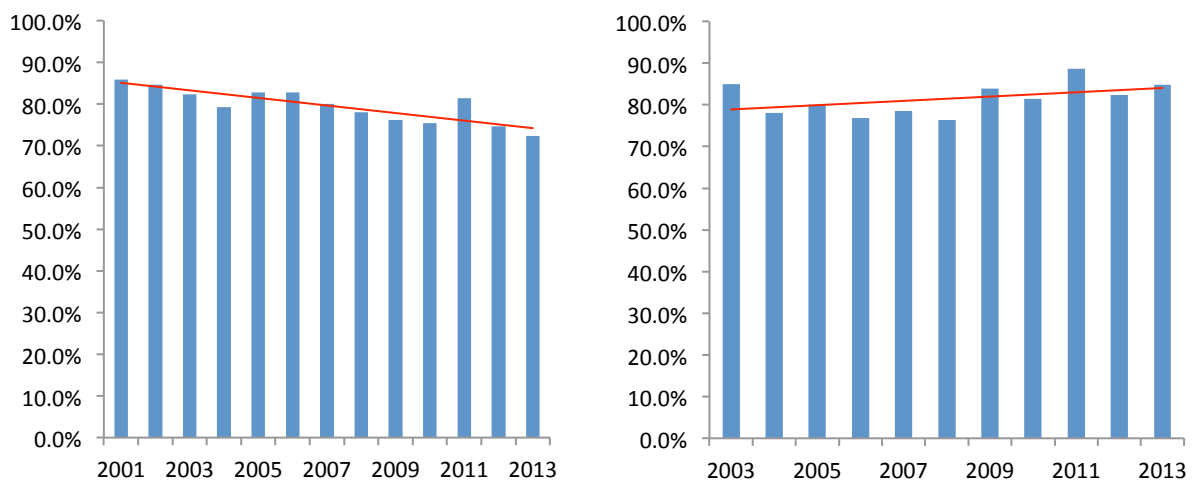
Figure 14: Proportion of past year cannabis users reporting daily cannabis use



Source: National Drug Strategy Household Surveys, AIHW

Examination of trends in data among people who inject drugs that are surveyed for the Illicit Drug Reporting System (IDRS) reveals that recent cannabis use (past 6 months) has decreased at a constant (and significant) rate of approximately 1.0% per year (Figure 15). As can be seen among regular ecstasy users (REU) surveyed for the Ecstasy and related Drugs Reporting System (EDRS) (the right hand graph), cannabis use in the past 6 months has remained relatively stable over time. The trends in IDRS and EDRS match the NDSHS trends.

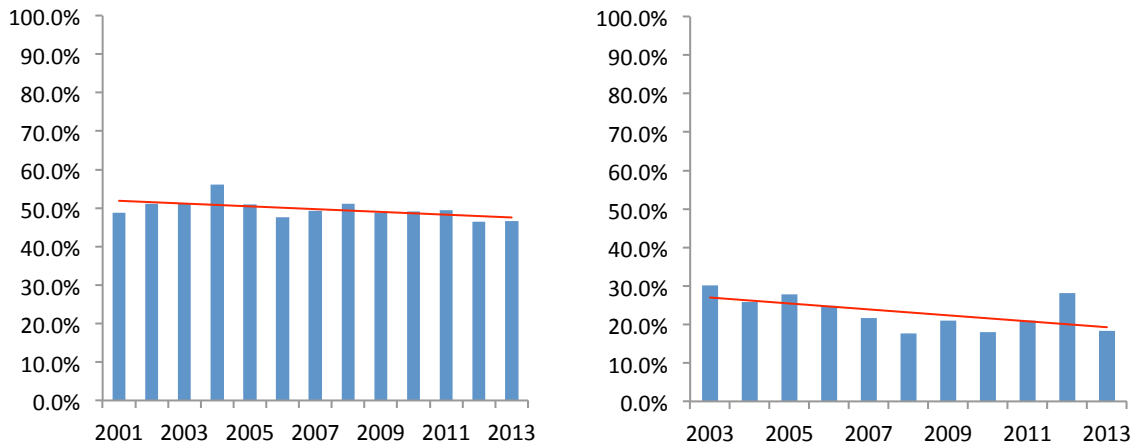
Figure 15: Linear trend in cannabis use (last 6 months) amongst IDRS respondents (LHS) and EDRS respondents (RHS)



Source: Illicit Drug Reporting System and Ecstasy and related Drugs Reporting System

Figure 16 provides the trend line for daily cannabis use amongst those IDRS and EDRS respondents who reported cannabis use. This reveals non-significant changes over time among IDRS respondents and a significant decreasing trend among EDRS respondents (decreasing by approximately 1.0% per year).

Figure 16: Linear trend in daily cannabis use amongst IDRS respondents (LHS) and EDRS respondents (RHS) reporting recent cannabis use



Source: Illicit Drug Reporting System and Ecstasy and related Drugs Reporting System

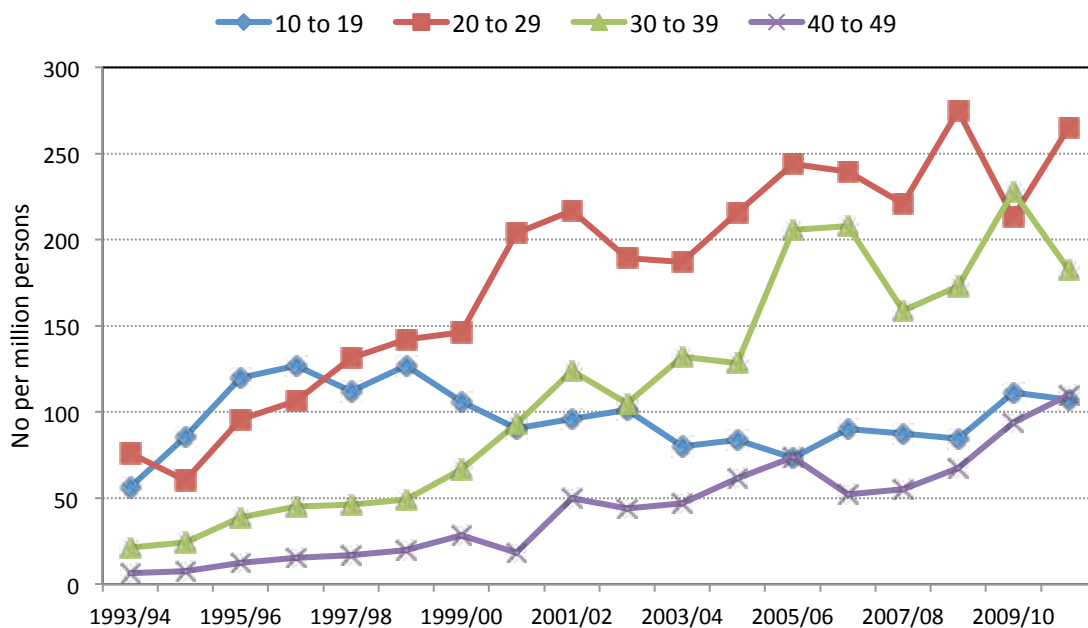
3.2 Patterns of harms associated with cannabis use

Hospital separations

In 2010/11, hospital separations with a principal diagnosis related to cannabis were substantially higher across all age groups than in 2001/02, with the exception of those aged 10 to 19 years (Figure 17). Looking at longer term trends in Australia the rate of separations has gone from 40 per million Australians aged between 15 and 54 years in 1993/94 to 168 per million persons aged 15 to 54 years in 2010/11 (A. Roxburgh, and Burns, L., 2013b). Cannabis-related separations are highest among the 20 to 29 year age group, which fits with patterns of use among the general population.

Admissions for cannabis dependence have accounted for an increasing proportion of all cannabis-related hospital admissions, from 55% in 1999/00 to 75% in 2010/11 (A. Roxburgh, and Burns, L., 2013b)

Figure 17: Rate of cannabis-related hospital separations by age group, 2001 to 2011

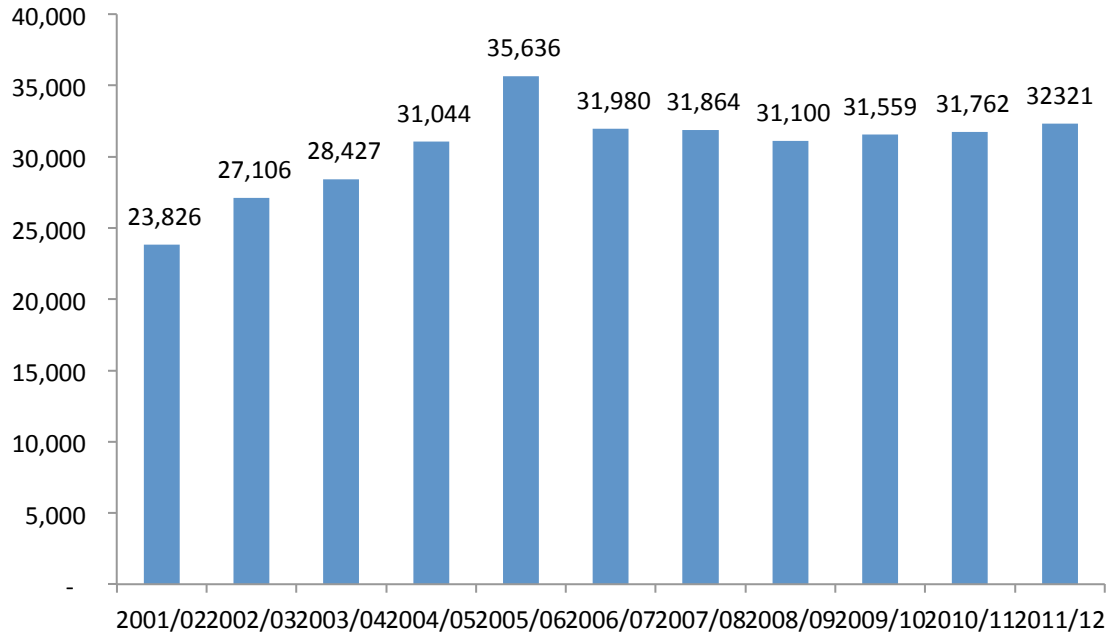


Source: National Hospital Morbidity Database, Roxburgh and Burns (2013)
 N.B. Cannabis-related separations include those for dependence, cannabis toxicity and cannabis use disorders

3.3 Patterns of cannabis treatment seeking

The greatest proportion of treatment sought for illicit drugs among alcohol and drug treatment agencies (reporting to the Alcohol and other Drug Treatment Services National Minimum Data Set, AODTS-NMDS) is for cannabis. In 2011/12, a slightly higher percentage (22%) of all treatment episodes (including alcohol) were for cannabis compared to 21% in 2001/02 (Figure 18).

Figure 18: Number of closed treatment episodes where cannabis was the principal drug of concern



Source: Alcohol and Other Drug Treatment Services National Minimum Data Set, AIHW

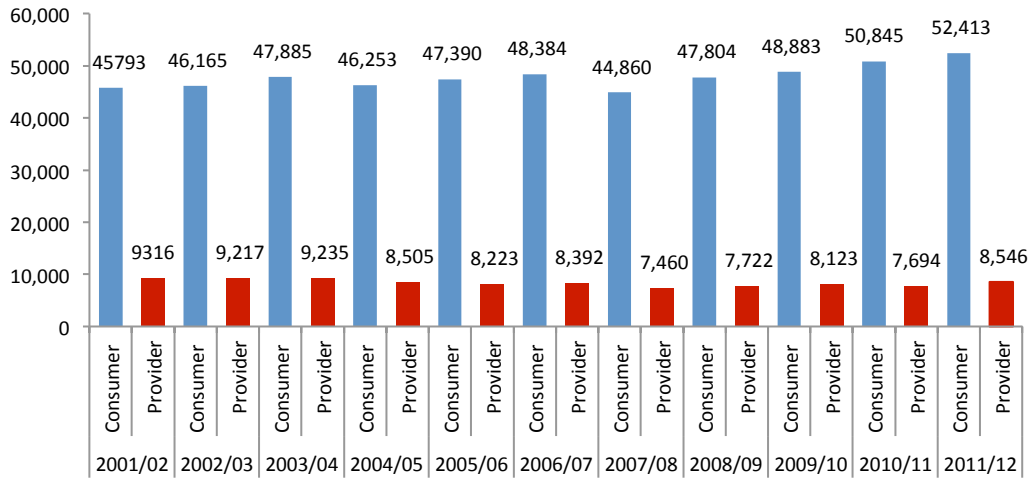
3.4 Cannabis law enforcement indicators

Consumer and Provider arrests

Despite the fact that the majority of all drug related arrests in 2011/12 were for cannabis offences (65.5%), this proportion is lower than that recorded in 2001/02, when cannabis arrest accounted for 75% of all drug arrests (Australian Crime Commission, 2013) (Figure 19).

Considering consumer arrests only, the percentage of these that are for cannabis is lower in 2011/12 (68.8%) than in 2001/02 (78%). This trend is seen in provider arrests also, where in 2001/02, 64% of all provider arrests were for cannabis while in 2011/12 this figure was 52% (Figure 19).

Figure 19: Cannabis consumer and provider arrests, 2001 to 2012

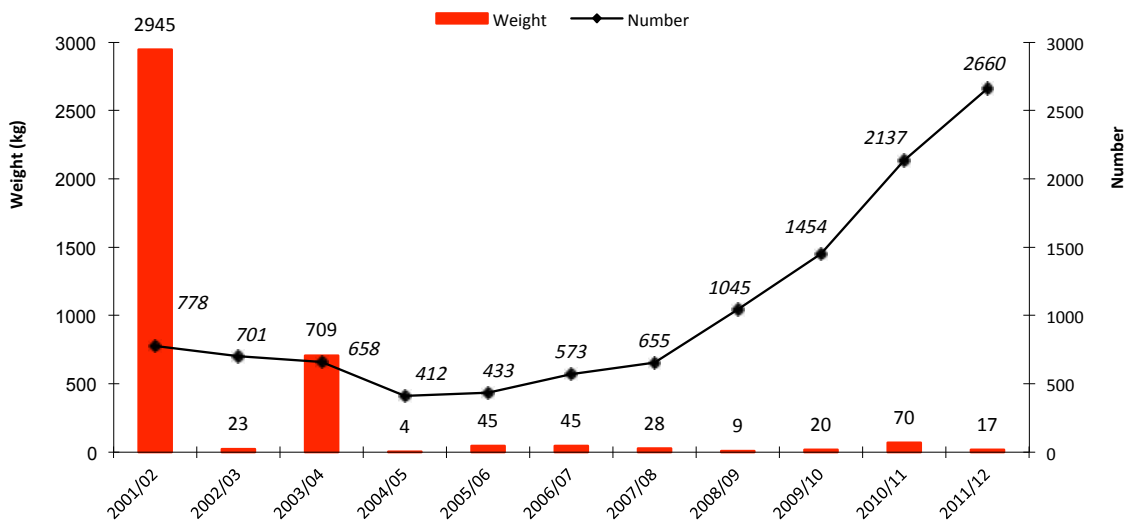


Source: Illicit Drug Report, ACC, Illicit Drug Data Reports, ACC

Seizures

We distinguish between border seizures (interdiction) and domestic seizures for each drug. The weight of cannabis detections at the border was at its highest in 2001/02 (Figure 20), and more recent years have seen a sharp decline in the weight of seizures coming into the country. The number of seizures however have steadily increased to the highest recorded in 2011/12 (2,660) during the period.

Figure 20: Weight and number of cannabis detections made at the border by the Australian Customs and Border Protection Service, 2001 to 2012

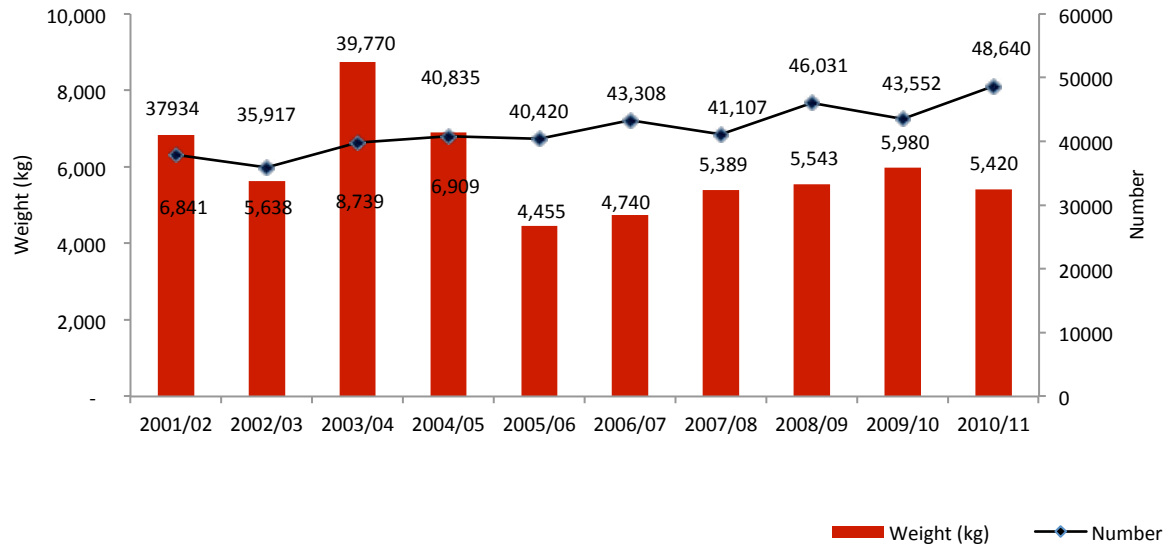


Source: Australian Customs and Border Protection Service

The Australian Crime Commission (ACC) reports that ‘the majority of cannabis consumed in Australia is domestically produced and remains readily available’ (Australian Crime Commission, 2009, 2013). Larger weights of domestic seizures (Figure 21) compared to border seizures (Figure 20) confirm that much of the cannabis consumed in Australia is likely to be produced domestically.

There appears to be little change in the number and weight of domestic cannabis seizures over time (Figure 21).

Figure 21: Weight and number of domestic cannabis seizures made by State/Territory police, 2001 to 2011



Source: Australian Illicit Drug Report, ACC, Illicit Drug Data Reports, ACC

3.5 Cannabis market indicators

Cannabis Price Potency and Availability reported by Regular Ecstasy users (REU) surveyed for the Ecstasy and related Drugs Reporting System (EDRS)

The following data represents median price potency and availability across Australia, which is likely to obscure any jurisdictional differences. For further information regarding jurisdictional trends on price, potency and availability of cannabis from the EDRS findings please refer to the following weblink:

<http://ndarc.med.unsw.edu.au/resource/ecstasy-and-related-drugs-reporting-system-edrs-national-report-2012>

Cannabis price – Hydroponic

Hydroponic cannabis prices per gram remained stable between 2006 and 2013 at \$20, while the price of an ounce has fluctuated from a high of \$300 in 2009 and 2010 to \$260 in 2012, the lowest price recorded since 2006 (Sindicich et al., in press).

Figure 22: Median price of hydroponic cannabis, 2006-2013 (EDRS)

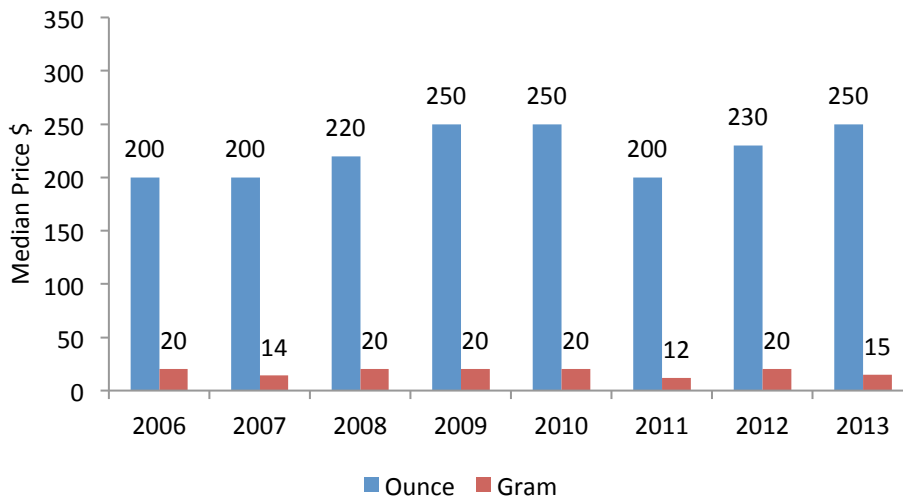


Source: Ecstasy and related Drugs Reporting System (EDRS), Sindicich and Burns (in press)

Cannabis price – Bush

The price of an ounce of bush cannabis increased in 2013 (from \$230 per ounce in 2012 to \$250 in 2013), while the price for a gram has decreased to \$15 (Figure 23).

Figure 23: Median price of bush cannabis, 2006-2013 (EDRS)

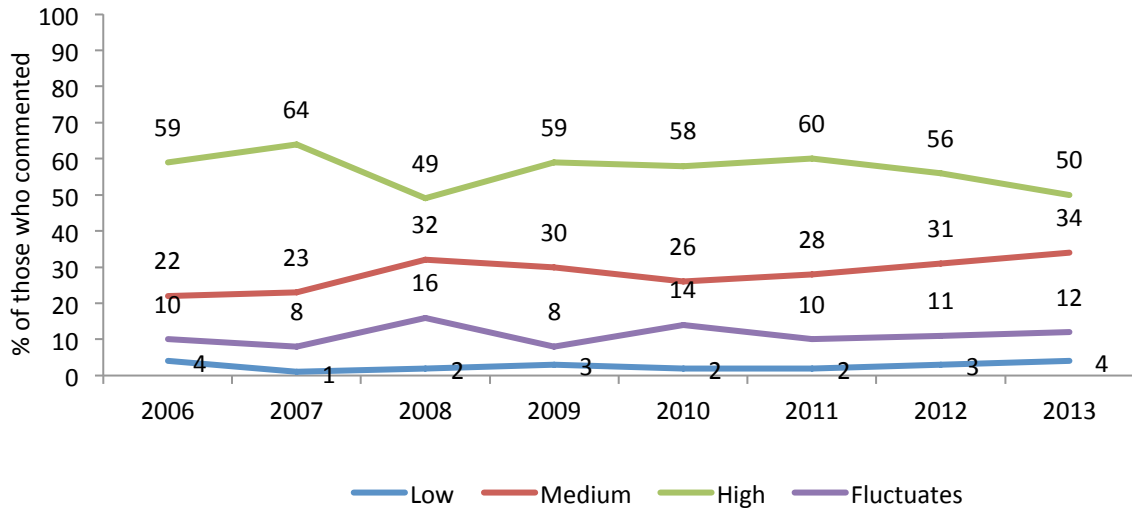


Source: Ecstasy and related Drugs Reporting System (EDRS), Sindicich and Burns (in press)

Cannabis potency – Hydroponic

Reports of hydroponic cannabis potency have remained stable across time with the majority of REU reporting that potency is 'high' (Figure 24).

Figure 24: Current potency of hydroponic cannabis nationally, 2006-2013 (EDRS)

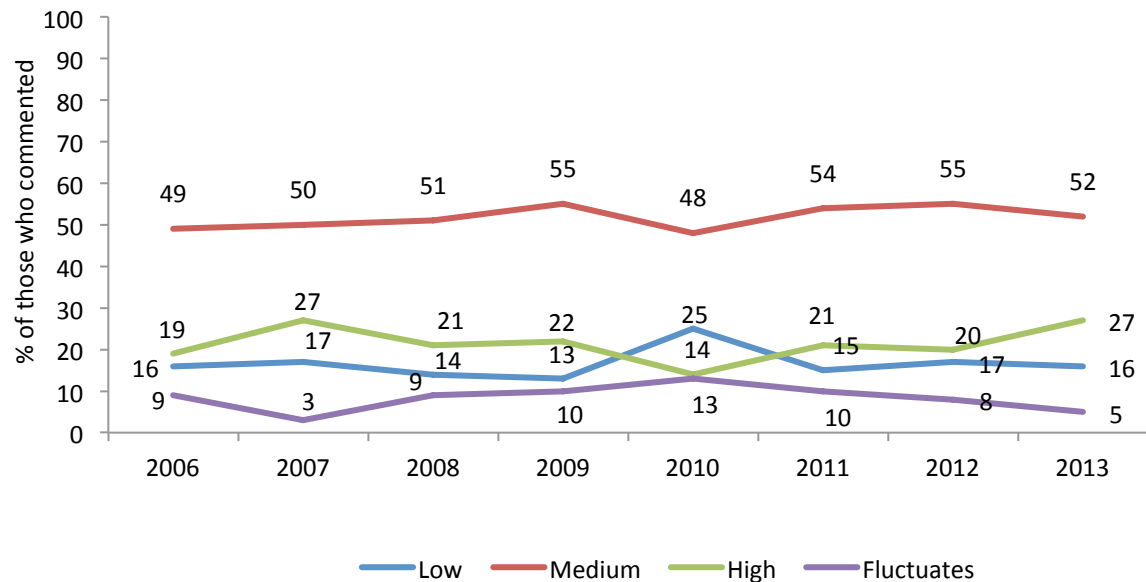


Source: Ecstasy and related Drugs Reporting System (EDRS), Sindicich and Burns (in press)

Cannabis potency – bush

The potency of bush cannabis has been reported by REU consistently to be ‘medium’. Reports of ‘medium’ potency have remained stable since 2006, while there has been an upward trend since 2010 in proportions reporting bush cannabis potency as ‘high’ from 14% to 27% in 2013 (Figure 25).

Figure 25: Current potency of bush cannabis nationally, 2006-2013 (EDRS)

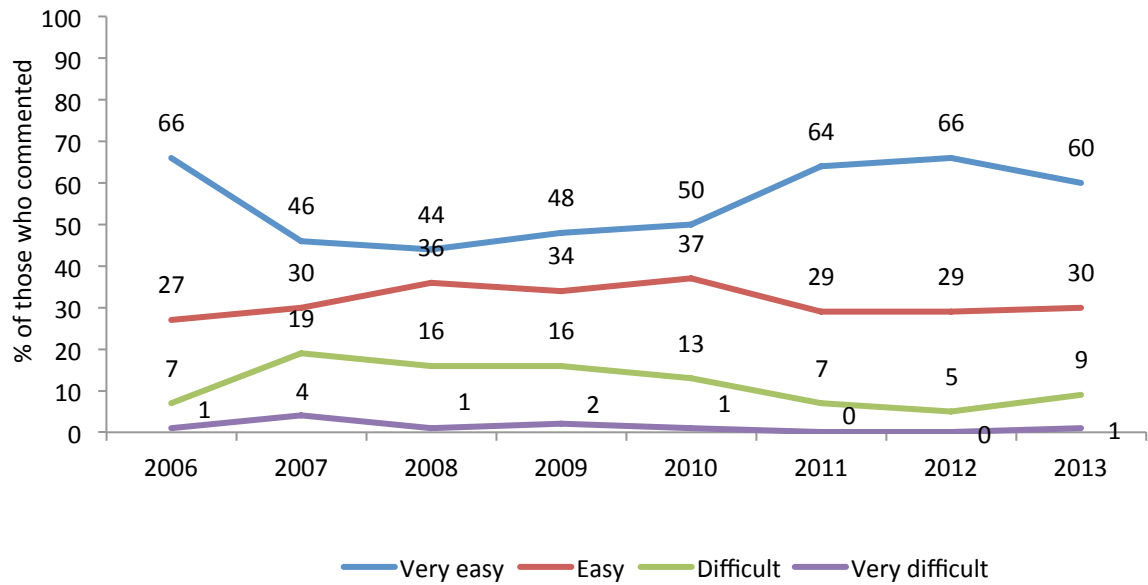


Source: Ecstasy and related Drugs Reporting System (EDRS), Sindicich and Burns (in press)

Cannabis availability –hydroponic

Nearly two thirds (60%) of the REU surveyed in 2013 reported hydroponic cannabis as being ‘very easy’ to obtain, and this proportion has increased since 2008 (Figure 26).

Figure 26: Current availability of hydroponic cannabis nationally, 2006-2013 (EDRS)

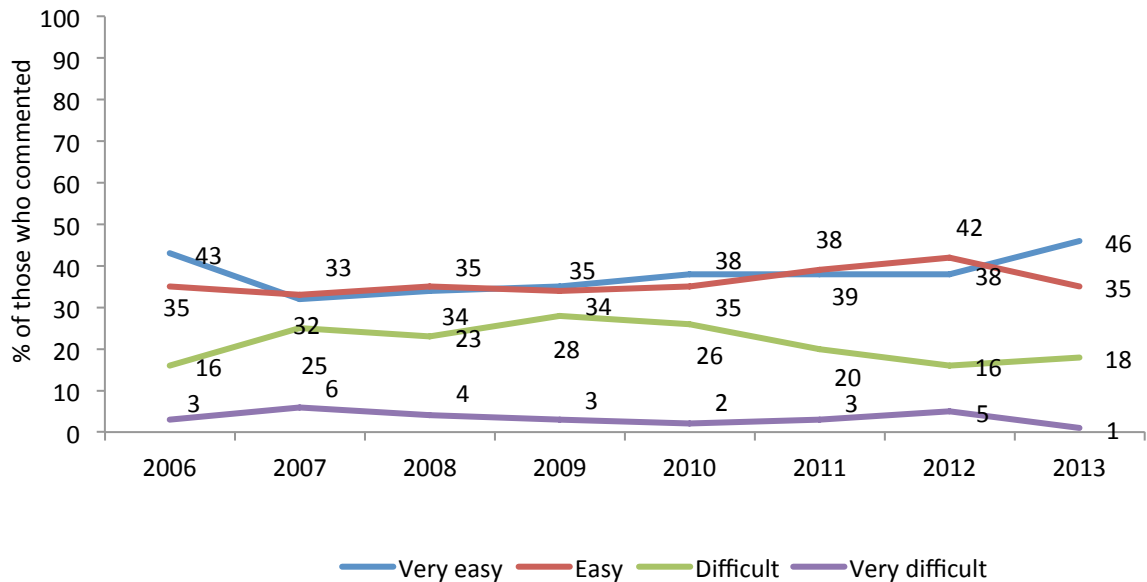


Source: Ecstasy and related Drugs Reporting System (EDRS), Sindicich and Burns (in press)

Cannabis availability – bush

The majority of REU have consistently reported that bush cannabis is ‘easy’ or ‘very easy’ to obtain (Figure 27), with proportions reporting difficulty in obtaining bush cannabis declining from 28% in 2009 to 18% in 2013.

Figure 27: Current availability of bush cannabis nationally, 2006-2013 (EDRS)



Source: Ecstasy and related Drugs Reporting System (EDRS), Sindicich and Burns (in press)

Cannabis Price Potency and Availability reported by people who inject drugs (PWID) as surveyed by the Illicit Drug Reporting System (IDRS)

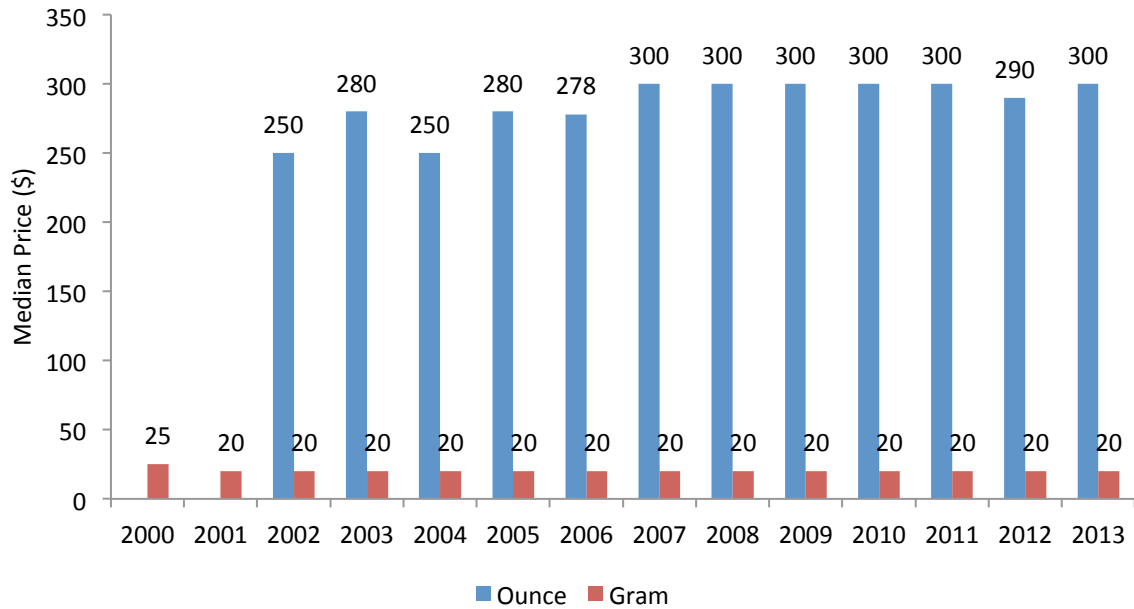
The following data represents median price potency and availability of cannabis across Australia, which is likely to obscure any jurisdictional differences. For further information regarding jurisdictional trends on price potency and availability of cannabis from the IDRS findings please refer to the following weblink:

<http://ndarc.med.unsw.edu.au/resource/illicit-drug-reporting-system-idrs-national-report-2012>

Cannabis price – Hydroponic

The price of a gram of hydroponic cannabis at \$20, remained stable between 2007 and 2013. The price of an ounce at \$300 in 2013 has also remained relatively stable over this time (Figure 28) (Stafford et al., in press).

