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**AUSTRALIAN
TRENDS IN ECSTASY AND RELATED
DRUG MARKETS 2010:
Findings from the Ecstasy and Related Drugs
Reporting System (EDRS)**

Australian Drug Trends Series No. 64



AUSTRALIAN TRENDS IN ECSTASY AND RELATED DRUG MARKETS 2010



Findings from the Ecstasy and Related Drugs Reporting System (EDRS)

Natasha Sindicich and Lucy Burns

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ABBREVIATIONS

5-MEO-DMT	5-methoxy-dimethyltryptamine
1,4B	1,4 butanediol
2C-B	4-bromo-2,5-dimethoxyphenethylamine
2C-E	2, 5-dimethoxy-4-ethylphenethylamine
2C-I	2,5-dimethoxy-4-iodophenethylamine
4-MTA	4-methylthioamphetamine
ABCI	Australian Bureau of Criminal Intelligence
ABS	Australian Bureau of Statistics
ACC	Australian Crime Commission
ACS	Australian Customs Service
ACT	Australian Capital Territory
ADIS	Alcohol and Drug Information Service
AFP	Australian Federal Police
AGDH&A	Australian Government Department of Health and Ageing
AIHW	Australian Institute of Health and Welfare
AOD	Alcohol and Other Drug
AODTS-NMDS	Alcohol and Other Drug Treatment Services National Minimum Data Set
AQFV	Alcohol Quantity Frequency and Variability
ATS	Amphetamine type stimulants
AUDIT	Alcohol Use Disorders Identification Test
AVO	Apprehended Violence Order
BBVI	Blood-borne viral infection(s)
BMI	Body Mass Index
BZP	1-Benzylpiperizine(s)
CNS	Central nervous system
CRUFAD	Clinical Research Unit For Anxiety and Depression
DASSA	Drug and Alcohol Services of South Australia
DOB	2,5-dimethoxy-4-bromoamphetamine
DOI	Death on Impact; 2, 5-dimethoxy-4-iodamphetamine
DOM	2,5-dimethoxy-4-methylamphetamine
DMT	Dimethyl tryptamine
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition
DXM	Dextromethorphan hydrobromide
D&A	Drug and Alcohol
EDRS	Ecstasy and Related Drugs Reporting System
EPS	Emerging psychoactive substances
ERD	Ecstasy and related drug(s)
GBL	Gamma-butyrolactone
GHB	Gamma-hydroxybutyrate
GP	General Practitioner
HBV	Hepatitis B virus
HCV	Hepatitis C virus
HIV	Human immunodeficiency virus

ICD-9	International Statistical Classification of Diseases and Related Health Problems, Ninth Revision
ICD-10	International Statistical Classification of Diseases and Related Health Problems, Tenth Revision
IDRS	Illicit Drug Reporting System
IDU	Person(s) who inject(s) drugs; injecting drug user(s)
Ivory wave	See MDVP
K10	Kessler Psychological Distress Scale
KE	Key expert(s)
LSD	<i>l</i> -lysergic acid
MDA	3,4-methylenedioxyamphetamine
MDEA	3,4-methylenedioxyethylamphetamine
MDMA	3,4-methylenedioxyamphetamine
MDVP	Methylenedioxypropylone (Ivory wave)
MSIC	Medically Supervised Injecting Centre (Sydney)
N	(or n) Number of participants
NCIS	National Coronial Information System
NIDIP	National Illicit Drug Indicators Project
NDARC	National Drug and Alcohol Research Centre
NDSHS	National Drug Strategy Household Survey
NDLERF	National Drug Law Enforcement Research Fund
NHMD	National Hospital Morbidity Database
NNDSS	National Notifiable Diseases Surveillance System
NSP	Needle and Syringe Program(s)
NSW	New South Wales
NT	Northern Territory
OD	Overdose
OCD	Obsessive Compulsive Disorder
OTC	Over the counter
PCP	Phencyclidine
PDI	Party Drugs Initiative
PMA	Para-methoxyamphetamine
QLD	Queensland
RBT	Random Breath Test
REU	Regular ecstasy users(s)
ROA	Route of administration
SA	South Australia
SAPOL	South Australia Police
SCID	Structured Clinical Interview for DSM-IV
SDS	Severity of Dependence Scale
SPSS	Statistical Package for the Social Sciences
STI	Sexually transmitted infection
TAS	Tasmania
TMA	3,4,5 trimethoxyamphetamine
VIC	Victoria

WA
WHO

Western Australia
World Health Organization

GLOSSARY OF TERMS

Binge	Use over 48 hours without sleep
Eightball	3.5 grams
Halfweight	0.5 gram
Illicit	Illicit refers to pharmaceuticals obtained from a prescription in someone else's name, e.g. through buying them from a dealer or obtaining them from a friend or partner
Indicator data	Sources of secondary data used in the EDRS (see <i>Method</i> section for further details)
Key expert(s)	Also referred to as KE; persons participating in the Key Expert Survey component of the EDRS (see <i>Method</i> section for further details)
Licit	Licit refers to pharmaceuticals (e.g. benzodiazepines, antidepressants and opioids such as methadone, buprenorphine, morphine and oxycodone) obtained by a prescription in the user's name. This definition does not take account of 'doctor shopping' practices; however, it differentiates between prescriptions for self as opposed to pharmaceuticals bought on the street or those prescribed to a friend or partner
Lifetime injection	Injection (typically intravenous) on at least one occasion in the participant's lifetime
Lifetime use	Use on at least one occasion in the participant's lifetime via one or more of the following routes of administration: injecting; smoking; snorting/shelving/shafting and/or swallowing
Opiates	Opiates are derived directly from the opium poppy by departing and purifying the various chemicals in the poppy
Opioids	Opioids include all opiates but also include chemicals that have been synthesised in some way e.g. heroin is an opioid but not an opiate, morphine is both an opiate and opioid
Point	0.1 gram although may also be used as a term referring to an amount for one injection
Recent injection	Injection (typically intravenous) in the six months preceding interview
Recent use	Use in the six months preceding interview via one or more of the following routes of administration: injecting; smoking; snorting; and/or swallowing
Shelving/shafting	Use via insertion into vagina (shelving) or the rectum (shafting)
Use	Use via one or more of the following routes of administration: injecting; smoking; snorting; shelving/shafting and/or swallowing

Guide to days of use/injection

180 days	daily use/injection* over preceding six months
90 days	use/injection* every second day
24 days	weekly use/injection*
12 days	fortnightly use/injection*
6 days	monthly use/injection*

* As appropriate

EXECUTIVE SUMMARY INTRODUCTION

The *Australian Drug Trends in Ecstasy and Related Drug Markets 2010* report presents the findings from the eighth year in which data have been collected in all states and territories in Australia on the markets for ecstasy and related drugs (ERD). The Ecstasy and Related Drugs Reporting System (EDRS; formerly the Party Drugs Initiative, or PDI) is the most comprehensive and detailed study of ERD markets in Australia.

Using a similar methodology to the Illicit Drug Reporting System (IDRS), the EDRS monitors the price, purity and availability of ‘ecstasy’ (3,4-methylenedioxymethamphetamine; MDMA) and other drugs such as methamphetamine, cocaine, gamma-hydroxybutyrate (GHB), *d*-lysergic acid (LSD), 3,4-methylenedioxyamphetamine (MDA) and ketamine. It also examines trends in the use and harms of these drugs. It utilises data from three sources: (a) surveys with regular ecstasy users (REU); (b) surveys with key experts (KE) who have contact with REU through the nature of their work; and (c) the analysis of existing data sources that contain information on ERD. The EDRS is designed to be sensitive to emerging trends, providing data in a timely manner, rather than describing issues in extensive detail.

It is important to note that the results from the REU surveys are not representative of ecstasy users and their other drug use in the general population, but this is *not* the aim of these data. These data are intended to provide evidence that is indicative of emerging issues that warrant further monitoring. REU are a sentinel group that provides information on patterns of drug use and market trends.

The findings from each year not only provide a snapshot of the ERD market in Australia, but in total they help to provide an evidence base for policy decisions; help to inform harm reduction messages; and to provide directions for further investigation when issues of concern are detected. Continued monitoring of the ERD markets in Australia will help add to our understanding of the use of these drugs; the price, purity and availability of these drugs; and how these may impact on each other; and the associated harms which may stem from the use of these drugs.

Drug trends in this publication are cited by jurisdiction, although they primarily represent trends in the capital city of each jurisdiction, where new drug trends are likely to emerge. Patterns of drug use may vary among other groups of REU in the capital cities and in regional areas.

Executive Summary Snapshot

Demographics of REU participants and Patterns of Drug use

- REU participants were primarily recruited through word-of-mouth and street press adverts.
- As a sample, the demographics of REU were consistent with previous years.

Ecstasy

- Most ecstasy use continued to be reported on a fortnightly basis, though less participants reported using it weekly compared with 2009.
- A median of two tablets were used in a typical session.
- There was an increase in the capsule form of ecstasy mainly in TAS, the NT and VIC.
- Price slightly increased from 2009 to between \$23-\$35 a tablet and it was purchased on a less frequent basis than in 2009 (monthly compared to fortnightly).
- Significant increase was reported in those reporting purity as 'low'.
- Availability still regarded as 'easy' to obtain by majority, however, larger proportion in 2010 regarding it as 'difficult'.
- Ecstasy is still most commonly used in nightclubs and purchase source is most commonly friends.
- Border detections (weight and number of detections) are at the lowest level recorded.

Methamphetamine

- Over half the number of REU participants interviewed reported use of one form of methamphetamine, with use across all forms reported as stable comparable to 2009 levels.
- Median days use of any form was four days (i.e sporadic use), with one participant reporting daily use.
- The most common route of administration (ROA) for speed was snorting, for base was swallowing and for ice/crystal was smoking.
- The average amount used in a typical session for speed was 0.5 grams, for base and ice/crystal was two points.
- Speed market characteristics of price, purity and availability all remained stable with 2009 results.
- Base market characteristics saw a rise in purity levels reported from 2009 to high as opposed to medium. Price and availability market characteristics remained stable.
- Ice/crystal market characteristics saw an increase in price to between \$50-\$100 per point, with the majority of participants commenting reporting a price increase. Other market characteristics of purity and availability remained constant.
- All forms were primarily sourced from friends or known dealers and used in a range of public and private locations.
- Amphetamine-type stimulants (ATS) and crystalline methamphetamine border detections both reported an increase in number of detections and a decrease in weight from 2008/09 figures.

Cocaine

- Recent cocaine use was reported by almost half of the sample (48%) a significant increase from 2009. Frequency of use remained low at three days over the last six months.
- Main ROA reported by participant REU was snorting (96%).
- Significant increases were reported for cocaine as a drug of choice in this sample.
- Market characteristics of cocaine saw purity reported as 'medium' an increase from the 'low' level reported in previous years. Price and availability market characteristics remained stable.
- Cocaine was reported mostly purchased from friends and mostly used in public locations such as nightclubs.
- Border detections saw cocaine levels decrease in number and weight slightly in 2009/10. State police seizures saw a large increase in number in QLD.

Ketamine

- Recent ketamine use remained localised to VIC, NSW and SA, with 12% of the national sample reporting recent use on a median of two days.
- The majority reported the main ketamine ROA was snorting (81%).
- Due to small numbers reporting recent use, market characteristics were also reported by small numbers so please interpret results with caution.
- Market characteristics of price and purity for ketamine remained consistent with 2009 figures, reports of availability were predominantly of 'difficulty' in obtaining the drug a change from the mixed results obtained in 2009.
- There were 22 seizures in 2009/10 of ketamine at the border, a slight decline from 31 in 2008/09.

GHB

- Six percent of the national sample reported recent use on a median of two days in the last six months. Use was localised to VIC and NSW.
- Main ROA was oral with one participant reporting injection.
- Very small numbers were able to report on market characteristics so please interpret results with caution. Price and availability were considered stable and purity had reportedly increased to 'high' from 'medium' in 2009.
- GHB was mostly obtained from friends and used in nightclubs.
- Detections of GHB at the border remained low at one detection, and for gamma-butyrolactone (GBL) there were 44 detections an increase from 24 in 2008/09.

LSD

- Two-fifths (38%) of the sample reported recent LSD use an increase from 28% in 2009, the median days of use was three days in the last six months.
- As a drug of choice, LSD had incrementally increased from 4% in 2007 to 8% in 2010.
- Price, purity and availability had all remained stable.
- As in 2008/09 there were two detections of LSD in 2009/10.

Cannabis

- Cannabis was the second most recently used drug in the sample behind alcohol and was the third most nominated drug for drug of choice in the sample.
- Frequency of use was weekly and main ROA was smoking (98%). Smoking cones was more common than smoking joints.
- Prices for hydro cannabis remained slightly higher than for bush cannabis, potency and availability remained stable for both types of cannabis.
- The number of detections of cannabis at the border had increased and the weight of detections had slightly increased also.

Other drugs

- MDA recent use continued to decline and was at 5% of the REU sample.
- Recent alcohol use was reported by 97% of the sample with a median of 60 days use in the last six months (between twice and three times per week) compared with 48 days in 2009.
- Half of the recent tobacco users (78%) were daily smokers.
- One-third (32%) of the REU sample reported recent benzodiazepine use.
- One-fifth (20%) of the REU sample reported recent nitrous oxide use; use was highest in TAS.
- One-third (29%) of REU had used amyl nitrate on a median of four days in the last six months.
- Eighteen percent of the national sample reported recent mushroom use. Use occurred on a median of two days, and 86% of recent users had used less than once per month.
- Other drugs discussed in this section include heroin and other opiates, methadone, buprenorphine, pharmaceutical stimulants, over the counter (OTC) codeine, OTC stimulants and steroid use.

Emerging psychoactive substances (EPS)

- Psychedelic Phenethylamines (EPS): 2,5-dimethoxy-4-iodophenethylamine (2C-I), 4-bromo-2,5-dimethoxyphenethylamine (2C-B), 2, 5-dimethoxy-4-ethylphenethylamine (2C-E), Death on Impact (DOI -2, 5-dimethoxy-4-iodamphetamine) and Mescaline were used recently by 1-2% of the REU sample. Median days of use for all five drugs were one day in the last six months.
- Psychedelic Tryptamines (EPS): 5-methoxy-dimethyltryptamine (5MeO-DMT) has recently been used by less than one percent of the sample. The only ROA was smoking and median use was one day. Dimethyl tryptamine (DMT) was used recently by seven percent of the REU sample, by ROA of smoking, median days of one-and-a half days in the last six months.
- Stimulant EPS: Mephedrone was used by 16% of the REU sample, with an equal proportion of the sample reporting ROA by snorting and swallowing with median days use being three days in the last six months. Recent 1-Benzylpiperazines (BZP) use was 4.5% (n=32 participants) with the majority of use reported in WA. Ivory Wave (MDVP) was used by four participants in the recent sample, and was used on a median of one-and-a half days in the last six months.
- Natural occurring substances of Datura (Angel's Trumpet) was used recently by three participants on a median of one day in the past six months.
- Other drugs included: DXM had been used recently by seven REU participants, it was swallowed by all recent users, median use was two days in the last six months. Para-

methoxyamphetamine (PMA) was used recently by five participants, on a median of three days.

Health-Related Trends Associated with ERD use

- Of the national sample, 21% reported having ever overdosed on a stimulant drug and, of those, 59% had done so in the preceding 12 months. Ecstasy was the main drug to which participants attributed the stimulant overdose. Of those that sought treatment, most were taken to an emergency department.
- Thirty-one percent of the national sample reported having ever overdosed on a depressant drug, and of those, 62% reported recent (last 12 months) overdose. Recent overdoses were most commonly attributed to alcohol (85%). The main drug attributed to the overdose (OD) was alcohol. Of those that sought treatment, most were taken to an emergency department.
- Twenty-four percent (19% in 2009) had accessed either a medical or health service in relation to their drug use during the six months preceding interview.
- In 2008/09, treatment seeking for ecstasy use (as the principal drug of concern) remained low in the general population at 1.0% of closed treatment episodes.

Risk Behaviour

- Sixteen percent of the national sample reported having injected at some time in their lives; 10% of the national sample reported injecting in the six months preceding interview. The mean age of first injection was 20 years of age. Among those who had injected in the preceding six months, the last drug injected was heroin (29%) a change from speed in 2009.
- Syringes were typically obtained from a needle and syringe program (NSP) (56%). Of those who had injected in the preceding six months a total of four respondents reported using a needle after someone else in the month preceding interview. Thirty-one recent injecting participants reported sharing of other injecting equipment.
- Fifty-one percent of the national sample reported they had completed the vaccination schedule for hepatitis B virus (HBV), the most common reason for the vaccination was being vaccinated as a child. The majority of the sample (83%) reported not ever being diagnosed with a sexually transmitted infection.
- Three-fifths (62%) of participants reported penetrative sex in the six months preceding interview with at least one casual partner. A fifth (19%) of those who had had casual sex reported never using a condom. The majority (86%) of those reporting recent penetrative sex reported using drugs during sex in the previous six months, predominantly alcohol, ecstasy and cannabis were the drugs reported.
- Just over three-quarters (77%) had driven a car in the last six months, 75% of those had reported having been over the legal limit, and 56% had driven shortly after taking an illicit drug on a median of four occasions. The most commonly reported illicit drugs after which these participants had driven were ecstasy and cannabis. A number reported positive notifications were from being saliva drug tested.
- The Alcohol Quantity Frequency and Variability (AQFV) found that males reported a significantly higher number of average drinks per session than females. In the Alcohol Use Disorders Identification Test (AUDIT) males were found to have a significantly higher score than females; higher scores are indicative of greater likelihood of hazardous drinking.

Law Enforcement-Related Trends Associated with ERD use

- One-third of the sample reported engaging in some form of criminal activity in the month prior to interview.
- Drug dealing was the most common crime reported across all jurisdictions, with smaller proportions reported having committing fraud or a violent crime in the last month.
- Reports of recent police activity was that it was stable. One-quarter (26%) responded that police activity had made it more difficult for them to score drugs.
- Over half the national sample (62%) – a rise from (36%) in 2008 – reported seeing sniffer dogs on a median of two occasions in the six months preceding interview, with two-fifths (41%) reporting that they were in possession of drugs at the time of seeing the sniffer dog.
- Fourteen percent of the national sample had been arrested in the past year, compared with 7% in 2008. The most common charge reported was in the ‘other’ category which centred around public orders.
- Consumer arrests had increased in relation to cocaine and hallucinogen use. All other drug arrests appeared to have remained stable.

Special Topics of Interest

- Body Mass Index (BMI) was calculated for participants for the first time in 2010. Of the sample 6.8% were classified as ‘underweight’ compared to 2.6% of the general population and males in the REU sample were more likely to be classified as ‘overweight’ when compared to females in the sample.
- In 2010, participants were asked questions regarding dependence on ecstasy. For further information, please contact Dr Raimondo Bruno (raimondo.bruno@utas.edu.au).
- The majority of the sample reported consuming energy drinks (70%) as a weekly to monthly practice for the purposes of liking the taste and helping participants to ‘party for longer’. The drug consumed most with energy drinks was ecstasy and then cannabis. Sixty-two percent of recent users had experienced a negative effect after their consumption.
- Just over half of the number of participants that commented (56%) were tested in the past two years for a sexually transmitted infection (STI) with the main reason being unprotected sexual practice. The majority were tested by their General Practitioner (GP) or in a Sexual Health Clinic.

1 INTRODUCTION

This report provides a national summary of trends from the eighth year of monitoring ecstasy and related drug (ERD) markets across Australia. These trends have been extrapolated from the three data sources: interviews with current regular ecstasy users (REU); interviews with professionals who have contact with ecstasy users (key experts, or KE); and the collation of indicator data. The data sources are triangulated in order to minimise the biases and weaknesses inherent to each, and ensure that only valid emerging trends are documented.

The term ‘ecstasy and related drugs’ includes drugs that are routinely used in the context of entertainment venues and other recreational locations including nightclubs, dance parties, pubs and music festivals. ERD include ecstasy (MDMA, 3,4-methylenedioxymethamphetamine), methamphetamine, cocaine, LSD (*d*-lysergic acid), ketamine, MDA (3,4-methylenedioxyamphetamine) and GHB (gamma-hydroxybutyrate).

In 2010, the Ecstasy and Related Drugs Reporting System (EDRS) was funded by the Australian Government Department of Health and Ageing (AGDH&A). The project uses a methodology that was based on the methodology used for the Illicit Drug Reporting System (IDRS) (Topp et al., 2004). The IDRS monitors Australia’s heroin, cocaine, methamphetamine and cannabis markets, but does not adequately capture ERD use and, therefore, there was a need to access a different population in order to obtain information on ERD markets. Consistency between the methodology of the main IDRS and this study was maintained where possible, as the IDRS has demonstrated success as a monitoring system.