Figure 28: Median price of hydroponic cannabis price per ounce and gram, nationally, 2000-2013 (IDRS)



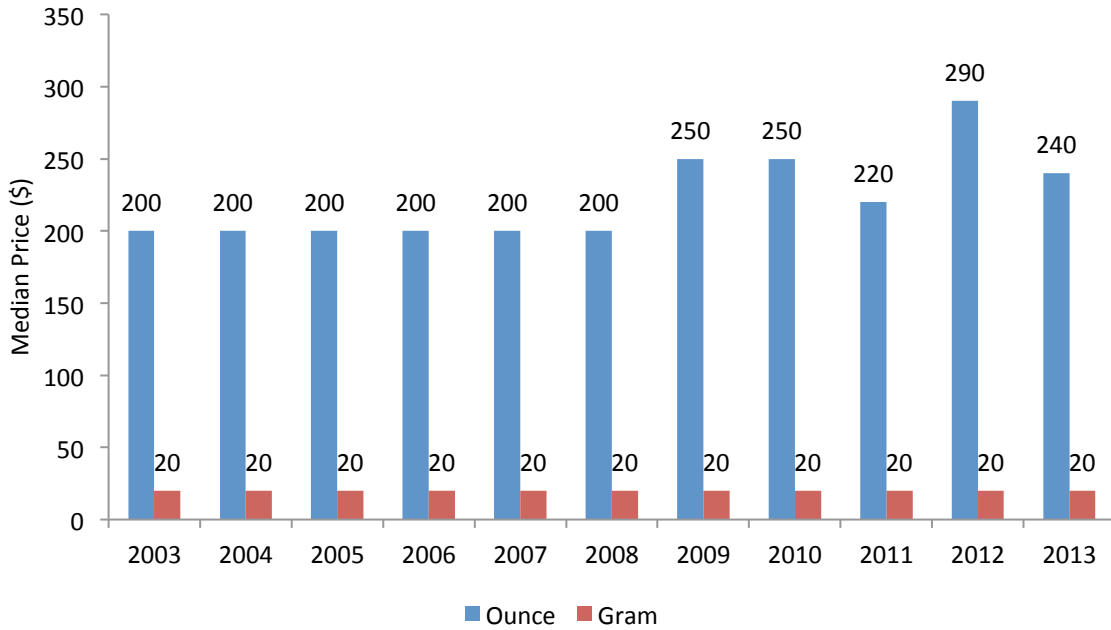
Source: Illicit Drug Reporting System (IDRS), Stafford and Burns (in press)

Note: from 2003 onwards hydroponic and bush cannabis data were collected separately. No data is available for the price of an ounce in 2000 and 2001.

Cannabis price – Bush

The price of a gram of bush cannabis is also \$20, and this has remained stable over time. The price of an ounce decreased to \$240 in 2013 after a sharp increase to \$290 in 2012 (Figure 29).

Figure 29: Median price of bush cannabis price per ounce and gram, nationally, 2000-2013 (IDRS)

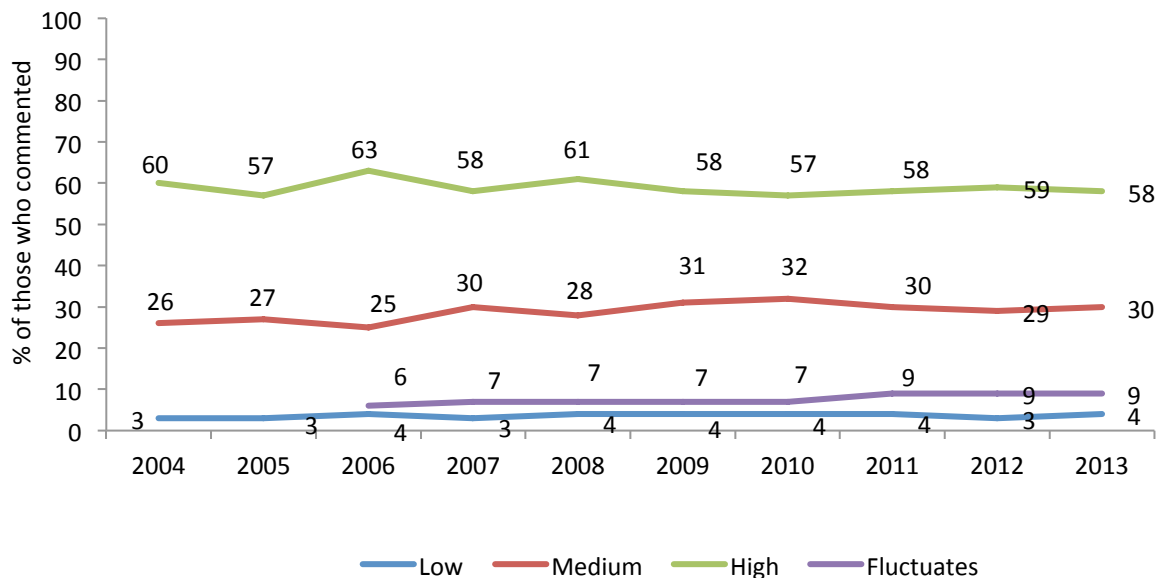


Source: Illicit Drug Reporting System (IDRS), Stafford and Burns (in press)
 Note: Collection of data on bush cannabis commenced from 2003 onwards

Cannabis potency – Hydroponic

The majority of IDRS respondents reported hydroponic cannabis potency as being ‘high’, and this has remained relatively stable over time (Figure 30).

Figure 30: Current potency of hydroponic cannabis nationally, 2004-2013 (IDRS)

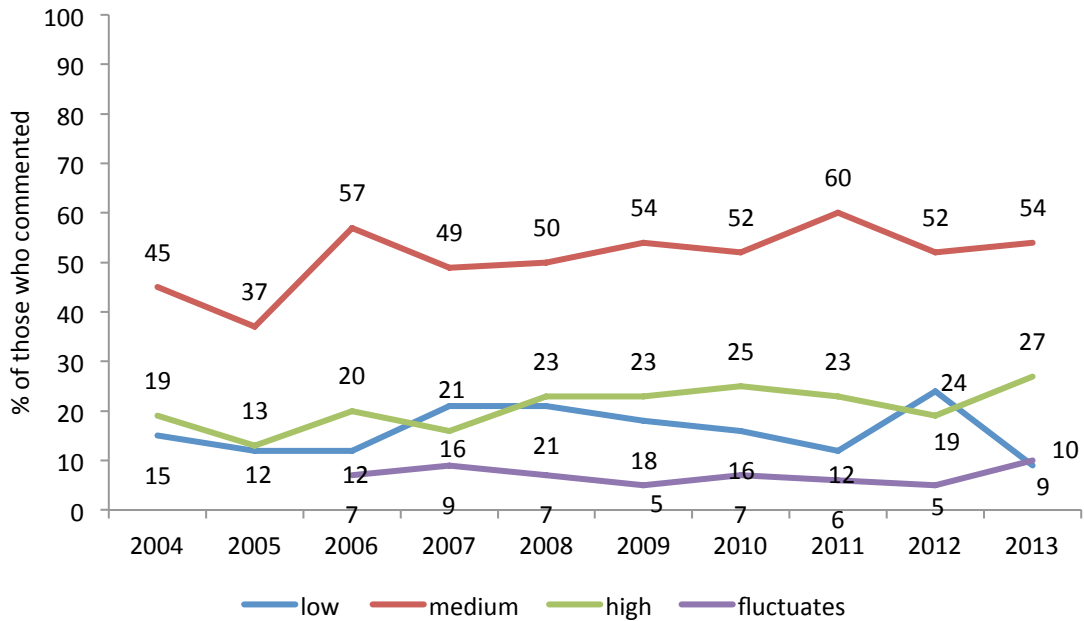


Source: Illicit Drug Reporting System (IDRS), Stafford and Burns (in press)

Cannabis potency – Bush

The current potency of bush cannabis has been relatively consistently reported as ‘medium’ over time (Figure 31). In 2013, the proportion reporting bush cannabis as ‘low’ potency decreased from 24% in 2012 to 9%. There was a corresponding increase in proportions reporting potency as ‘high’ (Figure 31).

Figure 31: Current potency of bush cannabis nationally, 2004-2013 (IDRS)

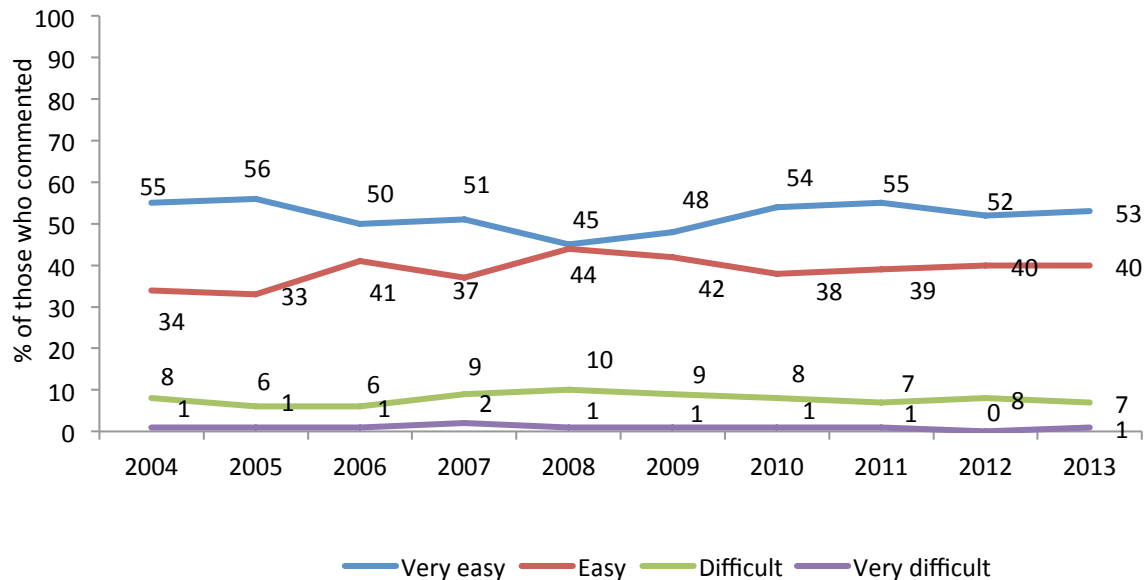


Source: Illicit Drug Reporting System (IDRS), Stafford and Burns (in press)

Cannabis availability – Hydroponic

The current availability of hydroponic cannabis has mainly been reported as ‘very easy’ or ‘easy’, and hasn’t changed over time (Figure 32).

Figure 32: Current availability of hydroponic cannabis nationally, 2004-2013 (IDRS)

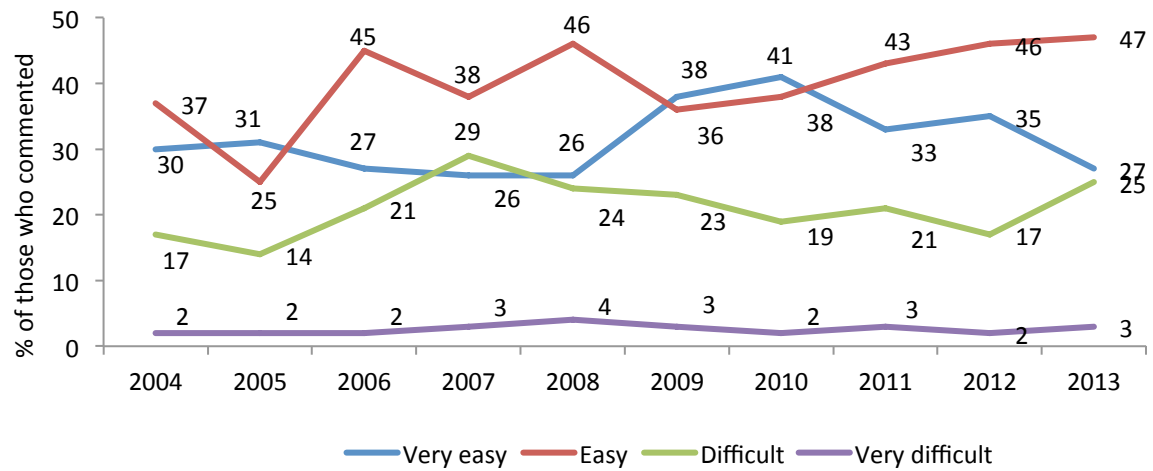


Source: Illicit Drug Reporting System (IDRS), Stafford and Burns (in press)

Cannabis availability – Bush

The majority of IDRS respondents (74%) report that bush cannabis ‘easy’ and ‘very easy’ to obtain, with an increasing proportion reporting ‘easy’ availability (Figure 33).

Figure 33: Current availability of bush cannabis nationally, 2004-2013 (IDRS)



Source: Illicit Drug Reporting System (IDRS), Stafford and Burns (in press).

3.6 Cannabis: summary

Prevalence

General population

- The prevalence of last year cannabis use in Australia declined between 1998 and 2007 (from 17.9% to 9.1), with 2010 recording a significant increase to 10.3%.
- The increase in 2010 was driven by higher prevalence among Australians aged 50 to 59 years.
- Data from the survey of secondary school students showed a decline in cannabis use from 32.4% in 1996 to 12.7% in 2011.
- Daily cannabis use among those who continue to use has remained relatively stable over time (13% of cannabis users in 2010).
- The highest proportion reporting daily cannabis use were Australians aged 40 years and over.

Sentinel Groups

- Among PWID, past 6 month cannabis use has declined significantly from 86% in 2001 to 72% in 2013.
- Daily cannabis use among current users has remained stable (46% in 2013).
- Among regular ecstasy users cannabis use has remained stable at 85% (in 2003 and 2013), while daily use among this group has decreased significantly from 30% in 2003 to 18% in 2013.

Treatment seeking

- There have been increases (particularly among older age groups) in numbers presenting to hospital for problems associated with cannabis use between 2001 and 2013. Cannabis related presentations remain highest among 20 to 29 year olds.
- There was an increase in outpatient treatment episodes for problems associated with cannabis from 23,826 in 2001/02 to 32,321 in 2011/12. Cannabis treatment episodes accounted for 22% of all drug treatment episodes in 2011/12.

Law enforcement

- Two thirds of all drug-related arrests in 2011/12 were for cannabis which represents a drop from 75% of all drug arrests in 2001/02. Numbers of cannabis arrests have increased slightly over time.

Market indicators

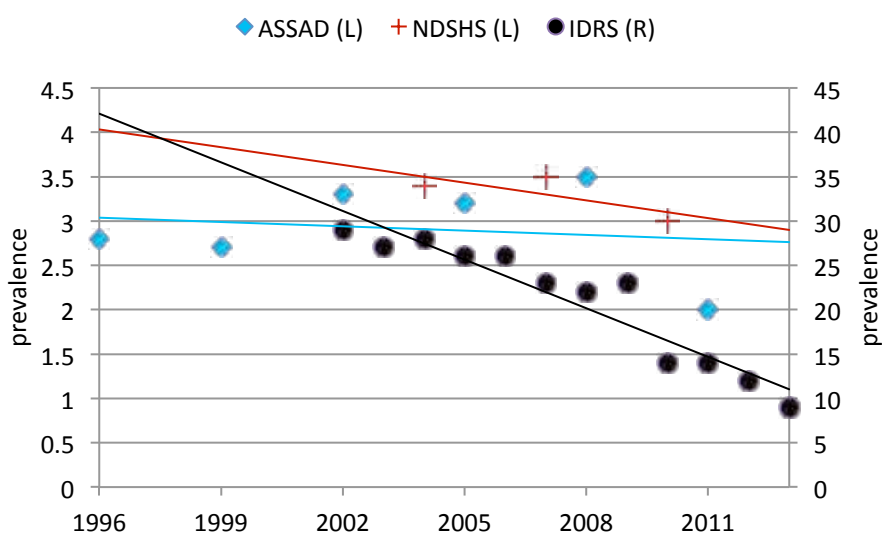
- Increases were reported in the price for larger amounts of cannabis (ounces), while prices for a gram remained stable. Both bush cannabis and hydroponic cannabis have remained readily available in Australia over time.

4. ECSTASY

4.1 Patterns of ecstasy use

Ecstasy is the second most commonly used illicit drug in the general population following cannabis (3% of Australians reported past year ecstasy use in 2010). Since 2004, this percentage has declined from 3.4% to 3% (Australian Institute of Health and Welfare, 2011). It should be noted that data prior to this is difficult to assess as in 2001 and earlier surveys, ecstasy was classified within a 'designer drug' category which was inclusive of Ketamine and GHB. From 2004 onwards ecstasy was asked about separately in the NDSHS. In 2011, 2% of secondary school students in Australia reported using ecstasy in the past year, representing a decline from 3.5% in 2008 (White & Bariola, 2012a).

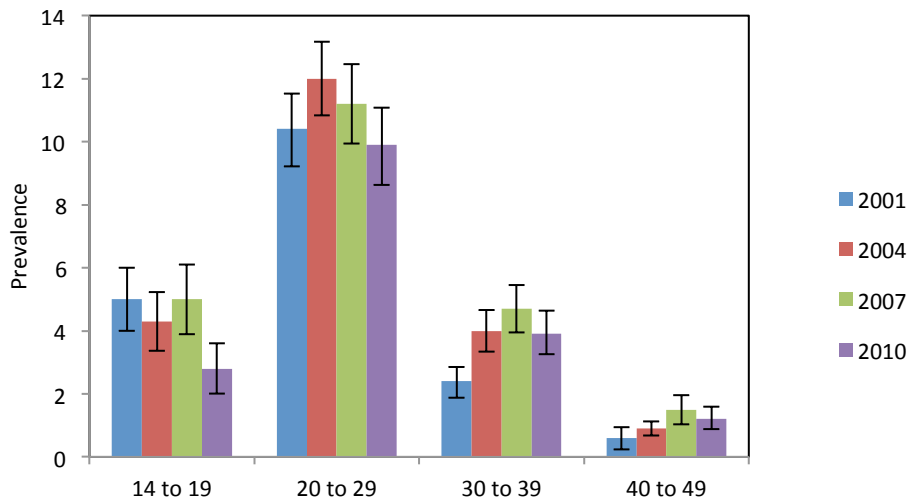
Figure 34: Ecstasy use across multiple surveys



Source: National Drug Strategy Household Surveys, AIHW. Australian secondary school students' use of over-the-counter and illicit substances (ASSAD), DoHA. Findings from the Illicit Drug Reporting System, NDARC.
 Note: Figure above does not include EDRS as by definition, all EDRS respondents used ecstasy in the last 12 months.

Looking at age analyses, data from the NDSHS show that past year ecstasy use is highest among the 20 to 29 year age group, and lowest among the 40 to 49 year age group (Figure 35). It remains significantly higher among the 20 to 29 year olds compared to all other age groups. Looking at trends over time across age groups, there has been a significant decrease among the 14 to 19 year age group, particularly females (Australian Institute of Health and Welfare, 2011) between 2007 and 2010. While there was a significant increase in the proportion of 30 to 39 year olds reporting recent ecstasy use between 2001 and 2007 (from 2.4% to 4.7%), this proportion was stable at 3.9% in 2010. Likewise, a significant increase is seen among 40 to 49 year olds between 2001 and 2007 (from .6% in 2001 to 1.5% in 2007), with the proportion stabilising at 1.2% in 2010 (Figure 35).

Figure 35: Proportion of the general population reporting past year ecstasy use



Source: National Drug Strategy Household Surveys, AIHW

Across the whole population, more males than females report past year ecstasy use (Table 5). There was a significant decline in the proportion of males reporting past year ecstasy use between 2007 and 2010.

Table 5: Past year ecstasy use by gender

	2001	2004	2007	2010
Males	3.6	4.4	4.4	3.6
Females	2.3	2.4	2.7	2.3

Source: National Drug Strategy Household Surveys, AIHW

Graph

Looking at gender by age group, larger proportions of males than females across age groups reported past year ecstasy use in 2010 (Table 6). The proportion of females aged 14 to 19 reporting past year ecstasy use declined significantly in 2010 from 6% in 2007 to 2.5%.

Table 6: Past year ecstasy use by gender and age group

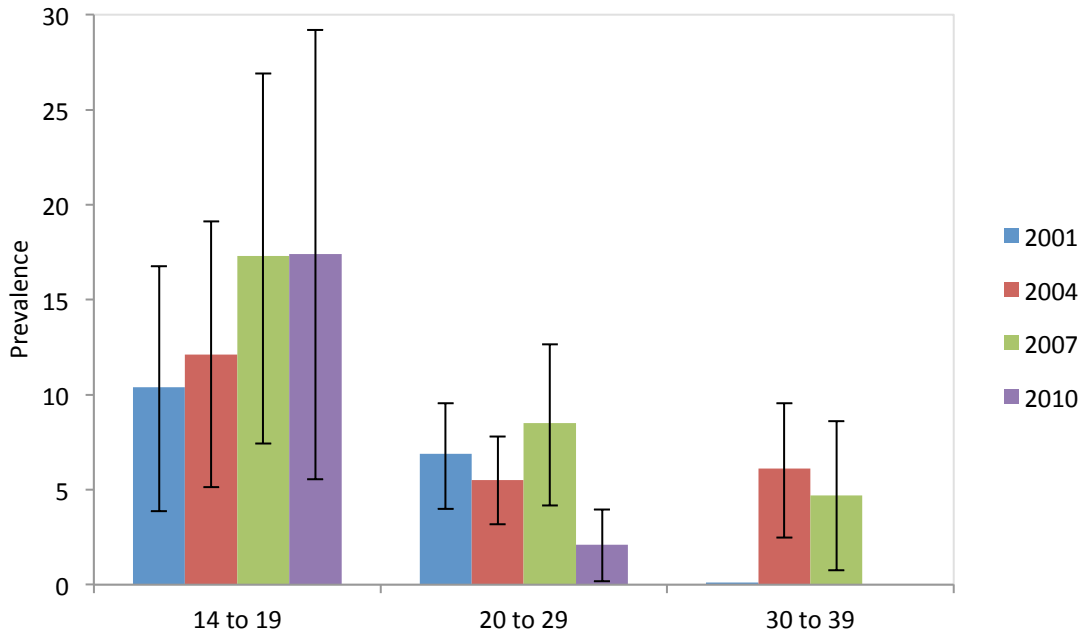
Males	14-19	20-29	30-39	40-49
2001	5.7	12.5	3.1	0.3
2004	3.9	15.1	5.8	0.6
2007	4	13.8	6.3	0.9
2010	3.1	11.4	4.9	1.9
Females	14-19	20-29	30-39	40-49
2001	4.3	8.3	1.7	0.3
2004	4.7	8.8	2.3	0.1
2007	6	8.7	3.2	0.2
2010	2.5	8.2	3.0	0.6

Source: National Drug Strategy Household Surveys, AIHW

Graph

Looking at weekly or more frequent ecstasy use among those reporting recent use, there has been no change in these patterns among any of the age groups over time, with the exception of the 20 to 29 year age group (Figure 36). There was a significant decline in proportions of 20 to 29 year olds reporting weekly or more ecstasy use in 2010 (from 8.5% in 2007 to 2.1%. Overall, the majority (84.5%) of Australians report infrequent ecstasy use, once every few months or less (Australian Institute of Health and Welfare, 2011).

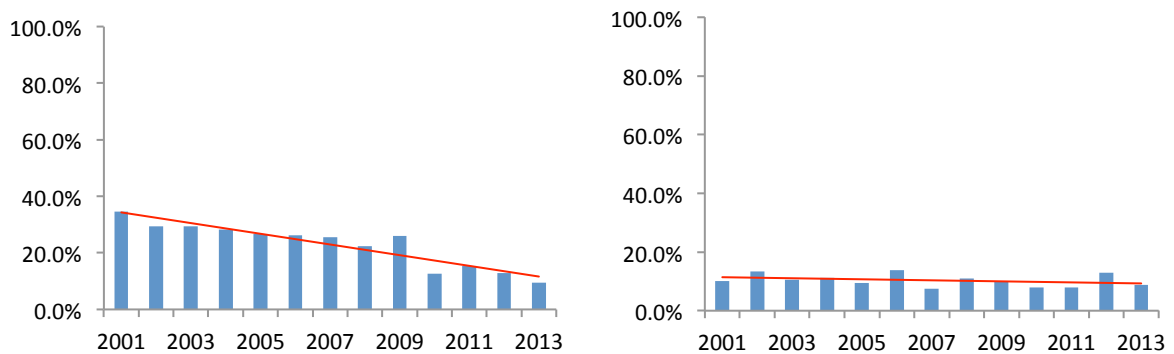
Figure 36: Proportion of past year ecstasy users reporting weekly or more ecstasy use



Source: National Drug Strategy Household Surveys, AIHW
 NB: 40 to 49 year age group data from 2001 to 2010, and 30 to 39 year data for 2010, not shown as the relative standard error for these proportions was greater than 50.

Among IDRS respondents, the prevalence of past six month ecstasy use is decreasing at a constant (and significant) rate of approximately 2% per year, while the frequency of (weekly) use among this group has remained stable since 2001 (Figure 37).

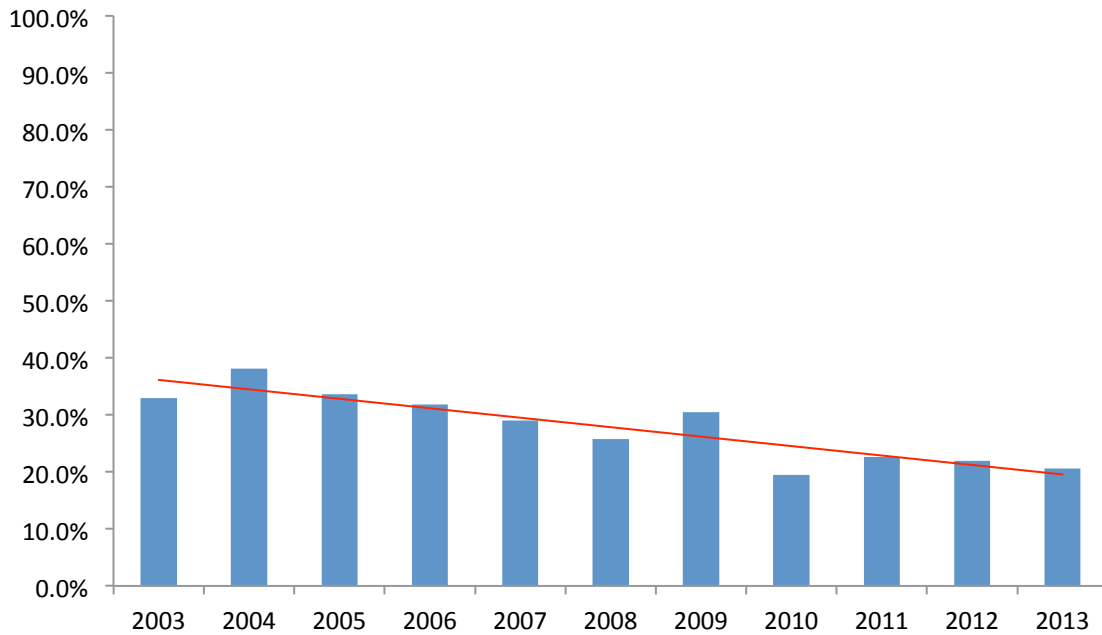
Figure 37: Linear trend in ecstasy use (last 6 months) (LHS) and weekly use among current users (RHS), IDRS respondents



Source: Illicit Drug Reporting System and Ecstasy and related Drugs Reporting System

Among regular ecstasy users surveyed for the Ecstasy and related Drug Reporting System (EDRS), the proportion reporting using ecstasy weekly or more frequently in the past six months was 21% in 2013 compared to 33% in 2003, representing a significant decrease of approximately 1.2% per year (Figure 38).

Figure 38: Linear trend in weekly ecstasy use amongst EDRS respondents



Source: Ecstasy and related Drugs Reporting System

4.2 Patterns of harms associated with ecstasy use

Hospital separations

Data on ecstasy-related hospital admissions are not available in Australia, as they are classified (in accordance with the International Statistical Classification of Diseases 10th revision Australian Modification – ICD-10AM) under amphetamines (National Centre for Classification in Health, 1998).

Deaths

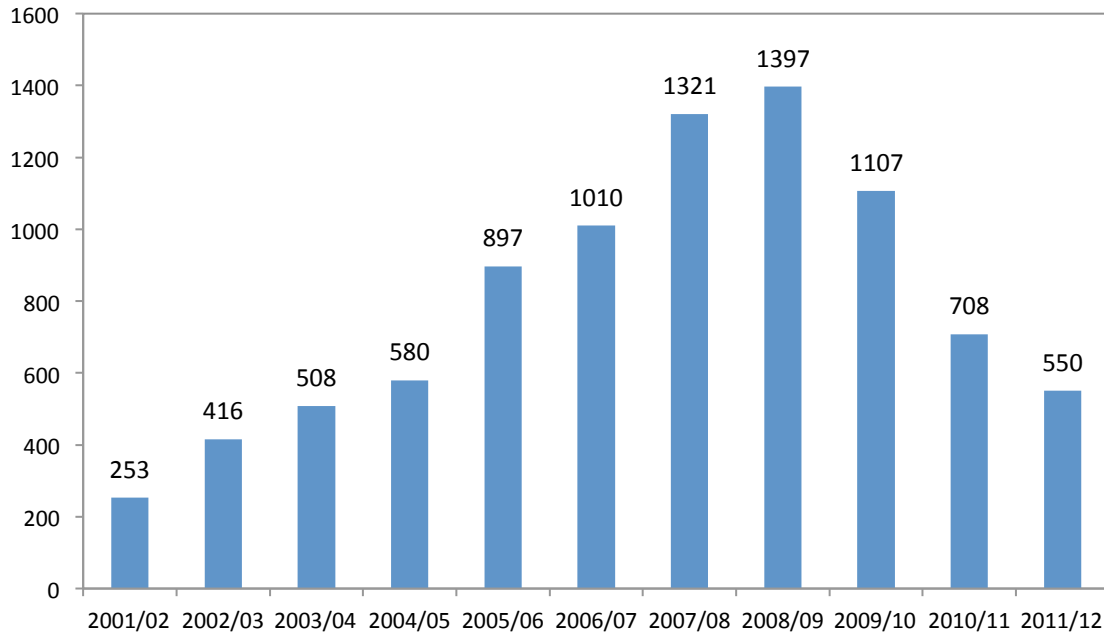
A recent review of the National Coronial Information System (NCIS) (Kaye et al., 2009) identified 82 ecstasy-related deaths during the period July 2000 to June 2005. MDMA was considered a direct cause or antecedent cause in 67 of these deaths. However, only 19 of these deaths were due to MDMA toxicity alone, with the larger proportion being due to multiple drug toxicity (most commonly opioids and methamphetamine). Ecstasy-related deaths in Australia are lower in number in comparison to methamphetamine and opioid-related deaths (Degenhardt et al., 2007a, 2007b). Nevertheless, the variable nature of the contents of MDMA tablets clearly increases the risks of adverse consequences, as does polydrug use.

4.3 Patterns of ecstasy treatment seeking

In 2011/12 ecstasy was nominated as the principal drug of concern in 550 closed treatment episodes compared to 253 in 2001/02 (NMDS) and accounted for less than 0.5% of all closed treatment episodes (Figure 39).

Regular ecstasy users in the EDRS report that they are unlikely to present for treatment for problems associated with their drug use (Degenhardt et al., 2009).

Figure 39: Number of closed treatment episodes where ecstasy was the primary drug of concern



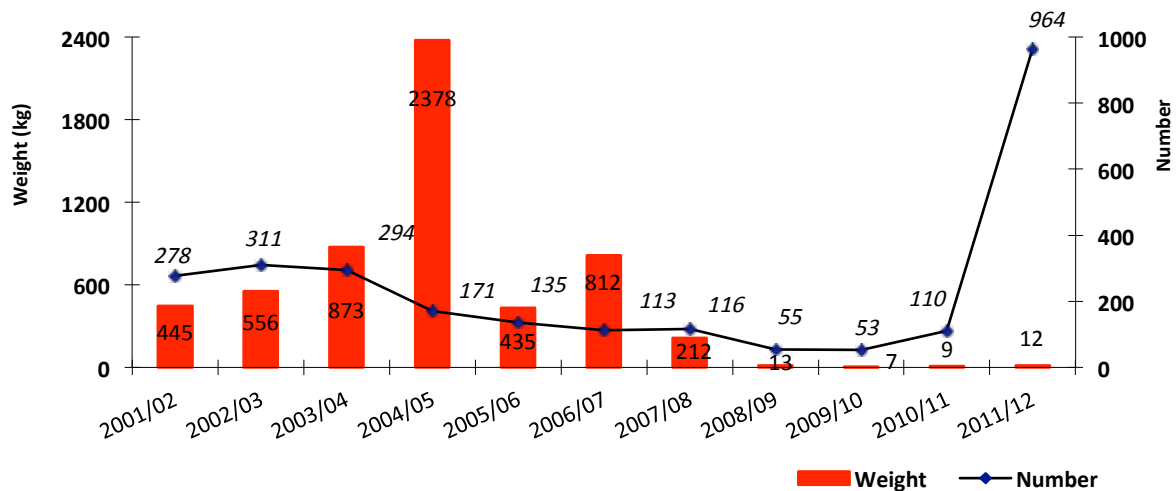
Source: Alcohol and Other Drug Treatment Services National Minimum Data Set, AIHW

4.4 Ecstasy law enforcement indicators

To date, information on consumer and provider arrests within Australia specifically related to ecstasy are unavailable and are included in data on amphetamine type stimulants (ATS).

The Australian Customs and Border Protection Service does differentiate between seizures for MDMA and ATS, and data show that over the past decade, the weight of ecstasy seizures detected at the Australian border has declined from 2378kg in 2004/05 to just 12kg in 2011/12 (Figure 40). Despite very low weights of seizures, the number of MDMA seizures increased sharply to 964 in 2011/12.

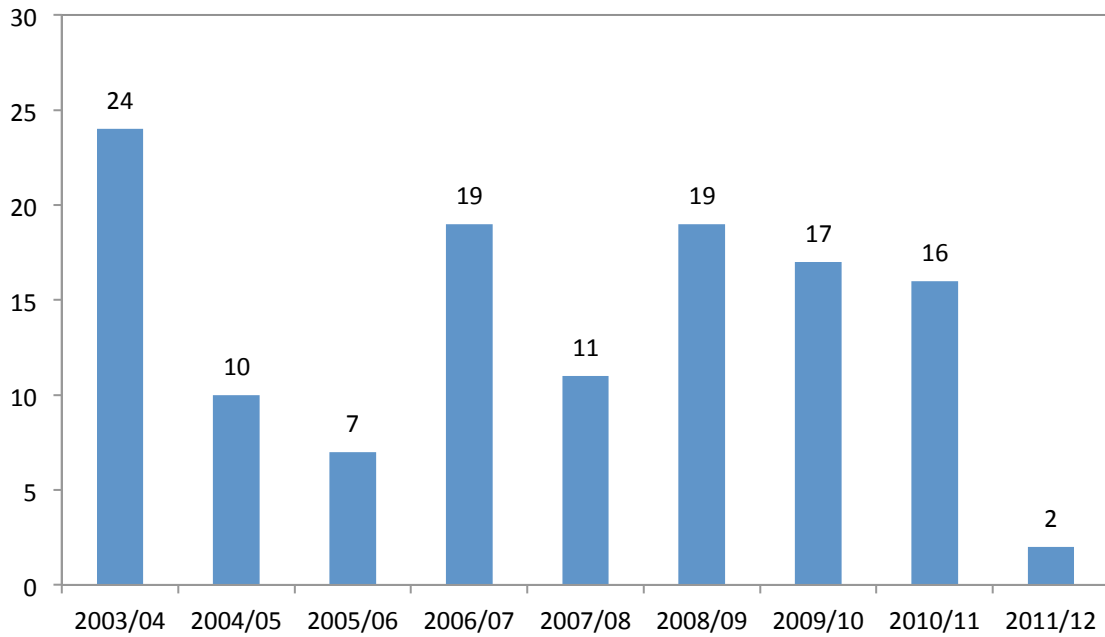
Figure 40: Weight and number of MDMA detections made at the border by the Australian Customs and Border Protection Service, 2001-2012



Source: Australian Customs and Border Protection Service

The number of clandestine laboratory detections in Australia in which MDMA was being produced has fluctuated over time. In 2011/12 they declined markedly from 16 in 2010/11 to 2 laboratories only accounted for 0.2% of all laboratory detections (Figure 41) (Australian Crime Commission, 2013).

Figure 41: Number of clandestine laboratory detections in which MDMA was being produced 2003 to 2012



Source: Australian Illicit Drug Data Reports, ACC
 Note: Earlier data on MDMA laboratory detections is unavailable.

4.5 Ecstasy market indicators

Ecstasy Price Potency and Availability reported by REU surveyed for the EDRS

The following data represents median price potency and availability across Australia, which is likely to obscure any jurisdictional differences. For further information regarding jurisdictional trends on price purity and availability of ecstasy from the EDRS findings please refer to the following weblink:

<http://ndarc.med.unsw.edu.au/resource/ecstasy-and-related-drugs-reporting-system-edrs-national-report-2012>

Ecstasy Price

The median price of an ecstasy pill has declined over time from \$35 in 2003 to \$25 in 2013 (Sindicich & Burns, in press).

Figure 42: Median price of an ecstasy pill, 2003-2013 (EDRS)

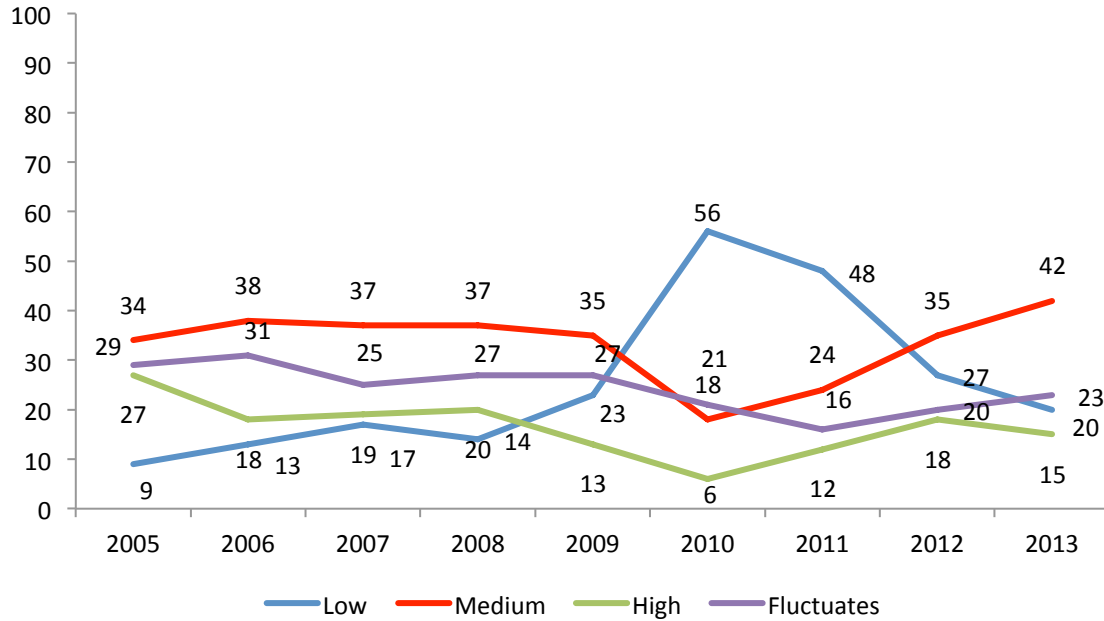


Source: Ecstasy and related Drugs Reporting System (EDRS), Sindicich and Burns (in press)

Ecstasy purity

After a sharp decline in the proportion of respondents reporting that ecstasy is 'high' in purity, between 2008 and 2010 (from 20% to 6%), figures increased to 15% in 2013 (Figure 43). Reports of 'medium' purity also increased to almost half (42%) of the sample in 2013. Conversely, proportions reporting ecstasy as 'low' in purity declined sharply between 2010 and 2013 (from 56% to 20%).

Figure 43: Current purity of ecstasy nationally, 2005-2013 (EDRS)

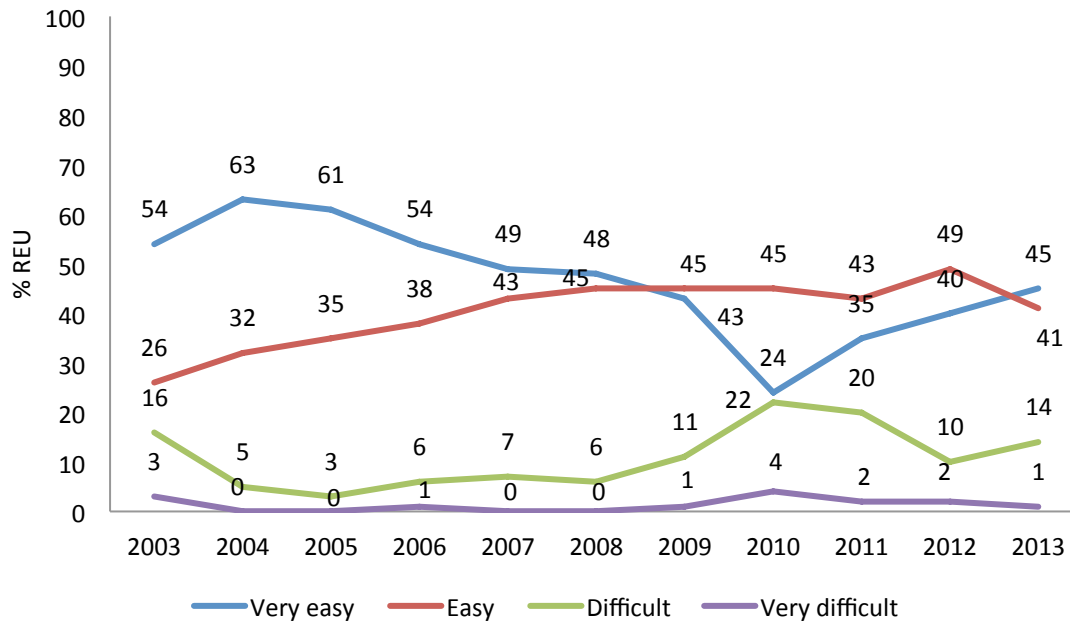


Source: Ecstasy and related Drugs Reporting System (EDRS), Sindicich and Burns (in press).

Ecstasy availability

Since 2010, there have been increasing proportions of EDRS respondents reporting that ecstasy is 'very easy' to obtain (from 24% in 2010 to 45% in 2013) (Figure 44). There has been a corresponding decline in proportions reporting that ecstasy is 'difficult' to obtain between 2010 and 2013 (from 22% to 14%).

Figure 44: Current availability of ecstasy nationally, 2003-2013 (EDRS)



Source: Ecstasy and related Drugs Reporting System (EDRS), Sindicich and Burns (2013).

4.6 Ecstasy: summary

Prevalence

General population

- Use of ecstasy in the general population has declined for the first time since 1995. The decline from 3.5% in 2007 to 3% in 2010 was statistically significant, and was driven by a significant decline in use among males over 14 (from 4.4% in 2007 to 3.6% in 2010), and young Australians aged 14 to 19 (particularly among females where use declined from 6% in 2007 to 2.5% in 2010).
- The decline in recent ecstasy use in Australia mirrors a downward trend in ecstasy markets recorded internationally around 2010.
- In 2010 the majority of Australians who used ecstasy reported using once every few months or less.

Sentinel Groups

- Among injecting drug users, prevalence of 6 month ecstasy use declined significantly from 29% in 2002 to 9% in 2013.
- Among regular ecstasy users there has been a significant decline in proportions reporting weekly ecstasy use between 2003 and 2013.

Treatment seeking

- There has been a decline in outpatient treatment episodes for problems associated with ecstasy use from a peak of 1,397 in 2008/09 to 550 in 2011/12.

Deaths

- Ecstasy-related deaths in Australia are low in comparison to methamphetamine and heroin-related deaths. During the period 2000 to 2005, 82 deaths that were ecstasy related were identified. Ecstasy was considered a direct antecedent or cause in 67 of these deaths, with only 19 considered to be due to ecstasy toxicity alone.

Law enforcement

- The number ecstasy seizures detected at the Australian border increased markedly from 110 in 2010/11 to 964 in 2011/12, while total weight of all seizures was only 12 kg.

Market indicators

- The price of ecstasy tablets has declined over time (to \$25 in 2013), while reports of ecstasy being of 'medium' purity have increased. Availability of ecstasy has also increased over the past few years, with higher proportions reporting it as 'very easy' to obtain in 2012 (40% compared to 24% in 2010).
- The ecstasy market in Australia appears to be stabilising after a downward trend in 2010.

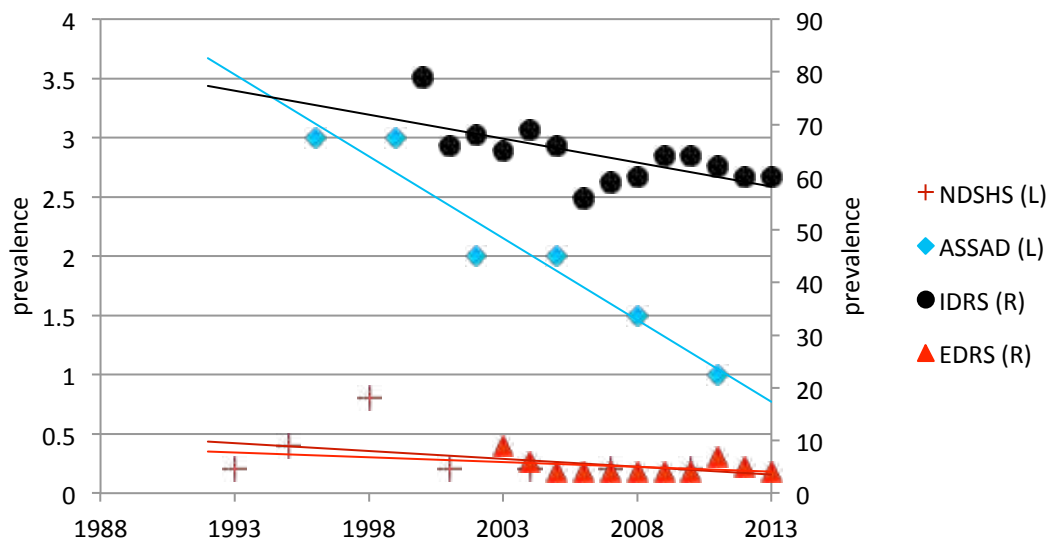
5. HEROIN

5.1 Patterns of heroin use

In December 2000 – January 2001 heroin markets in Australia experienced an unexpected and dramatic reduction in the availability of heroin. This translated into reduced consumption and significant reductions in overdose.

Determining the level of heroin use in the general population is difficult because heroin users are often not captured in the general population surveys. Less than 1% (0.2%) of Australians reported past year heroin use in 2010 (Figure 45). Use among people who inject drugs surveyed for the IDRS and the population of ecstasy users surveyed for the EDRS (on the right axis – Figure 45), has been declining since 2003.

Figure 45: Heroin use across multiple surveys



Source: National Drug Strategy Household Surveys, AIHW. Australian secondary school students' use of over-the-counter and illicit substances, DoHA. Findings from the Ecstasy and Related Drugs Reporting System, NDARC. Findings from the Illicit Drug Reporting System, NDARC.

Examining the age trends in heroin use from the NDSHS (as we have for other drugs) is difficult due to the very low prevalence of heroin use in the general population. We have not presented this data as no meaningful conclusions can be drawn from the analysis. Likewise we don't present trends in heroin use by gender among the general population as numbers are too small.

Published research on the changing heroin user population has revealed that there have been fewer young, new initiates to injecting drug use since the reduction in heroin availability. The Australian Needle and Syringe Program findings have documented a rise in longer term injecting careers among participants and a decline in both young people and new initiates attending services (J. Iversen et al., 2008).

Amongst people who inject drugs who are surveyed for the IDRS, past 6 month heroin use has recorded a declining trend. Heroin use is decreasing at a constant (and significant) rate of approximately 0.7% per year. The rate of daily heroin use amongst those users has significantly increased since 2001 (Figure 46).

Figure 46: Linear trend in heroin use (last 6 months) (LHS) and daily heroin use (RHS) amongst heroin users in the IDRS



Source: Illicit Drug Reporting System

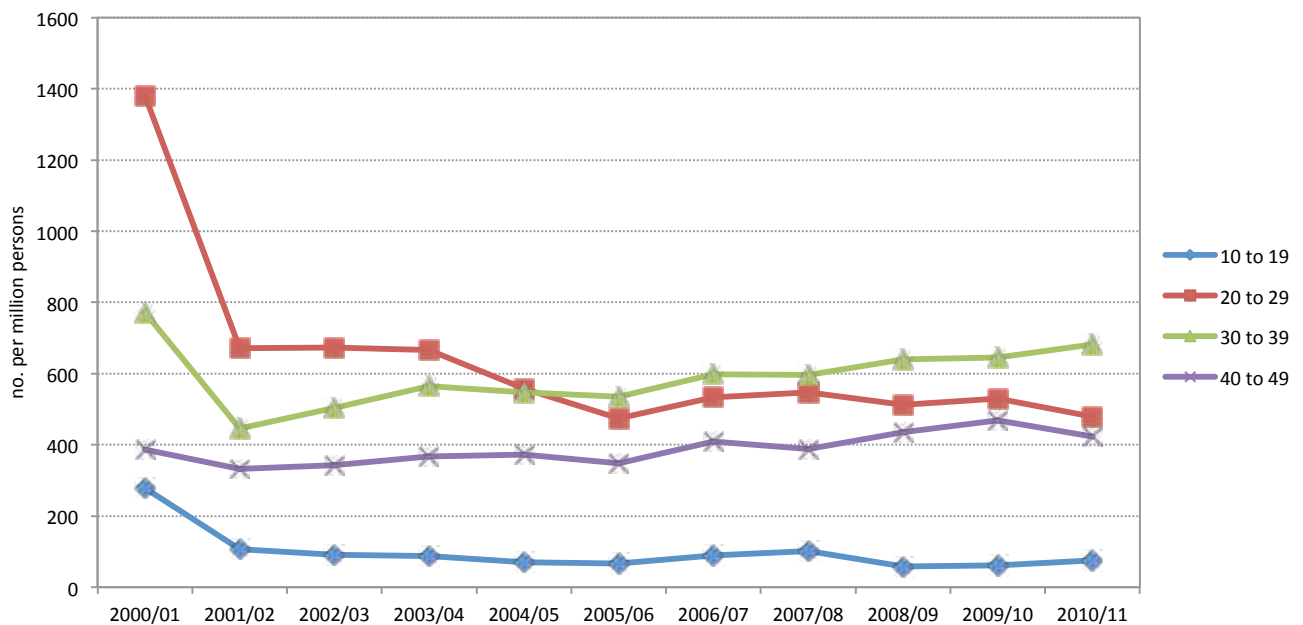
5.2 Patterns of harms associated with heroin use

Hospital separations

Consistent with the reduction in heroin availability seen in 2001, lower numbers of opioid-related hospital presentations have been recorded since this time (in 2010/11 there were 452 opioid-related hospital separations per million persons). Separations for opioid dependence accounted for more than half (55% of all opioid-related separations in 2010/11 (A. Roxburgh, and Burns, L., 2013b).

Examining age trends in hospitalisations for opioids, separations are highest among the older age groups. Opioid-related separations among the 40 to 49 year age group have remained relatively stable between 2000/01 and 2007/08, with increases recorded to 2010/11. There were marked declines in opioid-related separations around the time of the heroin shortage among the younger age groups (i.e. the 10 to 19 and the 20 to 29 year olds). These data are consistent with other literature showing that younger users, particularly in New South Wales, were most impacted by the heroin shortage (Degenhardt et al., 2005). These data suggest that although heroin-related harms are lower in Australia since 2000, it appears that the older more entrenched users continue to experience problems associated with their heroin use.

Figure 47: Rate of opioid-related hospital separations by age group, 2001 to 2011

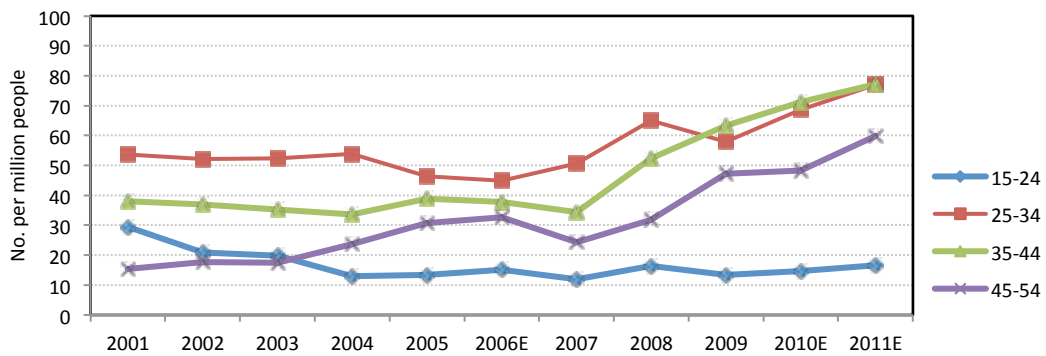


Source: National Hospital Morbidity Database, AIHW.

Deaths

Accidental opioid related deaths² have remained lower than in the late 1990's when heroin use was at its highest, however these deaths still outnumber those for psychostimulants (A. Roxburgh, and Burns, L., 2012, 2013a). Final data for 2001 to 2009 are presented in Figure 48, with estimates presented for 2010 and 2011. In 2009 there were a total of 563 deaths that were due to opioids³, lower than the peak in 1999 of 1,116 deaths. Since 2007 the rate of accidental deaths due to opioids per million persons has started to increase from 30.4 per million persons aged 15 to 54 to 45.9 in 2009. The largest increases have occurred among Australians aged 35 to 44 years and 45 to 54 years. Opioid related deaths have remained stable among younger Australians during this time (Figure 48).

Figure 48: Number of accidental deaths due to opioids per million persons among those aged 15-54 years by age group



Source: Roxburgh and Burns, 2013
2006E, 2010E and 2011E refers to estimated data

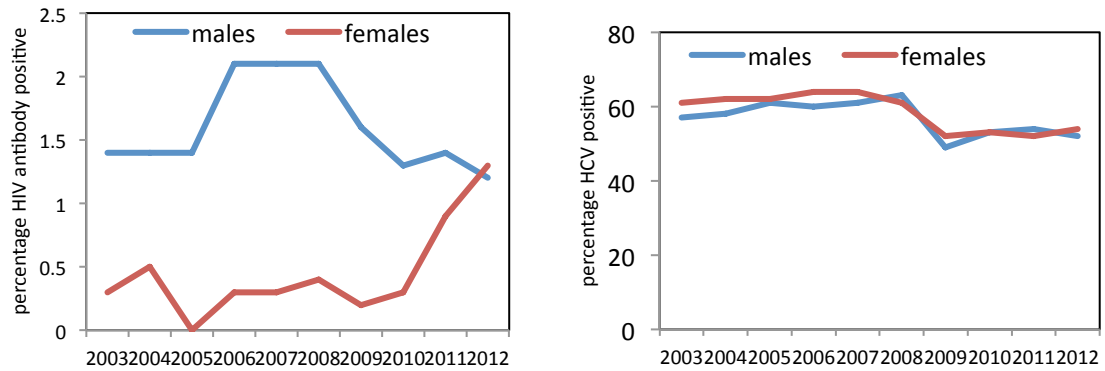
5.3 Harms associated with injecting drugs

Although drugs other than heroin are injected by people who inject drugs (methamphetamine for example), we report on injecting harms more generally here (for example blood borne virus rates of transmission).

The annual number of new HIV diagnoses per year in Australia has increased from 719 cases in 1999 to 1,137 cases in 2011 (The Kirby Institute, 2012). Of these cases in 2011, injecting drug use was the exposure category for 3%. Between these years the percent of new HIV diagnosis attributed to this exposure category has fluctuated. The prevalence of HIV antibody in a survey of needle and syringe programs has remained stable at 1.0 to 1.5 % since 2003 (J. Iversen, and Maher, L., 2013).

- 2 There was a change in the way the ABS collected their data in 2006, which means 2006 figures may be underestimated. In addition, the ABS release three iterations of the data. We've tried to offset underestimations by looking at the changes that occurred in 2007 and 2008 data and applying it to the 2006 figures. 2010 and 2011 figures are estimates based on the changes that occurred in 2008 and 2009, as the 2010 figure is the first revision and 2011 is the preliminary data. All estimates should be interpreted with caution.
- 3 All data on accidental opioid deaths refer to deaths in which opioids were considered to be the underlying cause of death. This means that the deaths recorded here only include those in which it was considered that opioids such as heroin, morphine, pethidine, methadone and codeine were primarily responsible for the person's death. There are more deaths each year in which opioids are considered to have contributed to a person's death (e.g. general medical conditions, suicides, other accidental deaths), however these deaths are not presented.

Figure 49: HIV (LHS) and HCV (RHS) antibody prevalence among PWID recruited for the Australian NSP Survey, 2003 to 2012



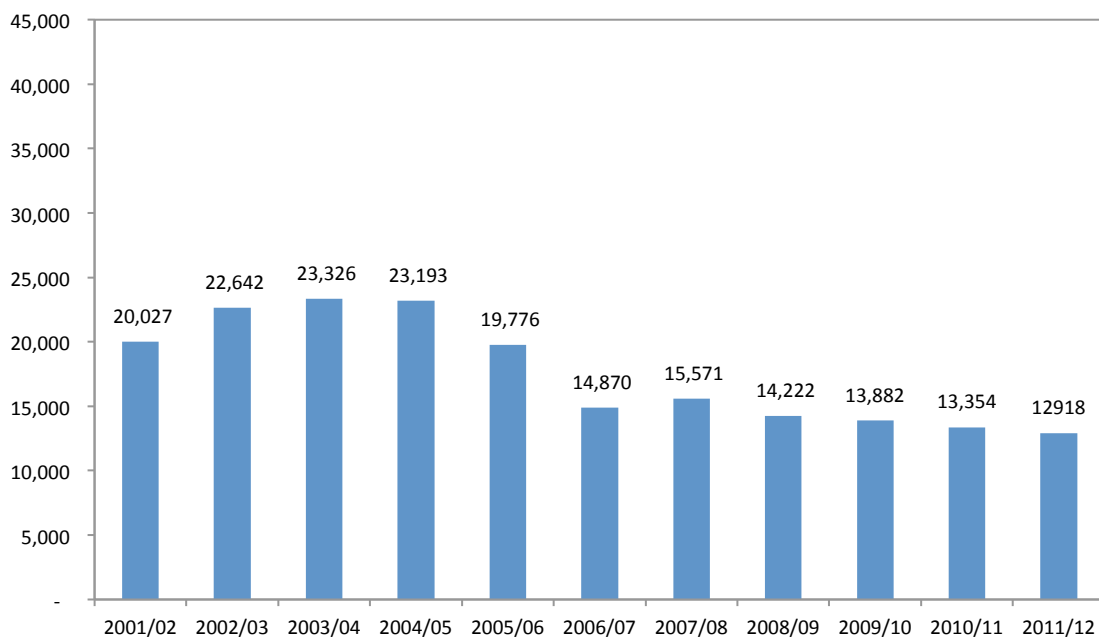
Source: Australian NSP Survey National Data Reports 2003-2013

The number of newly acquired HCV infections in Australia decreased from 550 in 2003 to 379 in 2007, with increases recorded to 2012 (400). Of the newly diagnosed cases between 2007 and 2012, injecting drug use was the exposure category for 64% and 60% respectively (The Kirby Institute, 2012). The prevalence of hepatitis C in the Australian needle and syringe program survey has declined slightly from 58% in 2003 to 53% in 2012 (J. Iversen, and Maher, L., 2013).

5.4 Patterns of heroin treatment seeking

The National Minimum Data Set for Alcohol and other Drug Services does not capture the number of clients in pharmacotherapy, which is the main treatment sought for heroin dependence. Therefore, the NMDS heroin treatment data mainly covers non-pharmacotherapy treatments. There were lower numbers of treatment episodes for heroin recorded in 2011/12 compared to earlier years (Figure 50). As a percentage of all treatment episodes, heroin episodes have declined from 17.7% in 2001/02 to 8.7% in 2011/12.

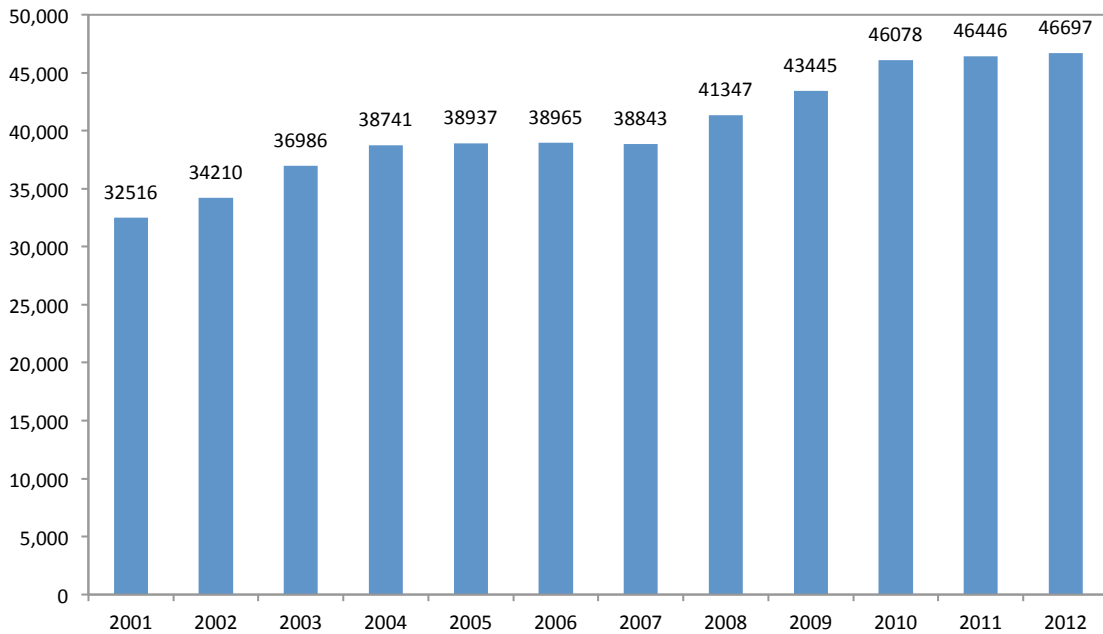
Figure 50: Number of closed treatment episodes where heroin was the principal drug of concern (excluding community based pharmacotherapy maintenance)



Source: Alcohol and Other Drug Treatment Services National Minimum Data Set, AIHW

Conversely, there were higher numbers of clients receiving pharmacotherapy in 2012 compared to 2001 (Figure 51). Since 2006 the proportion of opioid dependent Australians aged 50 years and over entering pharmacotherapy has more than doubled (from 8% to 18% in 2012). In contrast, there has been a decline in clients aged 30 years and under entering pharmacotherapy between 2006 and 2012 (from 28% to 13%) (Australian Institute of Health and Welfare, 2013b).

Figure 51: Total number of clients in pharmacotherapy as at 30 June each year



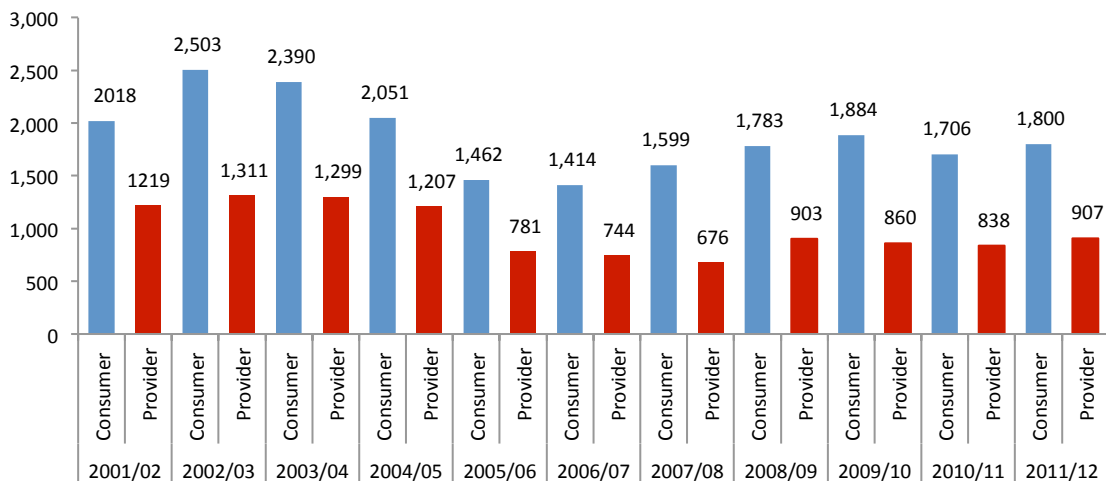
Source: Australian Institute of Health and Welfare; National Opioid Pharmacotherapy Statistics Annual Data (NOPSAD) collection
 Note: Data from 2001 includes buprenorphine, and from 2006, buprenorphine-naloxone.

5.5 Heroin law enforcement indicators

Consumer and Provider arrests

Both consumer and provider heroin drug offences are lower in numbers compared to 2001 with approximately 500 fewer consumer and provider arrests between 2001 and 2012. Consumer arrests have dropped from 2,018 in 2001 to 1,800 in 2012. Over the same time period provider arrests have decreased from 1,219 to 907 (Australian Crime Commission, 2013). In 2001 heroin arrests accounted for 3% of all consumer arrests, and 2% in 2011. The percentage of all provider arrests that are for heroin has declined (8% in 2001 and 5% in 2012) (Figure 52).

Figure 52: Heroin and other opioid consumer and provider arrests, 2001 to 2012

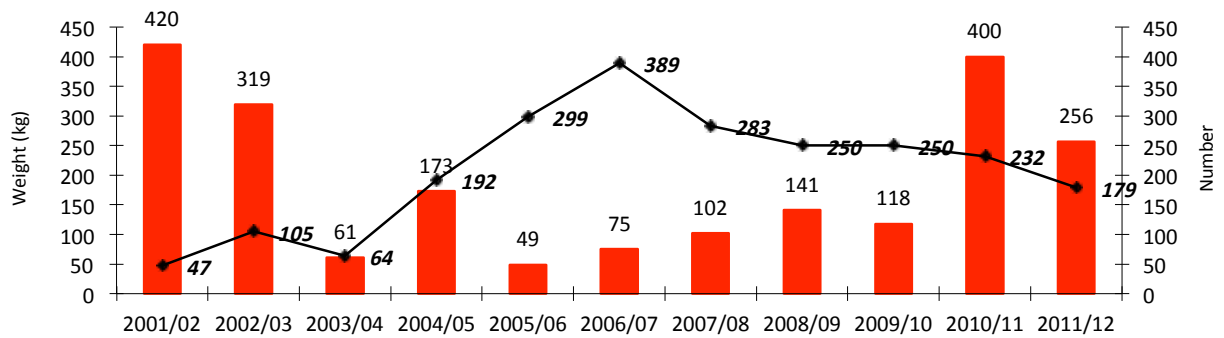


Source: Australian Illicit Drug Report, ACC, Illicit Drug Data Reports, ACC

Seizures

In the financial year 2011/12 there were 179 heroin detections at the Australian border, representing a decrease from a record high of 389 detections in 2006/07. Weights remain much lower. The total weight of heroin detections in 2011/12 was 256 kilograms (a decrease from 400 kilograms in 2010/11), with the vast majority detected via cargo and international mail (Australian Customs and Border Protection Service, 2012) (Figure 53).

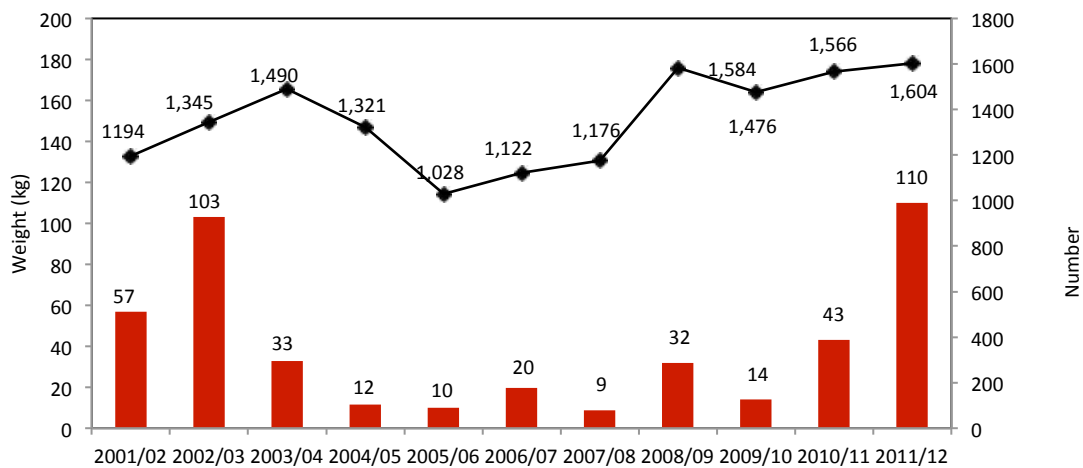
Figure 53: Weight and number of heroin detections made at the border by the Australian Customs and Border Protection Service, 2001 to 2012



Source: Australian Customs and Border Protection Service

The number of domestic heroin seizures made by State and Territory Police (Figure 54) has increased from 1,028 in 2005/06 to 1,604 in 2011/12. The weight of domestic heroin seizures was the highest recorded (110kg in 2011/12) since 103 kg, seized in 2002/03.