The focus is on the capital city in each state/territory because new trends in illicit drug markets are more likely to emerge in large cities rather than regional centres or rural areas. Detailed information from each state and territory is presented in individual jurisdictional reports which are available from the NDARC website. This report focuses on the 2010 data collection in all states/territories; reports from this and all previous years are available on the NDARC website¹. Before 2003, data were collected in New South Wales (NSW), Queensland (QLD) and South Australia (SA) and some trend data are reported here; however, the reader should refer to the jurisdictional reports for more detailed trend information available from these years.

Please note that as with all statistical reports there is the potential for minor revisions of data in this report over its life. Please refer to the online version at www.ndarc.med.unsw.edu.au.

1.1 Study aims

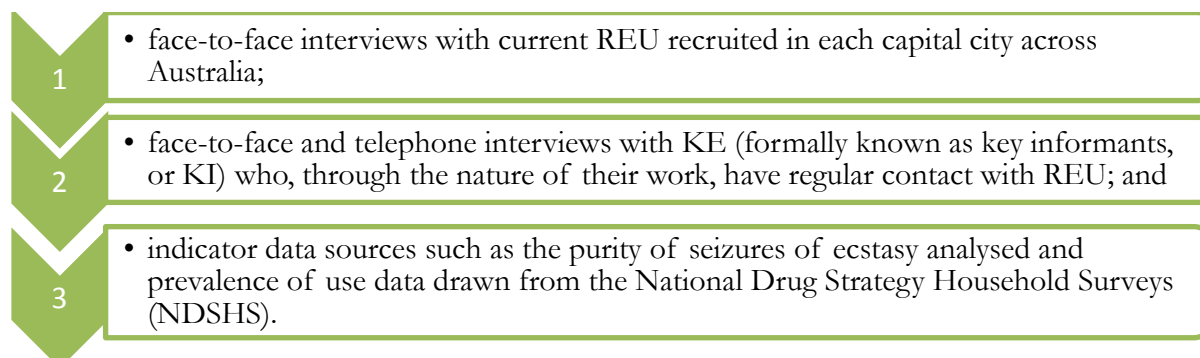
In 2010, the specific aims of the EDRS were:

1. to describe the characteristics of a sample of current REU interviewed in each capital city of Australia;
2. to examine the patterns of ERD use of these samples;
3. to document the current price, purity and availability of ERD across Australia;
4. to examine participants’ reports of ecstasy-related harm, including physical, psychological, occupational, social and legal harms; and
5. to identify emerging trends in the ERD market that may require further investigation.

¹ See www.ndarc.med.unsw.edu.au for details.

2 METHOD

The EDRS used the methodology trialled in the feasibility study (Topp et al., 2004, Breen et al., 2002) to monitor trends in the markets for ERD. The three main sources of information used to document trends were:



These data were used to provide an indication of emerging trends in ERD use, ERD markets and related issues. Comparisons of data sources were used to determine convergent validity of trends. The data sources were also used in a supplementary fashion, in which KE reports served to validate and contextualise the quantitative information obtained through the REU survey and/or trends suggested by indicator data. Comparable methodology was followed in each site for individual components of the EDRS. Further information on methodology in each jurisdiction in 2010 can be found in the jurisdictional reports, available from the NDARC website (www.ndarc.med.unsw.edu.au).

2.1 Survey of REU

The sentinel population chosen to monitor trends in ERD markets consisted of people who engaged in the regular use of the drug sold as ‘ecstasy’. Although a range of drugs fall into the ERD category, ecstasy is considered one of the main illicit drugs used in Australia. It is the second most widely used illicit drug after cannabis with 3.5% of the population aged 14 years or older reporting recent use of ecstasy in the Australian Institute of Health and Welfare’s (AIHW) *NDSHS Detailed Findings 2007* (Australian Institute of Health and Welfare, 2008).

A growing market for ecstasy, i.e. tablets sold purporting to contain MDMA, has existed in Australia for more than a decade. In contrast, other drugs that fall into the class of ERD have either declined in popularity since the appearance of ecstasy in this country (e.g. LSD), fluctuate widely in availability (e.g. MDA), or are relatively new in the market and are not as widely used as ecstasy (e.g. ketamine and GHB). It was suggested (Topp and Darke, 2001) that it would be difficult to identify a regular user of GHB or ketamine who was not also an experienced user of ecstasy, whereas the reverse will often be the case. Ecstasy may be the first drug categorised under ERD with which many young Australians who choose to use illicit drugs will experiment, and a minority of these users will go on to experiment with the less common related drugs such as ketamine and GHB.

The entrenchment of ecstasy in Australia’s illicit drug markets, relative to other related drugs, underpinned the decision that regular use of ecstasy could be considered the defining characteristic of the target population – REU (Topp and Darke, 2001). A sample of this population was successfully recruited and interviewed in the two-year feasibility trial, and was able to provide the data that were sought. Therefore, REU have been used again in 2010 to provide information on ERD markets, however, as will become evident in the report, it is

apparent that the ecstasy market and the regularity of its consumption and type of consumers may be changing. More discussion on this issues see Section 4.10: *Emerging Psychoactive Substances*.

Each jurisdiction obtained ethics approval to conduct the study from the appropriate Ethics Committees in their jurisdiction.

2.1.1 Recruitment

Participants were recruited through a purposive sampling strategy (Kerlinger, 1986), which included advertisements in entertainment street press, music and clothing stores, via internet websites, gay and lesbian newspapers, on radio and at university campuses. Interviewer contacts and ‘snowball’ procedures (Biernacki and Waldorf, 1981) were also utilised. ‘Snowballing’ is a means of sampling hidden populations which relies on peer referral, and is widely used to access illicit drug users both in Australian (Boys et al., 1997, Ovendon and Loxley, 1996, Solowij et al., 1992) and international (Solowij et al., 1992, Dalgarno and Shewan, 1996, Forsyth, 1996, Peters et al., 1997) studies. Initial contact was established through advertisements or, less commonly, through interviewers’ personal contacts. On completion of the interview, participants were asked if they would be willing to discuss the study with friends who might be willing and able to participate.

2.1.2 Procedure

Participants contacted the researchers by telephone (call or text) or email and were screened for eligibility. To meet entry criteria they had to be:

- at least 16 years of age (due to ethical constraints);
- have used ecstasy at least six times during the preceding six months (equating to monthly use); and
- have been a resident of the capital city in which the interview took place for the past year. As in the main IDRS, the focus was on the capital city because new trends in illicit drug markets are more likely to emerge in urban areas rather than in remote or regional areas.

All information provided was confidential and anonymous, and the study involved a face-to-face interview that took approximately 45 minutes. All respondents were volunteers who were reimbursed \$40 for time and expenses incurred. Informed consent to participate was obtained prior to the interview. All participants were assured that all information they provided would remain confidential and anonymous. Interviews took place in varied locations negotiated with participants, including the research institutions, coffee shops or parks, and were conducted by interviewers trained in the administration of the interview schedule. The nature and purpose of the study was explained to participants before informed consent was obtained.

2.1.3 Measures

Participants were administered a structured interview schedule based on a national study of ecstasy users conducted by NDARC in 1997 (Topp et al., 1998, Topp et al., 2000), which incorporated items from a number of previous NDARC studies of users of ecstasy (Solowij et al., 1992) and powder amphetamine/methamphetamine (Darke et al., 1994) (Hando and Hall, 1993, Hando et al., 1997). The interview focused primarily on the preceding six months, and assessed:

- demographic characteristics;
- patterns of ERD use, including frequency and quantity of use and routes of administration;

- drug market characteristics: the price, purity and availability of different ERD;
- risk behaviours (such as injecting, sexual behaviour, driving under the influence of alcohol and other drugs);
- help-seeking behaviour;
- mental and physical health, personal health and wellbeing;
- self-reported criminal activity;
- ecstasy-related problems, including relationship, legal and occupational problems;
- general trends in ERD markets, such as new drug types, new drug users and perceptions of police activity; and
- areas of special interest including: body mass index (BMI), ecstasy dependence, energy drinks and sexual health testing.

2.1.4 Data analysis

The REU participant survey results are used as the primary basis on which to estimate drug trends. These participants provide the most comparable information on drug price, availability and use patterns in all jurisdictions and over time. However, purity of drug seizures data provided by the Australian Crime Commission (ACC) are an objective indicator of drug purity, and data are also presented in this report. Other indicator data are reported to provide a broader overview and a basis against which trends in REU participant data may be contextualised. KE data are discussed within the individual jurisdictional reports to provide a context around the quantitative data from the REU surveys.

For continuous, normally distributed variables, *t*-tests were employed and means reported. Where continuous variables were skewed, medians were reported and the Mann-Whitney *U*-test, a non-parametric analogue of the *t*-test (Siegel and Castellan, 1988), was employed. Categorical variables were analysed using χ^2 . To investigate differences between states/territories, dummy variables were created and an individual state/territory was compared against all the other states/territories combined. All analyses were conducted using SPSS for Windows, Version 14.0 or Version 17.0 (SPSS Inc, 2008). More detailed analyses on specific issues may be found in other literature, including quarterly bulletins and peer-reviewed articles produced by the project, details of which may be found on the NDARC website².

2.2 Survey of KE

To maintain consistency with the main IDRS, it was decided that the eligibility criterion for KE participation in the EDRS would be regular contact, in the course of employment, with a range of REU throughout the preceding six months.

The interview schedule was a semi-structured instrument that included sections on drug use patterns, drug availability, criminal behaviour, health issues and police activity. The majority of interviews took approximately 45 minutes to one hour to conduct. Notes were taken during the interview and the responses were analysed and sorted for recurring themes. Interviews were conducted either in person or via telephone between June and September 2010. KE were remunerated with a small incentive (e.g. box of chocolates, coffee) for their time.

One-hundred and sixteen KE across the country participated in the 2010 EDRS. These included law enforcement personnel, drug treatment staff, harm reduction workers (including needle and syringe program (NSP) workers), emergency workers, ambulance services, first aid workers/‘drug rovers’, forensic scientists, counsellors, health promotion officers, peer educators,

² See www.ndarc.med.unsw.edu.au for details (click on ‘Drug Trends’).

youth workers, DJs, party promoters/event organisers, policy officers, researchers, dealers/users and venue managers/staff. Many KE reported they had contact with a range of REU, although several also reported having contact with specific groups such as youth, people who regularly inject drugs, human immunodeficiency virus (HIV) -positive people, and the gay and lesbian community.

KE reports are critical in providing a context within which the REU participant data may be understood, e.g. in providing an indication of the extent to which trends may be extending to groups of users in other areas. Detailed reports of key findings arising from KE interviews may be found in each jurisdictional report available on the NDARC website: www.ndarc.med.unsw.edu.au.

2.3 Other indicators

To complement and validate data collected from user surveys and KE interviews, a number of secondary data sources were examined. These included data from health, survey, research and law enforcement sources.

Data sources that are included in the national IDRS report were obtained as part of the National Illicit Drug Indicators Project (NIDIP) and include:

- The 2007 NDSHS (AIHW, 2008a);
- Drug purity data provided by the ACC. These data include the number and median purity of seizures of illicit drugs made by state/territory and federal law enforcement agencies that were analysed in Australia;
- Data on consumer and provider arrests by drug type provided by the ACC;
- Data from the National Hospital Morbidity Database (NHMD) provided by the AIHW (the ACT, TAS, NT, QLD, SA, NSW, VIC and WA health departments contribute to this database);
- Data from the Alcohol and Other Drug Treatment Services-National Minimum Dataset (AODTS-NMDS) provided by the AIHW;
- National notifiable diseases surveillance data provided by the AGDH&A National Notifiable Disease Surveillance System (NNDSS);
- Cocaine and amphetamine-related overdose fatalities provided by the Australian Bureau of Statistics (ABS); and
- Data on the number and weight of seizures of illicit drugs made at the border provided by the Australian Customs Service (ACS).

3 DEMOGRAPHICS

- REU in 2010 continue to be a group that are aged in their mid-20s (mean age of 24 years), predominantly male (58%), with a majority identifying as heterosexual (86%) and being of single marital status (53%). Small proportions reported a prison history or currently being in drug treatment.
- The REU interviewed were well educated: 80% had completed secondary school; 47% had obtained post-secondary qualifications; while 12% were full-time students.
- Almost one-third (29%) of the national sample was currently in full-time employment. The mean weekly income was \$566. The majority were renting (56%) or living in the parental/family home (34%).
- In 2010, REU participants were recruited primarily through word-of-mouth and adverts in street press. Although the same recruitment methodology to previous years was applied, difficulty was experienced in the NT and the ACT in being able to recruit 100 REU in the allotted time period. The NT has experienced difficulty with recruitment of 100 REU for some time.
- Data across time show that key demographic characteristics of the sample have remained stable.

In the 2010 EDRS, 693 REU participants were interviewed. The national sample comprised of 101 REU from Brisbane and Gold Coast (QLD); 100 each from Sydney (NSW), Melbourne (VIC), Hobart (TAS), and Perth (WA); and 92 from Adelaide (SA), 73 from Canberra (ACT) and 27 from Darwin (NT). The sample size was predetermined, with each state/territory aiming to interview 100 REU. Although the same recruitment strategies were employed across all jurisdictions, certain states found it difficult to recruit 100 eligible participants in the required timeframe. This may indicate a smaller or more hidden population of REU in these jurisdictions, which is further discussed in the ecstasy chapter.

3.1 Overview of the REU participant sample

Three fifths (58%) of the national sample interviewed in 2010 were male. The mean age of the sample was 24 years (SD=6.08, range=16-59). There was a significant difference between gender and age, with males found to be significantly older than females (24.93 *versus* 23.37, $t_{689}=3.35$, $p<0$).

05). Most participants identified as heterosexual and nominated English as the main language spoken at home. A minority (1.5%) identified as being of Aboriginal and/or Torres Strait Islander (ATSI) descent. The majority lived in either their own premises (purchased or rented) or in their parents' or family's house (Table 1).

The mean number of years of school education completed by the sample was 12 (SD=0.80, range=7-12), and 80% had completed high school education (year 12 or above). More than half had completed courses after school, with 25% having completed a trade or technical qualification and 23% having completed a university degree or college course. Main source of income for this sample was wages or salary (69%) followed by government benefits (23%). Mean weekly income nationally was \$566 with variations across jurisdictions. Four percent of the sample had a reportedly been to prison, remand was included in this table (Table 1)

Half (53%) of the national sample reported that they were of single status and just over one-third (37%) had a partner. Nine percent reported being married or living in a de facto relationship, and less than 1% reported that they were separated, divorced or widowed respectively.

Four percent (n=25) of the national sample reported that they were currently in drug treatment (Table 1). Of those that were in treatment, methadone was reported as their main form of treatment (n<10), with small numbers (n<=5) reporting other treatments including drug counselling, and buprenorphine treatment (Subutex or Suboxone) treatment.

Table 1: Demographic characteristics of REU, 2010

(%)	National N=693	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
Mean age (years)	24 (24)	26 (23)	23 (22)	24 (23)	23 (24)	26 (24)	23 (23)	25 (31)	25 (25)
Male	58 (64)	74 (64)	49 (60)	64 (67)	55 (64)	62 (65)	48 (65)	41 (61)	58 (60)
English speaking background	98 (98)	91 (94)	99 (100)	100 (100)	100 (100)	99 (99)	99 (97)	100 (99)	100 (98)
Aboriginal and/or Torres Strait Islander	1.5 (2)	1 (0)	3 (1)	0 (2)	1 (0)	1 (4)	4 (2)	4 (12)	1 (0)
Sexual identity									
Heterosexual	86 (86)	78 (91)	88 (89)	83 (84)	96 (98)	87 (83)	86 (84)	89 (60)	83 (89)
Gay male	5 (6)	14 (5)	4 (4)	5 (7)	0 (1)	2 (5)	3 (5)	0 (0)	7 (1)
Lesbian	3 (2)	4 (1)	3 (3)	1 (0)	1 (1)	3 (1)	4 (3)	4 (6)	3 (4)
Bisexual	6 (6)	4 (4)	4 (7)	11 (7)	11 (1)	8 (10)	7 (8)	0 (4)	6 (10)
Mean years of school education (n)	12 (12)	12 (12)	12 (11)	12 (12)	12 (12)	11 (11)	12 (12)	12 (11)	12 (12)
Tertiary qualifications	47 (43)	50 (33)	32 (22)	41 (46)	61 (46)	51 (53)	48 (46)	74 (40)	38 (62)
Employed full time	29 (29)	28 (21)	23 (33)	21 (25)	34 (27)	30 (28)	31 (22)	85 (55)	20 (29)
Students#	12 (11)	6 (13)	6 (12)	8 (9)	27 (22)	10 (4)	8 (13)	0 (5)	18 (6)
Unemployed	14 (18)	16 (13)	18 (14)	21 (16)	8 (14)	20 (33)	13 (15)	0 (22)	11 (19)
Mean weekly income (\$)	\$566	\$684	\$456	\$504	\$604	\$523	\$467	\$1209	\$484
Accommodation									
Own house/flat	7 (7)	7 (3)	3 (6)	4 (3)	9 (10)	8 (6)	7 (8)	11 (18)	6 (6)
Rented house/flat	56 (65)	64 (49)	45 (47)	57 (60)	60 (67)	53 (58)	45 (45)	70 (63)	64 (60)
Family home	34 (24)	26 (48)	45 (41)	32 (35)	31 (21)	39 (34)	44 (44)	19 (13)	26 (28)
No fixed address	<1 (1)	0 (0)	3 (0)	0 (2)	0 (1)	0 (1)	1 (0)	0 (2)	0 (0)
Prison history (including remand)	4 (6)	6 (3)	7 (9)	4 (1)	1 (2)	5 (8)	2 (8)	7 (11)	5 (1)
Currently in drug treatment	4 (3)	5 (4)	7 (4)	5 (2)	1 (3)	0 (1)	3 (5)	0 (0)	6 (5)

Source: EDRS REU interviews

Question wording changed in 2007 to include only full-time students

Note: Comparable data from 2009 presented in brackets. Mean weekly income first included in 2009

The demographic characteristics of the REU recruited were generally consistent across jurisdictions, though some jurisdictional differences were noted. Reasons for these demographic

differences between jurisdictions are unclear. Participants were recruited using the same methodology and eligibility criteria. It may be that there are differences between groups of REU around the country.

Table 2 presents key demographic characteristics across time. The age of REU in the national sample, have consistently been aged, on average, in their mid-20s. Other key demographic characteristics have also remained consistent across time. The proportions reporting a prison history and/or current engagement in drug treatment have remained low, supporting previous findings that REU are a group with little contact with law enforcement and drug treatment services.

Table 2: Demographic characteristics of REU, 2003-2010

(%)	2003 N= 809	2004 N=852	2005 N=810	2006 N=752	2007 N=741	2008 N=678	2009 N=756	2010 N=693
Mean age (n; range)	25 (15-59)	24 (16-61)	24 (16-61)	25 (16-71)	25 (16-54)	25 (17-59)	24 (16-54)	24 (16-59)
Male	60	62	59	63	58	57	64	58
English speaking background	98	98	98	98	98	98	98	98
Heterosexual	82	83	84	84	81	81	86	86
Tertiary qualifications	46	50	50	45	56	53	43	47
Employed full time	30	37	35	37	33	41	29	29
Unemployed	25	16	14	16	16	11	18	14
Prison history	8	7	8	7	6	4	6	4
Currently in drug treatment	6	3	3	4	4	3	3	4

Source: EDRS REU interviews

3.1.1 Recruitment of REU sample, 2010

Participant in the EDRS and/or IDRS study in previous years has continued to be reported by a minimal number of participants. Participants that meet criteria for the IDRS, that is regular injectors of illicit drugs, are purposefully screened out of the EDRS as they become a sentinel group able to provide information of a different nature for the IDRS study. A national change was noted in 2010 in the primary way in which participants were recruited with advertising in street press as opposed to word of mouth (snow-balling) identified as the most effective source of recruitment (Table 3). Despite the use of the same methodology, participants in the NT and ACT were extremely difficult to recruit in the given timeframe. SA did recruit 100, however data was unable to be reported for 8 due to interviewer error. For further explanation on jurisdictional differences please consult the relevant 2010 jurisdictional report.

Table 3: Previous participation in the EDRS and IDRS and source of participant recruitment, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=756	2010 N=693	n=100	n=73	n=100	n=100	n=92	n=100	n=27	n=101
Previously participated in EDRS	16	17	11	21	15	35	10	12	19	13
Where found out about EDRS survey recruitment										
Internet	8	5	2	1	10	2	6	6	0	8
Word of mouth	39	35	20	32	25	70	17	52	56	21
Advert in street press	38	48	75	62	64	6	74	30	4	40
Fliers	3	11	2	6	0	22	3	5	41	30
Previously participated in IDRS	3	2	2	4	0	0	6	3	0	0

Source: EDRS REU interviews

4 CONSUMPTION PATTERN RESULTS

4.1 Drug use history and current drug use

- While ecstasy remained the drug of choice nationally, trend data would indicate that ecstasy has been consistently declining in preference (52% in 2003 to 38% in 2010) and alcohol and cocaine have been subsequently increasing in preference.
- One-third of the sample continued to report excess stimulant use in a 'binge session'. VIC and the NT reported the highest level of binge use.
- Poly drug use is reported by this sample in a fortnightly to monthly frequency.
- Half of the sample commented on changes in the drug market over the preceding six months to interview, the main themes included: The low quality or purity of ecstasy pills, new drugs on the market such as: mephedrone, DMT and BZP, and an increase in prevalence of certain drugs such as cocaine.

In 2010, participants were asked about lifetime (i.e. ever having used) and recent (last six months) use of a broad range of drug types, including alcohol and tobacco.

The participants recruited for the EDRS were well placed to comment on the market characteristics of the main drugs focused on in the EDRS, namely ecstasy, methamphetamine, cocaine, ketamine, GHB and LSD.

Participants reported the use of a wide range of other drugs in their lifetime (Table 4). A small proportion of REU reported the use of less commonly used substances, including many of the synthetic analogues known as 'research chemicals' that have had much media attention including mephedrone, ivory wave, DMT (a powerful hallucinogen); synthetic drugs such as 2CI, 2CB and benzylpiperazines (BZP); and naturally occurring drugs, such as kava (data not shown). In 2010, the EDRS included a section investigating the prevalence of use of these substances in this sample. Results can be found in the Section 5.7 Emerging psychoactive substances. Jurisdictional reports may also provide a more detailed overview of the use of these drugs in those areas.

The drugs most likely to have ever been used and to have been used in the preceding six months were alcohol, followed by cannabis and tobacco (Table 4). Sixteen percent of the national sample reported having ever injected a drug, and one-tenth of the sample had injected a drug in the six months preceding interview.

4.1.1 Injecting drug use

Sixteen percent of the national sample reported that they had injected a drug in their lifetime, and 10% had injected in the preceding six months. Among those who had recently injected, the most commonly reported drugs injected recently were heroin (29% of recent injectors), speed (25% of recent injectors), and base (19% of recent injectors). For further details, please refer to Section 7.1 *Injecting Risk Behaviour* section.

Table 4: Lifetime and recent (last six months) polydrug use of REU, 2010

(%)	National N=693	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
Ever injected a drug	16	22	23	14	8	20	10	19	17
Injected drug recently	10	14	21	7	3	9	6	7	11
Alcohol									
ever used	99.6	100	99	99	100	99	100	100	100
recent use	97	97	95	97	100	92	98	100	100
median days recent use (n; range)	60 (2-180)	55 (2-180)	48 (3-180)	72 (3-180)	48 (2-180)	60 (2-180)	48 (6-180)	72 (12-180)	61 (5-180)
Cannabis									
ever used	99	98	100	97	100	100	99	100	96
recent use	80	78	89	89	72	84	81	70	72
median days recent use (n; range)	24 (1-180)	49 (1-180)	24 (1-180)	30 (1-180)	12 (1-180)	60 (1-180)	20 (1-180)	24 (1-180)	24 (1-180)
Tobacco									
ever used	91	92	99	97	96	80	84	96	91
recent use	78	76	89	88	80	69	67	78	79
median days recent use (n; range)	175 (1-180)	171 (1-180)	180 (1-180)	180 (1-180)	48 (1-180)	180 (6-180)	90 (1-180)	172 (1-180)	180 (1-180)
Meth. powder (speed)									
ever used	76	79	81	88	74	71	60	100	73
recent use	47	29	66	70	40	38	38	59	47
median days recent use (n; range)	3 (1-180)	2 (1-30)	3 (1-48)	5 (1-180)	2 (1-12)	2 (1-90)	5 (1-24)	6 (2-24)	3 (1-48)
Meth. base									
ever used	30	53	25	13	19	49	8	52	37
recent use	13	18	14	3	9	28	4	30	14
median days recent use(n; range)	2 (1-150)	2 (1-18)	4.5 (1-24)	2 (2-10)	2 (1-24)	3 (1-150)	2.5 (1-12)	1.5 (1-6)	2 (1-72)
Crystal meth. (ice/crystal)									
ever used	38	56	30	45	20	55	40	52	28
recent use	17	21	16	18	4	26	22	22	8
median days recent use (n; range)	4 (1-40)	3 (1-20)	5 (1-24)	3 (1-24)	1.5 (1-3)	5 (1-40)	6 (1-24)	3.5 (1-12)	1.5 (1-20)
Meth. (any form)									
ever used	81	86	85	88	80	83	66	100	75
recent use	56	50	70	72	48	57	45	63	51
median days recent use (n; range)	4 (1-180)	3 (1-30)	3 (1-84)	5 (1-180)	2 (1-26)	6 (1-150)	7 (1-27)	6 (1-27)	4 (1-84)
Cocaine									
ever used	73	88	81	76	75	69	51	79	73
recent use	48	59	58	54	49	42	26	52	51
median days recent use (n; range)	3 (1-180)	5 (1-100)	3 (1-72)	2 (1-24)	3 (1-20)	2 (1-40)	2 (1-180)	2 (1-48)	2 (1-15)
LSD									
ever used	63	77	62	72	46	66	48	67	66
recent use	38	44	41	49	27	35	35	26	38
median days recent use (n; range)	3 (1-96)	3 (1-25)	3 (1-24)	3 (1-36)	2.5 (1-24)	3.5 (1-24)	2 (1-45)	1 (1-5)	3 (1-96)

Source: EDRS REU interviews

Table 4: Lifetime and recent (last six months) polydrug use of REU, 2010 continued

(%)	National N=693	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
MDA									
ever used	17	21	10	14	14	27	11	26	17
recent use	7	2	3	6	5	7	5	7	7
median days recent use (n; range)	2 (1-20)	3 (2-4)	3.5 (3-4)	2 (1-20)	2 (1-3)	1 (1-3)	2 (1-6)	3.5 (2-5)	1 (1-3)
Ketamine									
ever used	36	64	22	53	19	49	14	41	26
recent use	12	24	6	23	6	13	4	7	8
median days recent use (n; range)	2 (1-30)	3 (1-30)	1.5 (1-12)	2 (1-12)	1 (1-5)	3 (1-15)	2 (1-6)	3 (1-5)	1 (1-5)
GHB/1,4B/GBL									
ever used	18	42	14	23	9	24	3	19	10
recent use	6	17	3	12	2	8	0	0	2
median days recent use (n; range)	2 (1-96)	3 (1-10)	1 (-)	2 (1-24)	1 (-)	1 (1-4)	- (-)	- (-)	49.5 (3-96)
Amyl nitrate									
ever used	51	78	49	58	76	40	20	37	40
recent use	29	46	33	34	51	8	5	30	23
median days recent use (n; range)	3.5 (1-180)	5 (1-90)	5 (1-72)	2 (1-90)	6 (1-48)	3 (1-30)	1 (1-15)	1 (1-12)	3 (1-180)
Nitrous oxide									
ever used	47	45	38	43	57	59	39	33	49
recent use	20	15	14	22	32	20	16	15	23
median days recent use (n; range)	4 (1-180)	1 (1-20)	7 (1-30)	5 (1-180)	4 (1-48)	4.5 (1-48)	7 (1-180)	22 (10-25)	3 (1-39)
Licit benzodiazepines									
ever used	17	15	19	28	7	19	14	4	22
recent use	10	15	17	6	6	9	10	0	14
median days recent use (n; range)	20 (1-180)	10 (1-180)	20 (3-180)	24 (3-180)	15 (3-72)	21 (2-72)	13.5 (3-180)	- (-)	90 (3-180)
Illicit benzodiazepines									
ever used	43	59	46	63	40	32	35	19	37
recent use	26	34	28	36	23	16	21	7	26
median days recent use (n; range)	3 (1-180)	5 (1-48)	3.5 (1-10)	4.5 (1-50)	3 (1-60)	3 (1-160)	2 (1-48)	26 (4-48)	2 (1-180)
Any benzodiazepines (licit/illicit)									
ever used	51	64	53	71	44	42	44	22	48
recent use	32	38	38	45	27	22	28	7	33
median days recent use (n; range)	5 (1-180)	4.5 (1-180)	6 (1-180)	7 (2-180)	4 (1-80)	4.5 (1-160)	3.5 (1-180)	26 (4-48)	3.5 (1-180)

Source: EDRS REU interviews

Table 4: Lifetime and recent (last six months) polydrug use of REU, 2010 continued

	National N=693	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
Licit pharm. stimulants									
ever used	6	8	7	6	1	7	6	7	4
recent use	1	0	4	3	0	0	4	0	0
median days recent use (n; range)	180 (1-180)	- (-)	2 (1-8)	180 (-)	- (-)	- (-)	180 (12-180)	- (-)	- (-)
Illicit pharm. stimulants									
ever used	49	46	67	51	21	42	83	48	34
recent use	23	16	36	24	9	10	58	22	12
median days recent use (n; range)	3 (1-180)	3 (1-95)	3 (1-180)	1.5 (1-116)	1 (1-58)	1 (1-5)	6 (1-90)	4 (2-10)	5.5 (1-48)
Any pharm. stimulants (licit/illicit)									
ever used	51	48	71	56	21	45	84	56	36
recent use	24	16	38	27	9	10	61	22	12
median days recent use (n; range)	4 (1-180)	3 (1-95)	3 (1-180)	3 (1-180)	1 (1-58)	2 (1-24)	6 (1-180)	4 (2-10)	5.5 (1-48)
Licit antidepressants									
ever used	21	20	16	32	13	22	19	11	25
recent use	10	9	7	15	3	10	10	7	13
median days recent use (n; range)	180 (1-180)	100 (1-180)	180 (90-180)	150 (14-180)	180 (15-180)	180 (2-180)	180 (12-180)	180 (-)	180 (7-180)
Illicit antidepressants									
ever used	8	9	12	9	5	8	7	11	9
recent use	3	4	7	1	2	2	1	0	2
median days recent use (n; range)	2 (1-60)	4 (1-48)	3 (2-10)	2 (-)	2.5 (1-4)	3.5 (2-5)	60 (-)	- (-)	1.5 (1-2)
Any antidepressants (licit/illicit)									
ever used	27	26	25	36	16	28	24	22	32
recent use	12	12	12	15	5	12	11	7	15
median days recent use (n; range)	150 (1-180)	28 (1-180)	90 (2-180)	150 (14-180)	155 (1-180)	180 (2-180)	180 (12-180)	180 (-)	180 (1-180)
Magic mushrooms									
ever used	57	60	60	75	58	52	43	52	55
recent use	18	10	30	22	18	14	12	7	26
median days recent use (n; range)	2 (1-60)	1 (1-6)	4.5 (1-20)	2 (1-6)	3 (1-8)	1 (1-6)	1 (-)	2 (1-7)	2 (1-7)

Source: EDRS REU interviews

Table 4: Lifetime and recent (last six months) polydrug use of REU, 2010 continued

(%)	National N=693	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
Heroin									
ever used	12	23	21	17	8	12	4	4	18
recent use	4	12	14	7	2	2	3	0	7
median days recent use (n; range)	12 (1-180)	8 (1-180)	24 (2-180)	40 (1-180)	22.5 (15-30)	2 (1-3)	30 (2-180)	- (-)	1 (1-180)
Methadone									
ever used	7	8	12	6	10	5	3	4	7
recent use	4	4	8	5	5	0	2	4	3
median days recent use (n; range)	8 (1-180)	180 (2-180)	59.5 (1-180)	58 (5-180)	2 (4-24)	- (-)	2.5 (1-4)	2 (-)	5 (4-180)
Buprenorphine									
ever used	4	4	8	5	5	5	2	0	5
recent use	2	2	7	3	1	1	1	0	2
median days recent use (n; range)	45 (1-180)	91 (2-180)	1 (1-180)	60 (30-90)	14 (-)	- (-)	96 (-)	- (-)	93.5 (7-180)
Other opiates licit									
ever used (%)	12	24	22	10	1	2	12	4	19
recent use (%)	3	2	4	3	1	1	5	4	7
median days recent use	2 (1-90)	3.5 (2-5)	4 (1-5)	6 (-)	4 (-)	2 (-)	7 (1-90)	3 (-)	1 (1-7)
Other opiates illicit									
ever used	18	22	22	16	19	14	17	4	20
recent use	6	8	6	6	4	8	6	0	7
median days recent use(n; range)	3 (1-180)	2.5 (1-15)	2 (1-180)	3 (1-12)	3.5 (1-12)	10 (1-48)	2 (1-6)	- (-)	2 (1-8)
Any other opiates									
<i>ever used</i>	27	39	40	25	19	15	27	7	35
<i>recent use</i>	9	8	10	8	4	8	10	4	14
<i>median days (not available)</i>	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
OTC codeine									
ever used	48	69	60	56	12	49	29	52	59
recent use	33	46	34	37	5	35	22	48	46
median days pain use*(n; range)	5 (1-180)	6 (1-180)	5 (1-180)	4 (1-72)	2^ (1-4)	6 (1-72)	5 (1-12)	6 (1-24)	5 (1-72)
median days other use** (n; range)	3 (1-175)	5^ (2-80)	2^ (1-10)	3^ (1-10)	1^ (1-4)	2 (1-4)	5^ (-)	12^ (5-21)	5 (1-175)
OTC stimulants									
ever used	37	50	47	29	13	28	36	44	59
recent use	22	27	23	16	3	14	26	33	42
median days recent use (n; range)	4 (1-72)	4 (1-20)	10 (1-30)	2.5 (1-30)	3 (2-4)	5 (2-20)	4 (1-24)	3 (1-14)	4.5 (1-72)
Steroids									
ever used	2	2	0	2	0	2	1	7	6
recent use	<1	0	0	1	0	0	0	4	2
median days recent use (n; range)	8 (2-90)	- (-)	- (-)	2 (-)	- (-)	- (-)	- (-)	90 (-)	8 (-)

Source: EDRS REU interviews

Note: Median days have been rounded to whole numbers. *of those that used OTC codeine for pain use

**of those that used OTC codeine for other than pain use

Table 5 presents the proportion of REU reporting lifetime and recent use the main drug types investigated by the EDRS across the sampling years (methamphetamine, cocaine, LSD, MDA, GHB and ketamine) as well as the proportion reporting lifetime and recent use of alcohol and cannabis. The proportion of participants reporting lifetime use of the drugs presented in Table 5 has remained consistent across the five sampling years.

Increasing and decreasing trends are evident across time in relation to lifetime and recent use of ecstasy and related substances (Table 5). In 2010, of interest is the decreasing trend of lifetime and recent use of methamphetamine (all forms), and the recent increasing trend of cocaine and LSD use.

Table 5: Lifetime and recent (last six months) polydrug use of REU, 2003-2010

(%)	2003	2004	2005	2006	2007	2008	2009	2010
Alcohol								
ever used	98	99	99	99	100	99	99	99
used last six months	93	95	97	96	98	97	97	97
Cannabis								
ever used	96	96	97	98	100	97	98	99
used last six months	85	81	84	83	87	76	82	80
Meth. powder (speed)								
ever used	87	85	89	86	82	77	74	76
used last six months	73	68	74	64	57	46	45	47
Meth. base								
ever used	51	53	52	52	45	39	33	30
used last six months	36	39	38	34	26	18	15	13
Crystal meth. (ice/crystal)								
ever used	63	63	60	65	54	47	36	38
used last six months	52	45	38	49	33	24	15	17
Meth. (any form)[^]								
ever used	92	91	94	93	89	83	79	81
used last six months	84	83	84	82	71	59	54	56
Cocaine								
ever used	54	54	61	63	66	68	63	73
used last six months	24	27	41	37	40	36	39	48
LSD								
ever used	65	60	64	61	61	58	61	63
used last six months	29	26	32	29	28	30	34	38
MDA								
ever used	33	32	20	23	24	21	14	17
used last six months	19	15	9	7	6	4	5	7
Ketamine								
ever used	40	40	38	35	39	35	29	36
used last six months	26	23	21	14	16	12	10	12
GHB/1,4B/GBL⁺								
ever used	22	23	21	20	20	17	14	18
used last six months	12	11	10	9	7	7	4	6

Source: EDRS REU interviews

⁺ GHB category also includes 1,4 butanediol (1,4B) and GBL

[^] Refers to participants who nominated one or more of the following drugs: speed, base and/or ice/crystal

4.1.2 Drug of choice and binge drug use

Ecstasy was the drug of choice for two-fifths (37%) of respondents in 2010. The next most commonly preferred drug was cannabis, followed by cocaine, and alcohol (Table 6). Trend data would indicate that ecstasy has been declining in preference (52% in 2003 to 37% in 2010) and alcohol and cocaine have been subsequently increasing in preference in this sample (Figure 1).

Participants were asked whether they had binged on ERD in the six months proceeding interview. Bingeing was defined as using drugs on a continuous basis for more than 48 hours without sleep (Ovendon and Loxley, 1996). One-third (34%) of the national sample had binged on one or more drugs in the preceding six months on a median of two occasions (range 1-90). The median length of the longest binge was almost three days (70 hours).

Amongst those who had binged for over 48 hours, ecstasy (84%) was the drug most commonly reported being used in a binge session. Alcohol more than five standard drinks (68%), cannabis (53%), speed (42%) and ice/crystal methamphetamine (24%) were also frequently reported as being used in a binge session. Other drugs mentioned included cocaine (29%), energy drinks (29%), LSD (16%), benzodiazepines (9%), pharmaceutical stimulants (11%), base (6%), amyl nitrate (4%), mushrooms (4%), nitrous oxide (3%), ketamine (3%), and GHB (5%).

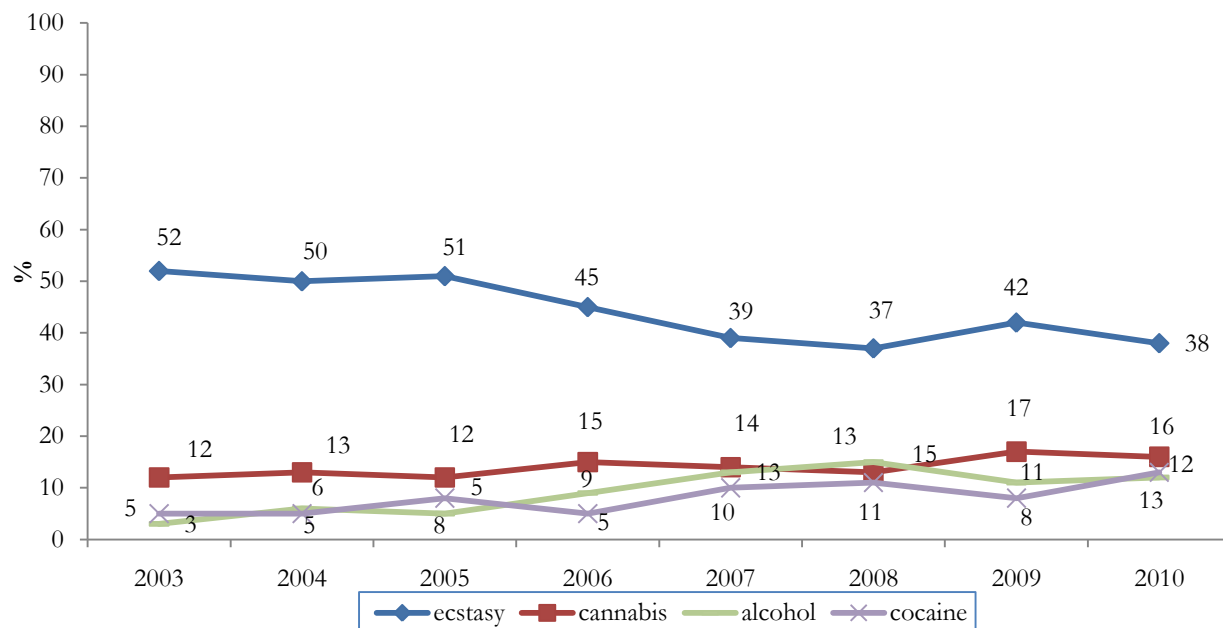
Table 6: Drug of choice and recent (last six months) bingeing among REU, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=756	2010 N=693	n=100	n=73	n=100	n=100	n=92	n=100	n=27	n=101
Drug of choice										
Ecstasy	42	37	32	36	31	37	37	45	33	43
Cannabis	17	16	22	22	17	7	18	11	22	14
Cocaine	8	13	12	8	12	22	21	6	22	5
Alcohol	11	12	9	8	11	19	5	14	4	21
LSD	5	8	10	10	7	7	4	8	0	9
Ice/crystal	2	3	5	3	3	0	3	4	0	1
Speed	5	2	0	1	7	0	1	2	4	2
Heroin	1	2	3	4	3	1	0	1	0	2
Base	2	1	1	1	1	2	2	0	11	0
Mushrooms	2	1	1	3	0	1	1	1	0	0
Ketamine	1	1	3	1	4	0	2	0	0	0
GHB	<1	<1	1	0	0	0	1	0	0	0
Pharm Stim	<1	<1	0	0	0	0	0	3	0	0
Benzodiazepines	<1	<1	1	0	0	0	0	0	0	0
Binged* on any stimulant	36	34	30	43	38	24	38	37	44	29

Source: EDRS REU interviews

* 'Binged' was defined as the use of any stimulant for more than 48 hours continuously without sleep

Figure 1: Drug of choice for REU, 2003-2010



Source: EDRS REU interviews

4.1.3 Polydrug use in REU, 2010

In 2010, participants were asked how often they used ERD. The majority of responses reported between monthly and weekly use which is supportive of the literature which indicates that this sample of regular ecstasy users is a poly drug using group. In comparison to 2009, there has been a reported decrease in the frequency of using ecstasy and related drugs with a decrease in the number reporting fortnightly use and an increase in those reporting monthly use. Very small numbers were reported for daily and more than once a week use (see Table 7).