Figure 54: Weight and number of total seizures of Heroin made by State/Territory police, 2001 to 2012



Source: Australian Illicit Drug Data Reports, ACC

5.6 Heroin market indicators

Heroin Price Purity and Availability reported by PWID as surveyed by the IDRS

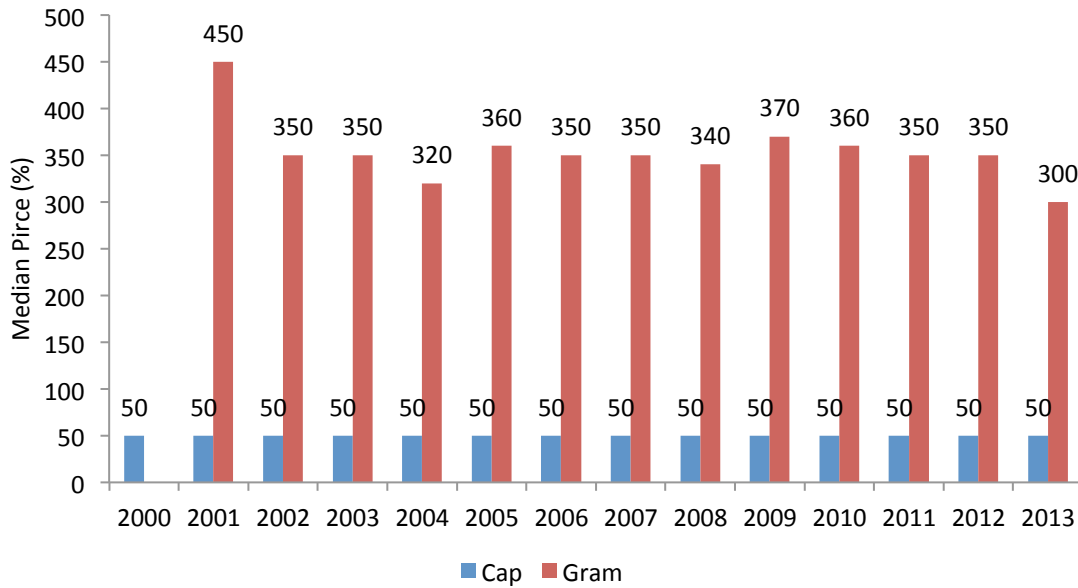
The following data represents median price purity and availability of heroin across Australia, which is likely to obscure any jurisdictional differences. For further information regarding jurisdictional trends on price purity and availability of heroin from the IDRS findings please refer to the following weblink:

<http://ndarc.med.unsw.edu.au/resource/illicit-drug-reporting-system-idrs-national-report-2012>

Heroin Price

The price of a cap of heroin remains unchanged at \$50 over the 14-year period, while prices for a gram are lower at \$300 in 2013 compared to \$450 in 2001 (Figure 55) (Stafford & Burns, in press).

Figure 55: Median price of heroin per point and gram, nationally, 2000-2013 (IDRS)

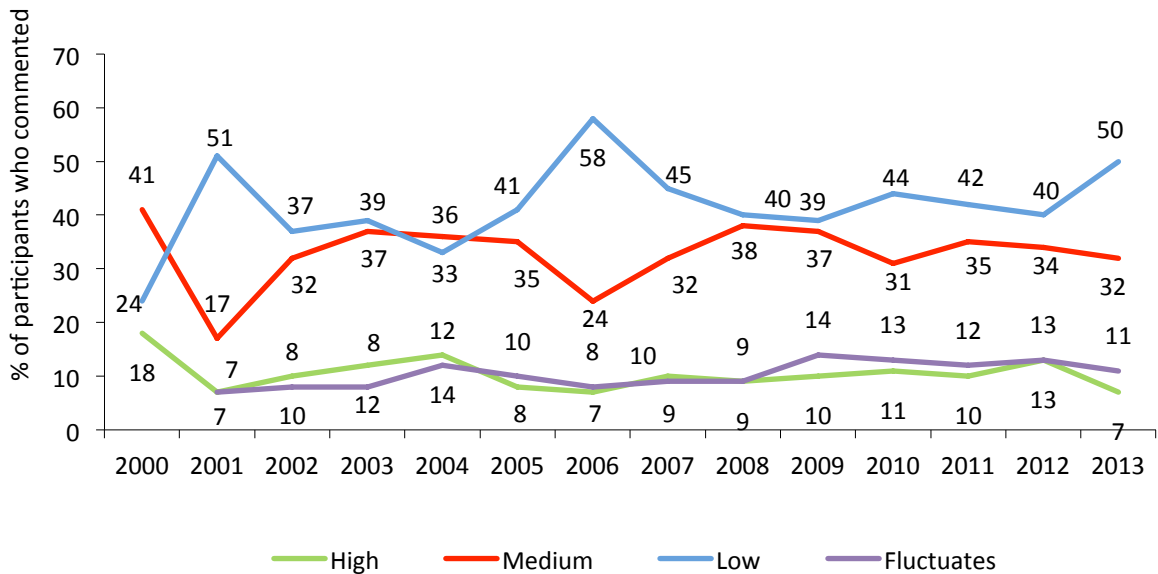


Source: Illicit Drug Reporting System (IDRS), Stafford and Burns (in press)
 Note: in 2000, a cap is actually a 'rock'. No data are available for the price of a gram in 2000.

Heroin Purity

In 2013, the majority (82%) of IDRS participants in Australia reported heroin purity as 'low' to 'medium'. A notable increase in participants reporting heroin as low in purity occurred in 2001 (from 24% in 2000 to 51% in 2001) around the time of the heroin shortage (Figure 56). There was another increase in 2013, with half (50%) of the participants reporting heroin purity as 'low' (up from 40% in 2012). Only 7% reported heroin purity as being 'high' in 2013.

Figure 56: Current purity of heroin nationally, 2000-2013 (IDRS)

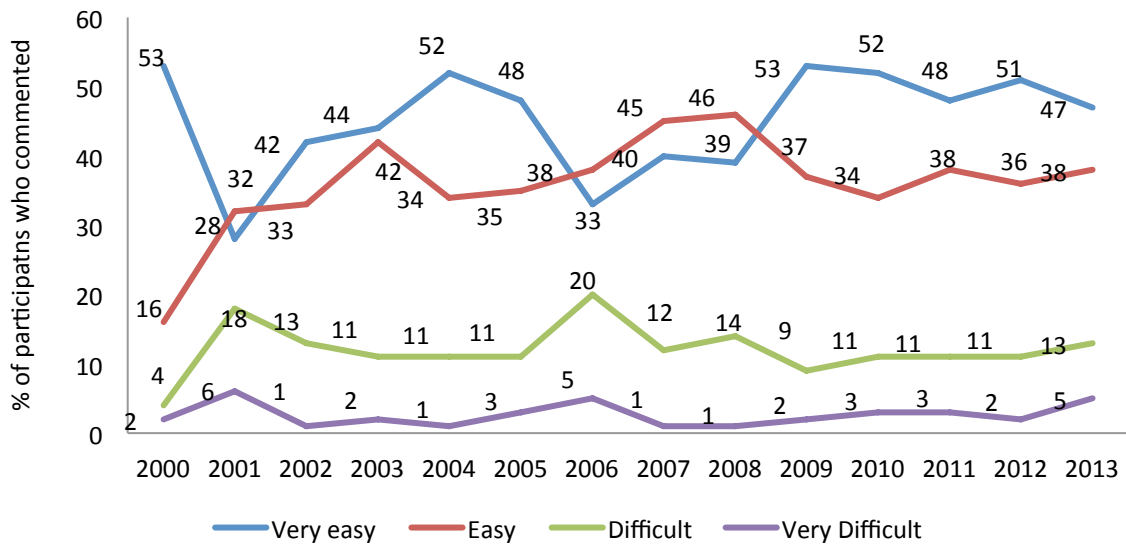


Source: Illicit Drug Reporting System (IDRS), Stafford and Burns (in press)

Heroin Availability

There was a marked reduction in proportions of IDRS participants reporting that heroin is 'very easy' to obtain, from 53% of participants in 2000 to 28% in 2001. This figure has since returned to 47% in 2013. Proportions reporting heroin as 'easy' to obtain have fluctuated between just under half of the sample to approximately one-third (38%) in 2013 (Figure 57).

Figure 57: Current availability of heroin, nationally, 2000-2013 (IDRS)



Source: Illicit Drug Reporting System (IDRS), Stafford and Burns (in press)

5.7 Heroin: summary

Prevalence

General population

- Past year heroin use remains low among the broader Australian population at less than 1% in 2010.

Sentinel Groups

- Among people who inject drugs there has been a decline in the prevalence of past 6 month heroin use over time (from 79% 2000 to 58% in 2013), however daily heroin among heroin users in this group has increased to one quarter (25%) in 2013.
- Very small proportions of regular ecstasy users (4% in 2013) reported recent heroin use.

Treatment seeking

- Opioid-related hospital presentations remain higher than other illicit drug presentations.
- Hospital presentations declined substantially in 2001/02 and remained stable to 2005/06. Since this time they have increased across all age groups except the 20 to 29 year age group. Opioid-related presentations have remained low and stable since 2001/02. The 30 to 39 year age group accounted for the largest proportion (37%) of presentations in 2010/11.
- Numbers of people in opioid substitution treatment have increased between 2001 and 2012, particularly among older Australians (50 years and over), with a decline in clients aged 30 years and under.

Deaths

- Opioid-related deaths continue to outnumber deaths for other illicit drugs.
- Since 2007 there has been an upward trend in opioid-related deaths among Australians aged 35 years and over. Deaths among Australians aged 15 to 24 have remained low and stable since 2004.

Law Enforcement

- The weight of heroin seizures detected at the Australian border has increased over the past few years (400kg in 2010/11 and 256 kg in 2011/12), however the number of seizures has declined (179 in 2011/12) from a peak of 389 in 2006/07.
- The number of heroin-related arrests has remained relatively stable since 2008/09.

Market indicators

- The price of small amounts of heroin ('caps') has remained unchanged between 2000 and 2012 at \$50, while there has been a decline in the price of a gram from \$450 in 2001 to \$300 in 2013, the lowest price recorded during the 14-year period.
- While heroin remains readily available according to IDRS participants, half (50%) of the sample in 2013 report that it is 'low' in purity. This may partly explain the decrease in price for a gram of heroin.

6. PHARMACEUTICAL OPIOIDS

The use of pharmaceutical opioids has an important and significant place in medicine. Opioids are used to manage (acute and chronic, as well as cancer-related) pain, post-operative care, and for analgesia and anaesthetic. Pharmaceutical opioids include morphine, pethidine, codeine, oxycodone, methadone, propoxyphene, dextropropoxyphene, hydromorphone, hydrocodone, fentanyl and buprenorphine.

This section focuses on the 'extramedical' use of pharmaceutical opioid medications, given the increasing concern in Australia about these drug classes. Extramedical use is defined as 'any use of a medication outside a doctor's prescription, not excluding the possibility that the user may have medically driven reasons for using the drug' (Larance et al., 2011).

There are a number of ways in which someone can obtain pharmaceutical opioids: through a legitimate prescription from a doctor, purchase on the illicit market, purchase on the internet, theft, from family and friends, or through visiting several doctors, which in Australia is defined as 'doctor shopping' where more than 5 doctors are consulted within a 12 month period.

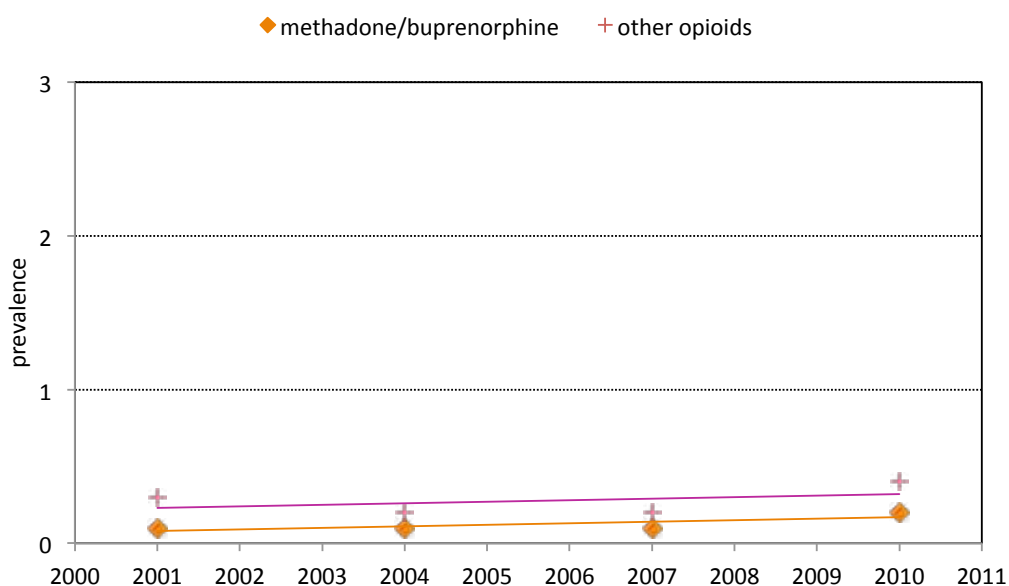
A key challenge with interpreting and understanding trends in use of these drugs is the distinction between medical use, extramedical use, non-adherence (e.g. using prescribed medication in a non-prescribed way such as intravenously) and diversion (the unsanctioned supply of pharmaceuticals from legal sources to illicit markets (Larance et al., 2011). Monitoring systems in Australia endeavour to distinguish between these different behaviours, however, in some instances this is not well documented.

According to recent research (A. Roxburgh, Bruno, R., Larance, B. and Burns, L., 2011), prescribing of morphine in Australia has declined, while oxycodone prescribing has increased markedly. Numbers of oxycodone prescriptions are highest among older Australians. This may in part reflect appropriate prescribing for pain management among an ageing population, however it is not possible to differentiate non-medical use from appropriate prescribing in these data.

6.1 Patterns of extramedical use of pharmaceutical opioids

Past year extramedical (the NDSHS uses the term 'non-medical') use of pharmaceutical opioids (methadone, buprenorphine and other opioids) remains low among the general population at less than 1% in 2010 (Australian Institute of Health and Welfare, 2011).

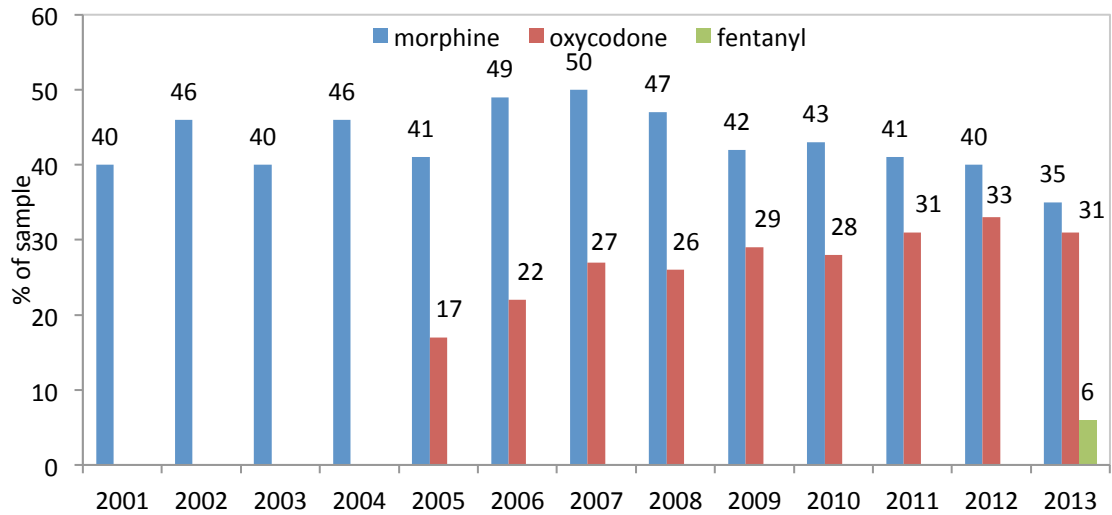
Figure 58: Past year non-medical use of pharmaceutical opioids (methadone, buprenorphine, morphine, other opiates/opioids)



Source: National Drug Strategy Household Surveys, AIHW
 NB: The other opioids category includes morphine, oxycodone and pethidine

The majority of use of morphine and oxycodone among IDRS participants is reported as being extramedical use (Stafford et al., 2010). Investigating injecting use of these drugs among IDRS participants, approximately 50% reported injecting morphine in the past six months between 2006 and 2008, with proportions declining to 35% in 2013. Approximately one-third (31%) of participants reported injecting oxycodone in 2013, representing an increase from 17% in 2005 (Stafford & Burns, in press). Data on fentanyl use was collected for the first time in 2013, with 6% of IDRS participants reporting injecting fentanyl in the past 6 months (Figure 59).

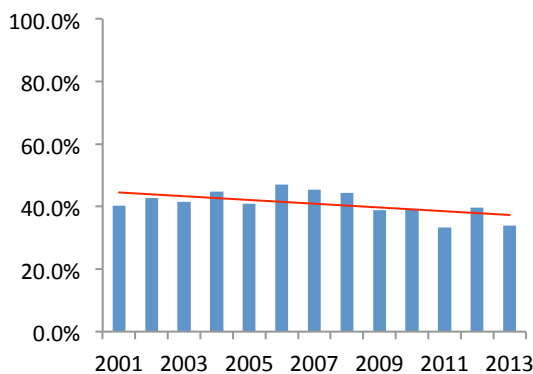
Figure 59: Recent (last 6 months) morphine, oxycodone, and fentanyl injection among PWID surveyed for the IDRS



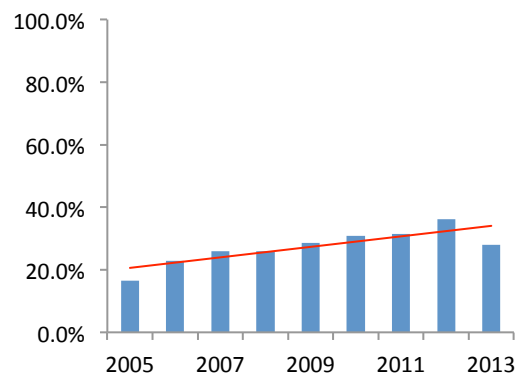
Source: Stafford and Burns (in press)
 Note: Oxycodone data only collected from 2005 onwards. Fentanyl only collected from 2013.

Examining whether there have been statistically significant changes over time within the IDRS sample in past 6 month morphine injecting, the linear trend line for morphine (2001 to 2013) reveals a significant decrease over this period (Figure 60, LHS). Conversely, there has been as significant increase in oxycodone injecting between 2005 and 2013, at a rate of approximately 1.2% per year (Figure 60, RHS).

Figure 60: Linear trend in morphine injecting (last 6 months) (LHS) and oxycodone injecting (RHS) among IDRS respondents



Source: Illicit Drug Reporting System, IDRS



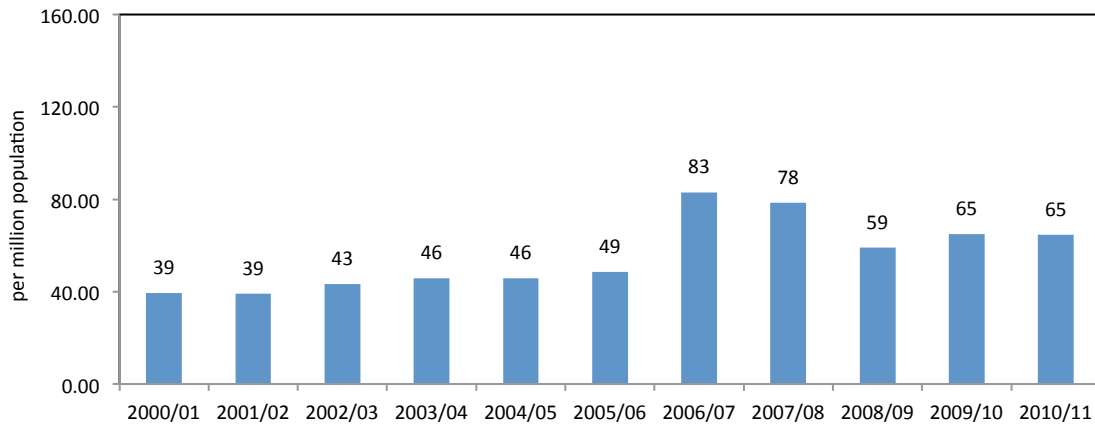
Source: Illicit Drug Reporting System, IDRS

6.2 Patterns of harms associated with pharmaceutical opioid use

Hospital separations

It is not possible to separate out hospital separations for morphine, oxycodone, and codeine, and any changes in these data may be attributable to the more readily accessible over-the-counter preparations containing codeine. Figure 61 shows a higher number of separations per million persons for other opioid poisoning in 2006/07 (up to 83 per million persons from 49 in 2005/06), with figures declining to 65 per million persons in 2010/11.

Figure 61: Rate of other opioid* hospital separations for poisoning, per million persons, 2001 to 2011



Source: National Hospital Morbidity Database, AIHW

*Figure includes morphine, oxycodone, and codeine and excludes heroin, methadone and pethidine

Deaths

Oxycodone deaths

Analysis of oxycodone deaths in Australia (A. Roxburgh, Bruno, R., Larence, B. and Burns, L., 2011) shows that a total of 465 oxycodone-related deaths were recorded during the period 2001 and 2009. Approximately one quarter (27%) of decedents had a recorded history of injecting drug use, and approximately half (53%) had been prescribed oxycodone prior to death. A small proportion (10%) of these deaths was due to oxycodone toxicity alone, where oxycodone was found at greater than therapeutic or fatal levels in toxicology testing. The vast majority (82%) of the deaths however, were attributable to multiple drug toxicity, with benzodiazepines and alcohol being the most common drugs detected. The combination of alcohol, benzodiazepines and opioids is a particularly dangerous one, and all three substances were found to have contributed to these deaths, whether they were detected at fatal levels or not. Within the context of increased prescribing of oxycodone, and high levels of continued benzodiazepine prescribing in Australia, it isn't surprising that toxicology reports are increasingly reporting oxycodone as a contributory factor. Oxycodone-related mortality overall is still relatively low in this country, particularly compared to heroin-related deaths which still make up the majority of fatal opioid overdoses in Australia (A. Roxburgh, Bruno, R., Larence, B. and Burns, L., 2011). Oxycodone-related deaths in Australia are also relatively low compared to numbers seen in the United States, where these deaths outnumber those for heroin and cocaine (Paulozzi et al., 2009).

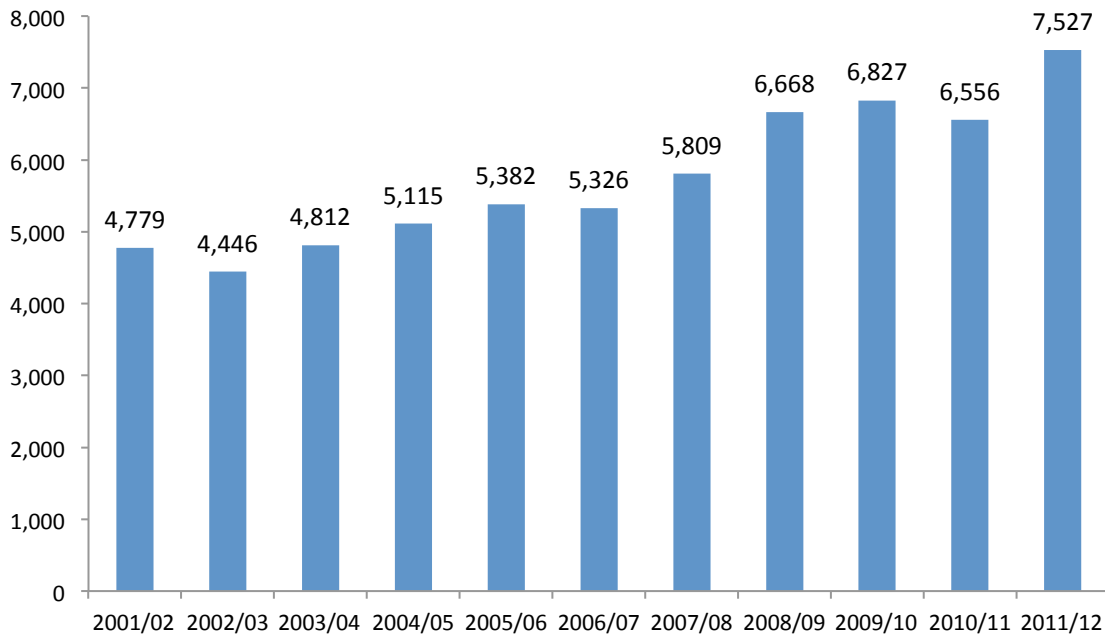
Fentanyl deaths

Analysis of fentanyl deaths in Australia (A. Roxburgh, Burns, L., Drummer, O.H., Pilgrim, J., Farrell, M., and Degenhardt, L 2013), shows a total of 136 fentanyl-related deaths were recorded during the period 2000 to 2011. Approximately one-third (34%) of these deaths were due to fentanyl toxicity alone. Among deaths due to multiple drug toxicity (including fentanyl), benzodiazepines, antidepressants and morphine were the most common drugs detected. In contrast to the oxycodone related deaths, approximately half (54%) of the decedents among the fentanyl deaths had a history of injecting drug use, most (64%) had not been prescribed fentanyl prior to their death, and the vast majority of this group (95%) had injected fentanyl at the time of death. This is a concerning finding, given the potency of fentanyl and the dangers of injecting this drug. Fentanyl-related mortality is currently low in Australia compared to the United States (Warner M, 2011) and parts of Europe (European Monitoring Centre for Drugs and Drug Addiction, 2012), however, these deaths appear to be occurring among a group of at risk Australians who report a history of injecting drugs.

6.3 Patterns of pharmaceutical opioid treatment seeking

Treatment seeking for pharmaceutical opioids (which includes methadone, buprenorphine, morphine and 'other analgesics'), collected within the Alcohol and other Drug Treatment Services National Minimum Data Set, has increased from 4,779 in 2001/02 to 7,527 in 2011/12 (Figure 62). As a percentage of all treatment episodes pharmaceutical opioids accounted for 5.1% in 2011/12, stable since 2001/02 where they represented 4%. Morphine accounted for one-quarter (25%) of all treatment episodes for opioids other than heroin in 2011/12.

Figure 62: Number of closed treatment episodes where methadone or "other opioid" was the principal drug of concern



Source: Alcohol and Other Drug Treatment Services National Minimum Data Set, AIHW

6.4 Pharmaceutical opioids: summary

Prevalence

General population

- Past year non-medical use of pharmaceutical opioids (such as oxycodone and morphine) among the general population increased significantly between 2007 and 2010 (from 0.2% to 0.4%). However, prevalence still remains relatively low in Australia.
- There has been a decrease in morphine prescribing in Australia. Prescriptions are most prevalent among older Australians.
- There has been an increase in oxycodone prescribing, particularly among older Australians. This increase may in part be due to legitimate prescribing given the ageing population in Australia however, it is not possible to differentiate non-medical use from legitimate prescribing in these data.
- Fentanyl prescribing has also increased, and again is predominantly prescribed to older Australians.

Sentinel groups

- Among IDRS participants, injecting use of morphine increased between 2001 and 2007 (from 40% to 50%), however this figure has since declined to 35% in 2013.
- There has been an increase in oxycodone injecting use among IDRS participants, from 17% in 2005 to 31% in 2013.
- Six percent of IDRS participants reported injecting fentanyl in the past six months in 2013.

Treatment seeking

- Treatment episodes for problems associated with opioids other than heroin have steadily increased over time from 4,779 in 2001/02 to 7,527 in 2011/12. A quarter of these episodes are for morphine related problems. These treatment episodes remain much lower in number than those for heroin (12,918 in 2013).

Deaths

Oxycodone

- During the period 2001 to 2009, 465 oxycodone related deaths were recorded.
- Approximately one-quarter (27%) of these decedents had a recorded history of injecting drug use.
- Approximately half (53%) of the decedents had been prescribed oxycodone prior to their death.
- Multiple drugs (in particular alcohol and benzodiazepines) were recorded in the majority (82%) of oxycodone-related deaths.
- Deaths due to heroin outnumber oxycodone-related deaths.
- Mortality related to oxycodone is currently relatively low in Australia, and is not comparable to numbers of oxycodone deaths seen in the United States, where they outnumber heroin and cocaine deaths.

Fentanyl

- During the period 2000 to 2011, 136 oxycodone related deaths were recorded.
- More than half (54%) of the decedents had a recorded history of injecting drug use.
- Approximately one third (36%) of the decedents had been prescribed fentanyl prior to their death.
- Two-thirds (66%) of the deaths recorded multiple drug toxicity and other drugs present were most notably benzodiazepines, antidepressants and morphine.
- Fentanyl related mortality is currently relatively low in Australia compared to the United States and parts of Europe, however a large proportion of these deaths are occurring among at risk groups who inject drugs.

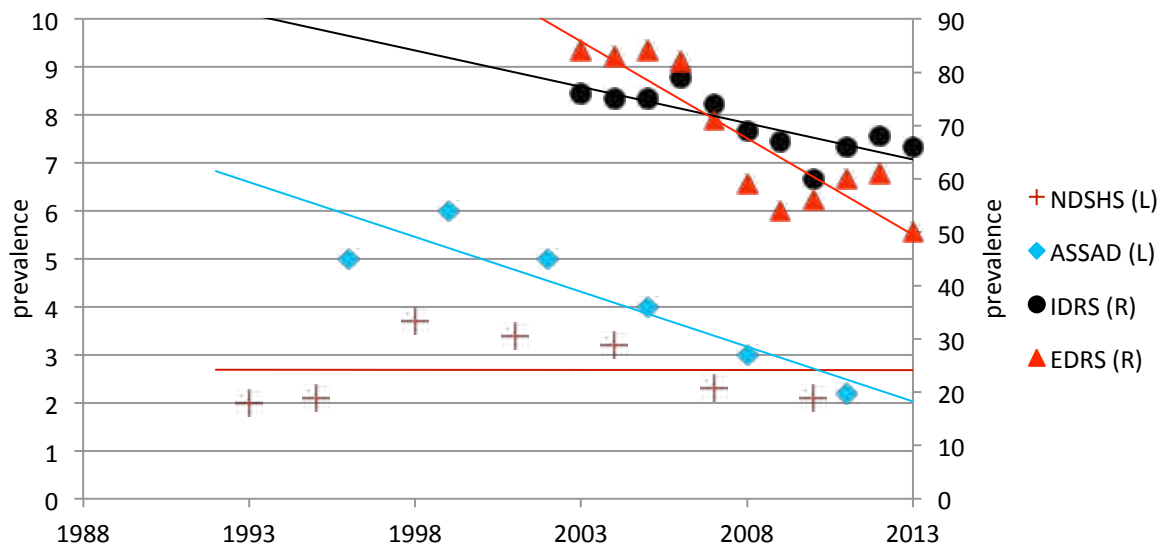
7. METHAMPHETAMINE

In this section we report on amphetamine and meth(yl)amphetamine⁴. Throughout the 80's in Australia, the most readily available form of illicit amphetamine was amphetamine sulphate (Topp et al., 2002). However, this changed over time through the 90's due to legislative controls that were introduced for precursor chemicals being used to manufacture amphetamine. This resulted in changes to the production of amphetamine, resulting in the increasing production of methamphetamine (Topp & Churchill, 2002). According to law enforcement data, methamphetamine now dominates the Australian market (Australian Crime Commission, 2009). Methamphetamine is usually sold as powder ('speed'), base, or crystal methamphetamine ('ice'). Regular crystal methamphetamine use in particular has been associated with problems such as greater liability for developing dependence, and increased risk of psychosis (McKetin et al., 2005). Some Australian surveillance systems monitor these three forms of methamphetamine separately.

7.1 Patterns of methamphetamine use

In the general population, past 12 month use of methamphetamine has remained low and stable since the early 1990s. The percentage of NDSHS respondents who reported recent use between 1993 and 2010 has ranged between 2.0% – 3.7%, at its peak in 1998, with a significant decrease recorded from 3.2% in 2004 to 2.3% in 2007 (Australian Institute of Health and Welfare, 2008). In 2010, 2.1% of Australians reported past year methamphetamine use (Australian Institute of Health and Welfare, 2011) Methamphetamine use among school students has declined over time from 6% reporting past year use in 1999 to 2.2% in 2011 (White & Bariola, 2012b). Declines are observable among people who inject drugs surveyed for the Illicit Drug Reporting System (IDRS) and among regular drug users surveyed for the Ecstasy and related Drugs Reporting System (EDRS) (Figure 63).

Figure 63: Methamphetamine use across multiple surveys

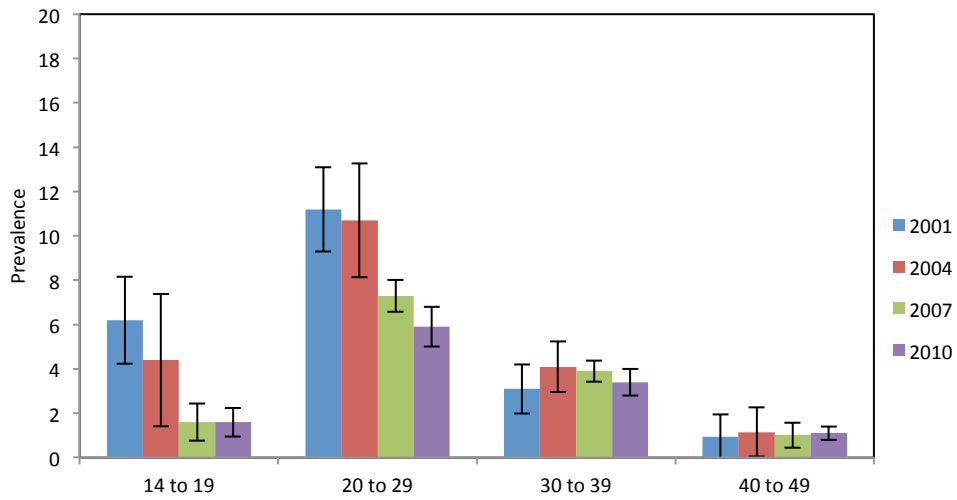


Source: National Drug Strategy Household Surveys, AIHW. Australian secondary school students' use of over-the-counter and illicit substances, DoHA. Findings from the Ecstasy and related Drugs Reporting System, NDARC. Findings from the Illicit Drug Reporting System, NDARC.