Table 7: Frequency of polydrug use in the REU sample, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=756	2010 N=685	n=100	n=69	n=99	n=100	n=89	n=100	n=27	n=101
Not in the last month	3	5	7	3	1	3	9	4	7	9
Monthly	19	27	21	19	20	39	25	42	33	22
Fortnightly	41	34	39	32	28	39	30	29	30	43
Weekly	26	24	23	30	36	16	27	19	19	22
More than once a week	9	8	10	16	13	3	9	5	11	4
Once a day	-	<1	0	0	1	0	0	1	0	1

Source: EDRS REU interviews

4.1.4 Change in trends of ERD use

Participants were asked to report if they had experienced anything novel regarding drug use (new drugs, routes of administration, types of people using) in the last six months. Proportions that reporting that there were changes are shown below in Table 8 (46% in 2009 and 50% in 2010).

Nationally, the common themes reported were:

- the low quality or purity of ecstasy pills, followed by a reported increase in presence and consumption of MDMA capsules;
- new drugs on the market and friends or participants seeing and using more of these drugs such as mephedrone, DMT and BZP; and
- a higher prevalence of certain drugs such as cocaine and various comments across a few jurisdictions (n<10) mainly NSW regarding smoking cocaine i.e. crack which has previously not been mentioned as often in the EDRS. Numbers are still extremely small. See jurisdictional reports for more details.

Readers are directed to jurisdictional reports for further in depth analysis of these trends.

Table 8: Proportion that reported recent changes in social drug use patterns, by jurisdiction, 2010

(%)	National N=693	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
Changes in drug use	50	58	47	65	50	44	48	33	45

Source: EDRS REU interviews

4.2 Ecstasy use

- Ecstasy tablets were used on a median of 12 days in the six months prior to interview, i.e. approximately fortnightly. Fourteen participants (10%) reported using ecstasy more than weekly.
- Participants reported using a median of two tablets in a typical session of use and a median of four tablets in a heavy session of use. Two-fifths (34%) reported typically using more than two tablets in a session.
- An increase was reported in those using ecstasy in the form of capsules (47% in 2010 from 27% in 2009). This form was mostly reported in TAS, the NT and VIC. The increase in capsule use may explain the increased reports of ‘snorting’ (6% in 2009, 11% in 2010) as a main ROA. However, swallowing (88%) remained the predominate ROA reported by most REU, and 1% had injected.
- The mean age at which ecstasy was first used was 18 years, and was used regularly (at least monthly) at a median age of 20 years. No sex differences were found.
- Ecstasy remained to be seen as a ‘social’ drug with REU reporting ‘most’ (43%) of their friends consumed it.
- Ecstasy continued to remain a drug that was consumed amongst other polydrug users during the cyclic drug use period of ecstasy (during peak and during the come down period).
- Current domestic and EDRS market indicators would suggest that ecstasy consumption is decreasing. See section 5.1 *Ecstasy* for more information.

4.2.1 Ecstasy use among REU

The median age at which participants in the 2010 national sample first used ecstasy was 18 years (range=11-50 years, mean is also 18 years) (see Table 9). The median age of first ecstasy use was the same for both males and females, with the mean age a year older for females (19 years versus 18 years). Participants reported that regular (at least monthly) ecstasy use occurred at a median of 19 years (range=14-48 years, mean is 20 years of age). The median length of time since participants reported first using regularly was three years (range=0-24 years).

Participants in the national sample had used ecstasy (referring to ecstasy tablets only) on a median of 12 days in the preceding six months (range=1-96 days). There was no significant difference reported in median days use in 2010 compared with 2009, $p>0.05$. Just over half (58%, 55% in 2009) of participants had used between monthly and fortnightly (inclusive), 22% (30% in 2009) had used between fortnightly and weekly and 10% (14% in 2009) had used ecstasy more than once per week³.

The median number of ecstasy tablets taken in a typical or average use episode in the preceding six months was two tablets (range=0.5-24 tablets). Over three-quarters (78%) of the national sample reported that they typically used more than one tablet and one-third (34%) reported using over two tablets per session. During the heaviest use episode in the preceding six months, participants in the national sample reported a median of four tablets (range=1-30 tablets).

³ Considering ecstasy pills, powder and capsules together, results were: 54% had used between monthly and fortnightly (inclusive); 30% had used between fortnightly and weekly; and 16% had used more than once per week.

The majority of participants reported using pills recently, while 47% reported using ecstasy capsules and 17% reported using ecstasy powder. Twenty-nine percent of the national sample reported having binged on ecstasy in the preceding six months; the longest binge session reported was a median of 62 hours (range= 48-336 hours). NSW, SA and the NT both reported the longest binge sessions of a median of 72 hours (three days).

A summary of these findings is shown in Table 9.

Table 9: Patterns of ecstasy use among REU, 2010

	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=756	2010 N=693	n=100	n=73	n=100	n=100	n=92	n=100	n=27	n=101
Median age first used ecstasy (years)	18	18	17	17	17	18	18	18	17	17
Median age first used ecstasy regularly (years)	19	19	18	19	18	20	19	19	19	18
Median days used ecstasy in the last six months [#]	12	12	12	12	12	6	12	10	12	12
Used ecstasy [#] more than weekly (%)	14	19	19	29	23	0	28	14	33	21
Median tablets in typical session	2	2	2	2	2	2	2	2	2	2
Typically use >2 tablets (%)	38	34	40	43	33	14	41	30	15	43
Forms used (%)										
Pills	100	98	99	99	98	96	99	100	100	98
Capsules	27	47	35	37	65	81	38	14	89	42
Powder	14	17	7	14	34	21	19	6	15	20
Recently binged* on ecstasy (%)	34	29	26	37	32	19	32	27	41	27
Ever injected [#] ecstasy (%)	7	7	11	10	2	2	8	6	7	9
Use other drugs with ecstasy (%)	N=553 82	92	94	88	98	99	91	85	89	93
Use other drugs to come down from ecstasy (%)	N=541 56	49	56	52	53	45	54	39	41	44

Source: EDRS REU interviews

* Binged defined as the use of ecstasy for more than 48 hours continuously without sleep

Refers to ecstasy 'pills' only; excludes powder and capsules

Note: Medians rounded to nearest whole number.

Participants were also asked what proportion of their friends used ecstasy (see Table 10). Across jurisdictions there did not appear to be much variation with the majority reporting 43% that most of their friends used ecstasy and 30% said about half their friends used it. This is aligned

with the literature that suggests ecstasy is a socially used drug. Smaller proportions reported that all (7%), a few (18%) or none (<1%) of their friends used ecstasy. There is little to no variation in reports of proportions of friends that use ecstasy from 2009 to 2010.

Table 10: Proportions of friends that use ecstasy, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=756	2010 N=693	n=100	n=73	n=100	n=100	n=92	n=100	n=27	n=101
All friends	7	9	6	6	9	5	12	9	26	8
Most friends	46	43	47	48	47	48	34	43	26	38
About half	29	30	33	33	30	37	24	28	19	30
A few	18	18	14	14	14	10	30	19	30	24
None	<1	<1	0	0	0	0	0	1	0	0

Source: EDRS REU interviews

4.2.2 Other drug use with ecstasy and when coming down from ecstasy

The majority (92%) of REU interviewed reported that they usually used other drugs with ecstasy.

Ten participants reported that they used mephedrone whilst using ecstasy, six participants reported use of ecstasy with mushrooms, two participants reported they used over the counter codeine. There were no reports of combined MDA use with ecstasy. As in previous years, alcohol, tobacco and cannabis were most commonly reported drugs typically used with ecstasy. Noticeably, energy drinks were consumed with ecstasy at a similar level that REU reported using any form of methamphetamine with ecstasy (see Table 11).

Table 11: Drugs usually used in combination with ecstasy among those who used other drugs with ecstasy, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=756	2010 N=693	n=100	n=73	n=100	n=100	n=92	n=100	n=27	n=101
Alcohol >5 standard drinks*	59	75	72	69	67	84	80	60	91	88
Tobacco	49	56	61	50	74	49	52	38	70	61
Cannabis	34	42	42	53	56	29	45	37	30	38
Energy drinks	-	20	14	8	29	26	21	11	22	23
Meth. (any form)	18	20	16	27	26	7	23	19	35	22
Speed	12	14	11	19	25	6	6	16	35	15
Cocaine	6	11	17	20	9	4	12	5	13	11
LSD	5	7	7	17	7	3	7	7	9	4
Pharmaceutical Stimulants	2	4	0	5	3	1	0	20	0	1
Ice/crystal	5	4	4	5	2	0	12	7	4	2
Amyl nitrate	3	3	11	3	1	3	2	0	4	2
Base	4	3	5	6	0	1	7	0	0	4
Benzodiazepines	-	3	2	5	4	2	0	0	0	5
Ketamine	1	2	6	2	2	0	1	1	0	0
Nitrous oxide	3	2	1	5	1	3	5	1	0	1
GHB	<1	1	3	0	3	0	1	0	4	0

Source: EDRS REU interviews

* Of those who reported usually drinking alcohol

Participants were also asked about the effect taking ecstasy had on their typical alcohol consumption behaviour. Most participants reported that it either had no effect (40%) on the number of alcoholic drinks consumed and a similar proportion reported that they believed they actually consumed less alcohol (37%)(Table 12).

Table 12: Drinking behaviour on last occasion of ecstasy use, of those who used ecstasy and alcohol, 2010

(%)	National N=576	NSW n=79	ACT n=55	VIC n=86	TAS n=93	SA n=78	WA n=72	NT n=22	QLD n=91
More alcohol than would normally consume	22	28	16	23	13	28	14	50	23
No change (same number of drinks)	40	44	26	31	66	32	43	23	37
Less alcohol than would normally consume	37	28	58	45	22	40	43	27	40

Source: EDRS REU interviews

Half (49%) of the sample also used other drugs to come down from ecstasy, ranging from 29% in TAS to 46% NSW (Table 13). Similarities in drug types used are reported across 2009-10.

Table 13: Drugs used to come down from ecstasy last time used, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=541	2010 N=693	n=100	n=73	n=100	n=100	n=92	n=100	n=27	n=101
Used drugs to come down from ecstasy	49	49	57	52	53	45	54	39	41	44
Cannabis	39	36	46	45	41	29	36	32	30	30
<i>Alcohol >5 standard drinks</i>	13	5	8	0	2	4	7	5	7	5
Tobacco	29	13	21	12	9	13	26	11	11	3
Benzodiazepines	<1	10	13	10	14	13	2	7	0	11
OTC Codeine	0	1	1	3	1	0	1	0	7	2
Meth. (any form)	1	<1	0	0	0	0	1	0	0	0
Speed	2	0	-	-	-	-	-	-	-	-
Ice/crystal	<1	0	-	-	-	-	-	-	-	-
Nitrous oxide	1	1	0	1	1	2	2	1	0	0
Ketamine	<1	1	2	0	1	0	2	0	0	0
Base	<1	<1	0	0	0	0	1	0	0	0
GHB	<1	<1	0	0	1	0	0	0	0	0
Cocaine		<1	1	0	1	0	0	0	0	0
Pharm. stimulants	<1	<1	0	1	0	0	0	0	3	0

Source: EDRS REU interviews

4.2.3 Route of administration

Table 14 presents the ‘main’ route of administration (ROA) by jurisdiction. In the six months preceding the interview, 97% of participants had swallowed ecstasy pills (99% in 2009), 66% had snorted them (62% in 2009), 5% had shelved/shafted (8% in 2009) (refers to vaginal/anal administration respectively), 3% had smoked (5% in 2009) and 2% had injected ecstasy pills (2% in 2009). Ecstasy capsules were predominantly swallowed by 29% of the entire sample (26% in 2009), 44% had snorted (9% in 2009), 2% had smoked and two participants had injected ecstasy capsules recently (n=4 in 2009). Ecstasy powder was swallowed by 9% of the national sample in the preceding six months (8% in 2009), snorted by 14% (11% in 2009), smoked by nine participants and injected by four participants (n=6 in 2009). Two participants reported having shelved or shafted ecstasy powder during that time (no reports in 2009). The vast majority of participants (88%) nominated oral ingestion as their main route of ecstasy administration, 11% mainly snorted the drug, and small numbers mainly injected it. One participant reported smoking as the main route of administration. The slight increase in the route of administration of snorting may be due to the increase in reported use of powder and capsule forms of ecstasy.

Table 14: Main ROA of ecstasy in the last six months, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=756	2010 N=693	n=100	n=73	n=100	n=100	n=92	n=100	n=27	n=101
Swallow	93	88	92	92	85	70	92	94	82	91
Snort	6	11	7	4	13	30	7	5	19	9
Inject	2	1	1	4	1	0	1	1	0	0

Source: EDRS REU interviews

4.2.4 Perceived benefits associated with ecstasy use, 2010

The majority of REU that commented reported that they perceived there to be benefits to their ecstasy use. The three main benefits endorsed by REU were as expected to be associated with the pleasurable effects of the drug MDMA. Other associated benefits reported by the REU sample included to relax/escape/release (10%), to increase confidence/decrease inhibitions (10%), for the drug effects of hallucinations and insight (7%), different effects to alcohol (non-violent) (8%), to enhance sexual experience (7%), due to affordability (cheap) (4%), and to keep the feeling of being in control or focused (3%, see Table 15).

The responses gained were very similar to the perceived benefits to ecstasy use reported in the PDI (subsequently the EDRS) between 2003 and 2006 and the interested reader is directed to the EDRS website where these reports are freely available for comparison (<http://ndarc.med.unsw.edu.au/NDARCWeb.nsf/page/EDRS>). For further discussion see jurisdictional reports.

Table 15: Benefits associated with using ecstasy, 2010

(%)	National N=693	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
Yes, there are benefits associated	92	88	93	87	93	92	95	100	95
Of those who reported that there were benefits:									
Fun (enjoyable night/good time)	41	39	41	51	61	39	23	30	41
Enhanced mood (euphoria/wellbeing)	42	43	38	35	54	46	40	41	37
Enhanced closeness and bonding	37	35	38	46	38	28	38	48	32
Enhanced communication/talkativeness	32	41	34	18	42	28	35	30	26
Appreciation of music/dance	29	16	28	22	26	28	39	33	42
The high/rush/buzz	28	19	34	24	27	32	35	26	26
Increased energy/stay awake	18	30	12	21	8	17	24	15	17

Source: EDRS REU interviews

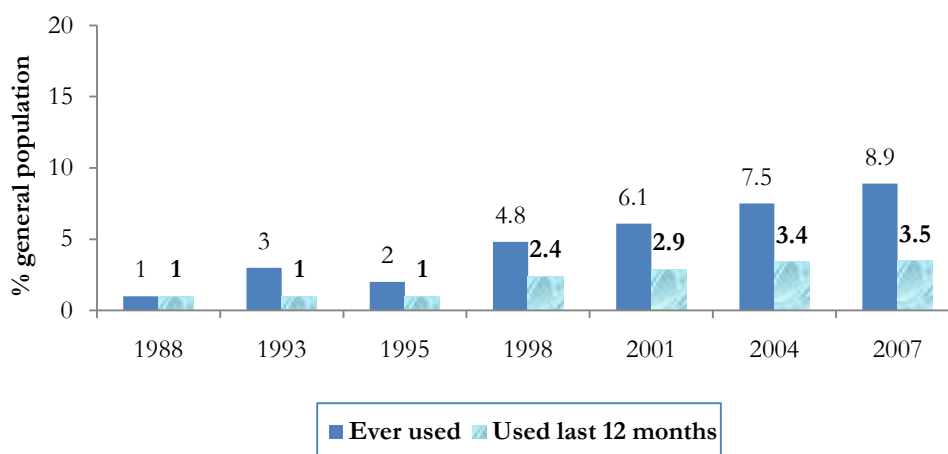
4.2.5 Use of ecstasy in the general population

Since ecstasy was first included in the NDSHS in 1988, reported lifetime prevalence of ecstasy use among the general population aged 14 years and above increased from 1% in 1988 to 8.9% in 2007. In 2007, ecstasy (3.5%) was the second most commonly reported illicit drug used in the previous 12 months behind cannabis (9.1%) in 2007 (Australian Institute of Health and Welfare, 2008).

Similarly, as shown in

Figure 2, the proportion of the general population who reported using ecstasy in the preceding 12 months has increased over time from 1% in 1988 to 3.5% in 2007 (Australian Institute of Health and Welfare, 2008).

Figure 2: Prevalence of ecstasy use in Australia, 1988-2007



Source: NDSHS 1988-2007 (Commonwealth Department of Health and Family Services, 1996, Commonwealth Department of Health, 1993, Australian Institute of Health and Welfare, 2002, Australian Institute of Health and Welfare, 2005, Australian Institute of Health and Welfare, 2008, Commonwealth Department of Community Services and Health, 1988)

Note: In the 2001 and earlier surveys, ecstasy was analysed as ecstasy/designer drugs, the term 'designer drugs' not being defined in the survey. The 2004 survey separated out ecstasy, ketamine and GHB and did not cover any other 'designer drugs'.

The prevalence of ecstasy use varied slightly according to gender, although differences were modest compared to other drugs. In the 2007 NDSHS, 10.2% of males and 7.6% of females reported having ever used ecstasy. This is consistent with data from previous surveys (Australian Institute of Health and Welfare, 2002, Higgins et al., 2000, Commonwealth Department of Health and Family Services, 1996).

In the 2007 survey, both lifetime (23.9%) and past year (11.2%) ecstasy use was most common among those aged 20-29 years. Again, more males than females in this age group reported lifetime use (25.7% versus 22.1%) and recent use, i.e. in the preceding 12 months (13.8% versus 8.7%). Those aged 30-39 years reported lifetime use of 17% and recent use of 4.7%. Those aged 14-19 years reported lifetime use of 6% and recent use of 5% (Australian Institute of Health and Welfare, 2008). These figures related to secondary school students have remained relatively low

and stable in relation to lifetime and past-year ecstasy use between 1996 and 2005 (Letcher and White, 1999, White and Hayman, 2001).

4.3 Methamphetamine use

The majority of participants reported lifetime use of one or more forms of methamphetamine (speed, base and/or ice/crystal) and over half reported use of one or more of these forms during the six months preceding interview.

The median frequency of methamphetamine use among users was four days (any form methamphetamine) in the preceding six months. Daily use was uncommon, with one participant reporting daily use in 2010. Sixteen percent of the national sample reported having ever injected methamphetamine (any form).

Speed powder

- Just under half (47%) of the sample reported the use of speed in the six months prior to interview. The median days of use was three days, i.e. sporadic use. As in 2009, VIC was the jurisdiction with the highest reported use of speed powder. The mean age of first use was 19 years.
- Among recent speed users, snorting (72%) and swallowing (62%) were the most common routes of recent (last six months) administration. The amount used in an average session was 0.5 gram and the amount used in a heavy session was one gram.

Base

- Thirteen percent of participants reported using base in the six months prior to interview. The median days of use among users remained at two days. The NT and SA were the jurisdictions with the highest reported base use. The mean age of first use was 21 years.
- Among recent base users, swallowing was the most commonly nominated ROA (69%). The average amount used in a typical session was two points.

Ice/crystal

- Seventeen percent of the national sample reported recent ice/crystal use. The median days of use among those who had recently used was four days. SA was the jurisdiction with the most recent ice/crystal use reported. The median age of first use was 21 years. The most common ROA for ice/crystal was smoking (75%). The average amount used in a typical and heavy session was two points.

4.3.1 Methamphetamine use among REU

While majority (81%) of the national sample reported having used one or more forms of methamphetamine (speed, base and/or ice/crystal) at some stage during their lifetimes, recent use of any form of methamphetamine seems to have stabilised at a lower level of use compared with use in previous years (see Figure 3). Over half (56%) of the national sample reported use during the preceding six months, ranging from the highest use reported in VIC (70%) to the lowest use reported in WA (45%). These results are consistent with 2009 data. Speed was the form accounting for the majority of recent any methamphetamine use. Sixteen percent of participants in the national sample reported having ever injected methamphetamine. Frequency of use among recent users averaged approximately just less than monthly use (median four days). Use remained at similar levels across jurisdictions with SA and the NT reporting the most frequency of use at approximately monthly (Table 16). Nationally, 56% of recent users reported using less than monthly (65% in 2009), 26% used between monthly and fortnightly (14% in 2009), 9% had used between fortnightly and weekly (10% in 2009) and 9% had used weekly or

more often (14% in 2009). Daily use of methamphetamine was uncommon in this group, being reported by one participant in the entire sample.

Table 16: Patterns of methamphetamine (any form) use among REU, 2010

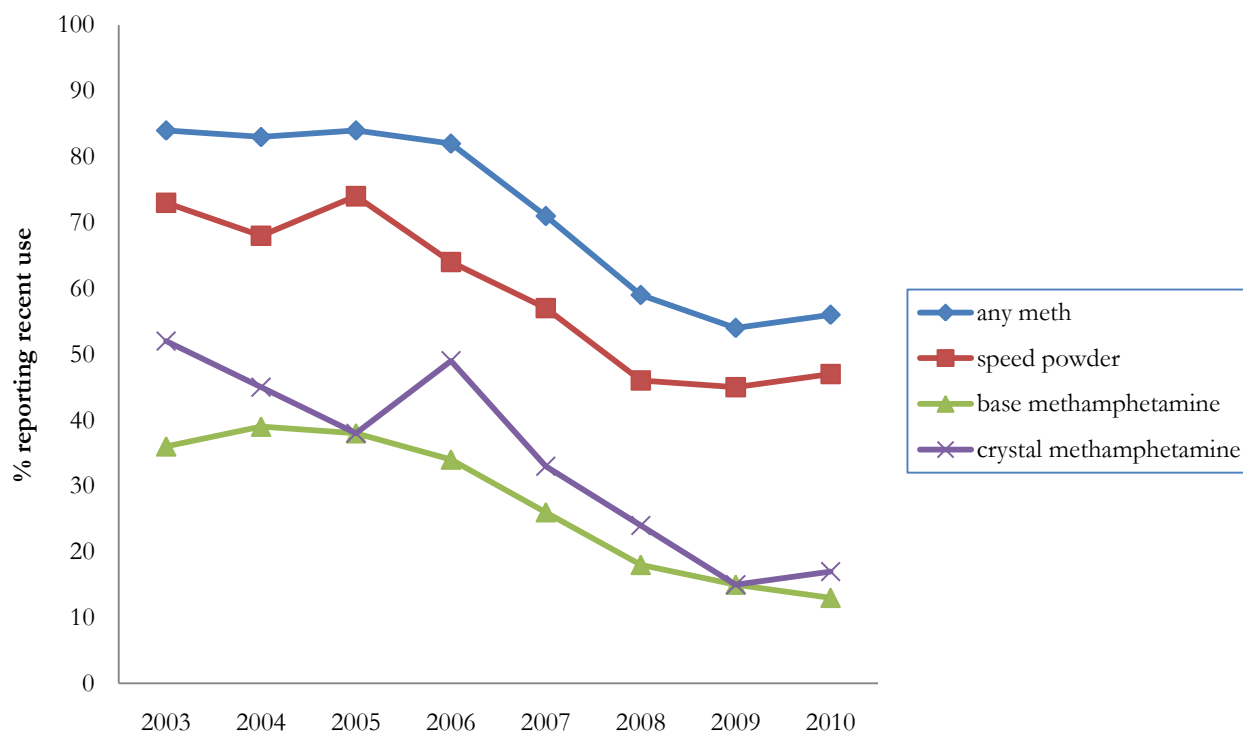
(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=756	2010 N=693	n=100	n=101	n=100	n=100	n=100	n=100	n=67	n=88
Ever used	79	81	89	84	87	80	82	66	100	74
Ever injected	14	16	24	22	15	8	19	10	19	15
Used last six months	54	56	50	70	72	48	57	45	63	51
Median days used* last six months (n;range)	4 (1-180)	4 (1-180)	3 (1-30)	3 (1-84)	5 (1-180)	2 (1-26)	6 (1-150)	7 (1-27)	6 (1-27)	4 (1-84)

Source: EDRS REU interviews

* Among those who had used recently.

Note: Includes speed, base and ice/crystal. Medians rounded to nearest whole number.

Figure 3: Recent any methamphetamine, speed powder, base and ice/crystal methamphetamine use, 2003-2010



Source: EDRS REU interviews

4.3.1.1 Methamphetamine powder (speed)

Three-quarters (76%) of participants in the 2010 national sample reported lifetime speed use and half (47%) had used speed in the preceding six months (Table 17). Those who had used speed recently reported first using it at mean age of 19 years (SD=2.7, range=12-30). No significant difference was found between recent six monthly use from 2009 to 2010 ($p>0.05$).

The most common ROA for speed was snorting followed by swallowing and smoking (Table 17).

Of those who recently used speed, the median number of days used was three, ranging from having used once to daily use. There was no significant difference in median days used 2009 compared to 2010, $p>0.05$. Two-thirds of recent users (64%) used less than once a month, 23% used speed between monthly and fortnightly (18% in 2009), 7% between fortnightly and weekly and 6% used speed more than once a week. Daily use was uncommon, being reported by one participant (n=3 in 2009).

Recent speed users reported using a median of half a gram in a typical session of use (range=0.1-4.5 grams) and one gram in the heaviest recent session of use (range=0.1-10 grams).

Table 17: Patterns of methamphetamine powder (speed) use among REU, 2010

(%)	National		NS W	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=756	2010 N=693	n=100	n=73	n=100	n=100	n=92	n=100	n=27	n=101
Ever used	74	76	79	81	88	74	71	60	100	73
Ever injected	13	11	12	16	9	4	16	8	15	15
Used last six months	45	47	29	66	70	40	38	38	59	47
Snorted*	70	72	90	58	90	65	53	84	81	57
Swallowed*	56	62	48	63	56	73	68	34	88	81
Injected*	14	11	7	23	4	5	11	13	6	15
Smoked*	24	23	7	8	43	3	27	29	63	15
Median days used* last six months (n; range)	3 (1-180)	3 (1-180)	2 (1-30)	3 (1-48)	5 (1-180)	2 (1-12)	2 (1-90)	5 (1-24)	6 (2-24)	3 (1-48)
Average grams used (n; range)*	0.5 (0.05-3.5)	0.5 (0.10-4.5)	1 (0.3-2)	0.3 (0.1-1.5)	0.5 (0.1-4.5)	0.4 (0.2-1.5)	1 (0.1-3)	0.5 (0.1-1)	0.5 (0.5-2)	0.5 (0.13-3.5)
Heaviest grams used (n; range)*	1 (0.05-20)	1 (0.10-10)	1 (0.30-7)	0.5 (0.1-4)	1 (0.1-10)	0.5 (0.2-2)	1 (0.25-4)	1.5 (0.25-4)	1 (0.5-6)	0.63 (0.13-4)
Drug of choice	5	2	0	1	7	7	4	8	0	9
Binged on speed**	38	40	20	48	55	29	29	35	67	52

Source: EDRS REU interviews

* Of those who used in the six months preceding interview

** Of those that had used stimulants for more than 48 hours

Note: Medians rounded to nearest whole number

4.3.1.2 Methamphetamine base

One-third (30%) of participants in the national sample reported lifetime use of base and 13% had used it in the six months preceding interview (Table 18). The mean age of first use (among those who had recently used base) was 21 years (median = 20 years, range=14-50 years). There was no significant difference found between recent users from 2009 to 2010 ($p>0.05$).

Most recent base users reported swallowing (69%) followed by smoking (26%) and snorting (25%) as the most common ROA. Injecting as a ROA was reported by 19% of recent users; a decrease from 31% in 2009. The median number of days used was two (sporadic use), ranging from having used base once to 150 days (Table 18). There was no significant difference in median days used in 2009 compared to 2010 ($p>0.05$). The majority of recent base users (68%) had used less than monthly; 20% used base between monthly and fortnightly; four participants used between fortnightly and weekly (n=10 in 2009) and seven participants used base more than once a week (n=8 in 2009). There were no reports of daily use (n=1 in 2009).

Recent base users reported using a mean of two points in a typical session of use (range=0.1-8 points) and two points in the heaviest recent session of use (range=0.2-140 points).

Table 18: Patterns of methamphetamine base use among REU, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=756	2010 N=693	n=100	n=73	n=100	n=100	n=92	n=100	n=27	n=101
Ever used	33	30	53	25	13	19	49	8	52	37
Ever injected	9	6	9	10	1	5	10	2	4	4
Used last six months	15	13	18	14	3	9	28	4	30	14
Snorted*	18	25	28	70	68	33	19	0	0	7
Swallowed*	56	69	67	60	67	78	65	50	75	79
Injected*	31	19	33	20	0	11	12	50	0	21
Smoked*	32	26	6	20	33	33	50	25	25	7
Median days used* last six months (n; range)	2 (1-180)	2 (1-150)	2 (1-18)	4.5 (1-24)	2 (1-10)	2 (1-24)	3 (1-150)	2.5 (1-12)	1.5 (1-6)	2 (1-72)
Average points used (n; range)*	1.75 (0.2-10)	2 (0.10-8)	1 (0.5-2)	3 [^] (0.2-8)	1 [^] (-)	1.5 [^] (0.25-3)	2 (0.10-5)	1 [^] (0.10-2)	2 [^] (1-3)	3 (0.3-8)
Heaviest points used (n; range)*	2 (0.2-13)	2 (0.20-140)	1.25 (0.5-3)	3 [^] (0.2-8)	1 [^] (-)	2 [^] (0.25-3)	2 (0.25-20)	1 [^] (0.4-4)	2.5 [^] (1-8)	3 (0.3-140)
Drug of choice	2	1	1	1	1	2	2	0	11	0
Binged on base**	13	8	10	7	0	8	26	0	8	3

Source: EDRS REU interviews

* Of those who used in the six months preceding interview

**Of those that had used stimulants for more than 48 hours

[^]Small numbers responded; interpret with caution

Note: Medians rounded to nearest whole number.

4.3.1.3 Crystalline methamphetamine (ice/crystal)

Thirty-eight percent of the participants in the 2010 national sample reported having ever used ice/crystal and around one-sixth (17%) had used ice/crystal in the six months preceding

interview (Table 19). The mean age of first use, among those who reported using ice/crystal recently, was 21years (median = 21 years, range=12-40 years).

Of those who reported recent use of ice/crystal, the most common ROA was via smoking; notable proportions also reported swallowing, snorting, injecting the drug in the past six months (Table 19).

Of those who reported recent use of ice/crystal, the median number of days used was four, ranging from having used once in the preceding six months to approximately twice weekly (40 days) (Table 19). Recent ice/crystal use in 2010 was comparable to the level reported in 2009 (17% versus 15%; $p > 0.05$). There was no significant difference found in median days use in 2010 compared with 2009 ($p > 0.05$). Fifty-six percent of recent users reported using less than monthly, 31% between monthly and fortnightly (22% in 2009), two participants reported between fortnightly and weekly use and six participants reported using more than weekly. There were no reports of daily use in 2010 ($n = 1$ in 2009).

The median amount of ice/crystal used in a typical or average use episode in the preceding six months was two points (range=0.1-10 points). Recent ice/crystal users reported using a median of two points (range=0.2-20 points) during the heaviest recent use episode.

Table 19: Patterns of crystalline methamphetamine (ice/crystal) use among REU, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=756	2010 N=693	n=100	n=101	n=100	n=100	n=100	n=100	n=67	n=88
Ever used	36	38	44	30	45	20	55	40	52	28
Ever injected	7	8	12	14	6	3	8	6	4	8
Used last six months	15	17	21	16	18	4	25	22	22	8
Snorted*	17	18	5	33	11	0	13	41	33	0
Swallowed*	25	33	33	33	17	0	44	27	50	6
Injected*	27	18	38	42	0	0	13	18	0	13
Smoked*	82	75	76	42	94	100	70	82	83	63
Median days used* last six months (n; range)	4 (1-180)	4 (1-40)	3 (1-20)	5 (1-24)	3 (1-24)	2 [^] (1-3)	5 (1-40)	6 (1-24)	4 [^] (1-12)	2 [^] (1-20)
Average points used (n; range)*	2 (0.1-5)	2 (0.10-10)	1 (0.5-7)	1 [^] (0.2-8)	1 (1-6)	5 [^] (-)	2 (0.1-10)	1 (0.10-4)	2 [^] (1-2)	2 [^] (1-5)
Heaviest points used (n; range)*	3 (0.1-20)	2 (0.2-20)	3 (0.5-10)	0.75 [^] (0.2-3)	1.5 (0.1-65)	5 [^] (-)	3 (0.25-20)	2 (0.4-8.5)	2 [^] (1-2)	2 [^] (1-4)
Drug of choice	2	3	5	3	3	0	3	4	0	1
Binged on ice/crystal**	20	23	40	16	21	0	31	32	25	14

Source: EDRS REU interviews

* Of those who used in the six months preceding interview

** Of those that had used stimulants for more than 48 hours

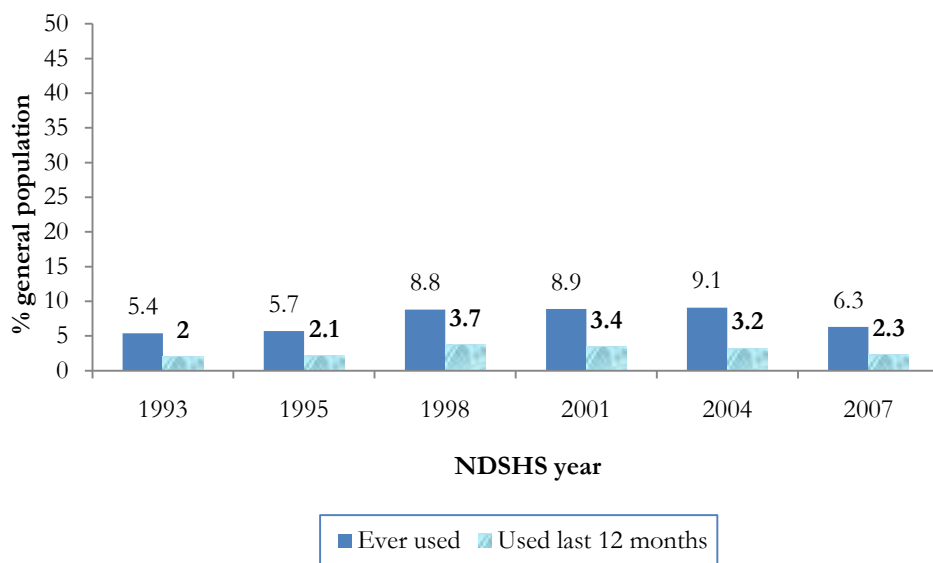
[^] small numbers responded; interpret with caution

Note: Medians rounded to nearest whole number.

4.3.1.4 Meth/amphetamine use in the general population

The NDSHS presents the proportion of the Australian general population who have ever used methamphetamine as well as the proportion that have used the drug in the past 12 months (see Figure 4). A noticeable increase in the lifetime use occurred between 1995 and 1998, with the proportion of the Australia general population having ever used methamphetamine remaining stable until 2007 at which time it began to decrease. Past-year use of methamphetamine has slightly decreased to similar levels of those reported in 1995. Males aged 20-29 years were the group most likely to be recent (previous 12 months) methamphetamine users in 2007 (Australian Institute of Health and Welfare, 2008).

Figure 4: Prevalence of methamphetamine use in Australia, 1993-2007



Source: NDSHS 1993-2007 (Commonwealth Department of Health and Family Services, 1996, Commonwealth Department of Health, 1993, Australian Institute of Health and Welfare, 2002, Australian Institute of Health and Welfare, 2005, Australian Institute of Health and Welfare, 2008)

4.4 Cocaine use

Current use

- Almost half (48%) of the national sample reported cocaine use in the six months prior to interview, a significant increase from 2009. WA was the jurisdiction with the least amount of recent use reported.
- Among recent users, cocaine had typically been snorted (96%), or swallowed (30%). The mean age of first use was 20 years.
- Frequency of cocaine use remained low at a median of three days (sporadic use) during the six months prior to interview. The majority (74%) had used less than once per month. One participant reported daily use.
- The median amount of cocaine used in a typical session of use was half a gram and in a heavy session it was one gram.
- Significant increases were reported compared with 2009 for cocaine as drug of choice, and use of cocaine in a binge session.

4.4.1 Cocaine use among REU

Three-quarters (73%) of the participants in the national sample reported having ever used cocaine and just under half (48%) had used cocaine in the six months preceding interview (Table 20). There was a significant increase found in recent use of cocaine in 2010 compared with 2009 (48% in 2010 from 39% in 2009 $p < 0.05$). The increase was reported across the majority of states, with a pronounced difference detected in SA. The mean age of first use, among those who reported having used cocaine recently, was 20 years (median = 20, range=13-38 years).

Of those who had used cocaine, the median number of days of use was three, ranging from having used cocaine once to daily ($n=1$) (Table 20). There was no significant difference detected in median days of use between 2009 and 2010 ($p > 0.05$). The majority (74%) had used less than monthly (80% in 2009); 16% had used between monthly (12% in 2009) and fortnightly; 6% ($n=21$) reported using between fortnightly and weekly (5% in 2009) and ten participants had used cocaine once a week or more ($n=6$ in 2009). One participant reported daily use of cocaine.

Cocaine was predominantly snorted, with substantial proportions also reporting swallowing as an ROA. The median amount of cocaine used in a typical or average use episode in the preceding six months was half a gram (range=0.05-4 grams). Recent cocaine users reported using a median of one gram (range=0.05-8 grams) during the heaviest use episode in the last six months (Table 20). There was a significant increase reported of cocaine as the drug of choice in 2010 compared with 2009 (13% *versus* 8%; CI -0.019, -0.082, $p < 0.01$). There was also a significant increase reported in those that had reported bingeing on cocaine in 2010 compared with 2009 (28% *versus* 18%; CI -0.29, -0.17, $p < 0.05$).

Table 20: Patterns of cocaine use, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=756	2010 N=693	n=100	n=101	n=100	n=100	n=100	n=100	n=67	n=88
Ever used	63	73	88	81	76	75	69	51	78	73
Ever injected	5	5	15	11	2	2	2	0	0	4
Used last six months	39	48	59	58	54	49	42	26	52	51
Snorted*	96	96	93	88	100	100	95	92	100	100
Swallowed*	30	25	22	31	19	40	15	27	50	18
Injected*	1	4	14	10	2	0	0	0	0	2
Smoked*	5	5	15	2	7	2	0	0	0	4
Median days used* last six months (n; range)	2 (1-180)	3 (1-180)	5 (1-100)	3 (1-72)	2 (1-24)	3 (1-20)	2 (1-40)	2 (1-180)	2 (1-48)	2 (1-15)
Average grams used (n; range)*	0.5 (0.1-4)	0.5 (0.05-4)	0.5 (0.2-3)	0.5 (0.1-2)	0.5 (0.05-3)	0.42 (0.25-2.5)	0.75 (0.25-2)	0.5 (0.5-1)	1^ (0.25-4)	0.5 (0.17-2)
Heaviest grams used (n; range)*	1 (0.1-5)	1 (0.05-8)	1 (0.25-7)	1 (0.2-3)	0.5 (0.05-8)	1 (0.25-4)	1 (0.25-2.5)	1 (0.5-3.75)	1^ (0.5-4)	0.5 (0.17-4)
Drug of choice	8	13	12	8	12	22	21	6	22	5
Binged on cocaine**	18	28	43	32	16	33	26	19	42	28

Source: EDRS REU interviews

* Of those who used in the six months preceding interview

** Of those that had used stimulants for more than 48 hours

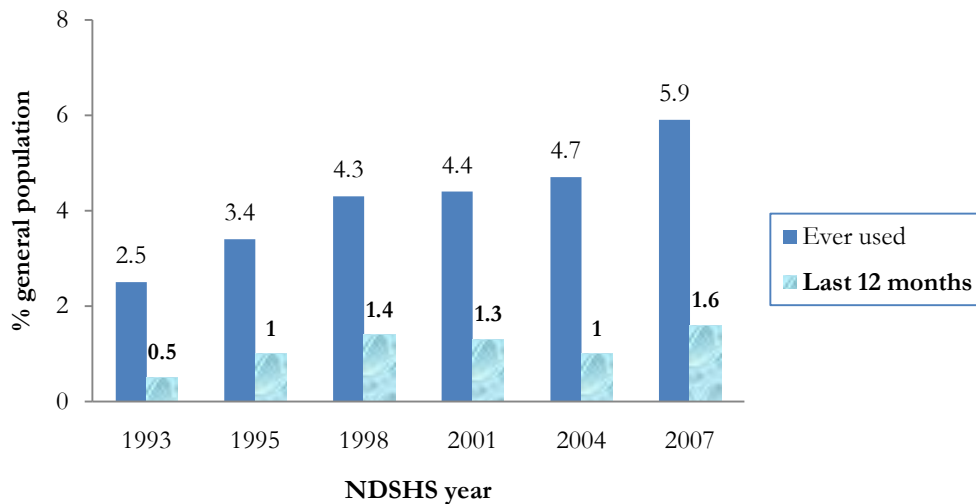
Note: Medians rounded to nearest whole number

^small numbers responded; interpret with caution

4.4.2 Use of cocaine in the general population

Reports of lifetime cocaine use amongst the Australian general population remained consistent between 1993 and 1995 with approximately 3% of the population having ever used the drug. This figure rose to 4.3% in 1998, and remained consistent in 2001 and 2004 (see Figure 5). In 2007, 5.9% reported ever having used cocaine, which was a significant increase from that reported in 2004 (Figure 5: Prevalence of cocaine use in Australia, 1993-2007). Recent use of cocaine has remained relatively stable across the five sampling years; however, in 2007 significant increases were recorded for recent use between 2004 and 2007 for males aged between 20-29 years (from 3.7% to 7%), 40 years or older (from 0.2% to 0.5%) and for all males (from 1.3% to 2.2%) (Australian Institute of Health and Welfare, 2008).