Figure 64 provides trends within age groups from the NDSHS. There was a significant decline in past year methamphetamine use among the younger age groups (14 to 19 and 20 to 29 year olds) between 2001 and 2007. These figures remained stable in 2010. Past year methamphetamine use among the 30 to 39 year olds and 40 to 49 year olds has remained stable between 2001 and 2010.

4 We use the generic term methamphetamine in this report for simplicity.

Figure 64: Proportion reporting past year methamphetamine use by age group



Source: National Drug Strategy Household Surveys, AIHW

Table 7 shows the proportion of males compared to females reporting past year methamphetamine use between 2001 and 2010. Although a larger proportion of males than females report past year methamphetamine use, there has been a decline over time among both.

Table 7: Past year methamphetamine use by gender

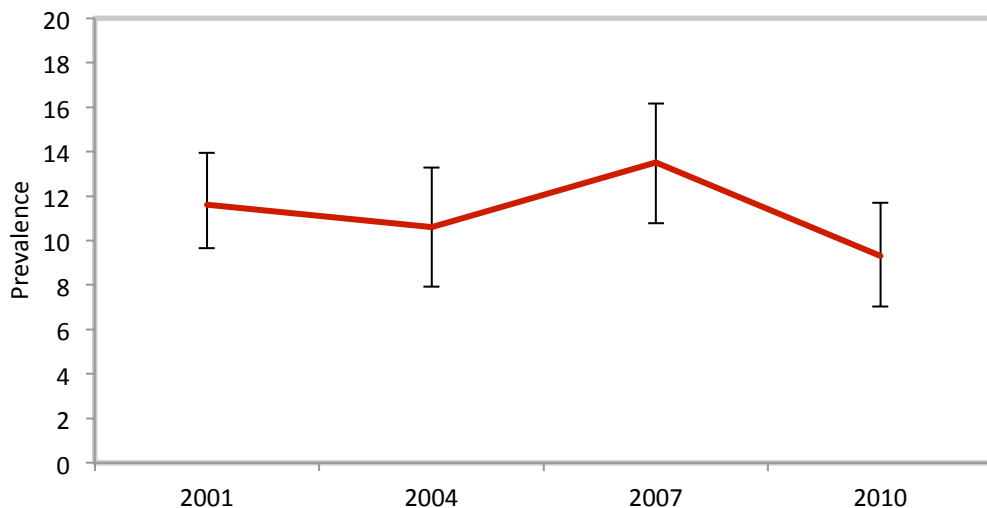
	2001	2004	2007	2010
Males	4.2	4	3	2.5
Females	2.7	2.5	1.6	1.7

[Graph](#)

Looking at frequency of use (Figure 65) the proportion of past year methamphetamine users reporting weekly or more frequent use among the general population has not changed significantly between 2001 and 2010. Three-quarters of Australians aged 14 years and older report using methamphetamine every few months or less frequently (Australian Institute of Health and Welfare, 2011).

In the 2010 NDSHS survey, the most commonly used form of methamphetamine among the general population was 'speed' or powder methamphetamine (Australian Institute of Health and Welfare, 2011).

Figure 65: Proportion of past year methamphetamine users reporting weekly or more use

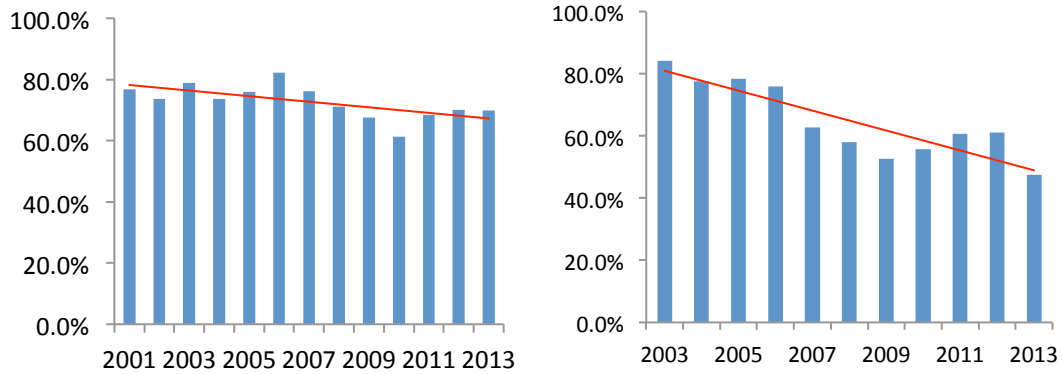


Source: National Drug Strategy Household Surveys, AIHW

Among participants surveyed for the IDRS, there has been a significant decline of past 6 month use of any form of methamphetamine between 2001 and 2013 (Figure 66 – LHS).

There has also been a significant decline of past 6 month use of methamphetamine amongst the EDRS participants (decreasing by approximately 2.7% per year, Figure 66 – RHS).

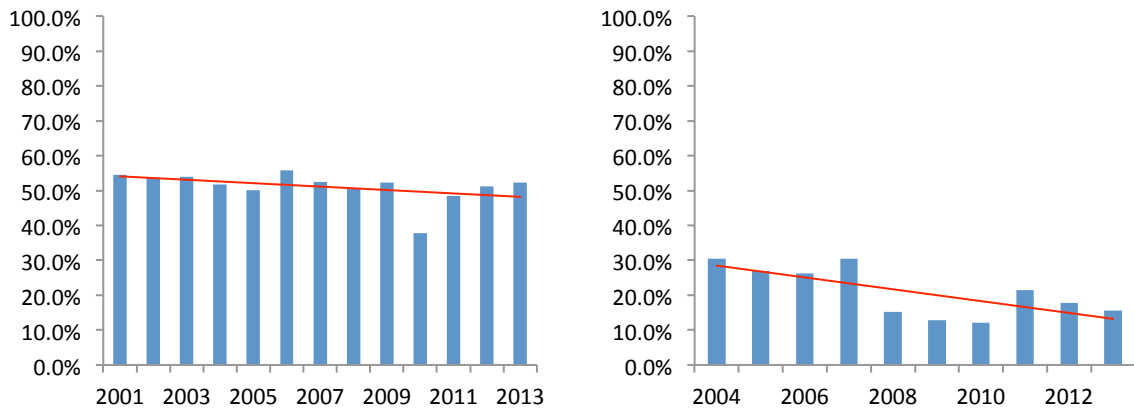
Figure 66: Linear trend in methamphetamine use (last 6 months) amongst IDRS (LHS) and EDRS (RHS) respondents



Source: Illicit Drug Reporting System
Ecstasy and related Drugs Reporting System

Figure 67 provides the trend lines for weekly or more frequent use amongst those IDRS (on the left) and EDRS (on the right) respondents reporting past 6 month methamphetamine use. The prevalence of weekly methamphetamine use among both groups has declined significantly over time.

Figure 67: Linear trend in weekly methamphetamine use amongst IDRS (LHS) and EDRS (RHS) respondents reporting recent methamphetamine use



Source: Illicit Drug Reporting System
Ecstasy and related Drugs Reporting System

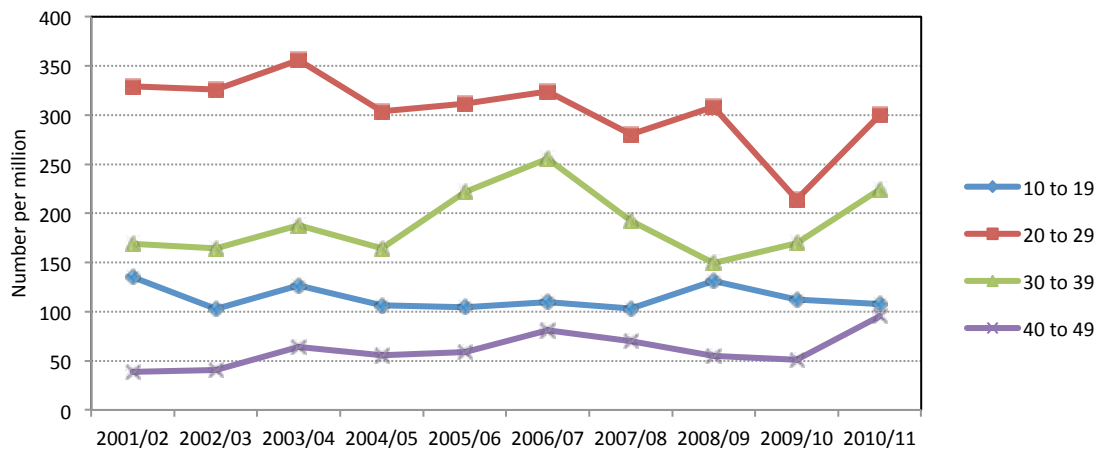
7.2 Patterns of harms associated with methamphetamine use

Hospital separations

To date, the coding system for the National Hospital Morbidity Database (NMHD) is unable to distinguish between hospital separations related to amphetamine, methamphetamine and ecstasy (A. Roxburgh et al., 2006). It is likely however, that most of these separations will be related to methamphetamine, with only a small minority related to ecstasy. Amphetamine related hospital separations are second highest to opioids among the four major illicit drug classes (amphetamine, cocaine, opioids and cannabis). Higher numbers of amphetamine-related hospital presentations have been recorded over time from 62.7 per million persons in 1993/94 to 182 per million persons in 2010/11. Separations for amphetamine dependence have accounted for an increasing proportion (40% in 2010/11) of all amphetamine-related separations (A. Roxburgh, and Burns, L., 2013b)

Looking at age trends in amphetamine-related separations, they are highest among the 20 to 29 year age group, followed by the 30 to 39 year age group, among whom separations have fluctuated over the past few years (Figure 68). Separations for amphetamine-related problems have stabilised among the 10 to 19 year age group.

Figure 68: Rate of amphetamine-related hospital separations by age group, 2001 to 2011



Source: National Hospital Morbidity Database, AIHW

Deaths

Table 8 shows deaths where methamphetamine was recorded as the underlying cause of death and deaths where methamphetamine was either recorded as the underlying cause or contributory cause of death. There has been a slight increase across both of these figures since 2001. In 2009 (the most recent year for which final data is available), there was a total of 86 drug induced deaths in which methamphetamine was mentioned among Australians aged 15 to 54, and 20 deaths where methamphetamine was thought to be the underlying cause (A. Roxburgh, and Burns, L., in press). Population rates for deaths where methamphetamine was mentioned have increased over time from 3.4 per million persons in 2001 to 7 per million persons in 2009. Methamphetamine-related mortality remains relatively low in Australia at this stage.

Table 8: Number of methamphetamine-related deaths among those aged 15-54

	Methamphetamine underlying cause of death	Methamphetamine mentions
2001	13	51
2002	1	55
2003	17	50
2004	17	75
2005	26	68
2006	23	99
2007	27	74
2008	16	82
2009	20	86
2010E*	26	88
2011E*	29	110

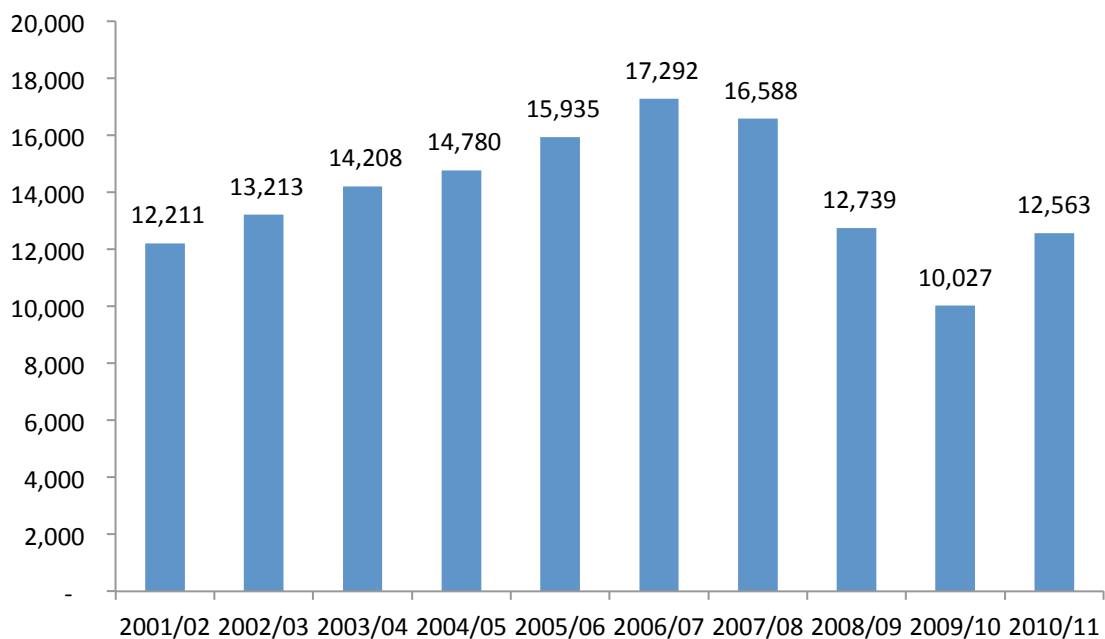
*These figures are estimates only as final data for these years are not yet available. They should be interpreted with caution.
Source: Roxburgh and Burns, in press

Graph

7.3 Patterns of methamphetamine treatment seeking

Higher numbers of treatment episodes for amphetamines were recorded between 2001/02 and 2006/07 (from 12,211 to 17,292), however there has been a decline over the past four years to 12,563 in 2010/11. The percentage of all treatment episodes attributable to amphetamines has fluctuated between 7.2% (the lowest recorded – 2009/10 and 12.3% (the highest recorded – 2006/07) (Figure 69).

Figure 69: Number of closed treatment episodes where amphetamine was the principal drug of concern



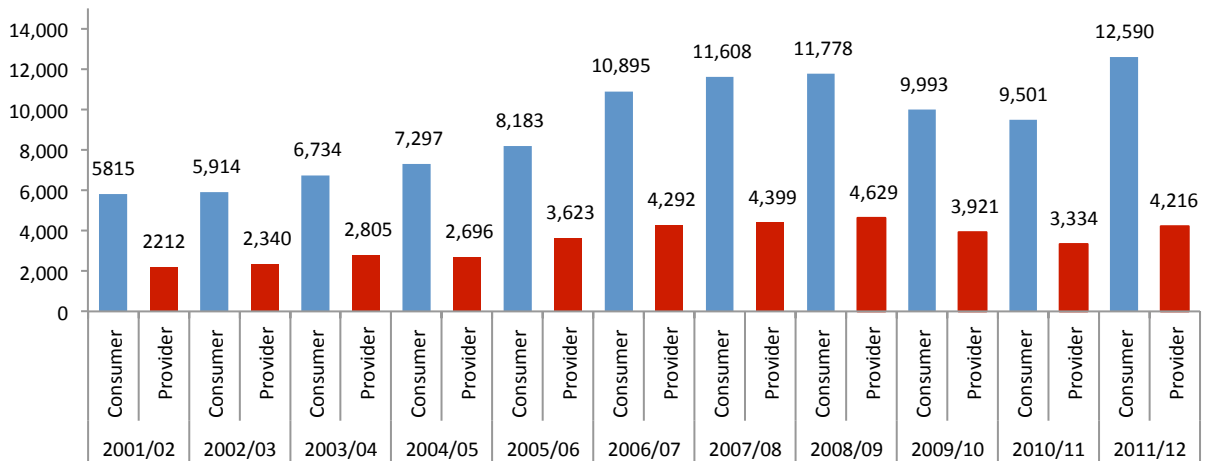
Source: Alcohol and Other Drug Treatment Services National Minimum Data Set, AIHW

7.4 Methamphetamine law enforcement indicators

Consumer and Provider arrests

To date, state and territory and Australian Federal Police data do not distinguish between amphetamine and ecstasy related arrests, rather they are grouped together. In 2011/12, consumer arrests for ATS (including amphetamine, methamphetamine, MDMA, MDA) peaked at 12,590, the highest number during the eleven-year period (Figure 70). Provider arrests peaked in 2008/09 at 4,629 and have since declined to 4,216 in 2011/12. In 2001/02, 10% of all consumer drug related arrests were for ATS (including ecstasy); this figure was 16% in 2011/12. ATS provider arrests have changed from 15% of all arrests in 2001/02 to 26% in 2011/12.

Figure 70: Amphetamine Type Stimulant consumer and provider arrests, 2001 to 2012

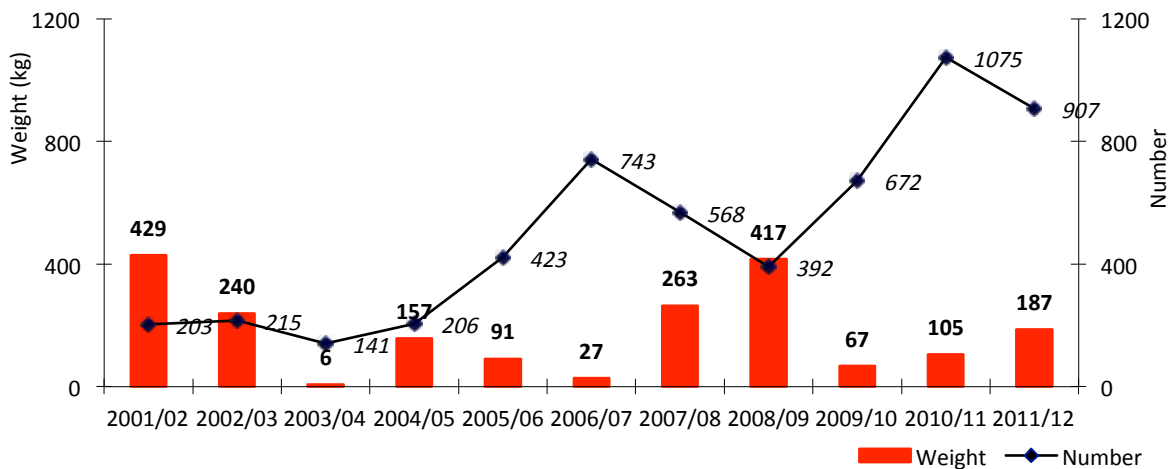


Source: Australian Illicit Drug Data Reports, ACC

Seizures

In 2011/12 the number of detections of amphetamine type stimulants was higher at 907 (compared to 392 in 2008/09). Conversely the weight has decreased from 417 kilograms in 2008/09 to 187 in 2011/12 (Figure 71).

Figure 71: Weight and number of amphetamine* detections made at the border by the Australian Customs and Border Protection Service, 2001 to 2012

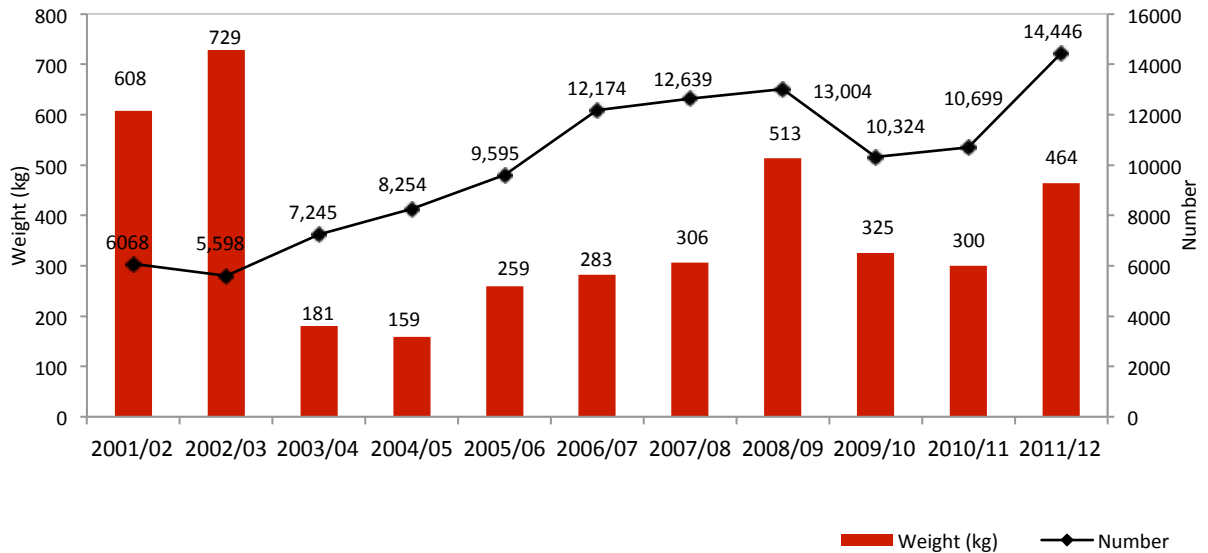


Source: Australian Customs and Border Protection Service

*Seizures include amphetamine, methamphetamine and crystal methamphetamine (ice) detections, and exclude MDMA

Figure 72 provides the number and weight of domestic seizures of amphetamine-type stimulants (which include MDMA). The figure below demonstrates a rising trend in both number and weight of seizures over time. Although MDMA seizures are not differentiated in these figures, it is likely that this trend reflect changes in the domestic methamphetamine market rather than the MDMA market, given that MDMA border seizures were low in number and weight between 2008/09 and 2010/11, and the fact that there is very little MDMA produced domestically within Australia (Australian Crime Commission, 2013).

Figure 72: Weight and number of domestic seizures of Amphetamine –type stimulants (including MDMA) made by State/Territory police, 2001 to 2012

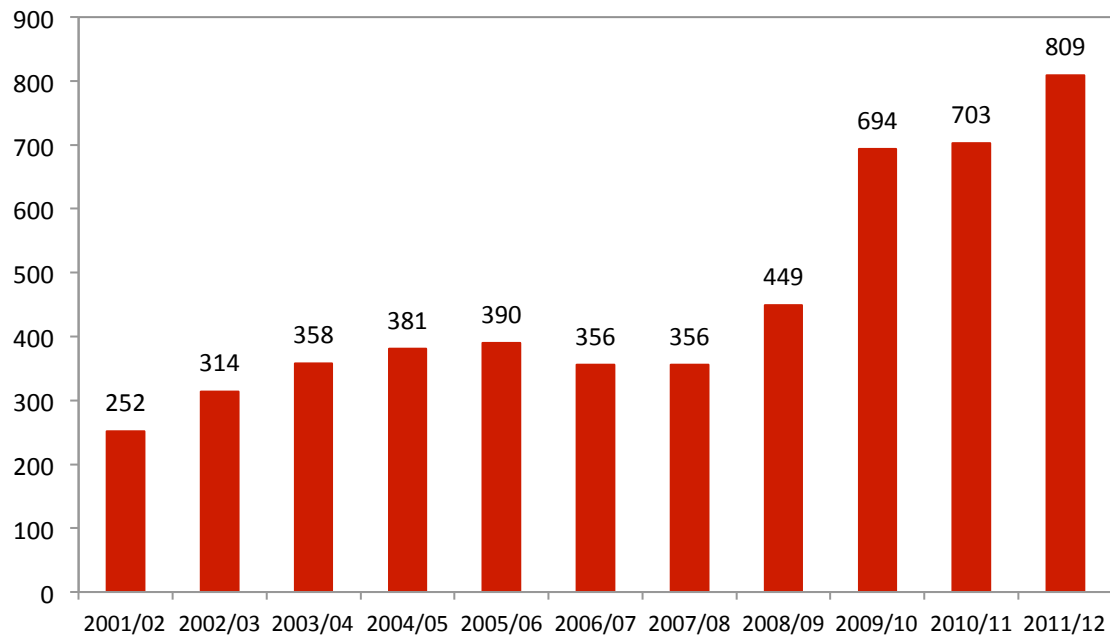


Source: Australian Illicit Drug Data Reports, ACC

Clandestine laboratories and precursor seizures

The number of clandestine laboratories detected nationally has increased markedly from 252 in 2001/02 to a peak of 809 in 2011/12 (Figure 73). Only 2 of the 709 laboratories detected in 2011/12 were producing MDMA, accounting for less than 1% (Australian Crime Commission, 2013)

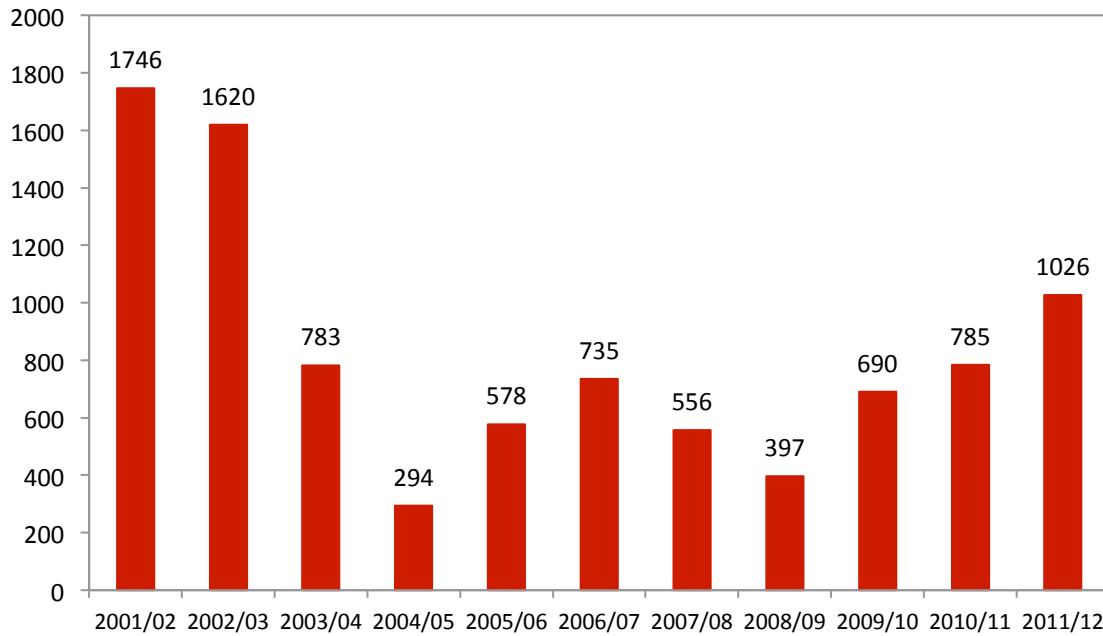
Figure 73: Total number of clandestine laboratory detections including MDMA, 2001 to 2012



Source: Australian Illicit Drug Data Reports, ACC

Data on the number of precursor seizures at the Australian border reveal that the total number of precursor seizures declined between 2001/02 and 2004/05 (Figure 74), with numbers increasing to 1,026 in 2011/12. The vast majority (93%) of these seizures were comprised of precursors used in the production of amphetamine type stimulants (Australian Customs and Border Protection Service, 2012).

Figure 74: Number of precursor seizures detected at the border by Australian Customs and Border Protection Service, 2001 to 2012



Source: Australian Illicit Drug Data Reports, ACC

7.5 Methamphetamine market indicators

Methamphetamine Price Purity and Availability reported by Regular Ecstasy users (EDRS)

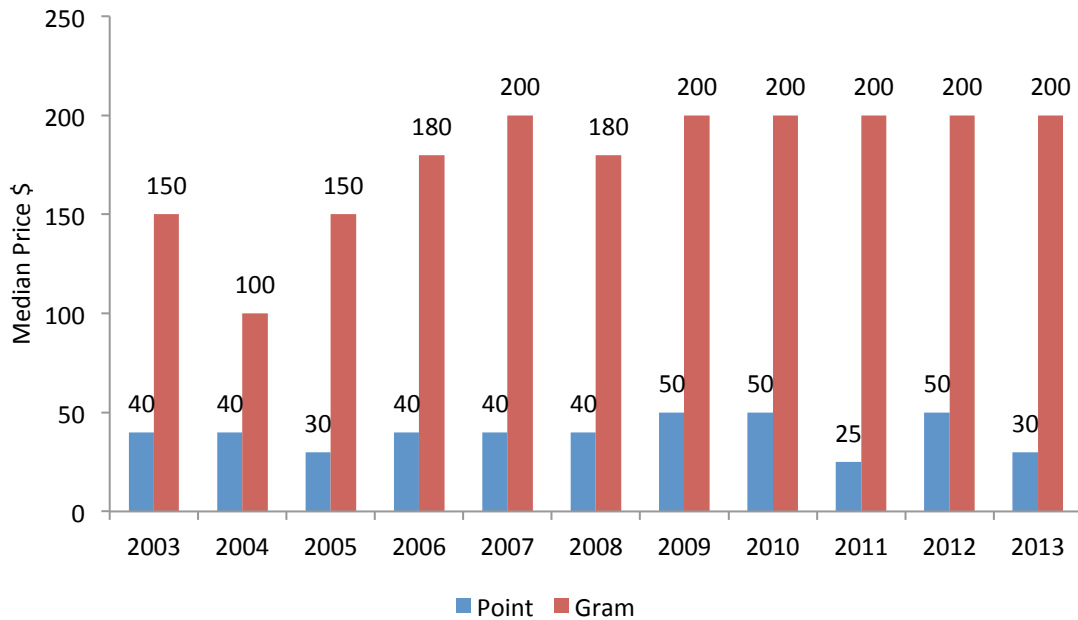
The following data represents median price purity and availability across Australia, which is likely to obscure any jurisdictional differences. For further information regarding jurisdictional trends on price purity and availability of methamphetamine from the EDRS findings please refer to the following weblink:

<http://ndarc.med.unsw.edu.au/resource/ecstasy-and-related-drugs-reporting-system-edrs-national-report-2012>

Methamphetamine Price – Powder

The price of a point of powder methamphetamine has remained relatively stable over the majority of the period, however, 2013 recorded a decrease from \$50 in 2012 to \$30. The price for a gram has changed from a low of \$100 in 2004 to \$200 in 2013, and this figure has remained stable since 2009 (Figure 75).

Figure 75: Median price of powder methamphetamine (speed), nationally 2003-2013 (EDRS)

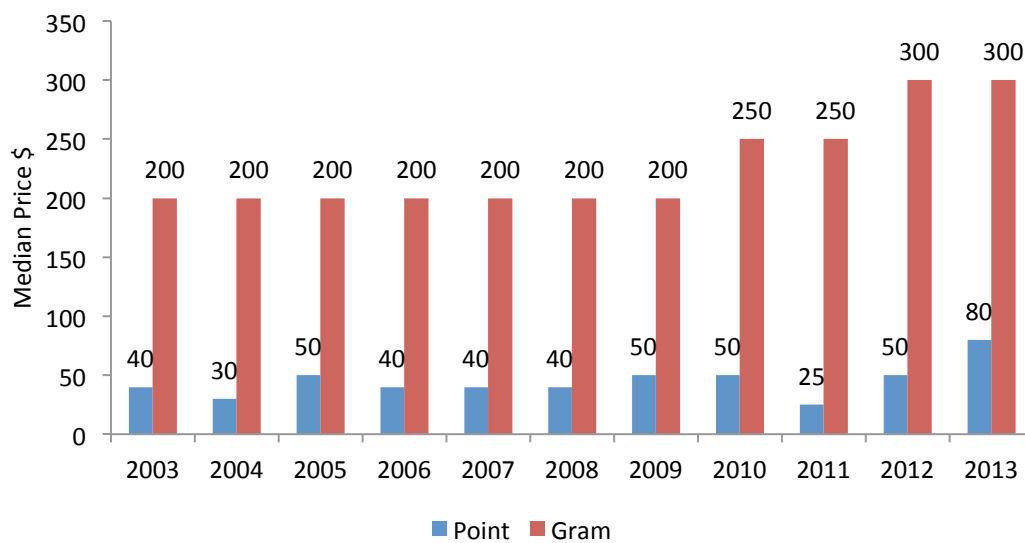


Source: Ecstasy and related Drugs Reporting System (EDRS) Sindicich and Burns (in press).

Methamphetamine Price – Base

The price for a point of base methamphetamine has increased since 2011, from \$25 to \$80 in 2013. The price of a gram is also higher at \$300 (Figure 76).

Figure 76: Median price of base methamphetamine, 2003-2013 (EDRS)

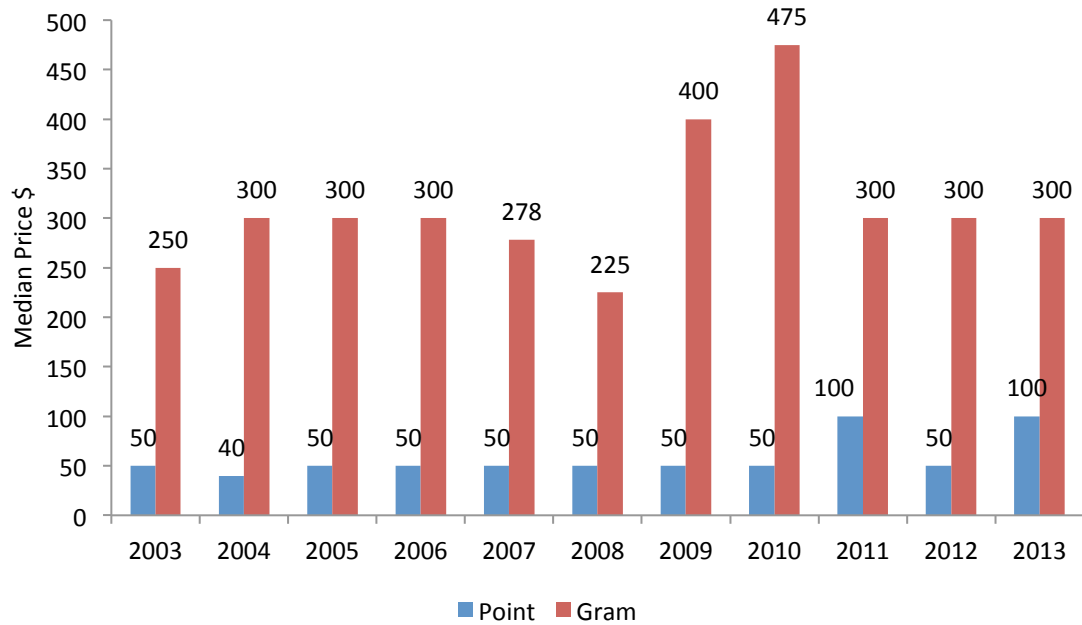


Source: Ecstasy and related Drugs Reporting System (EDRS) Sindicich and Burns (in press).