Figure 5: Prevalence of cocaine use in Australia, 1993-2007



Source: NDSHS 1993-2007 (Commonwealth Department of Health and Family Services, 1996, Commonwealth Department of Health, 1993, Australian Institute of Health and Welfare, 2002, Australian Institute of Health and Welfare, 2005, Australian Institute of Health and Welfare, 2008)

4.5 Ketamine use

Current use

- One-third (35%) of the national sample reported lifetime use of ketamine, and 12% reported using ketamine recently. The mean age of first use was 21 years.
- Ketamine use is predominantly reported in VIC, NSW and SA. All other states had less than 10 participants reporting recent use.
- Amongst recent ketamine users, the majority (81%) snorted, while one-quarter (25%) had swallowed it.
- Among users, ketamine had been used on a median of two days in the past six months; the majority (70%) had used ketamine less than once per month. There were four reports of more than weekly use.

Trend use

- In 2009, a tenth of the national sample (10%) reported using ketamine recently.
- Proportion of reported recent use of ketamine has declined in all jurisdictions from 2003-2009. This may be related to a demographic issue (i.e. ketamine use is becoming refined to a group of users not targeted by the EDRS) or a sampling issue (i.e. perhaps the EDRS is no longer able to target this sub-group of REU that use ketamine) or a change in availability, purity or price may be the issue, though trend data collected has not demonstrated this to be the case.

4.5.1 Ketamine use among REU

One-third (36%) of the 2010 national sample reported lifetime use of ketamine and just over a tenth (12%) had used it in the six months preceding interview (Table 21). There was no significant difference detected in recent use from 2009 compared with 2010 ($p>0.05$). While the figures reported were relatively low, they were more substantial than those reported in the 2007 NDSHS (0.2% recent use for participants aged 12 years and over). The EDRS has been able to monitor and document trends in ketamine use nationally since 2003, placing it in a good position to shape appropriate evidence-based policy responses in light of new trends that may be detected.

Ketamine was first used at a mean age of 21 years (median = 19 years, range=15-37 years) by recent users. Lifetime ketamine injection was reported by 1% (n=8) of the national sample (Table 21).

In the six months preceding interview, snorting was the most common ROA of ketamine, followed by swallowing.

Of those who used ketamine, the median number of days used was two (range=1-12 days) (Table 21). There was no significant difference detected in median days of use in 2010 compared with 2009 ($p>0.05$). The majority (70%) had used less than monthly (88% in 2009); 18% had used between monthly and fortnightly (9% in 2009); 7% used between fortnightly and weekly (3% in 2009). Four participants reported more than weekly use, no reports of daily use were reported.

Ketamine use was commonly quantified in 'bumps'. A bump refers to a small amount of powder, typically measured and snorted through a bumper. A bumper is a small glass nasal inhaler that is used to store and administer powdered substances in a measured dose. The

median amount of ketamine used was two bumps (range=0.5-12 bumps) for a typical or average use episode and two bumps (range=1-12 bumps) for the heaviest recent use episode.

Ketamine use was also quantified in lines and grams. Fifteen participants reported using a median of two lines in a typical session (range=0.5-6 lines) and the heaviest recent session of use was two lines (range=1-5 lines). Sixteen participants reported using a median of half a gram (range=0.5-2 gram) in a typical session of use and reported using a median of one gram (range=0.5-3 grams) in the heaviest recent session of use.

Table 21: Patterns of ketamine use among REU, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=756	2010 N=693	n=100	n=73	n=100	n=100	n=92	n=100	n=27	n=101
Ever used	29	36	64	22	53	19	49	14	41	26
Ever injected	2	1	3	0	1	0	1	0	0	3
Used last six months	10	12	24	4	23	6	13	4	7	8
Snorted*	82	81	96	75	96	33	58	75	100 [^]	63
Swallowed*	25	25	8	50	4	67	50	50	0	50
Injected*	1	1	0	0	0	0	5	0	0	13
Smoked*	4	2	4	0	4	0	0	0	0	0
Median days used* last six months (n; range)	2 (1-12)	2 (1-30)	3 (1-30)	1.5 (1-12)	2 (1-12)	1 (1-5)	3 (1-15)	2 (1-6)	3 (1-5)	1 (1-5)
Average bumps used (n; range)*	2 (1-7)	2 (0.5-12)	3 [^] (1-12)	2 [^] (1-3)	2 (1-10)	1 [^] (1-3)	0.5 [^] (-)	1.5 [^] (1-2)	1 [^] (-)	1 [^] (1-4)
Heaviest bumps used (n; range)*	2 (1-8)	2 (1-12)	3 [^] (1-12)	2 [^] (1-3)	2 (1-10)	1 [^] (1-3)	-	2 [^] (1-3)	1 [^] (-)	1 [^] (1-8)
Drug of choice	1	1	3 [^]	1 [^]	4 [^]	0	2 [^]	0	0	0
Binged on ketamine**	5	3 [^]	7 [^]	0	13 [^]	0	0	0	0	0

Source: EDRS REU interviews

* Of those who used in the six months preceding interview

** Of those that had used stimulants for more than 48 hours

Note: Medians rounded to nearest whole number.

[^]small numbers responded; interpret with caution

4.5.2 Ketamine in the general population

The 2007 NSDSHS was the second year in which the prevalence of ketamine use in the general population was investigated. Use of ketamine in those aged 14 years and above was low – only 1.1% had ever used ketamine, and 0.2% had used ketamine in the past year (Australian Institute of Health and Welfare, 2008). Males were more likely than females to have ever used the drug and to have used it in the past 12 months (Australian Institute of Health and Welfare, 2008).

4.6 GHB use

Current use

- Eighteen percent of the national sample reported lifetime use of GHB, with 6% reporting recent use. The mean age of first use was 23 years.
- There was a significant increase in recent use in 2010 compared to 2009. Six percent of the national sample reported recent use, with most recent use reported on the east coast of Australia (VIC and NSW). There were no reports of recent use in the NT and WA.
- Recent use occurred on a median of two days in the six months preceding interview; 83% reported using less than once per month.
- Recent GHB users reported using a median of 3.5 mls in a typical episode of use and a median of 5 ml in the heaviest recent episode of use. GHB was consumed orally; only one participant reported recent injection and shelving/shafting.

Trends in use

- Proportion of reported recent use of GHB has declined in all jurisdictions from 2003-2009. This may be related to a demographic issue (i.e. GHB use is becoming refined to a group of users not specifically targeted by the EDRS).

4.6.1 GHB use among REU

Almost one-fifth (18%) of the 2010 national sample reported lifetime use of GHB and 6% had used it in the six months preceding interview (Table 22). There was significant increase in recent use reported in 2010 compared with 2009 (4% in 2009 *versus* 6% in 2010; 95% CI 0.034, 0.061; $p < 0.005$).

GHB was first used at a mean of 23 years (median = 21 years, range=15-34 years). All recent GHB users reported swallowing GHB, with one participant reporting recent injection and one participant reporting recent shelving/shafting. There were no other ROA reported.

Of those who used GHB in the six months preceding interview, the median number of days used was two (Table 22). There was no significant difference found in median days of use in 2010 compared to 2009 ($p > 0.05$). Over three-quarters of the sample (83%) reported using less than once per month (85% in 2009); three participants between monthly and fortnightly (n=2 in 2009); two participants reported using between fortnightly and weekly; one participant reported using more than once per week. No daily use was reported.

GHB use was typically quantified in millilitres (ml). The median amount used in a typical or average use episode in the preceding six months was 3.5 ml (range=1-15 ml). Recent GHB users reported using a median of 5 ml (range=1-50 ml) during the heaviest recent use episode.

Table 22: Patterns of GHB use among REU, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=756	2010 N=693	n=100	n=73	n=100	n=100	n=92	n=100	n=27	n=101
Ever used	14	18	42	14	23	9	24	3	19	10
Used last six months	4	6	17	3	12	2	8	0	0	2
Median days used* last six months (n; range)	2 (1-72)	2 (1-96)	3 (1-10)	1 [^] (-)	2 (1-24)	1 [^] (-)	1 [^] (1-4)	n.a	n.a.	50 [^] (3-96)
Average mls used (n; range)*	5.75 (0.5-50)	3.5 (1-15)	3.5 (1-10)	3 [^] (1-15)	3 (2-10)	n.a	5 [^] (2-5)	n.a	n.a	5 [^] (3-8)
Heaviest mls used (n;range)*	9 (1-50)	5 (1-50)	5 (1-50)	3 [^] (1-15)	7 (2-20)	n.a	5 [^] (2-6)	n.a	n.a	22 [^] (8-35)
Drug of choice	<1	<1	1	0	0	0	1	0	0	0
Binged on GHB**	3	4	10 [^]	0	11 [^]	0	6 [^]	0	0	3 [^]

Source: EDRS REU interviews

* Of those who used in the six months preceding interview

** Of those that had used stimulants for more than 48 hours

Note: Medians rounded to nearest whole number.

[^]small numbers responded; interpret with caution

4.6.2 GHB use in the general population

The 2004 NSDSHS was the first to investigate the prevalence of GHB use in the general population. In 2007, results were identical to those found in the 2004 NDSHS. Use of GHB in those aged 14 years and above was low: only 0.5% had ever used GHB, and 0.1% had used GHB in the past year (Australian Institute of Health and Welfare, 2008).

4.7 LSD use

Current use

- Sixty-three percent of the national sample reported the lifetime use of LSD; 38% reported recent use of LSD. The mean age of first use was 19 years.
- The median days of LSD use amongst recent users was three. Recent users reported using a median of one tab in a typical session and one-and-a-half tabs in the heaviest recent session of use.
- LSD remains a drug that a substantial proportion of the sample 'binge' on (17%).

Trends in use

- Recent use has steadily increased from 28% in 2003 to 38% in 2010. The slight majority of use appears to be reported on the east coast of Australia (NSW, ACT and VIC).
- LSD as drug of choice has incrementally increased each year from 4% in 2007 to 8% in 2010.

4.7.1 LSD use among REU

In 2010, 63% of the national sample reported lifetime use of LSD and 38% had used it in the six months preceding interview (Table 23). There was no significant difference detected between recent use of LSD in 2010 compared with 2009 ($p>0.05$). The mean age of first use was 19 years (median = 18 years, range=12-39 years).

Of those that were asked and answered positively to using other drugs with ecstasy (n=639), 7% answered that they usually used LSD with ecstasy. One participant reported using LSD to come down from ecstasy. Eight percent (n=52) of the 2010 national sample reported that LSD was their drug of choice.

The primary ROA was oral ingestion (99%) by recent LSD users. One participant had snorted LSD. No other route of administration was reported.

Of those who used LSD in the six months preceding interview, the median number of days used was three, ranging from having used once in the six months preceding interview to having used approximately weekly during this same period. There was no significant difference found in median days use in 2010 compared with 2009 ($p>0.05$). The majority (86%) had used less than monthly (75% in 2009); 14% used between monthly and fortnightly (15% in 2009); 7% used between fortnightly and weekly (8% in 2009); six participants used LSD more than weekly (n=1 in 2009). There was no daily use reported in 2010 or 2009.

The median amount of LSD used in a typical or average use episode in the preceding six months was one tab (range=0.25-5 tabs). The median amount used in the heaviest recent session was 1.5 tabs (range=0.25-11 tabs).

Table 23: Patterns of LSD use among REU, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=756	2010 N=693	n=100	n=73	n=100	n=100	n=92	n=100	n=27	n=101
Ever used	61	63	77	62	72	46	66	48	67	66
Ever injected	2	1	4	0	1	1	2	0	0	1
Used last six months	34	38	44	41	49	27	35	35	26	38
Median days used* last six months (n; range)	2 (1-25)	3 (1-96)	3 (1-25)	3 (1-24)	3 (1-36)	2.5 (1-24)	3.5 (1-24)	2 (1-45)	1 [^] (1-5)	3 (1-96)
Average tabs used (n; range)*	1 (0.25-4)	1 (0.25-5)	1 (0.5-3)	1 (0.5-3.5)	1 (0.5-3)	1 (0.25-2)	1 (0.5-2)	1 (1-2)	1 [^] (0.5-3)	1 (1-5)
Heaviest tabs used (n; range)*	2 (0.25-20)	1.5 (0.25-11)	1 (0.5-6)	1.5 (1-10)	1.5 (1-10)	1.5 (0.25-10)	2 (0.5-7)	1.5 (1-5)	1 [^] (0.5-5)	2 (1-11)
Drug of choice	5	8	10	10	7	7	4	8	0	9
Binged on LSD**	15	17	13	23	18	21	20	14	8	14

Source: EDRS REU interviews

* Of those who used in the six months preceding interview

** Of those that had used stimulants for more than 48 hours

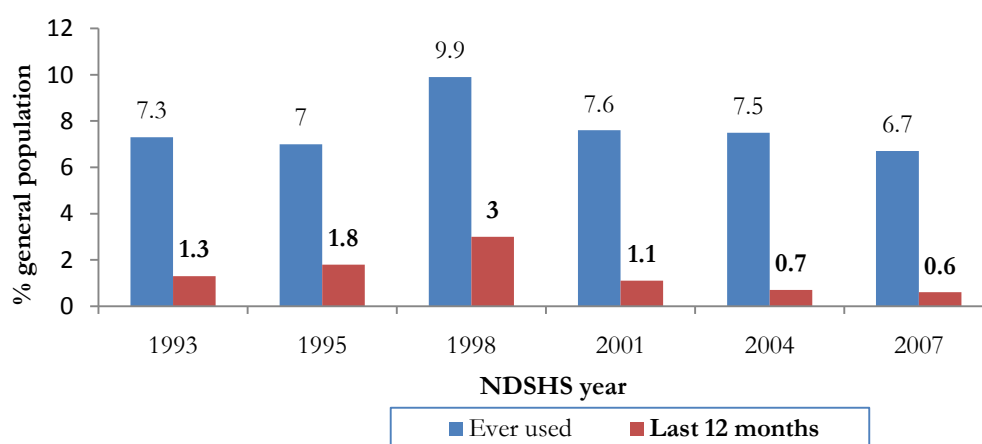
Note: Medians rounded to nearest whole number.

[^]small numbers responded; interpret with caution

4.7.2 Hallucinogen use in the general population

Figure 6 presents the trends in lifetime and past-year use of hallucinogens in the Australian general population aged 14 years and above. The lifetime use of hallucinogens has remained relatively constant between 1993 and 2007, with a slight increase between 1995 and 1998, and a subsequent decrease between 1998 and 2001. Recent hallucinogen use increased between 1993 and 1998, though subsequently decreased from 1998 onwards.

Figure 6: Prevalence of hallucinogen use in Australia, 1993-2007



Source: NDSHS 1993-2007 (Commonwealth Department of Health and Family Services, 1996, Commonwealth Department of Health, 1993, Australian Institute of Health and Welfare, 2002, Australian Institute of Health and Welfare, 2005, Australian Institute of Health and Welfare, 2008)

4.8 Cannabis use

Current trends

- Along with alcohol, cannabis was the second most used drug by the REU sample recently (80%).
- Among recent (six month) users, cannabis had typically been smoked (98%), and swallowed (33%). The mean age of first use by regular users was 15 years.
- Among those who had used cannabis in the six months preceding interview, use occurred on a median of 24 days during this time, i.e. approximately weekly use.
- Cannabis was the drug of choice for 16% of the sample.
- 14% of the national sample were daily cannabis smokers.
- Smoking of cannabis in cones was more common than in joints in the majority of jurisdictions. The median number of cones smoked was three.

Trends in use

- The cannabis market remains relatively stable in relation to use with a reduction from twice weekly use in 2007 to weekly use in 2009 and 2010.

Following high rates of cannabis use reported by REU samples in previous years, from 2006 the EDRS has included survey items on price, potency and availability of this drug. These items distinguish between indoor-cultivated hydroponic (hydro) and outdoor cultivated (bush) cannabis following reports of different market characteristics of each (Stafford et al., 2005, Breen et al., 2004). In the absence of definitive data on the extent to which this distinction reflects actual cultivation methods in Australia (McLaren et al., 2008, Hall and Swift, 2000); however, use patterns refer to any form of cannabis.

In 2010, participants completing the section were also asked if they were able to differentiate between hydro and bush cannabis in terms of price, potency and availability. Just over half (51%) of the national sample reported that they were able to distinguish between the forms, responses remained comparable across states (range = 57% in NSW and QLD to 44% in VIC).

It should also be noted that the use of hashish (hash) and hash oil was rarely reported by REU participants (n=15 across all jurisdictions reported recent purchase of either form in 2010). Consequently, price was the only market characteristics reported. The median price for a gram of hash is \$22.50 (range = \$2-\$100) and the median price for a cap of hash oil is \$35[^] (range = \$4-\$50).

This section contains information about cannabis use by the EDRS REU sample, followed by data on market characteristics (including price, purity and availability). Information on harms (health and law enforcement-related) associated with cannabis use, including indicator data on treatment and toxicity, are discussed in the relevant sections later in this report. Further information about cannabis trends in Australia may be found in reports produced as part of the IDRS, and are available from the NDARC website⁴.

4.8.1 Cannabis use among REU

Almost all (98%) of the 2010 national sample had ever used cannabis, with over three-quarters (80%) of the sample having used cannabis in the six months prior to interview. There was no

⁴ See www.ndarc.med.unsw.edu.au

significant difference in recent use in 2010 compared with use reported in 2009. The mean age of first use was 15 years (median = 15 years, range=7-31 years) of recent users. Cannabis was the drug of choice for 16% of the sample (see Table 24).

Almost all (98%) of those who had recently used cannabis had smoked it, while one-third (33%) had recently swallowed it. Cannabis had been used on median of 24 days (range=1-180 days) in the six months preceding interview, which equates to use of approximately once per week (see Figure 7 **Error! Reference source not found.**). There was no significant difference found in days of use in 2009 compared to 2010 ($p>0.05$).

Amongst recent users, 22% reported using less than once per month; 11% reported using between monthly and fortnightly; 11% reported using between fortnightly and weekly; and 48% reported using more than once per week. Eighteen percent of recent cannabis users (14% of the entire sample) reported daily cannabis use during the preceding six months (See Figure 8).

Recent cannabis users were asked how much cannabis they had smoked on the last day of use, as measured by the number of cones or joints used on that occasion, either by themselves or shared with others. Nationally, cannabis had been predominantly smoked in cones (49%) as opposed to joints (46%). Among those who had smoked in cones, the median number used on the last day was three (range=0.33 to 180 cones), while the number of joints smoked was one (range=0.10 to 12 joints). Daily users of cannabis had smoked a median of five cones (range=1-180 cones) or two joints (range=1-5 joints) on the last day of use.