Methamphetamine Price – Crystal

The price of a point of crystal methamphetamine remained relatively stable prior to 2011 at \$50. In 2013 the price increased to \$100. The price of a gram has changed markedly from a low of \$225 in 2008 to \$475 in 2010, declining to \$300 in 2013. It should be noted that the median price may be due to the effects of jurisdictional differences, particularly in jurisdictions where crystal methamphetamine may not be as readily available (Figure 77).

Figure 77: Median price of crystal methamphetamine, 2003-2013 (EDRS)

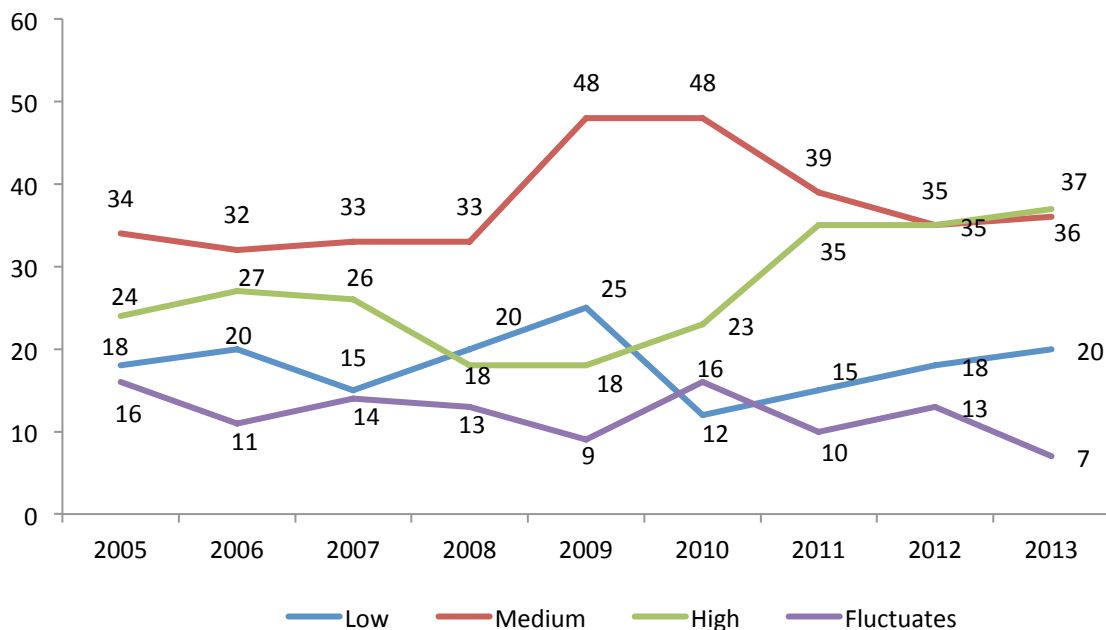


Source: Ecstasy and related Drugs Reporting System (EDRS) Sindicich and Burns (in press).

Methamphetamine purity – Powder

The majority of EDRS participants reported powder methamphetamine as being of 'medium' or 'high' purity (73%) in 2013, and proportions reporting 'high' purity have doubled between 2009 (18%) and 2013 (36%) (Figure 78).

Figure 78: Current purity of powder methamphetamine nationally, 2005-2013 (EDRS)

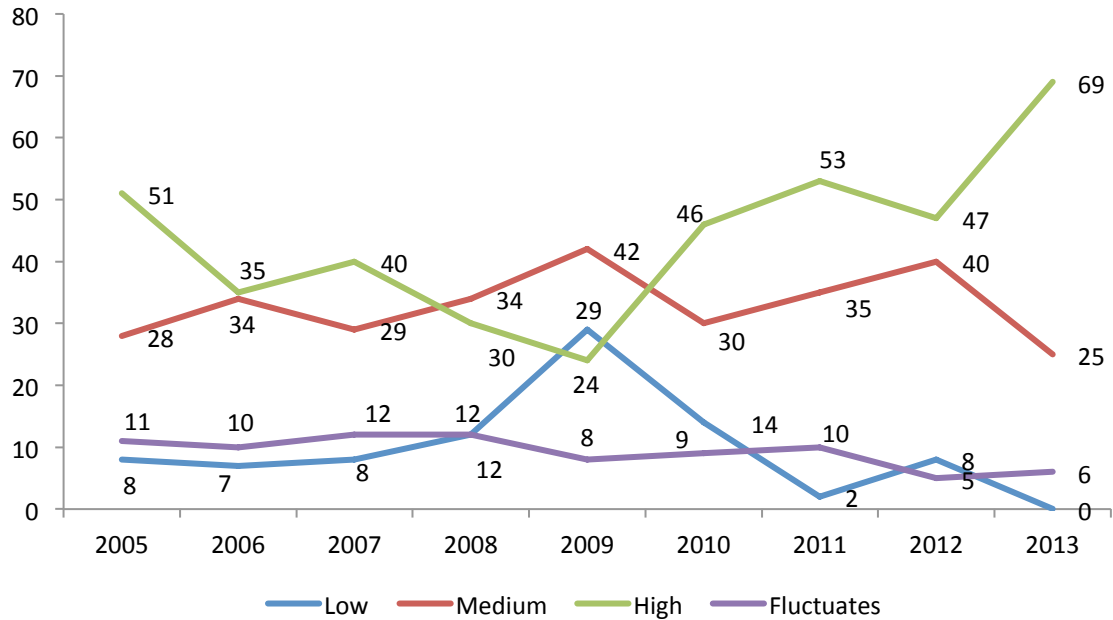


Source: Ecstasy and related Drugs Reporting System (EDRS), Sindicich and Burns (in press).

Methamphetamine purity – Base

There has been a marked increase in proportions of EDRS respondents reporting the purity of base methamphetamine as 'high', from 24% in 2009 to 69% in 2013. Conversely, proportions reporting 'low' purity have declined dramatically over the same time period from 29% to 0% (Figure 79).

Figure 79: Current purity of base methamphetamine nationally, 2005-2013, (EDRS)

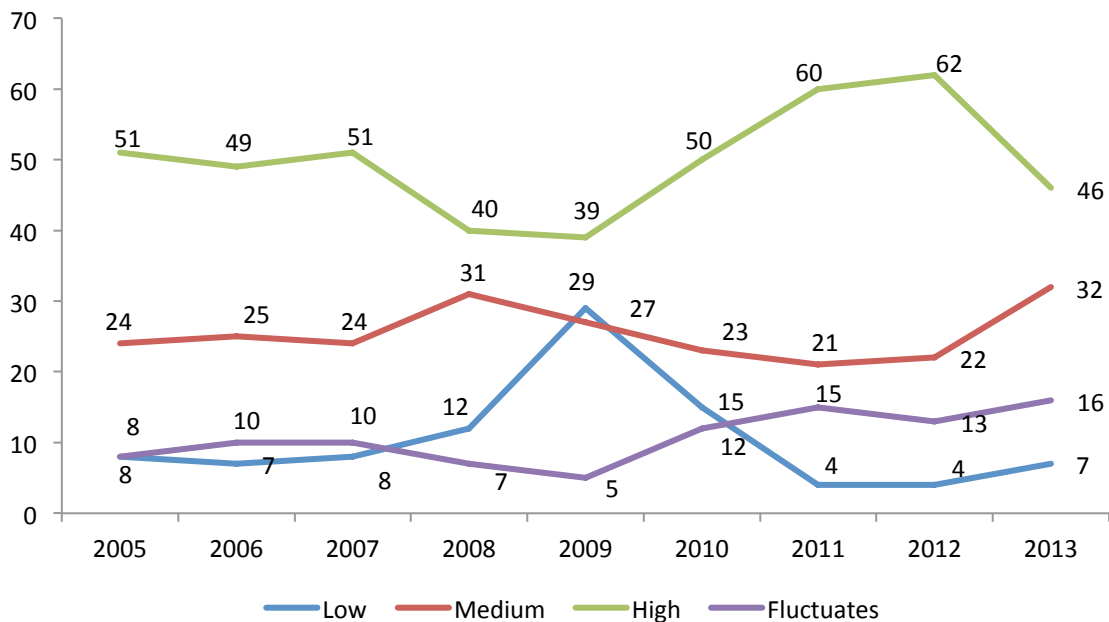


Source: Ecstasy and related Drugs Reporting System (EDRS), Sindicich and Burns (in press).

Methamphetamine purity – Crystal

Proportions reporting 'high' purity of crystal methamphetamine have also increased between 2009 and 2012 from 39% to 62%, however this proportion dropped markedly to 46% in 2013 (Figure 80).

Figure 80: Current purity of crystal methamphetamine nationally, 2005-2013, (EDRS)

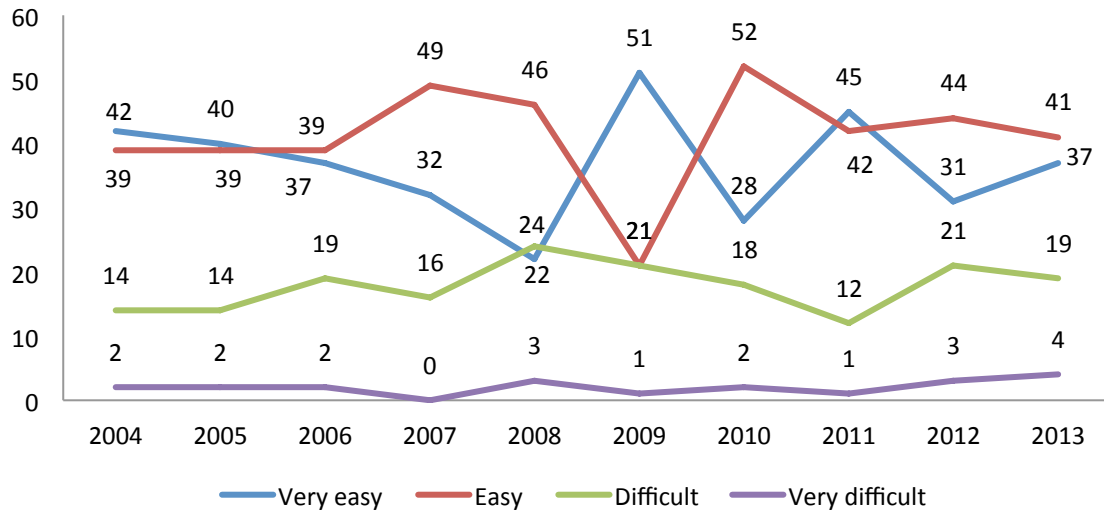


Source: Ecstasy and related Drugs Reporting System (EDRS), Sindicich and Burns (in press).

Methamphetamine availability – Powder

The availability of powder methamphetamine has fluctuated since 2007. Approximately three quarters (78%) of IDRS respondents reported it as 'easy' to 'very easy' to obtain in 2013 (Figure 81).

Figure 81: Current availability of powder methamphetamine nationally, 2004-2013, (EDRS)

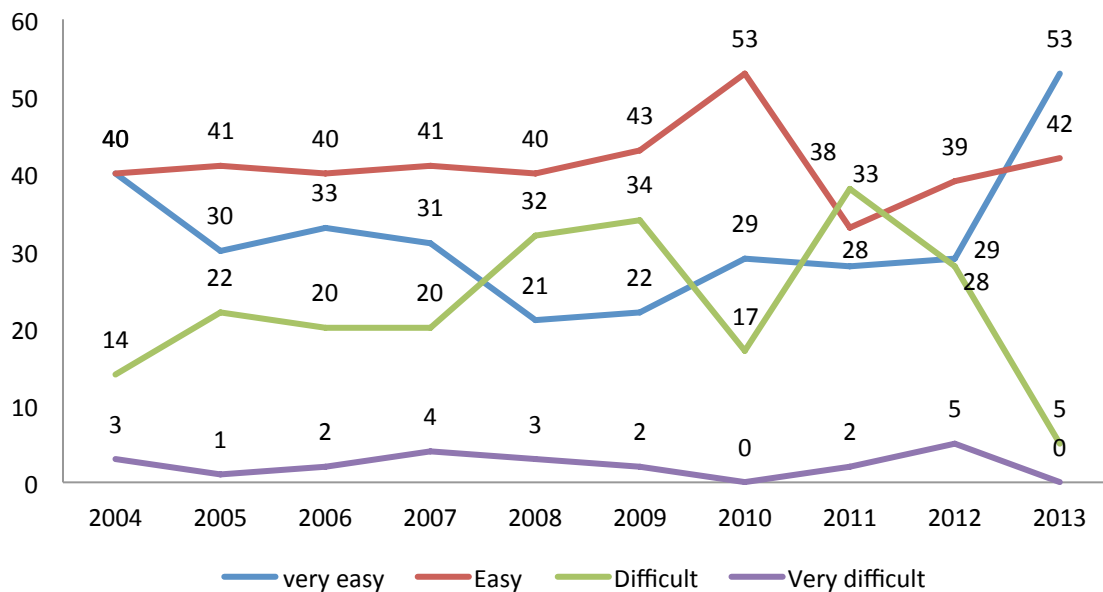


Source: Ecstasy and related Drugs Reporting System (EDRS), Sindich and Burns (in press).

Methamphetamine availability – Base

There was a marked increase in proportions of EDRS respondents reporting base methamphetamine as 'very easy' to obtain in 2013 from 29% in 2012 to 53%. Proportions reporting base as 'difficult' to obtain have decreased from 28% in 2012 to 5% in 2013 (Figure 82).

Figure 82: Current availability of base methamphetamine nationally, 2004-2013, (EDRS)

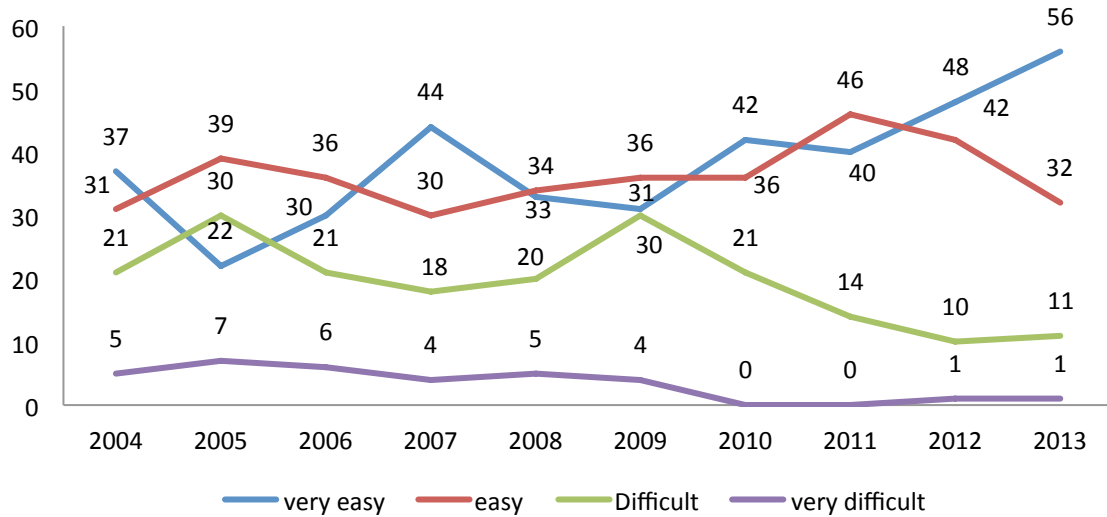


Source: Ecstasy and related Drugs Reporting System (EDRS), Sindich and Burns (in press).

Methamphetamine availability – Crystal

An increasing proportion of EDRS respondents in 2013 reported crystal methamphetamine as 'very easy' to obtain (56%) (Figure 83).

Figure 83: Current availability of crystal methamphetamine nationally, 2004-2013, (EDRS)



Source: Ecstasy and related Drugs Reporting System (EDRS), Sindich and Burns (in press).

Methamphetamine Price Purity and Availability reported among people who inject drugs (PWID) as surveyed by the Illicit Drug Reporting System (IDRS)

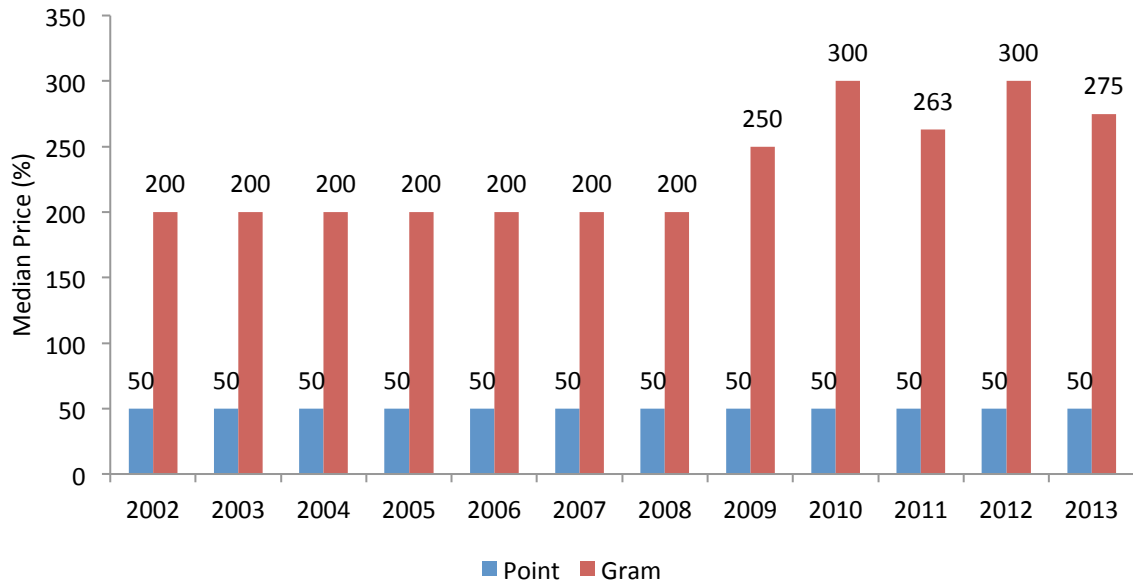
The following data represents median price purity and availability of methamphetamine across Australia, which is likely to obscure any jurisdictional differences. For further information regarding jurisdictional trends on price purity and availability of methamphetamine from the IDRS findings please refer to the following weblink:

<http://ndarc.med.unsw.edu.au/resource/illicit-drug-reporting-system-idrs-national-report-2012>

Methamphetamine Price – Powder

The median price for a point of methamphetamine powder remains unchanged at \$50, while the price for a gram has fluctuated between \$200 and \$300 (Figure 84).

Figure 84: Median price of powder methamphetamine (speed), nationally 2003-2013, (IDRS)

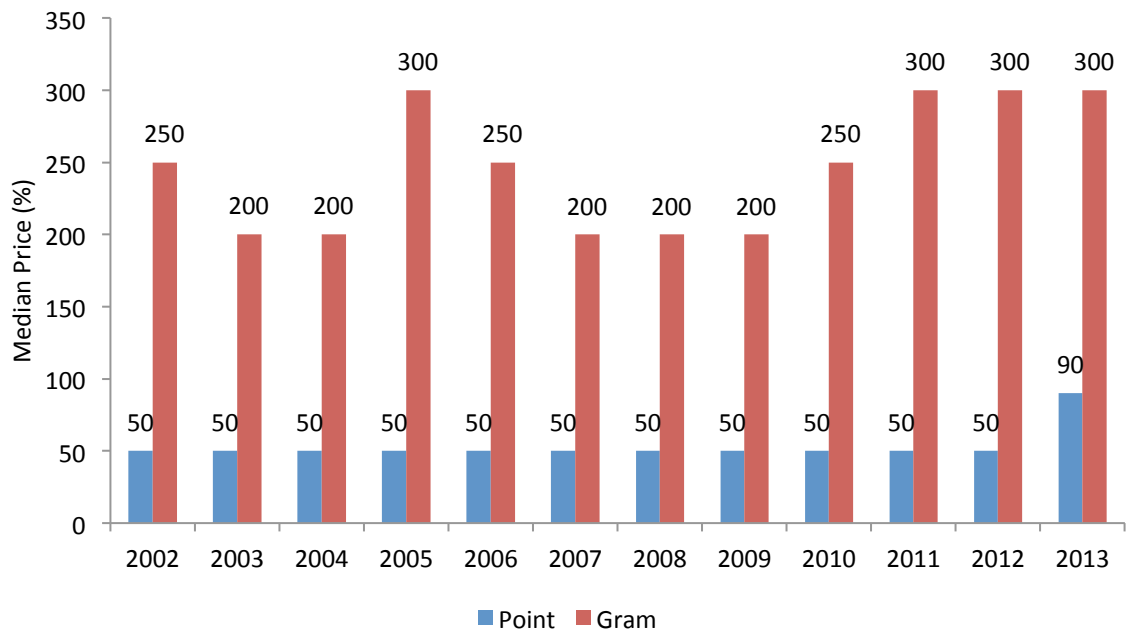


Source: Illicit Drug Reporting System (IDRS), Stafford and Burns (in press).

Methamphetamine Price – Base

The price for a point of base increased in 2013 from \$50 to \$90. The price for a gram of base has fluctuated between \$200 and \$300 (Figure 85). These fluctuations may in part reflect jurisdictional variation.

Figure 85: Median price of base methamphetamine, nationally 2003-2013, (IDRS)

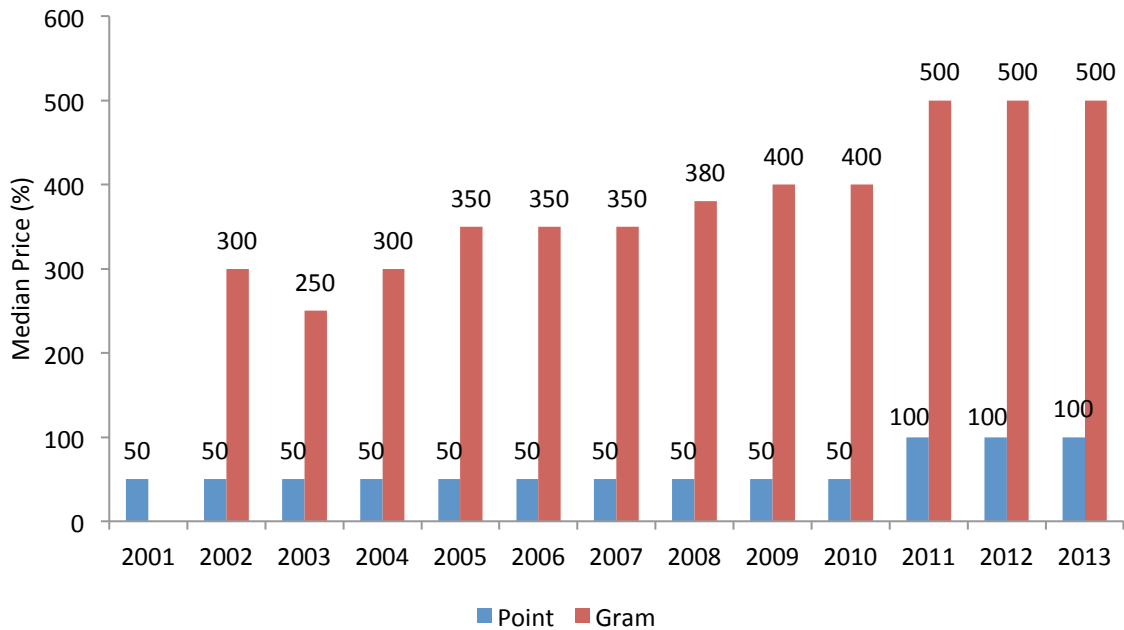


Source: Illicit Drug Reporting System (IDRS), Stafford and Burns (in press).

Methamphetamine Price – Crystal

In 2013, the price for a point of crystal methamphetamine remained higher at \$100. The price for a gram has steadily increased from \$250 in 2003 to \$500 in 2013 (Figure 86). Again, these changes most likely reflect jurisdictional variations, with prices likely to be high in areas where crystal methamphetamine is not as readily available.

Figure 86: Median price of crystal methamphetamine, nationally 2003-2013, (IDRS)

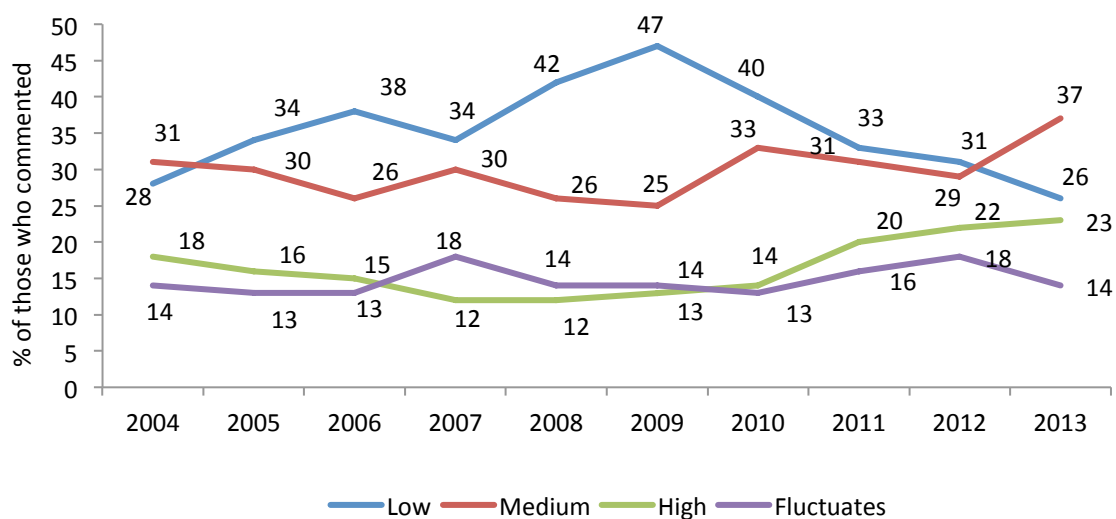


Source: Illicit Drug Reporting System (IDRS), Stafford and Burns (in press).

Methamphetamine purity – Powder

Proportions of IDRS participants reporting powder methamphetamine as being of 'medium' and 'high' purity have increased over the past few years (37% and 23% in 2013 respectively). Conversely, there has been a steady decline in proportions reporting purity as 'low' since 2009 (from 47% to 26% in 2013).

Figure 87: Current purity of powder methamphetamine, nationally, 2004-2013, (IDRS)

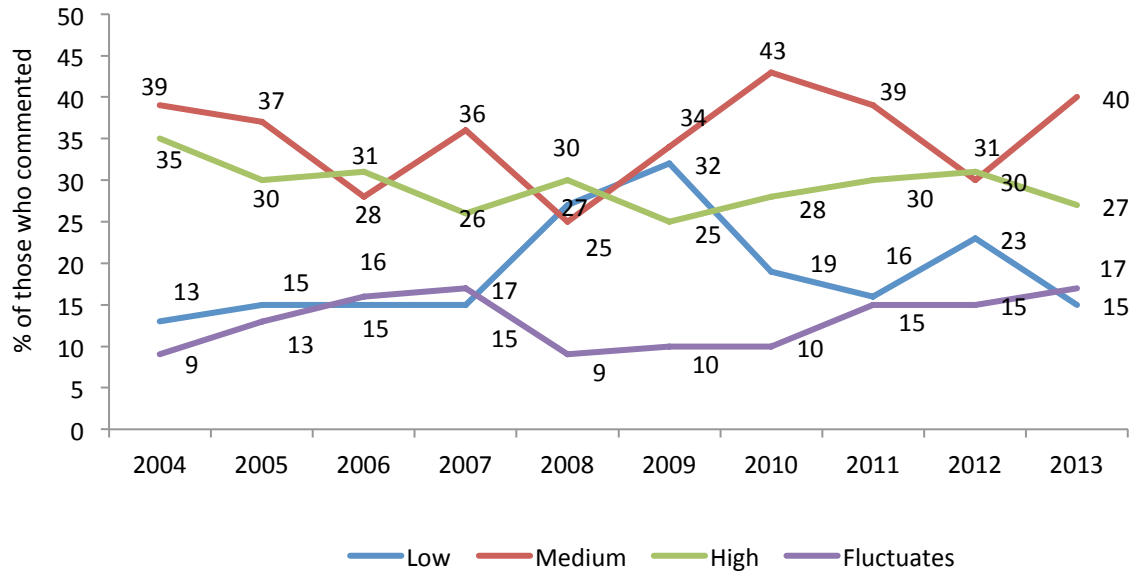


Source: Illicit Drug Reporting System (IDRS), Stafford and Burns (in press).

Methamphetamine purity – Base

According to IDRS participants, the purity of base over time has alternated between 'medium' and 'high', with higher proportions (40%) reporting 'medium' purity in 2013 (Figure 88).

Figure 88: Current purity of base methamphetamine nationally, 2004-2013, (IDRS)

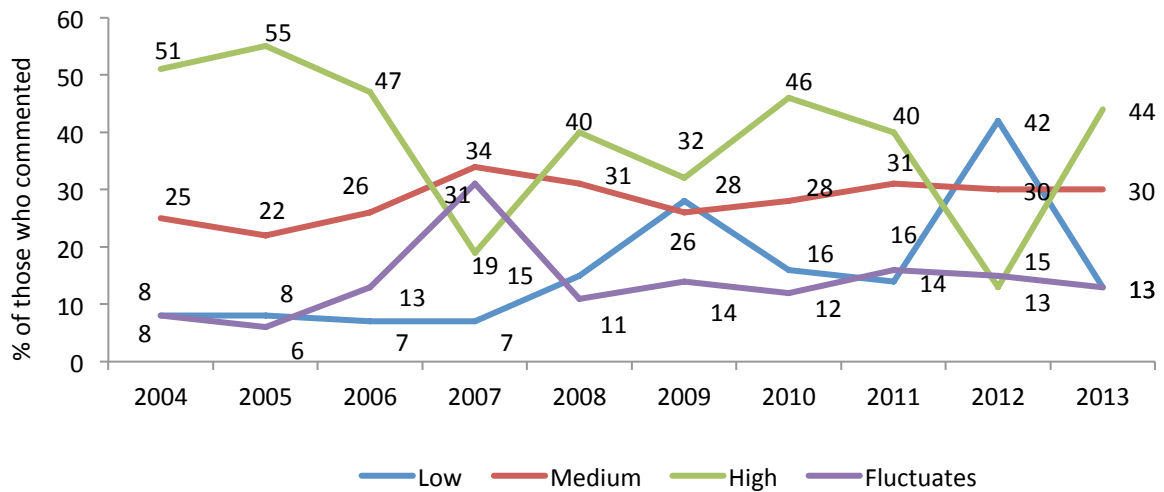


Source: Illicit Drug Reporting System (IDRS), Stafford and Burns (in press).

Methamphetamine purity – Crystal

Proportions of IDRS participants reporting crystal methamphetamine as 'medium' have remained relatively stable at approximately one-third (30%) of the sample since 2007. In contrast, proportions reporting purity as 'high' and 'low' have fluctuated since 2010. Those reporting 'high' purity increased markedly between 2012 and 2013 (from 15% to 44%) (Figure 89).

Figure 89: Current purity of crystal methamphetamine nationally, 2004-2013, (IDRS)

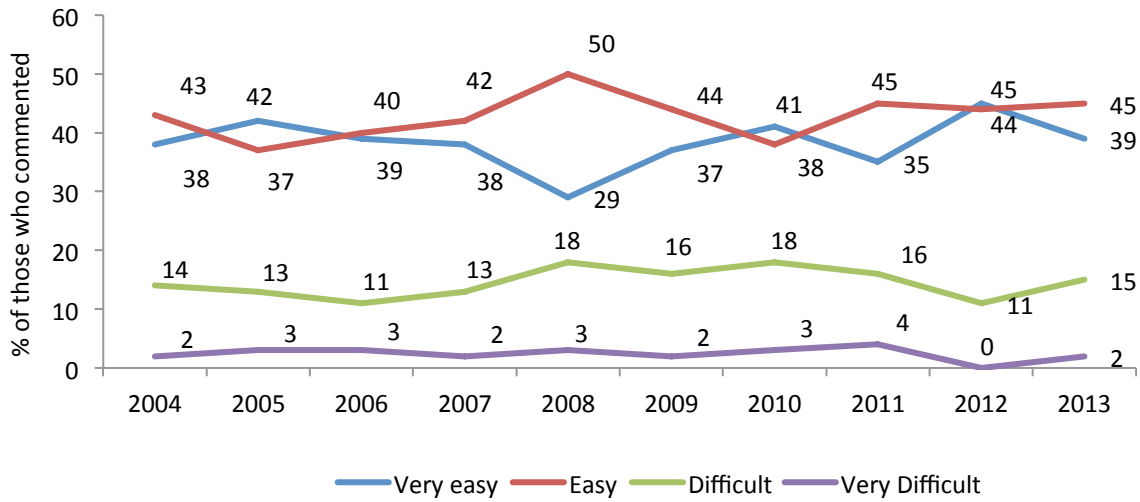


Source: Illicit Drug Reporting System (IDRS), Stafford and Burns (in press).

Methamphetamine availability – Powder

The majority of IDRS respondents report the availability of powder methamphetamine availability as either 'very easy' or 'easy' (84% in 2013) (Figure 90).