Table 24: Patterns of cannabis use among REU, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=756	2010 N=693	n=100	n=73	n=100	n=100	n=92	n=100	n=27	n=101
Ever used	98	99	98	100	98	100	100	97	100	100
Used last six months	82	80	78	89	89	72	84	81	70	72
Smoked*	82	98	100	99	99	100	94	100	100	100
Swallowed*	29	33	27	37	33	32	33	33	16	43
Median days used* last six months (n; range)	29 (1-180)	24 (1-180)	49 (1-180)	24 (1-180)	30 (1-180)	12 (1-180)	60 (1-180)	20 (1-180)	24 (1-180)	24 (1-180)
Cones used last time (n; range)*	4 (0.1-60)	3 (0.33-180)	5 (1-35)	4 (1-20)	4 (1-24)	4 (0.5-20)	3 (1-180)	2 (1-10)	1 [^] (1-4)	3 (0.33-300)
Joints used last time n; (range)*	1 (0.2-10)	1 (0.1-12)	1 (0.1-4)	1.5 (1-3)	2 (0.5-12)	1 (0.25-9)	1 (0.5-4)	1 (0.5-4)	1.5 (1-4)	1.5 (0.5-10)
Drug of choice	17	16	22	22	17	7	18	11	22	14
Binged on Cannabis**	54	51	53	61	66	42	46	46	33	48

Source: EDRS REU interviews

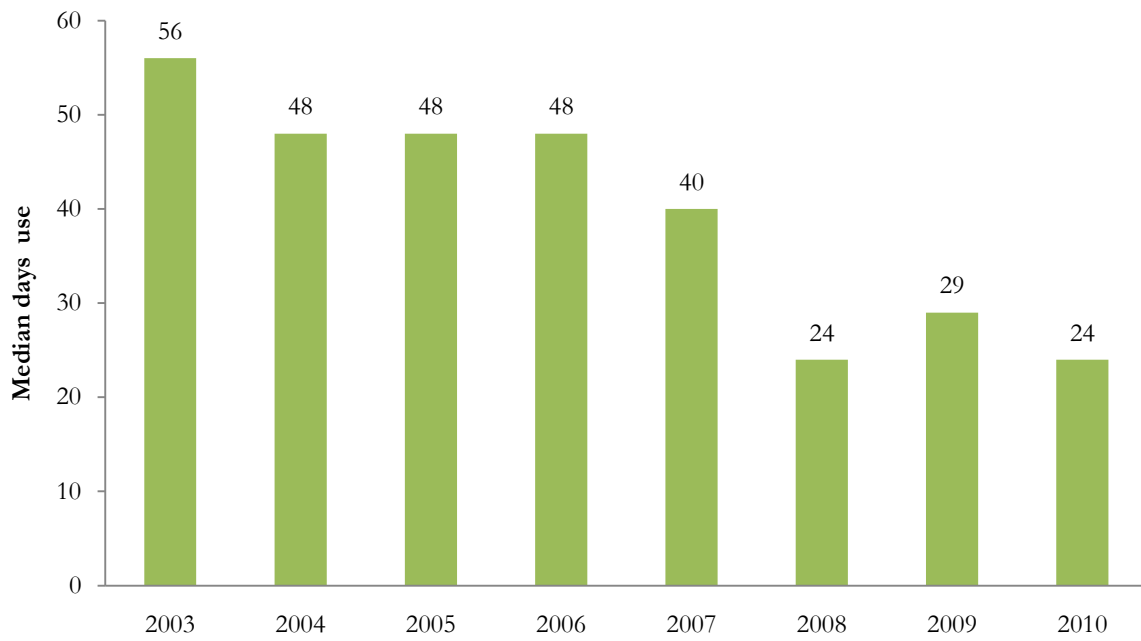
* Of those who used in the six months preceding interview

** Of those that had used stimulants for more than 48 hours

Note: Medians rounded to nearest whole number

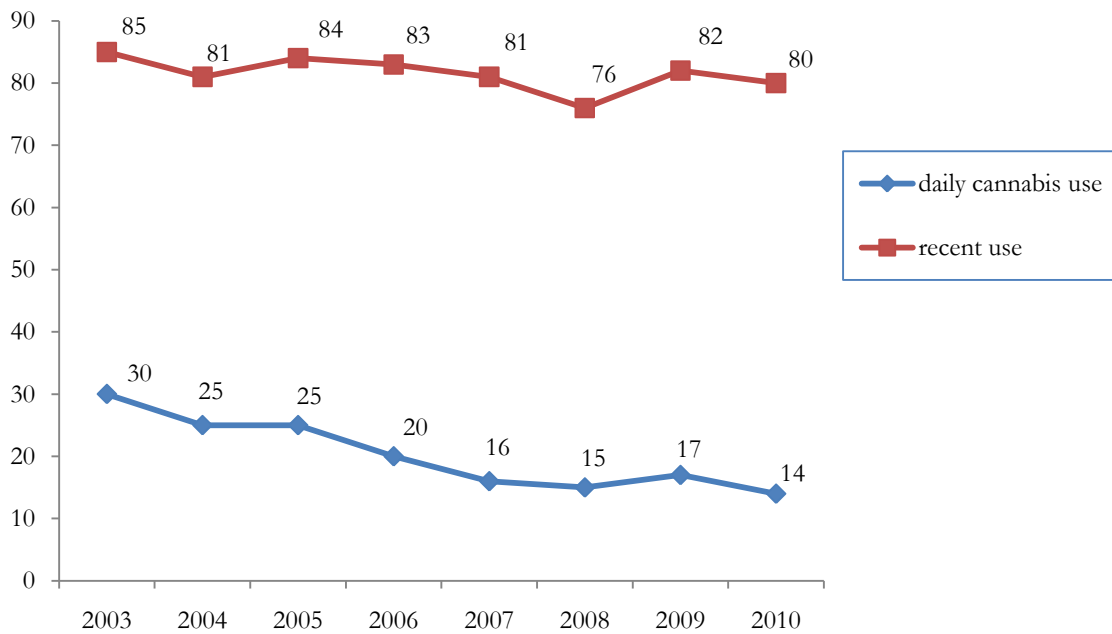
[^]small numbers responded; interpret with caution

Figure 7: Median days used cannabis among national REU, 2003- 2010



Source: EDRS REU interviews
 *daily use is reported from the entire sample

Figure 8: Patterns of recent and daily* cannabis use among national REU, 2003- 2010

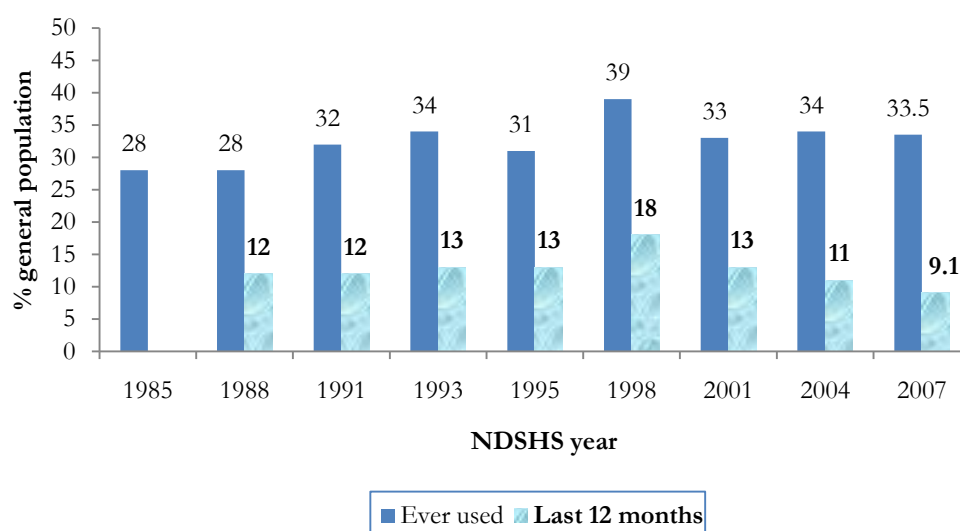


Source: EDRS REU interviews
 *daily use is reported from the entire sample

4.8.2 Cannabis use in the general population

As can be seen in Figure 9, the prevalence of lifetime and recent cannabis use in the Australian general population aged 14 years and above has remained relatively stable across sampling years. The most recent survey was conducted in 2007 and found that one-third (33.5%) of the Australian population aged 14 years and above had ever tried cannabis, while 9.1% had used cannabis in the 12 months prior to interview (Australian Institute of Health and Welfare, 2005).

Figure 9: Lifetime and past year prevalence of cannabis use by Australians, 1985-2007



Source: NDSHS 1988-2007 (Australian Institute of Health and Welfare, 2005, Commonwealth Department of Community Services and Health, 1988)

Note: Caution should be exercised when interpreting prevalence of cannabis use between 1985 and 1993 due to major changes in sampling and methodology of the surveys.

4.9 Other drugs use

Current use

- **MDA** having declined in reported use annually since 2007, has been included in the *Other drug use* section. MDA lifetime use was small at 17% of the national sample, with 5% reporting recent use on a median of two days.
- Almost all (99.6%) participants reported lifetime use of **alcohol**, and 97% reported alcohol use in the six months preceding interview. The mean age of first use was 14 years. The median days of alcohol use was 60 (48 days in 2009). No significant differences were detected from 2009 to 2008 in use or frequency of consumption. Alcohol was commonly reported as a drug used in combination with other drugs during binge sessions.
- Ninety-two percent reported lifetime **tobacco** use and 78% had used tobacco in the six months preceding interview. Half (50%) of recent tobacco users were daily smokers, with median days use being 175 (i.e. almost daily).
- Half (51%) of the sample reported lifetime **benzodiazepine** (both licitly and illicitly obtained) and one-third (32%) reported recent illicit use. Injecting and snorting were reported as routes of administration for illicit use. Daily use of illicit (n=3) and licit (n=14) benzodiazepine use was minimal.
- One-tenth (10%) of the national REU sample reported recent licit use and three percent reported illicit use of **antidepressants**. Licit use was higher than illicit use in 2010. ROA was mainly swallowing with n<5 reports of shelving.
- One-fifth (20%) of the REU sample reported recent **nitrous oxide** use in the six months preceding interview on a median of four days, comparable with 2009 results. Use was highest in TAS.
- Recent use of **amyl nitrate** (nationally) was reported by almost one-third (29%) in 2010 compared with 2009. Use was occasional on a median of four days.
- Eighteen percent of the national sample reported recent **mushroom** use. Use occurred on a median of two days, and 86% of recent users had used less than once per month.
- **Other drugs** discussed in this section include **heroin** and **other opiates**, **methadone**, **buprenorphine**, **pharmaceutical stimulants**, **OTC codeine**, **OTC stimulants** and **steroid use**.

4.9.1 MDA use

Due to the reported continued decline in use of MDA, it has been moved to the *Other drugs* section as opposed to retaining its own chapter on consumption patterns and market characteristics.

Seventeen percent of the national sample reported the lifetime use of MDA. The mean age of first use was 20 (range= 14-29 years) years for recent users. Five percent of the national sample reported using it in the six months preceding interview (5% of recent use reported in 2009). Use occurred on a median of two days (range= 1-20), with the majority (91%) of recent users reporting that use had occurred less than once per month. Swallowing (80%) was the most frequently nominated ROA. There were no reports of injecting or smoking MDA.

A median of two capsules (range=0.4-5 capsules) were used in a typical session of use and a median of two capsules (range=0.4-10 capsules) were used in the heaviest session of use over the preceding six months.

4.9.2 Alcohol

Twelve percent of the 2010 (11% in 2009) national sample nominated alcohol as their drug of choice. Almost all of the national sample reported they had used alcohol in their lifetimes (99.6%) and in the six months preceding interview (97%; see Table 4). The mean age of first use in recent alcohol users was 14 years (median = 15 years, range=8-32 years).

Among those who had used alcohol, use had occurred on a median of 60 days (approximately between twice and three-times weekly use) in the past six months (range=2-180 days) an increase from 48 days in 2009. There was a significant difference in median days consumed alcohol in 2009 compared to 2010 ($p=0.015$). Sixty-seven percent of recent alcohol users reported using alcohol more than once per week. Nine percent of recent users reported daily drinking (7% were daily drinkers in 2009 and 2008).

Of the sample, those that reported using drugs in combination with ecstasy (n=639), 75% reported that they usually consumed more than five standard alcoholic drinks.

In 2010 the Alcohol Quantity Frequency and Variability (AQFV) and the Alcohol Use Disorders Inventory (AUDIT) was administered to participants. Detailed information regarding the AQFV in the 2010 EDRS can be found in chapter 7 *Risk Behaviour*.

4.9.3 Tobacco

Ninety-one percent of the national sample reported they had used tobacco in their lifetime and 78% had used tobacco in the six months prior to interview, these figures are consistent with those reported in 2009. Median days used was reported at 175 days, i.e. almost daily (range=1-180 days). Tobacco was first used at a mean age of 15 years (range=6-31 years) by recent users. Tobacco was the drug of choice for nine participants of the national sample. Half (50%) of those who reported recent tobacco use (38% of the entire sample) were daily smokers.

4.9.4 Benzodiazepines

Half (51%) of the 2010 sample reported the lifetime use of any benzodiazepine. Almost one-third (32%) reported the recent use of any benzodiazepine on a median of five days (i.e. less than monthly). Five percent of recent users (n=11) reported daily use. Sixteen participants in the sample reported usually using benzodiazepines with ecstasy; 20% (n=67) reported usually using benzodiazepines to come down from ecstasy (of those that use drugs to come down off ecstasy

n=336); and 8% reported bingeing on benzodiazepines (of those that binged on stimulants n=236). One participant nominated benzodiazepines as their drug of choice. Since 2007, a distinction was also made between benzodiazepines that were licitly and illicitly obtained (see below). Brand of benzodiazepine was not specified.

4.9.4.1 Licitly obtained (prescribed) benzodiazepines

Seventeen percent of the 2010 (13% in 2009) sample reported having ever used licitly obtained benzodiazepines and 10% (8% in 2009) reported their use in the six months preceding interview. The mean age of first use was 22 years (median = 21, range=14-40 years). Licit benzodiazepines had been used on a median of 20 days (range=1-180 days) in the preceding six months. Fourteen percent of recent users reported daily use (20% in 2009). All of the recent licit benzodiazepine users reported swallowing in the preceding six months. There were no reports of injecting and snorting licit benzodiazepines during this time.

4.9.4.2 Illicitly obtained (non-prescribed) benzodiazepines

Two-fifths (43%) of the 2010 sample reported having ever used illicitly obtained benzodiazepines and one-quarter (26%) reported their use in the six months preceding interview (Table 25). The mean age of first use was 21 years (median = 20 years, range=12-40 years) in recent users. Illicit benzodiazepines had been used on a median of three days (range=1-180 days) in the preceding six months. Amongst recent users, the majority (88%) reported using illicit benzodiazepines less than monthly, three participants reported daily use. Swallowing was the most common ROA in the six months preceding interview (98%), though three participants reported injecting and 13 participants (7% of recent users) reported snorting illicit benzodiazepines, four participants reported snorting benzodiazepines during this time.

Table 25: Use of illicitly obtained benzodiazepines, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=756	2010 N=693	n=100	n=73	n=100	n=100	n=92	n=100	n=27	n=101
Ever used	39	43	59	46	63	40	32	35	19	37
Used last 6 months	21	26	34	29	36	23	16	21	7	26
Median days use (n; range)*	3 (1-180)	3 (1-180)	5 (1-48)	3.5 (1-10)	4.5 (1-50)	3 (1-60)	3 (1-160)	2 (1-48)	26^ (4-48)	2 (1-180)

Source: EDRS REU interviews

* Of those who had used illicit benzodiazepines in the past six months

^small numbers responded; interpret with caution

4.9.5 Antidepressants

4.9.5.1 Licitly obtained (prescribed) antidepressants

Twenty-one percent of the national sample reported using licit antidepressants in their lifetime and one-tenth (10%) reported recent use (Table 26). The mean age of first using licit antidepressants was 21 years (median = 20 years, range = 8-37 years) amongst recent users. The median days of use was 180 days, or daily among those who recently used licit antidepressants. Nine percent (n = 6) reported using them daily.

Table 26: Use of licitly obtained antidepressants, by jurisdiction, 2010

(%)	National		NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
	2009 N=756	2010 N=693								
Ever used	19	21	20	16	32	13	22	19	11	24
Used last 6 months	8	10	9	7	15	3	10	10	7	13
Median days use (n; range)*	170 (1-180)	180 (1-180)	100 [^] (1-180)	180 [^] (90-180)	150 (14-180)	180 (15-180)	180 [^] (2-180)	180 (12-180)	180 (-)	180 (7-180)
ROA*										
Swallowing	100	92	89	100	100	100	89	100	0	92
Shelve/shaft	0	8	11	0	0	0	11	0	100	8

Source: EDRS REU interviews

* Of those who had used licit antidepressants in the past six months

[^]small numbers responded; interpret with caution

4.9.5.2 Illicitly obtained (non-prescribed) antidepressants

Eight percent of the national sample reported using illicit antidepressants in their lifetime and 3% report recent use (Table 27). The mean age of first using licit antidepressants was 18 years (median = 18 years, range = 14-25 years) among recent users. The median days of use was two days among those who recently used illicit antidepressants. Main ROA was swallowing by all recent consumers. There was one report of shelving/shafting.

Table 27: Use of illicitly obtained antidepressants, by jurisdiction, 2010

(%)	National		NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
	2009 N=756	2010 N=693								
Ever used	7	8	9	12	9	5	8	7	11	9
Used last 6 months	2	3	4	7	1	2	2	1	0	2
Median days use (n; range)*	4 (1-48)	2 (1-60)	4 [^] (1-48)	3 [^] (2-10)	2 [^] (-)	2.5 [^] (1-4)	3.5 [^] (2-5)	60 [^] (-)	-	1.5 [^] (1-2)

Source: EDRS REU interviews

* Of those who had used illicit antidepressants in the past six months

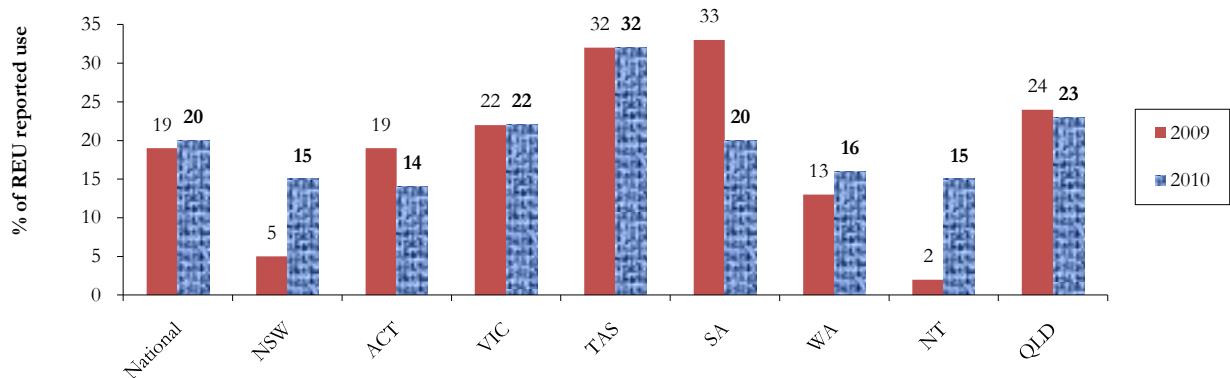
[^]small numbers responded; interpret with caution

4.9.6 Inhalants use

4.9.6.1 Nitrous oxide

Almost half (47%) of the national sample reported lifetime use of nitrous oxide and one-fifth (20% comparable with 19% in 2009) had used nitrous oxide in the six months preceding interview (Figure 10). REU recent users reported first using nitrous oxide in their late teens (mean=19 years, range=13-35 years). Nitrous oxide was used on a median of four days in the preceding six months (range=1-180 days). Two participants reported daily use. The majority (61%) reported using nitrous oxide less than once per month in the preceding six months. Nitrous oxide was not nominated by any participants as their drug of choice. The median number of bulbs ingested in an average session was 10 (range =0.5-180), the most number of bulbs consumed in a heavy session was also 10 (range =1-250).