Figure 90: Current availability of powder methamphetamine nationally, 2004-2013, (IDRS)

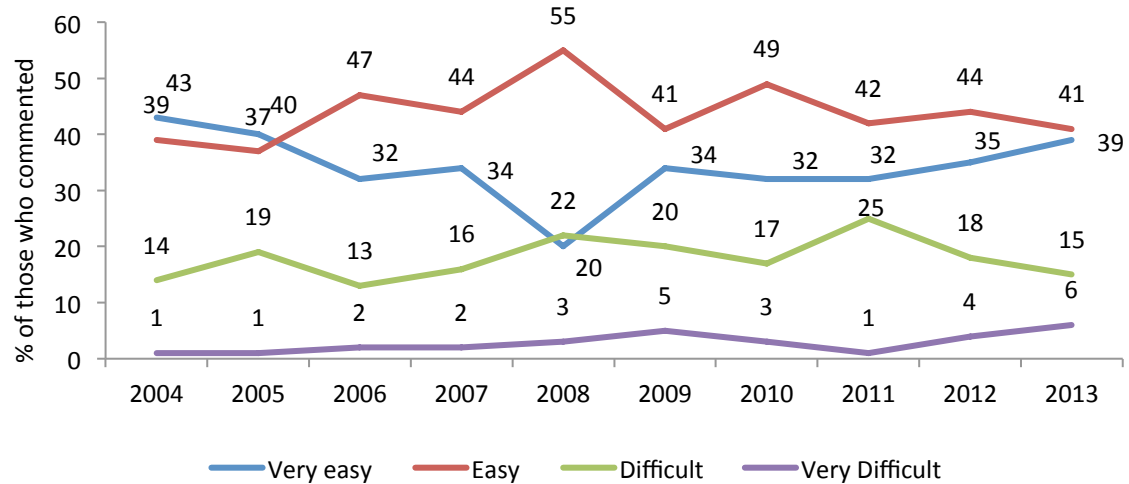


Source: Illicit Drug Reporting System (IDRS), Stafford and Burns (in press).

Methamphetamine availability – Base

The currently availability of base methamphetamine over time has mainly been reported as either 'very easy' or 'easy' to obtain (80% in 2013) (Figure 91).

Figure 91: Current availability of base methamphetamine nationally, 2004-2013, (IDRS)

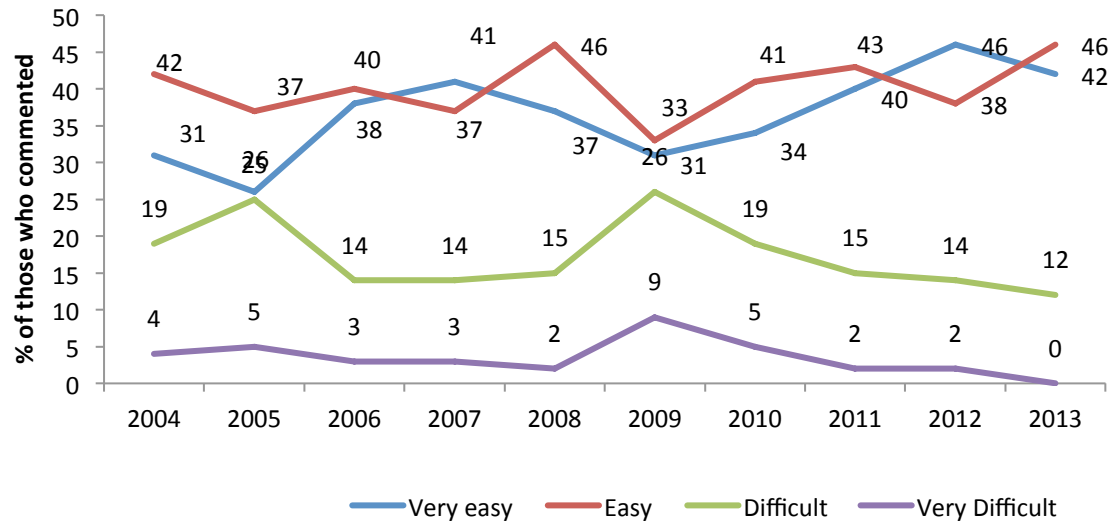


Source: Illicit Drug Reporting System (IDRS), Stafford and Burns (in press).

Methamphetamine availability – Crystal

Proportions of IDRS respondents reporting the availability of crystal methamphetamine as either 'very easy' or 'easy' to obtain has increased since 2009 from 61% to 88% in 2013 (Figure 92). There is a corresponding decline in proportions reporting it as difficult to obtain (from 26% in 2009 to 12% in 2013).

Figure 92: Current availability of crystal methamphetamine nationally, 2004-2013, (IDRS)



Source: Illicit Drug Reporting System (IDRS), Stafford and Burns (in press).

7.6 Methamphetamine: summary

Prevalence

General population

- Prevalence of past year methamphetamine use remains stable in Australia at 2.1% in 2010.
- Between 2001 and 2010, there has been a significant decline in past year methamphetamine use among younger Australians aged 14 to 19 (from 6.2% to 1.6%) and 20 to 29 (from 11.2% to 5.9%) years.
- Weekly methamphetamine use has remained stable between 2001 and 2010 (9.3% reported weekly or more use in 2010), with the majority of Australians across all age groups reporting use every few months or less frequently.
- Powder methamphetamine continues to be the form most used in the general population.

Sentinel groups

- There has been a significant decline since 2001 in past 6 month methamphetamine use among IDRS respondents.
- There has also been a significant decline since 2003 in past 6 month methamphetamine use among EDRS respondents.
- The prevalence of weekly or more methamphetamine among current users has also declined significantly across both IDRS and EDRS respondents.

Treatment seeking

- During the period 2001/02 to 2006/07 there was a steady increase in treatment episodes for methamphetamine (from 12,211 to 17,292). Since this time treatment episodes have declined to 12,563 in 2011/12). This is consistent with the decline in methamphetamine use seen across sentinel groups and among younger Australians in the general population.

- Hospital presentations for methamphetamine related problems are second highest after opioids. Australians aged 20 to 39 years old account for the largest proportion of these presentations. Presentations among younger Australians (aged 10 to 19) have remained relatively low and stable.

Deaths

- Methamphetamine-related deaths remain lower than those for opioids. An increase in deaths was recorded between 2001 and 2005, while numbers have stabilised at a higher rate over the past few years. This trend may, in part, be driven by opioid-related deaths, as the majority of methamphetamine deaths are due to multiple drug (often heroin) toxicity.

Law enforcement

- Numbers of amphetamine-type stimulant seizures detected at the border were higher at 907 in 2011/12 compared to 203 in 2001/02. The weight of seizures has fluctuated over time.
- Arrests for amphetamine-type stimulants have steadily increased since 1999/00, with the 2011/12 figure of 16,806 being the highest during the period.
- The number of clandestine laboratories detected in 2011/12 (809) represents the highest on record. This figure has steadily increased since 2001/02.

Market indicators

- There were mixed trends for the median price of a gram of powder, base and crystal methamphetamine, with EDRS respondents reporting stable prices for powder and crystal methamphetamine, while the price for a gram of base methamphetamine has increased over the past few years. Among IDRS respondents, a decline was reported in the price for a gram of powder methamphetamine, while prices for a gram of base and crystal methamphetamine remained stable at a higher level.
- Trends in median prices for points of each form were also mixed. According to EDRS respondents, the price for a point of powder methamphetamine decreased, while prices for a point of base and crystal methamphetamine increased. Among IDRS respondents, the price for a point of powder and crystal methamphetamine remained unchanged, while the price for a point of base methamphetamine increased.
- Purity of base and crystal methamphetamine is reported as high among EDRS respondents, while powder methamphetamine purity is reported as medium to high. An increasing proportion of EDRS respondents reported base methamphetamine as being of high purity in 2013. IDRS respondents reported powder and base methamphetamine purity as medium, and crystal methamphetamine as high.
- Among EDRS respondents, there were marked increases in proportions reporting both base and crystal methamphetamine as 'very easy' to obtain, while among IDRS respondents there wasn't much change in availability ('easy' to 'very easy') across all three forms of methamphetamine.
- Mixed trends seen in these market indicators are likely to reflect a few things, firstly jurisdictional differences with respect to availability and therefore prices for methamphetamine. Second, there are likely to be differences in drug markets across EDRS respondents and IDRS respondents, including access, affordability and patterns of use.

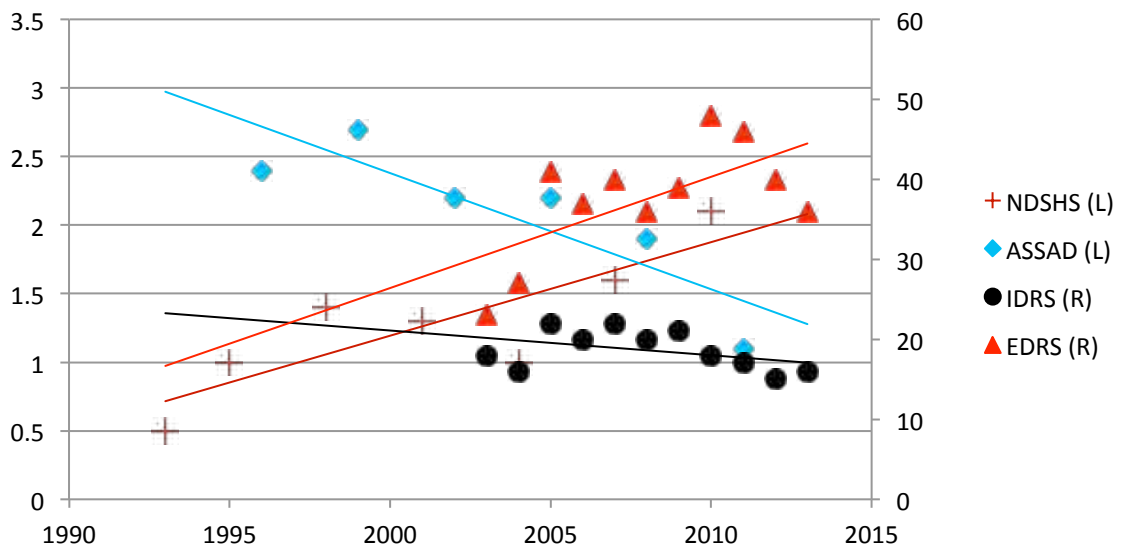
8. COCAINE

There are unique jurisdictional patterns of cocaine use in Australia, with previous research into cocaine markets showing that the majority of cocaine use occurs within Victoria and New South Wales (Shearer et al., 2005). Analysis of routine data collections such as hospital admissions also show that the majority (75%) of cocaine-related presentations are documented in New South Wales (A. Roxburgh, and Burns, L., 2013b).

8.1 Patterns of cocaine use

It is difficult to obtain an accurate estimate of the prevalence of cocaine use in the general population due to the low levels consumed. In the NDSHS data since the early 1990's show that past 12 month use of cocaine has remained low (in 2010 to 2.1% of Australians reported past 12 month cocaine use). Among school students recent use has remained below 3%, and has declined since 1996. Among regular ecstasy users recruited for the EDRS, past 6 month use increased from 23% in 2003 to a peak of 48% in 2010. This figure declined to 30% in 2013. The pattern of cocaine use among IDRS respondents is variable (Figure 93).

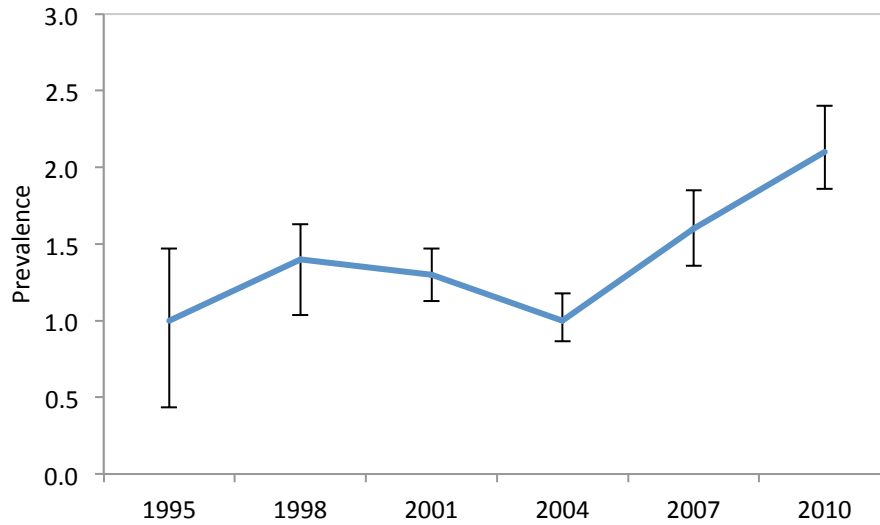
Figure 93: Cocaine use across multiple surveys



Source: National Drug Strategy Household Surveys, AIHW. Australian secondary school students' use of over-the-counter and illicit substances, DoHA. Findings from the Ecstasy and Related Drugs Reporting System, NDARC. Findings from the Illicit Drug Reporting System, NDARC.

Examining cocaine use in the general population survey (NDSHS) the rise in recent cocaine use from 2004 (1%) to 2007 (1.6%) is statistically significant (Figure 94). Analysis reported by the Australian Institute of Health and Welfare (Australian Institute of Health and Welfare, 2011) shows that the increase to 2.1% in 2010 is also significant (Figure 94). It should be noted however that prevalence remains low.

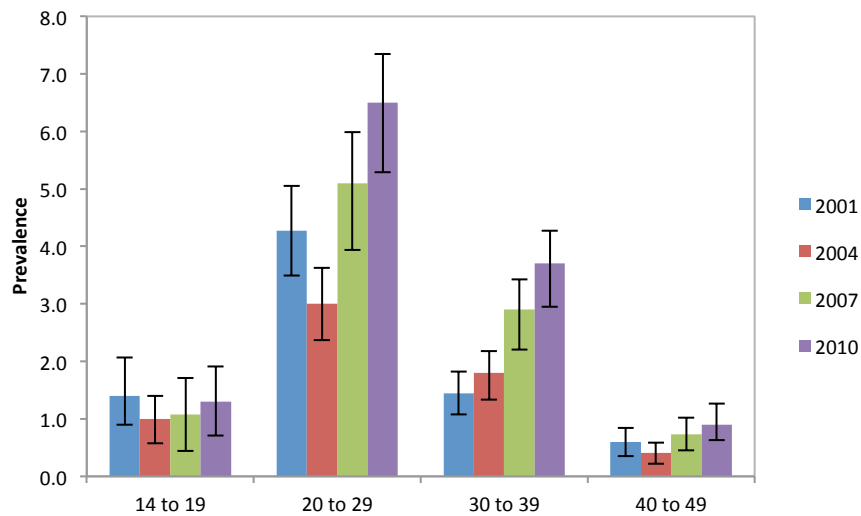
Figure 94: Proportion of general population reporting past year cocaine use



Source: National Drug Strategy Household Surveys, AIHW

Looking at trends by age group, past year cocaine use is most prevalent among the 20 to 29 year age group. The increase recorded overall in 2010 is most likely being driven by this age group (Figure 95). There have been significant increases in past year cocaine use between 2001 and 2010 among the 20 to 29 year olds and the 30 to 39 year olds.

Figure 95: Proportion of the general population reporting past year cocaine use by age group



Source: National Drug Strategy Household Surveys, AIHW

Table 9 shows cocaine use by gender, with a larger proportion of males reporting past year use than females.

Table 9: Past year cocaine use by gender

	2001	2004	2007	2010
Males	1.6	1.3	2.2	2.7
Females	1	0.8	1	1.5

[Graph](#)

Turning to sentinel samples (IDRS and EDRS participants), we examine a linear trend for cocaine use in the past 6 months⁵ (Figure 96). The IDRS linear trend indicates cocaine use is significantly decreasing at a constant rate of approximately 1.7% per year (LHS). In 2013, 16% of IDRS respondents used cocaine in the preceding 6 months. The pattern of use among EDRS participants (on the RHS) is different from that of the IDRS participants: cocaine use has significantly increased amongst the EDRS population.

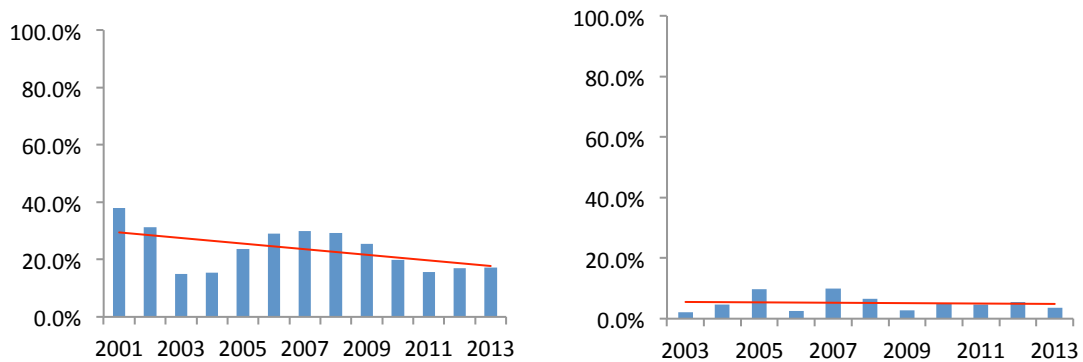
Figure 96: Linear trend in cocaine use (last 6 months) amongst IDRS (LHS) and EDRS (RHS) respondents



Source: Illicit Drug Reporting System
Ecstasy and related Drugs Reporting System

Examining weekly cocaine use among IDRS respondents in the past 6 months, the linear trend shows a significant decline over time. The prevalence of weekly use amongst EDRS respondents, this has remained low and stable over time (Figure 97).

Figure 97: Linear trend in weekly cocaine use amongst IDRS (LHS) and EDRS (RHS) respondents reporting recent cocaine use



Source: Illicit Drug Reporting System
Ecstasy and related Drugs Reporting System

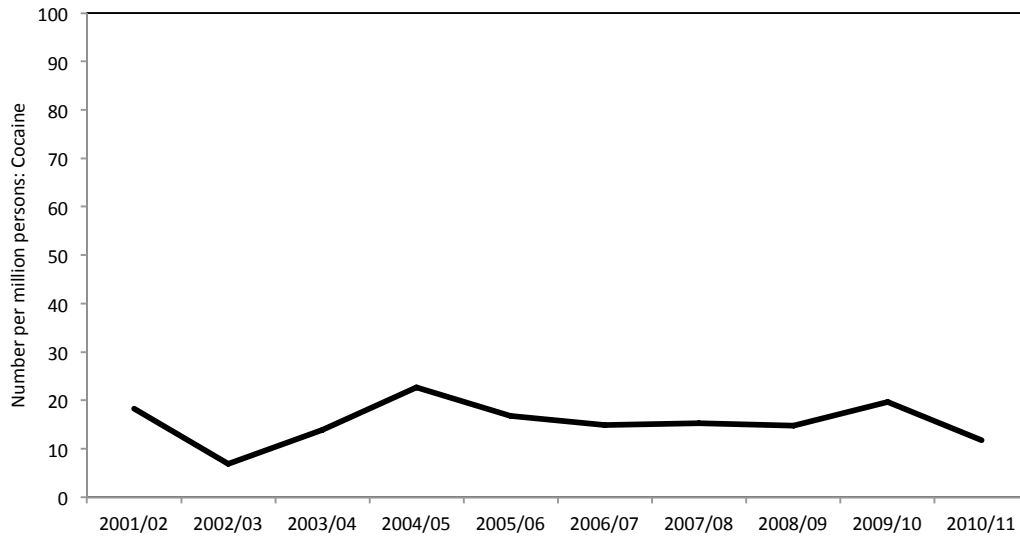
5 While the trend is not strictly linear for these data, for the purposes of simplicity and uniformity across other drug types we have conducted linear trend analyses.

8.2 Patterns of harms associated with cocaine use

Hospital separations

Principal cocaine related separations are higher in number over the last 10 years, with peaks in 2001/02, 2004/05 and 2009/10. In 2010/11, separations for cocaine-related problems in NSW accounted for the majority (75%) of all cocaine separations in Australia, and three quarters (75%) of NSW cocaine-related separations were for dependence (A. Roxburgh, and Burns, L., 2013b).⁶ Cocaine related separations are low when compared to opioids, amphetamines and cannabis and due to the relatively small number conclusions should be drawn with caution.

Figure 98: Rate of cocaine-related hospital separations among persons aged 15-54, 2001 to 2011



Source: National Hospital Morbidity Database, AIHW; Roxburgh and Burns 2013

Deaths

Cocaine-related deaths remain relatively low in Australia. In 2009 (the most recent year for which final data is available) there were only 5 deaths where cocaine was determined to be the underlying cause and a total of 23 deaths where cocaine was mentioned as either the underlying or contributory cause.

Table 10: Number of cocaine-related deaths among those aged 15-54

	Cocaine underlying cause of death	Cocaine mentions
2001	2	28
2002	1	15
2003	5	15
2004	5	20
2005	10	15
2006	6	18
2007	7	15
2008	2	16
2009	5	23
2010E*	3	15
2011E*	13	14

*These figures are estimates only as final data for these years are not yet available. They should be interpreted with caution.
Source: Roxburgh and Burns, in press

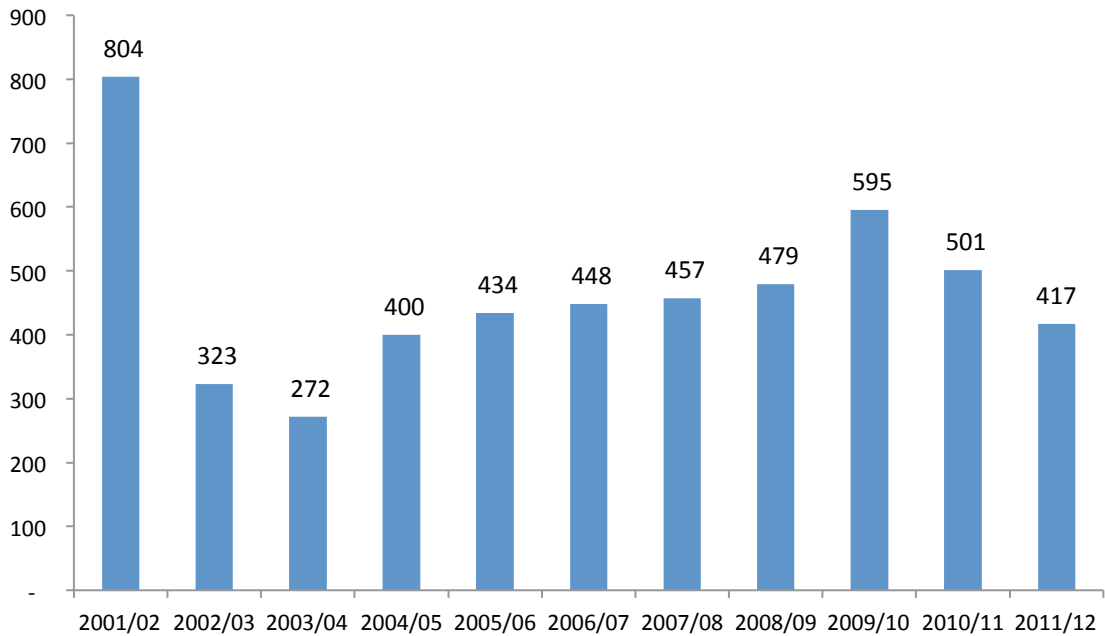


⁶ Due to small numbers age trends in cocaine-related separations have not been presented.

8.3 Patterns of cocaine treatment seeking

In 2011/12 cocaine was nominated as the principal drug of concern in 417 closed treatment episodes, representing a decline from 2010/11. Cocaine related treatment episodes only represented 0.3% of all treatment episodes in 2011/12 (Figure 99).

Figure 99: Number of closed treatment episodes where cocaine was the principal drug of concern



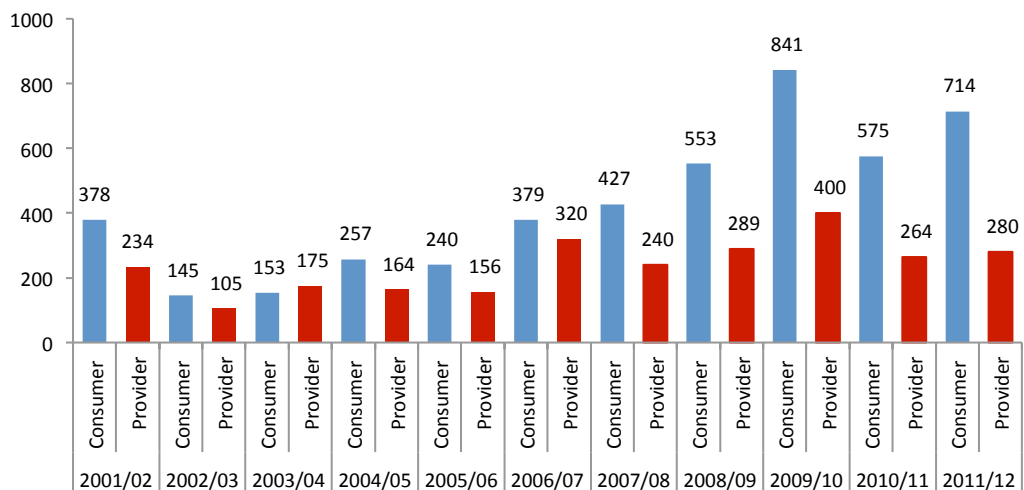
Source: Alcohol and Other Drug Treatment Services National Minimum Data Set, AIHW

8.4 Cocaine law enforcement indicators

Consumer and Provider arrests

Consumer and provider cocaine arrests remain negligible relative to other illicit drugs, however fluctuating increases can be observed since 2001/02 (Figure 100). Numbers of cocaine consumer arrests have increased from 378 in 2001/02 to 714 in 2011/12. Provider arrests have shown a similar pattern, and were highest in 2009/10 at 400. They have since declined to 280 in 2011/12. Relative to other drugs, consumer cocaine arrests account for less than 1% of all drug arrests, while provider arrests account for just over 1% (Australian Crime Commission, 2013).

Figure 100: Cocaine consumer and provider arrests, 2001 to 2012

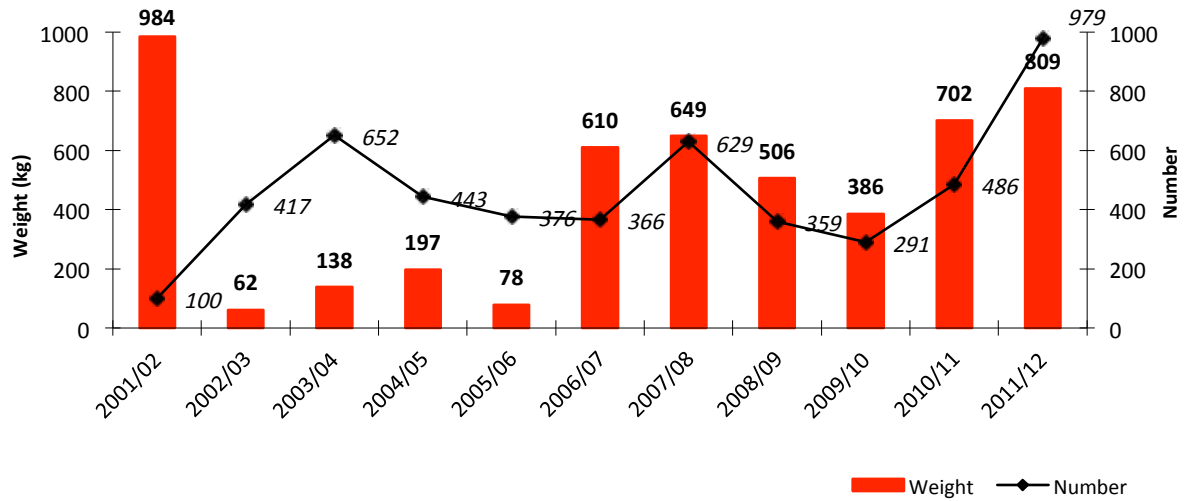


Source: Australian Illicit Drug Data Reports, ACC

Seizures

The past few years have seen steady increases in both the number and weight of cocaine seizures detected at the border, from 291 seizures weighing 386 kilograms in 2009/10 to 979 seizures weighing 809 kilograms in 2011/12 (Figure 101). Two large cocaine seizures were detected in 2011/12, one arriving in sea cargo weighing 271kg and one arriving by yacht from Vanuata weighing 300kg (Australian Customs and Border Protection Service, 2012).

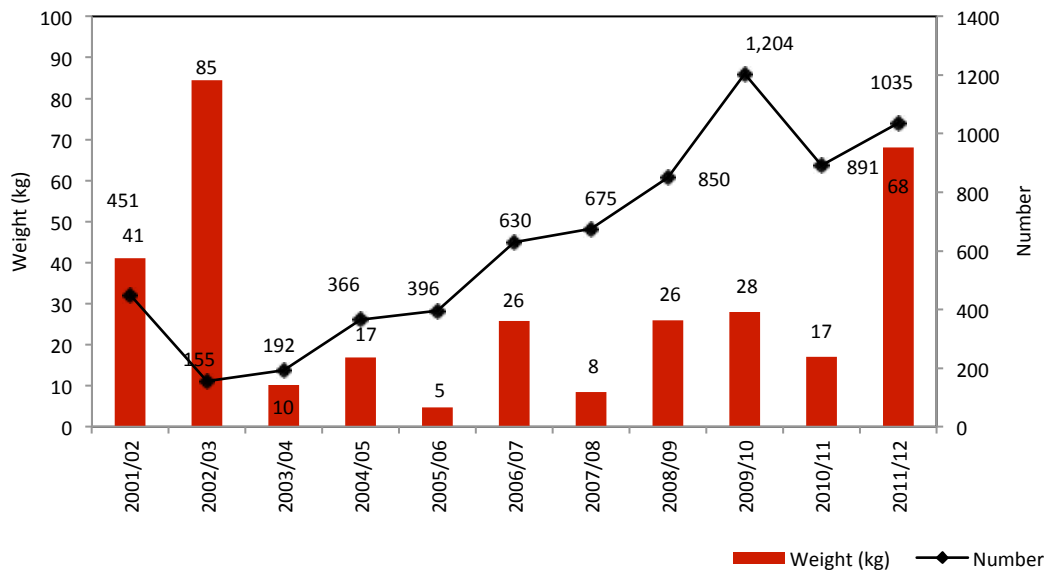
Figure 101: Number and weight of cocaine detections made at the border by the Australian Customs and Border Protection Service, 1995/96 to 2011/12



Source: Australian Customs and Border Protection Service

The number of cocaine seizures recorded by domestic and territory police in 2011/12 (1,035) represents one of the highest on record (Figure 102), and the weight of these seizures (68kg) was also relatively high (Australian Crime Commission, 2013). There have been steady increases in the number of domestic cocaine seizures since 2003/04.

Figure 102: Weight and number of total seizures of cocaine made by State/Territory police, 2002 to 2012



Source: Australian Illicit Drug Data Reports, ACC

8.5 Cocaine market indicators

Cocaine Price Purity and Availability reported by Regular Ecstasy users (EDRS)

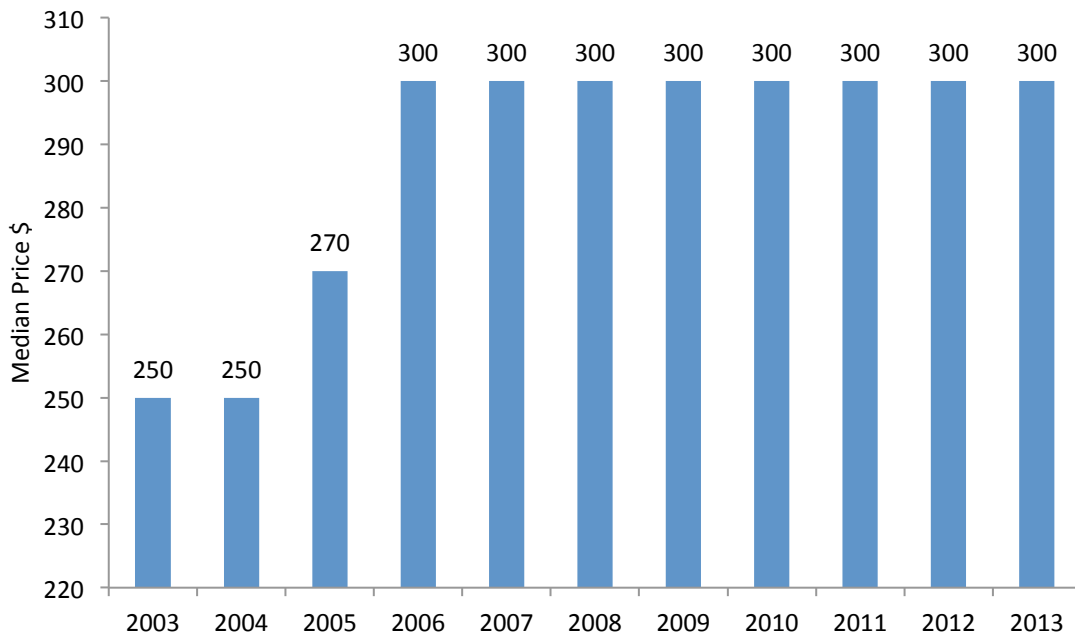
The following data represents median price purity and availability across Australia, which is likely to obscure any jurisdictional differences. There are likely to be large jurisdictional differences in cocaine indicators given that a large part of this market tends to be concentrated in Victoria and New South Wales. For further information regarding jurisdictional trends on price purity and availability of cocaine from the EDRS findings please refer to the following weblink:

<http://ndarc.med.unsw.edu.au/resource/ecstasy-and-related-drugs-reporting-system-edrs-national-report-2012>

Cocaine price

According to EDRS respondents, the price of a gram of cocaine increased from \$250 in 2003 to \$300 in 2006 and has remained stable at this price between 2006 and 2013 (Figure 103).

Figure 103: Median price of cocaine (per gram), nationally 2003-2013, (EDRS)

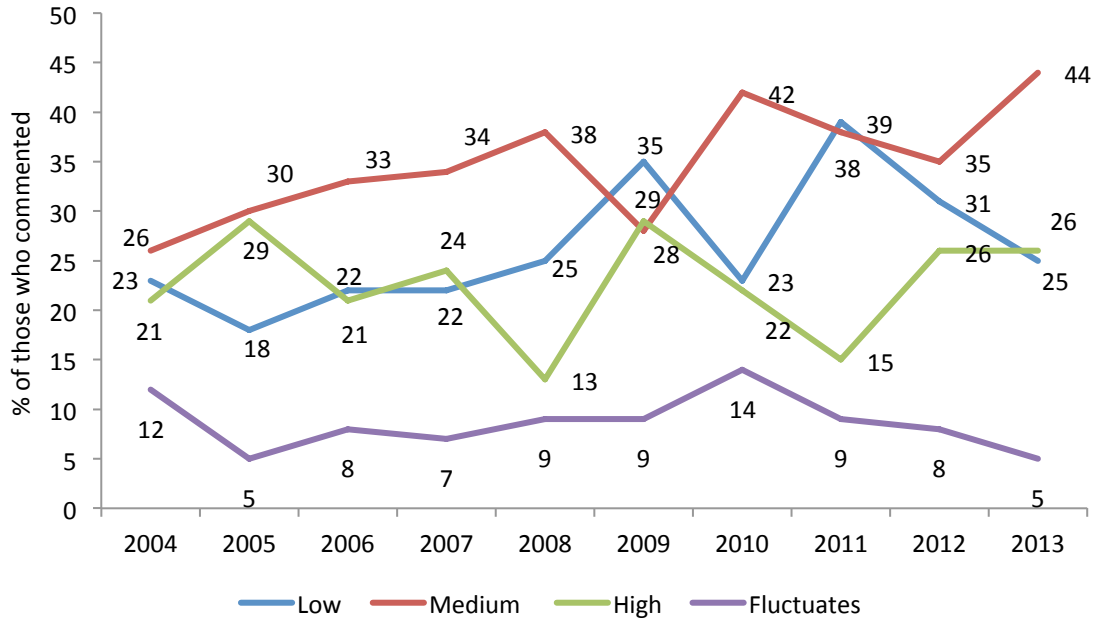


Source: Ecstasy and related Drugs Reporting System (EDRS), Sindich and Burns (in press)

Cocaine purity

Almost half (44%) of the EDRS respondents in 2013 reported cocaine is being of medium purity, representing an increase from 35% in 2012. Proportions reporting cocaine as being 'high' in purity have fluctuated over time (25% in 2013) (Figure 104).

Figure 104: Current purity of cocaine nationally, 2004-2013, (EDRS)

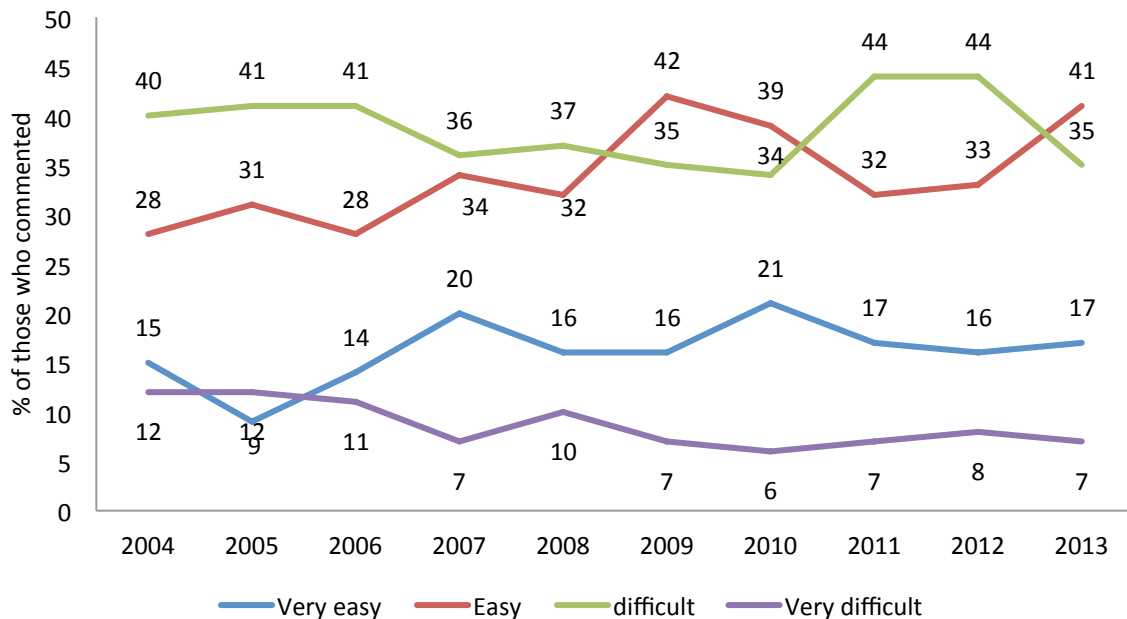


Source: Ecstasy and related Drugs Reporting System (EDRS), Sindich and Burns (in press)

Cocaine Availability

Just under half (41%) of the EDRS participants in 2013 reported cocaine as 'easy' to obtain, representing an increase from 33% in 2011 (Figure 105). Conversely, proportions reporting cocaine as 'difficult' to obtain decreased from 44% in 2012 to 35% in 2013. Proportions reporting cocaine as 'very easy' to obtain remains low at 17% in 2013.

Figure 105: Current availability of cocaine nationally, 2004-2013, (EDRS)



Source: Ecstasy and related Drugs Reporting System (EDRS), Sindich and Burns (in press)

Cocaine Price Purity and Availability reported among people who inject drugs (PWID) as surveyed by the Illicit Drug Reporting System (IDRS)

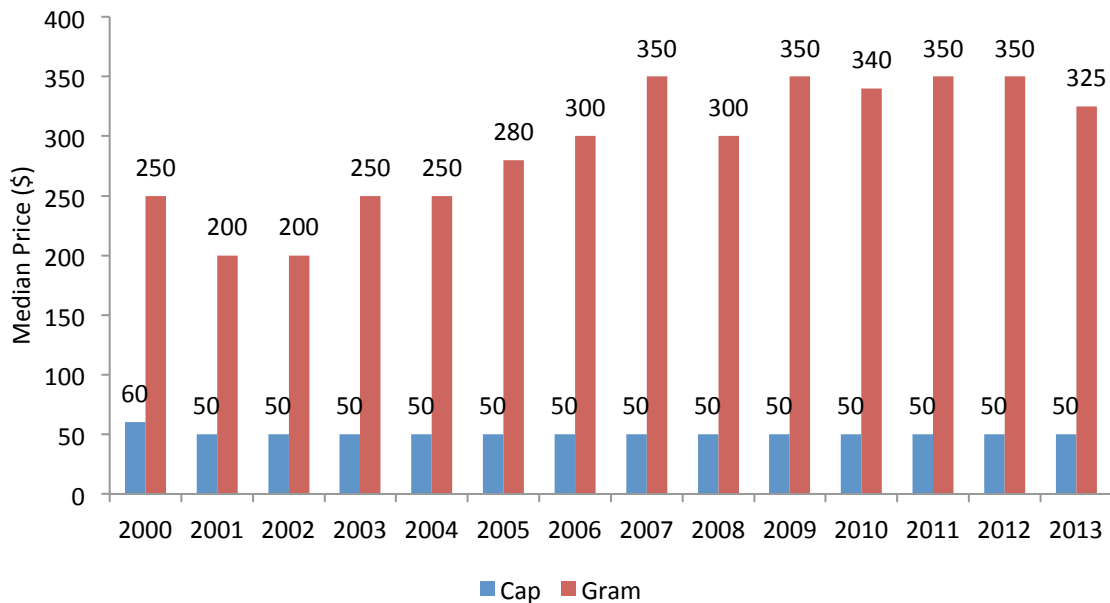
The following data represents median price purity and availability of cocaine across Australia, which is likely to obscure any jurisdictional differences. For further information regarding jurisdictional trends on price purity and availability of cocaine from the IDRS findings please refer to the following weblink:

<http://ndarc.med.unsw.edu.au/resource/illicit-drug-reporting-system-idrs-national-report-2012>

Cocaine price

IDRS respondents report that a price of a cap of cocaine has remained stable at \$50 over time, while the price of a gram has fluctuated (this figure was \$325 in 2013, representing a slight decline from \$350 in 2012) (Figure 106).

Figure 106: Median price of cocaine, nationally, 2000-2013, (IDRS)

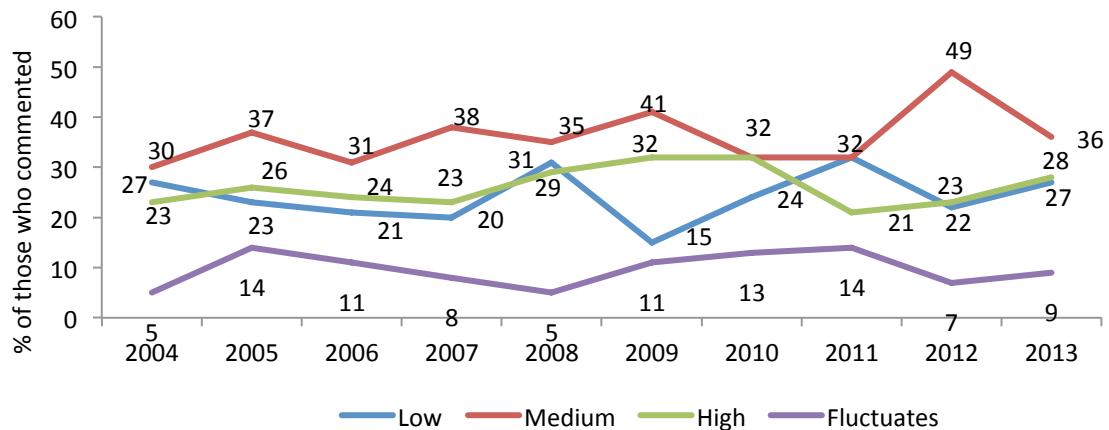


Source: Illicit Drug Reporting System (IDRS), Stafford and Burns (in press)

Cocaine purity

Similar proportions of IDRS respondents reported cocaine as being of 'high' (28%) and 'low' purity (27%) in 2013, while there was a decrease in proportions reporting purity as 'medium' (from 49% in 2012 to 36% in 2013). (Figure 107).

Figure 107: Current purity of cocaine nationally, 2004-2013, (IDRS)

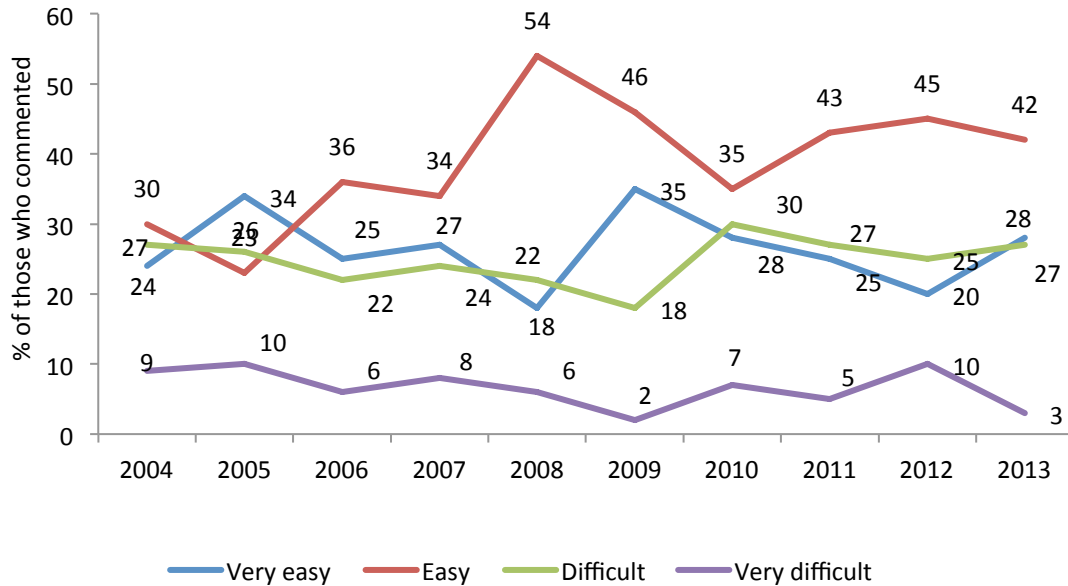


Source: Illicit Drug Reporting System (IDRS), Stafford and Burns (in press)

Cocaine availability

Cocaine availability, according to IDRS respondents, has fluctuated over time. Proportions reporting that cocaine is 'easy' to obtain have declined from 54% in 2008 to 42% in 2013, while there has been a corresponding increase in proportions reporting it as 'difficult' to obtain (from 18% in 2008 to 28% in 2013) (Figure 108). Approximately one-quarter (27%) reported cocaine as 'very easy' to obtain in 2013, and 3% thought it 'very difficult'.

Figure 108: Current availability of cocaine nationally, 2004-2013, (IDRS)



Source: Illicit Drug Reporting System (IDRS), Stafford and Burns (in press)

8.6 Cocaine: summary

Prevalence

General population

- There was a slight increase in cocaine use among the general population in 2007 (from 1% in 2004 to 1.6% in 2007) and again in 2010 to 2.1%. However cocaine use in the broader population remains relatively low. The rise in 2010 was mainly accounted for by 20 to 29 year olds.
- Frequency of cocaine use in the general population remains sporadic, with the majority of Australians reporting monthly or less frequent use in 2010.

Sentinel groups

- Among IDRS respondents there has been a significant decline in prevalence of 6 month cocaine use between 2001 and 2013. Proportions reporting cocaine use weekly or more often has also significantly declined during this period.
- Conversely, among EDRS respondents there has been an increase in prevalence of past 6 month cocaine use between 2003 and 2013, however weekly cocaine use or more often remains low and stable among this group.

Treatment seeking

- An increase in cocaine-related harms in 2001 (treatment and hospital presentations) mirrored high levels of use among injecting drug users in NSW. These indicators have since declined with hospital and treatment presentations for problems relating to cocaine remaining relatively low.

Law enforcement

- The past few years have seen steady increases in both the number and weight of cocaine seizures detected at the border, with 2 relatively large seizures detected in 2011/12; one seizure arriving by sea cargo weighing 271kg, and another arriving by yacht from Vanuatu weighing 300kg.
- Cocaine-related arrests have increased since 2001/02. Relative to other drug types, they comprise a very small proportion (less than 1%) of all drug-related arrests.

Deaths

- Cocaine-related deaths remain relatively low in Australia. In 2009 there were 5 deaths where cocaine was determined to be the underlying cause and a total of 23 deaths where cocaine was mentioned as either the underlying or contributory cause.

Market indicators

- The price of a gram of cocaine among EDRS respondents has remained stable at a higher price of \$300, while among IDRS respondents the price has declined slightly from \$350 in 2012 to \$325 in 2013.
- Interestingly similar proportions of EDRS respondents reported cocaine purity as 'high' (26%) or 'low' (25%). A similar trend is seen among IDRS respondents (28% reported 'high' and 27% reported 'low').
- While there has been an increase in 2013 in proportions of EDRS respondents reporting cocaine as 'easy' to obtain, a substantial proportion find it 'difficult' (35%) to obtain. Cocaine appears to be more available for IDRS respondents, with approximately two-thirds (69%) reporting it as 'easy' to 'very easy' to obtain, and smaller proportions (27%) than the EDRS respondents reporting it as 'difficult' to obtain.

9. NEW PSYCHOACTIVE SUBSTANCES(NPS) AND OTHER DRUG USE IN 2013 AMONG EDRS PARTICIPANTS

9.1 NPS

Within the context of a declining ecstasy market internationally, an alternative market developed when European manufacturers began introducing other synthetic compounds, and marketing them as having similar effects to ecstasy. These substances are often referred to collectively as 'new psychoactive substances' (NPS) (United Nations Office on Drugs and Crime, 2013). NPS are now expanding onto the international market at an ever-increasing rate, estimated to be more than one new drug per week, and are predicted to dominate illicit drug markets over the next decade (United Nations Office on Drugs and Crime, 2013). NPS are designed to be structurally similar to their banned counterparts, but without containing controlled substances. Historically, some NPS have not (initially) fallen under legislative control, and have been marketed as 'legal highs' (Winstock, 2010).

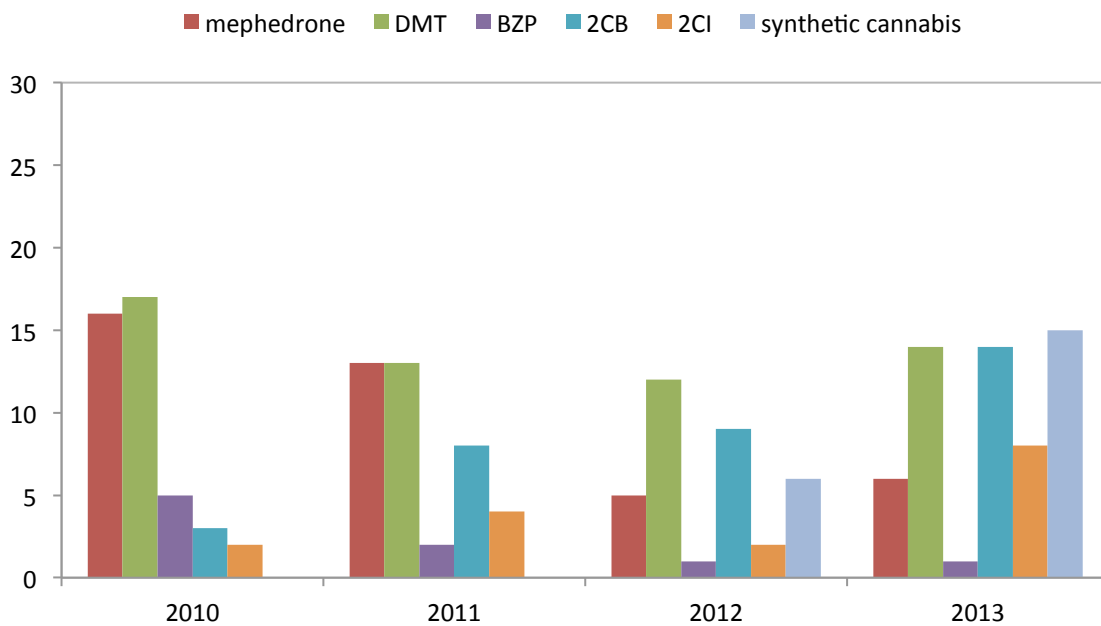
There is currently no available data on the prevalence of NPS use among the general population in Australia. This data is scheduled to be collected in the 2013 National Drug Strategy Household Survey.

Prevalence data is available for the EDRS respondents and has been collected since 2010.

Overall, just under half (44%) of the national EDRS sample reported recent use of any form of Emerging Psychoactive Substance (NPS) in 2013, including synthetic cannabinoids, in the preceding six months. This proportion has increased slightly from 40% in 2012.

Figure 109 presents the most commonly used NPS in the past 6 months among EDRS respondents during the period 2010 to 2013.

Figure 109: Proportion of EDRS respondents reporting past 6 month NPS use



Source: Ecstasy and related Drugs Reporting System (EDRS), Sindich and Burns (in press)

Mephedrone was most prevalent in 2010, with 16% reporting past 6 month use. Synthetic cannabis and DMT were more prevalent in 2013, with 16% and 14% reporting past 6 month use respectively. The NPS most commonly used in 2013 included 2C-B (14%), DMT (14%), 2C-I (8%), Kronik (8%) and mephedrone (6%). Changes over time in the types of NPS being used highlight the dynamic nature of the NPS market.

Despite an increasing proportion of participants reporting recent NPS use, median days of use remained low, ranging from one to four days in the last six months across all substances.

Overall, NPS was mostly reported to have been obtained from friends and dealers, with 72% reporting that their last purchase of any NPS was from a friend, and 29% indicating that they purchased from a dealer.

While frequency of NPS use is sporadic among this group, NPS use has been documented each year since these substances were first investigated in the EDRS at length in 2010. NPS appear to have an established presence among this community of substances users in Australia, and continued monitoring of these drugs is important.

9.2 Ketamine

- Over one-third (36%) of the national EDRS sample reported lifetime use of ketamine, and 19% reported using ketamine recently in 2013. The mean age of first use was 21 years.
- Ketamine use was predominantly reported in VIC, ACT and NSW. All other states had less than 10 participants reporting recent use.
- Proportion of reported recent use of ketamine has largely declined across jurisdictions from 2003-2013, however in recent years, a steady increase has been observed in the ACT (from 2% in 2009 to 33% in 2013) and VIC (from 21% in 2009 to 46% in 2013). Despite this, use of ketamine is very sporadic, with the median days of use in the last 6 months varying across jurisdictions from 2 to 4 days.
- The current purity of ketamine was reported to be high and this was reported to have remained stable by the majority that commented.
- Ketamine availability was mixed with 67% reporting that it was easy and 33% reporting that it was difficult to obtain. According to participants who commented, availability had remained stable in the preceding six months.

9.3 GHB

- Fifteen per cent of the national EDRS sample reported lifetime use of GHB, and 6% reported recent use in 2013. The mean age of first GHB use was 23 years.
- Recent use was largely stable in 2013 compared to 2012, with most recent use reported on the east coast of Australia (VIC and NSW).
- Recent use occurred on a median of two days in the six months preceding interview; 85% reported using less than once per month.
- Recent GHB users reported using a median of 3.0 ml in a typical episode of use and a median of 4 ml in the heaviest recent episode of use. GHB was consumed orally, with no reports of injection or snorting/shafting.
- Only 20 participants were able to comment on the price of a millilitre of GHB (median price \$5 per ml; range \$1-\$30). Half of the participants who commented reported that the price had not changed (i.e. it was stable).
- Purity reports were mostly medium, and most reported that purity had remained stable.
- Of those who commented on GHB availability, reports were mostly that it was easy to very easy to obtain (75%), and availability had remained stable.

9.4 LSD

- Over two-fifths (43%) of the national EDRS sample reported using LSD in the preceding six months, representing a significant increase from 34% in 2012. Recent use was most prevalent in the ACT, VIC and NSW.
- The median price per tab of LSD ranged from \$15 in SA and VIC to \$33 in the NT. Sixty-nine percent of those commenting reported that the price had remained stable in the six months prior to interview.
- Of those who commented, 40% reported that the current purity of LSD was high. Half of those who commented (50%) reported that purity had remained stable, in the six months preceding interview.
- Overall LSD was reported to have remained easy or very easy to obtain and this has remained stable (60%) in the last six months.
- LSD was mostly reported to have been obtained from friends and used in private locations such as the participants' own homes or friend's homes.

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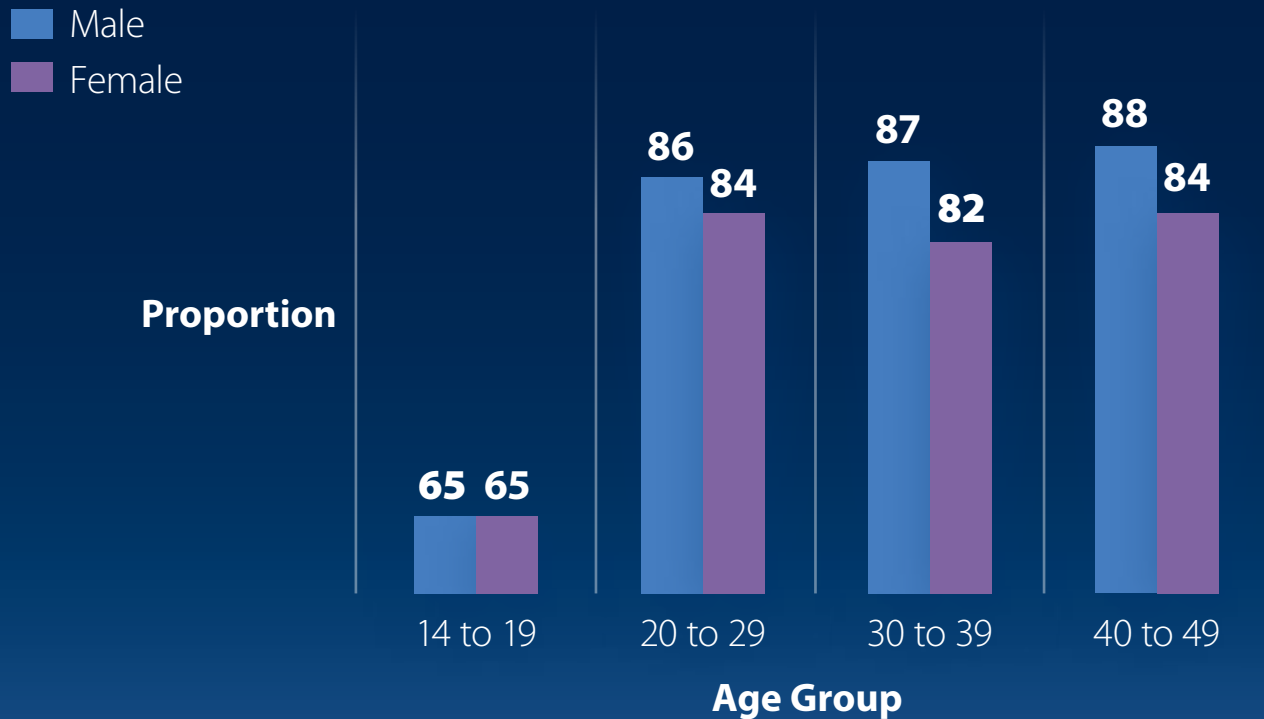
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TABLE 1

Past year alcohol use by age and gender, 2010



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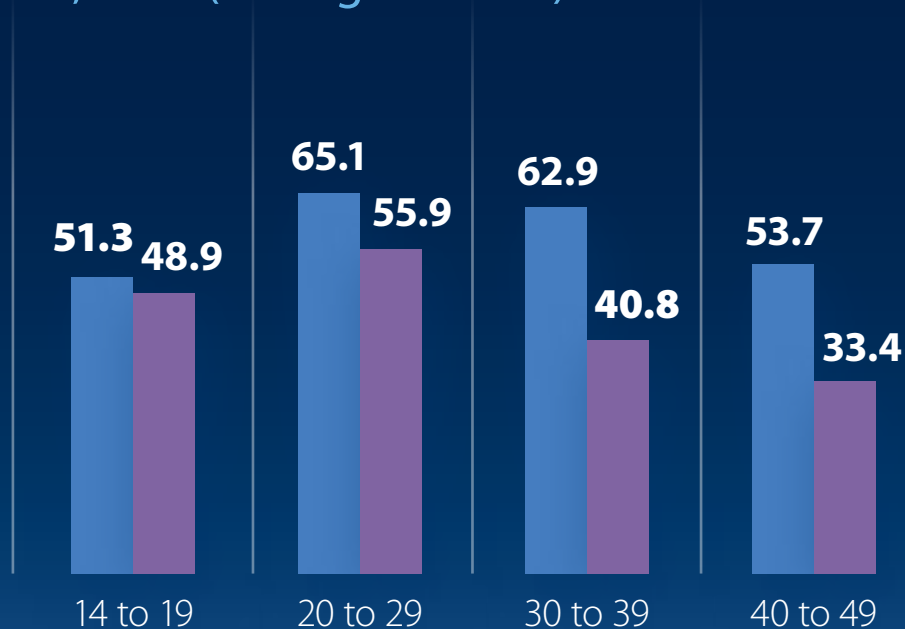
TABLE 2

Prevalence of past year alcohol consumption that places individuals at risk of alcohol-related injury on a single occasion, by age and gender, 2010 (2009 guidelines)

Male

Female

Prevalence



Age Group

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TABLE 3

Past year cannabis use by gender



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TABLE 4

Past year cannabis use by gender and age group

Male
Female



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TABLE 5

Past year ecstasy use by gender



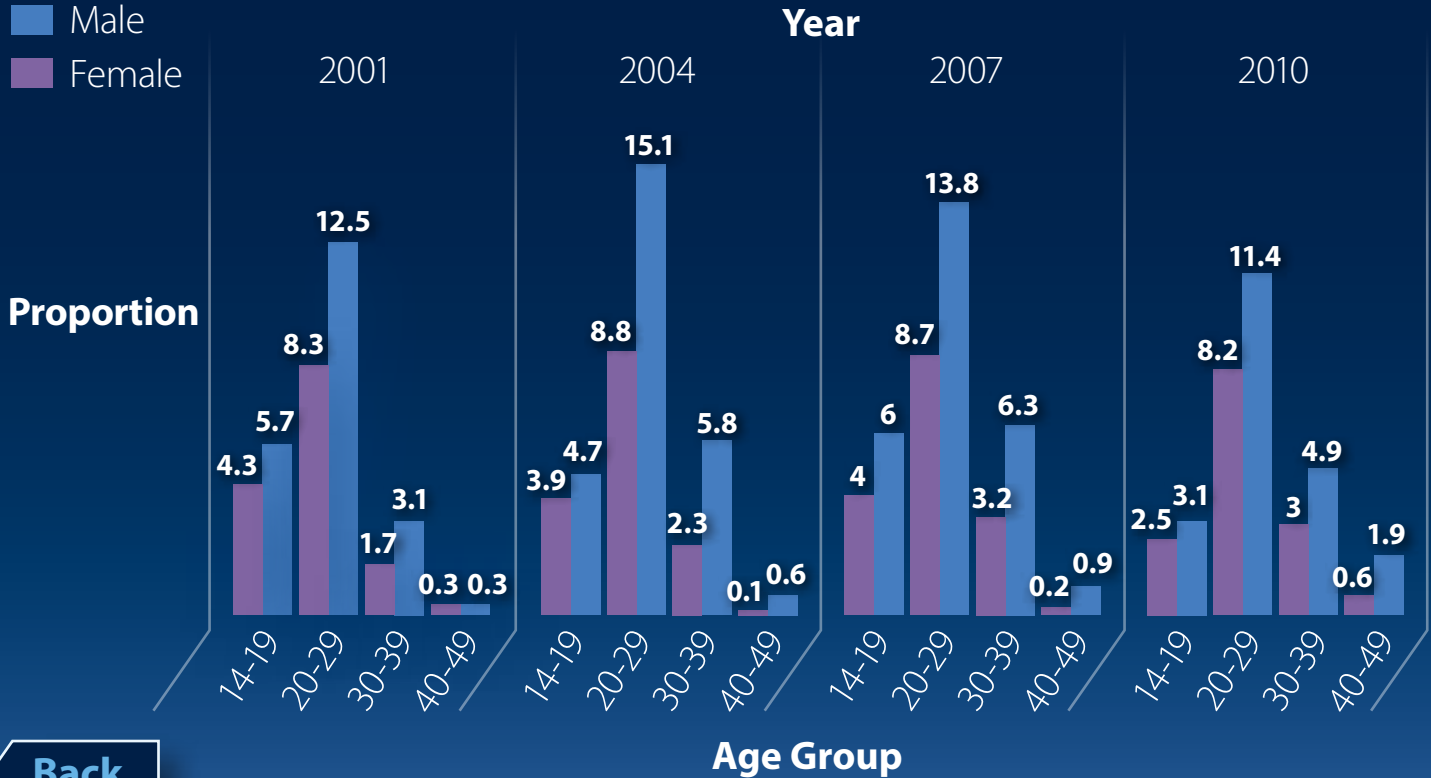
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TABLE 6

Past year ecstasy use by gender and age group

Male
Female



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TABLE 7

Past year methamphetamine use by gender

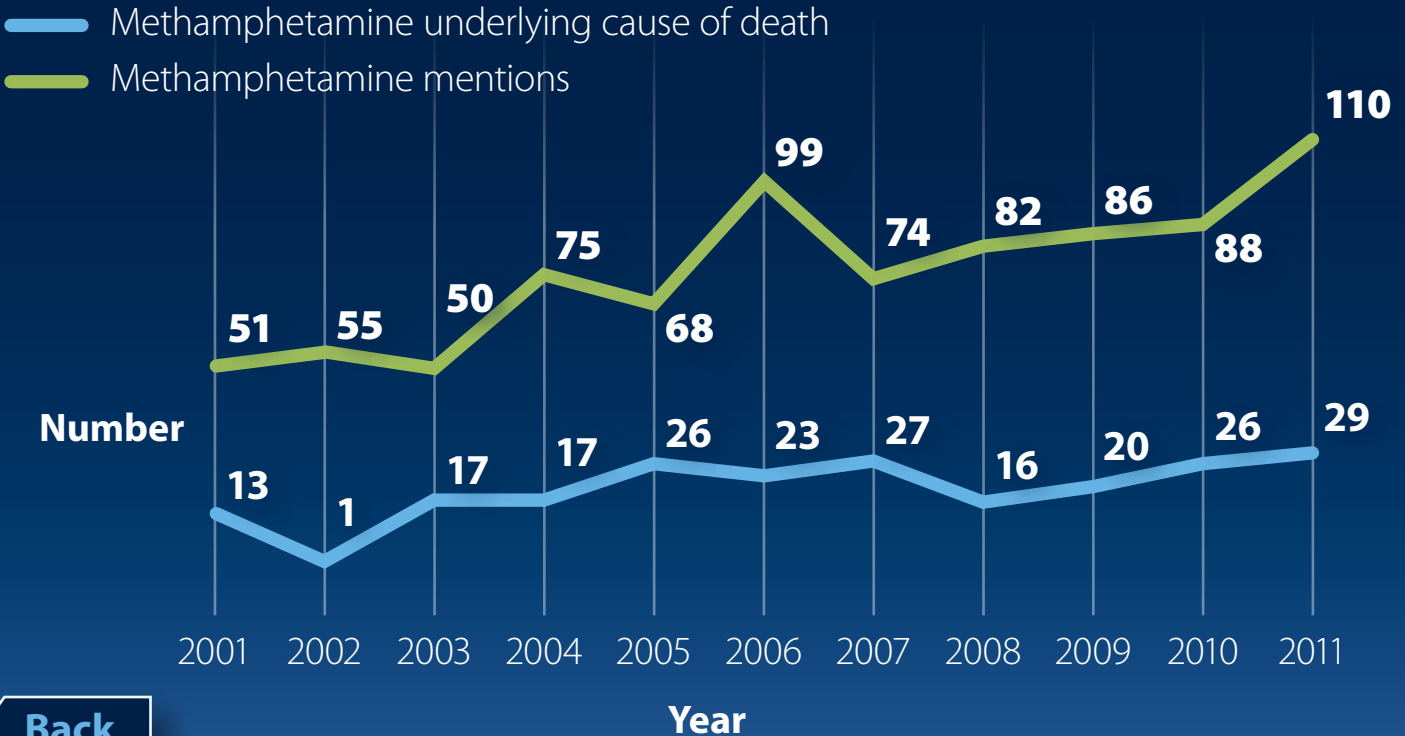


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TABLE 8

Number of methamphetamine-related deaths among those aged 15-54



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TABLE 9

Past year cocaine use by gender

— Male

••• Female



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TABLE 10

Number of cocaine-related deaths among those aged 15-54

- Cocaine underlying cause of death
- Cocaine mentions



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