Figure 10: Use of nitrous oxide across jurisdictions, 2009-2010



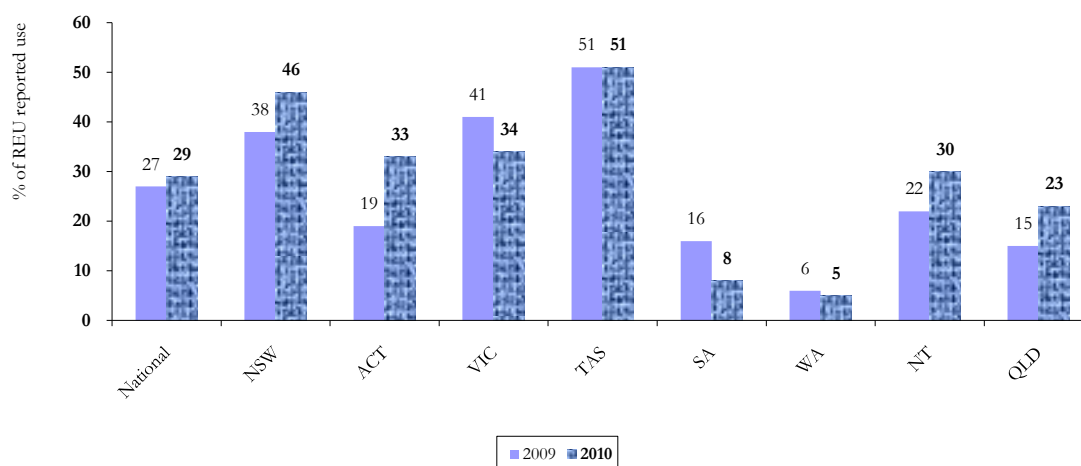
Source: EDRS REU interviews

4.9.6.2 Amyl nitrate

Half (51%) of the REU sample reported having used amyl nitrate (a vasodilator) in their lifetimes and 29% had used amyl nitrate in the six months preceding interview (Figure 11). No significant differences were detected in national use from 2009 to 2010.

REU first used amyl nitrate at a mean age of 20 years (range=10-40 years) by recent users. Frequency of amyl nitrate use was generally low, with users reporting a median of four days of use in the last six months (range=1-180 days). Sixty-two percent of recent users had used less than once per month in the preceding six months. One participant reported daily use.

Figure 11: Use of amyl nitrate across jurisdictions, 2009-2010



Source: EDRS REU interviews

4.9.6.3 Mushrooms

Three percent of the national sample (n=6) nominated mushrooms as their drug of choice. Of the national sample, half (57%) had reported lifetime use of mushrooms and 18% had used mushrooms in the six months preceding interview. The majority of recent use has been reported in the ACT, VIC, and QLD (see Table 4). REU first used mushrooms at a mean age of 19 years (range=12-41 years). Of those who used mushrooms in the preceding six months, oral consumption was the most common ROA (98%), though small proportions reported smoking them (n=2). Mushrooms were used on a median of two days (range=1-60 days) indicating sporadic or very occasional use. The majority of all recent mushroom users (86%) had used mushrooms less than monthly.

4.9.7 Heroin and other opioids

Thirteen participants nominated heroin as their drug of choice. Twelve percent reported they had used heroin in their lifetimes, 9% had injected heroin in their lifetime and 6% reported recently using heroin in the six months prior to interview (Table 4). The mean age of first use of heroin was 20 years (range=13-30 years) in recent users. Heroin had been used on a median of 12 days (range=1-180 days) in the preceding six months by recent users. One-third (37%) had used heroin less than monthly, 16% between monthly and fortnightly, 12% between fortnightly and weekly and 35% reported using heroin more than once per week. The majority of recent heroin users had injected heroin (74%) in the preceding six months with smaller proportions reporting smoking (26%), snorting (19%) or swallowing (7%) heroin during this time.

4.9.8 Methadone

Methadone medication used for the treatment of opioid dependence, had been used by 7% of the entire sample of which 4% (n=26) had used methadone in the last six months (Table 4). Three percent had ever injected methadone and 1% (n=7) had injected it in the last six months. Methadone was used on a median of eight days (i.e. approximately monthly use) in the six months preceding interview (range=1-180 days). A quarter (27%, n=9) of those who used methadone reported daily methadone use.

4.9.10 Buprenorphine

Four percent (n=28) of the national sample had used buprenorphine in their lifetimes, another medication registered for the treatment of opioid dependence. Two percent (n=14) reported recent use of buprenorphine (Table 4). Of those who had used buprenorphine in the last six months, 86% had swallowed and 43% had injected it. The frequency of use in the last six months ranged from one day to 180 days, with a median of 45 days. Two-fifths (43%, n=6) reported using buprenorphine weekly or less in the preceding six months. Three participants of recent users used buprenorphine daily.

4.9.11 Other opioids

4.9.11.1 *Licily (prescribed) other opioids*

Lifetime use of licit other opioids was 12% of the national sample and 3% had used at least once in the last six months prior to interview (Table 28). Median days of licit opioid use was two days (range = 1-90 days). The main ROA was swallowing (52%), followed by injecting (43%) and one participant reported smoking. The mean age of first use for recent licit users was 19 years (median = 20, range=13-26 years). Examples of other opioids include codeine, pethidine and opium, however main brand was not specified.

Table 28: Use of licit opioids, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=756	2010 N=693	n=100	n=73	n=100	n=100	n=92	n=100	n=27	n=101
Ever used	14	12	24	22	11	1	2	12	4	19
Used last 6 months	3	3	2	4	3	1	1	5	4	7

Source: EDRS REU interviews

4.9.11.2 *Illicitly obtained (non-prescribed) other opioids*

Lifetime use of illicit other opioids was almost a fifth (18%) of the national sample, and 6% of the national sample had used other illicit opioids in the previous six months prior to interview (see Table 29). Median days of licit opiate use was three days (range = 1-180 days). The main ROA was swallowing (67%), followed by snorting (21%), injecting (19%), smoking (14%), and two participants reported shelving/shafting. The mean age of first use for recent illicit users was 21 years (median = 20, range=13-32 years). Examples of other opioids include codeine, pethidine and opium, however main brand used was not specified.

Table 29: Use of illicit opioids, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=756	2010 N=693	n=100	n=73	n=100	n=100	n=92	n=100	n=27	n=101
Ever used	17	18	22	22	16	19	14	17	4	20
Used last 6 months	7	6	8	6	6	4	8	6	0	7

Source: EDRS REU interviews

4.9.12 Pharmaceutical stimulants

4.9.12.1 *Licily obtained (prescribed) pharmaceutical stimulants*

Six percent of the national sample reported licit lifetime use of pharmaceutical stimulants, ten participants reported recent use. The majority of recent use occurred in WA (see Table 30). The median days of use was 180 days (daily use, range 1-180 days). Swallowing was the ROA reported by all participants with small numbers $n < 3$ reporting snorting and injecting also. Mean age of first use by recent users was 19 years (median = 18, range = 10-39 years). Median amount used in an average session was four tablets (range = 2-15 tablets). The median amount reported for most tablets taken in a session was 11 (range = 2-15 tablets). Main brand was not specified for pharmaceutical stimulants but they included Dexamphetamines and Ritalin.

Table 30: Use of licit (prescribed) pharmaceutical stimulants, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=756	2010 N=693	n=100	n=73	n=100	n=100	n=92	n=100	n=27	n=101
Ever used	6	6	8	7	6	1	7	6	7	4
Used last 6 months	2	1	0	4	3	0	0	4	0	0

Source: EDRS REU interviews

4.9.12.2 *Illicitly obtained (non-prescribed) pharmaceutical stimulants*

Forty-nine percent of the national sample reported illicit lifetime use of pharmaceutical stimulants, 23% reported recent use (see Table 31). Illicit use accounts for the majority of pharmaceutical stimulant use in this sample of REU. The majority of recent use occurred in WA. The median days of use was 180 days (daily use, range 1-180 days). Swallowing was the ROA reported by the most participants (94%) followed by snorting (29%) and small numbers $n < 6$ reporting injecting, smoking and shelving/shafting. Mean age of first use by recent users was 19 years (median = 18, range = 12-43 years). Median amount used in an average session was three tablets (range = 0.25-17 tablets). The median amount reported for most tablets taken in a session was four (range = 0.5 -120 tablets). Main brand was not specified for pharmaceutical stimulants included Dexamphetamines and Ritalin.

Table 31: Use of illicit pharmaceutical stimulants, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=756	2010 N=693	n=100	n=73	n=100	n=100	n=92	n=100	n=27	n=101
Ever used	44	49	46	67	51	21	42	83	48	34
Used last 6 months	19	23	16	36	24	9	10	58	22	12

Source: EDRS REU interviews

4.9.13 Over the counter (OTC) codeine

Forty-eight percent (48%) of the 2010 sample reported the lifetime use of over the counter codeine and 32% reported their recent use (see Table 32). Most recent use was reported in NSW and QLD. OTC codeine was first used by recent users at a mean age of 17 years (range=5-59 years). In the six months preceding interview, use occurred on a median of five days for among those that had used it for pain (range=1-180 days). Fifty-five participants (26% of recent users)

reported that they had used OTC codeine for purposes unrelated to pain (i.e. recreational use) at least on one day in the previous six months (range = 1-175 days), seven participants reported that they had experienced harm from this type of recreational use. Swallowing was the most commonly reported ROA (99%); six participants reported snorting, and one participant reported smoking and injecting.

Table 32: Use of OTC codeine, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=756	2010 N=693	n=100	n=73	n=100	n=100	n=92	n=100	n=27	n=101
Ever used	46	48	69	60	56	12	49	29	52	59
Used last 6 months	33	32	46	34	37	5	35	22	48	46

Source: EDRS REU interviews

4.9.13 Over the counter (OTC) stimulants

Thirty-seven percent (37%) of the 2010 sample reported the lifetime use of OTC stimulants and 22% reported their recent use. Recent use was mostly reported in QLD (42%). OTC stimulants was first used at a mean age of 17 years (range=6-35 years) for recent users. In the six months preceding interview, use occurred on a median of four days (range=1-72 days); the majority (68%) reported monthly use or less. Swallowing was the most commonly reported ROA (98%); six participants reported snorting, and one participant reported smoking. There were no reports of injecting in the last six months. The main brand specified was Codral (45%) followed by Sudafed (26%).

4.9.14 Steroid use

Two percent (n=15) of the 2010 sample reported the lifetime use of steroids four participants reported using steroids recently. Of those that had used steroids in their lifetime, most of those participants had injected steroids in their lifetime, with three participants having done so recently. One participant reported having swallowed steroids recently. No other ROA was reported. Median days injected and used by recent steroid users was eight (2-90). No main brand was specified.

4.9.15 Other drugs

See Table 4 on changes in general trends for ERD use regarding drugs not mentioned.

4.10 Emerging psychoactive substance (EPS) use

4.10.1 Psychedelic phenethylamines EPS

4.10.1.1 2C-I, 2C-B and 2C-E

2C-I is a psychedelic drug with stimulant effects.

A standard oral dose of 2C-I is between 10-25 mg. Recent reports suggest that 2C-I is slightly more potent than its closely related cousin 2C-B (see below). Fourteen participants reported using 2C-I in the last six months (Table 33). Median days of use was one (range =1-3 days). ROA reported was swallowing (n=10) and snorting (n=4). There were no reports of smoking or injecting the drug.

2C-I Effects Comments (interpret with caution as very small numbers). Regarding the effects of 2C-I, there was a mixed view with an equal number of participants reporting the effects to be positive and negative. Description of effects included “trippy” and “hallucinations, mellow”, with a report of the effects lasting for six hours. The comedown effect of the drug was reported as “terrible” with negative mental and physical (uncontrollable twitching) symptoms mentioned.

Closely related is the psychedelic phenethylamine 2C-B (2,5-dimethoxy-4-bromophenethylamine), the dosage range is listed as 16–24mg. 2C-B is sold as a white powder sometimes pressed in tablets or gel caps. The drug is usually taken orally, but can also be snorted. Nine percent of the national sample had lifetime experience of consuming 2C-B, 4% had consumed the drug in the past six months (Table 33). SA reported the most recent use. Median days of use nationally was one day (range = 1-20 days). Swallowing was the most common ROA reported (96% of recent users, n=22), and two participants reported having snorted the drug. One participant reported injecting and smoking 2C-B.

2C-B Effects Comments (interpret with caution as small numbers). In relation to the effects of 2C-B there was a general consensus of a positive drug experience one of stronger effect than ecstasy (MDMA). In the description of effects 2C-B was likened to acid (LSD), described as “trippy”, “nice and flowy feeling” and creating “an energetic mind”. Effects were reported by one participant to last for four hours.

2C-E is also in this class of psychedelic research chemical drugs. It is commonly active in the 10–20mg range, taken orally, and highly dose-sensitive. Snorting requires a much lower dose, typically not exceeding 5mgs, but this method of consumption elicits a noticeably painful or uncomfortable sensation in the nasal cavity for 10 minutes or so. Of the three related psychedelic phenethylamines, 2C-E is the drug least used in the lifetime (3%) and recently (2%) by this sample of REU (Table 33). Most commonly reported ROA nationally was swallowing (79%, n=11) and snorting (43%, n=6). No other ROA was reported. Median days used 2C-E was one day (range =1-10 days).

2C-E Effects Comments (interpret with caution as small numbers). The majority of comments regarding the effects of 2C-E was that it was a negative “hallucinogenic intense” experience, “stronger than acid but more dangerous”, “confusion, twists your mind so you think you are going to trip but you don’t”. There were no positive reports of the drug. The physical effect of nausea was repeatedly reported. One report was that the effects lasted for 6-7 hours

Table 33: Use of 2C-I, 2C-B, 2C-B, by jurisdiction, 2010

(%)	National N=693	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
Ever used									
2CI	6	4	4	4	15	4	9	4	1
2CB	9	16	10	9	6	15	5	4	5
2CE	3	2	8	4	5	2	0	4	2
Used last 6 months									
2CI	2	1	1	1	7	3	1	0	0
2CB	4	2	6	2	2	11	2	0	2
2CE	2	2	6	1	4	2	0	0	1

Source: EDRS REU interviews

4.10.1.2 DOI (Death on Impact)

DOI (Death on impact, 2,5-dimethoxy-4-iodoamphetamine) is also a psychedelic phenethylamine. It requires only very small dosages to produce full effects. It is uncommon as a substance for human ingestion but common in research. It has been found on blotter and may be sold as LSD (Erowid: www.erowid.org/chemicals/doi/doi.shtml). Lifetime and recent use of DOI appears to have occurred in SA and TAS in small numbers (Table 34). All recent users reported swallowing the drug as the only ROA. Median days of recent use was one day (range = 1-6 days).

DOI Effects Comments (interpret with caution as small numbers).

Very few comments on effect were available, with mixed perspectives of a negative and positive experience. The consensus was that it was a long-lasting drug with peak and comedown effects, reportedly lasting between 24 hours to four days.

Table 34: Use of DOI by jurisdiction, 2010

(%)	National N=693	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
Ever used	2	0	0	0	4	9	0	0	0
Used last 6 months	1	0	0	0	3	4	0	0	0

Source: EDRS REU interviews

4.10.1.3 Mescaline

Mescaline is a psychoactive phenethylamine chemical which comes from the peyote cactus. It has hallucinogenic properties. A standard dose for oral mescaline use ranges from 200-500 mg. Recent use was reported by 2% of the national sample. Swallowing was reported by all recent users and snorting was reported by smaller numbers (9%; see Table 35). Median days used is one day (range = 1-14 days) over the last six months.

Mescaline Effects Comments (interpret with caution as small numbers n=5 commenting).

Comments on effects were mixed in relation to positive experiences. Its effects were likened to LSD however described as being “stronger” it was also described as a “dirty and stressful” drug.

Table 35: Use of Mescaline by jurisdiction, 2010

(%)	National N=693	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
Ever used	5	8	6	5	6	4	7	0	3
Used last 6 months	2	1	0	2	1	2	4	0	1
ROA *									
Snorted	9	0	50	0	0	0	0	0	0
Smoked	0	0	0	0	0	0	0	0	0
Swallowed	100	100	100	100	100	100	100	100	100
Injected	0	0	0	0	0	0	0	0	0

Source: EDRS REU interviews

*Of those that had used Mescaline recently

4.10.2 Psychedelic Tryptamines EPS

4.10.2.1 5-MEO-DMT

5-MeO-DMT (5-methoxy-dimethyltryptamine) is a psychedelic tryptamine. 5-MeO-DMT is a naturally occurring psychedelic present in numerous plants and in the venom of the *Bufo alvarius* toad. It is found in some traditional South American shamanic snuffs and sometimes in ayahuasca brews. It is somewhat comparable in effects to DMT; however, it is substantially more potent, so it should not be confused with DMT. 5-MeO-DMT is mostly encountered as a crystalline chemical and smoked, snorted, or swallowed for recreation and/or insight. The standard dosage range for smoked 5-MeO-DMT is between 2-15 mg (Erowid: www.erowid.org/chemicals/5meo_dmt/5meo_dmt.shtml). Three participants reported consuming 5-MeO-DMT in the previous six months of the national sample. The only ROA reported was smoking. Median days used was one day (range = 1-3 days). No comments were reported on its use or the effects experienced (Table 36).

Table 36: Use of 5-MEO-DMT, by jurisdiction, 2010

(%)	National N=693	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
Ever used	2	1	6	2	0	1	4	0	0
Used last 6 months	<1	0	1	0	0	1	1	0	0

Source: EDRS REU interviews

4.10.2.2 DMT

DMT (chemical name dimethyltryptamine) is a hallucinogenic drug in the tryptamine family, which is similar to LSD though its effects are said to be more powerful. Pure DMT is reportedly found in crystal form but has been as reportedly sold in powder form. It can be injected, smoked or sniffed and the effects rarely last more than two hours (Drugscope: www.drugscope.org.uk/resources/drugsearch/drugsearchpages/dmt). Seven percent (n=47) of the national sample reported recently using DMT. The main route of administration reported by users was smoking (94%) followed by swallowing (7%). No other ROA was reported. Median days of use was 1.5 (range = 1-14 days) among recent users (Table 37).

DMT Effects Comments

The majority of comments of effects of DMT centred around the psychedelic intensity of the experience and were positively described. The drug was described as inducing a “spiritual”, “trippy-different reality” experiences. It was reported as being of short-acting duration.

Table 37: Use of DMT by jurisdiction, 2010

(%)	National N=693	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
Ever used	13	18	8	23	12	11	13	0	9
Used last 6 months	7	7	4	15	7	3	8	0	4

Source: EDRS REU interviews

4.10.3 Stimulant EPS

4.10.3.1 Mephedrone

Mephedrone (4-methylmethcathinone) is a stimulant which is closely related chemically to amphetamines. Users report that mephedrone produces a similar experience to drugs like amphetamines, ecstasy or cocaine. Mephedrone is a white, off-white or yellowish powder which is usually snorted, but can also be swallowed in bombs (wraps of paper) and may also appear in pill or capsule form. Mephedrone is probably the most well known of a group of drugs derived from cathinone (the same chemical found in the plant called khat) although two other compounds are also increasingly recognised on the market. These are methedrone and methylone. The effects of methedrone are said to be broadly similar to mephedrone, although methylone is said to give the user an experience more closely related to taking ecstasy (Drugscope: www.drugscope.org.uk/resources/drugsearch/drugsearchpages/mephedrone).

Mephedrone use generally was reported to have occurred primarily in TAS, VIC and WA.

Swallowing and snorting were reported by equal proportions in the sample (66%) followed by small numbers reporting smoking (n<5) and one participant reporting injecting mephedrone in the last six months (see Table 38). Median days use in the last six months is three days (range 1-100). For more information on Mephedrone, see Matthews and Bruno (2010) Mephedrone use among regular ecstasy consumers in Australia.

[http://ndarc.med.unsw.edu.au/NDARCWeb.nsf/resources/BulletinsEDRS2010/\\$file/EDRS+December+2010.pdf](http://ndarc.med.unsw.edu.au/NDARCWeb.nsf/resources/BulletinsEDRS2010/$file/EDRS+December+2010.pdf)

Mephedrone Effects Comments

Recurrent comments about mephedrone centred around the effects being likened to amphetamines, and an effect that is between cocaine and MDMA. The “peak” period was described by many as being “strong or intense”; however, of short duration.

Table 38: Use of mephedrone by jurisdiction, 2010

(%)	National N=693	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
Ever used	18	4	1	29	44	10	19	4	14
Used last 6 months	16	4	1	28	42	9	16	4	13
ROA*									
Snorted	66	67	100	71	74	63	64	0	39
Swallowed	66	67	100	50	69	50	79	100	85
Smoked	5	0	0	7	2	0	8	0	8
Injected	<1	0	0	4	0	0	0	0	0

Source: EDRS REU interviews

* Of those who had used mephedrone recently

4.10.3.2 BZP

BZP (1-benzylpiperazine) is a piperazine and a central nervous system (CNS) stimulant which gained popularity in some countries in the early 2000s as a legal alternative to amphetamine, methamphetamine, and MDMA. It is one of the more commonly used piperazines, providing stimulant effects which people describe as a noticeably different than those of amphetamines. It is not particularly popular because many people find that it has more side effects than amphetamines. BZP is used orally at doses of between 70-150 mg and effects are reported to last 6-8 hours (Erowid: www.erowid.org/chemicals/bzp/bzp_basics.shtml).

Recent use was reported by 32 REU participants, with the majority of use reported in WA (Table 39). The most popular ROA reported was swallowing (97%, n=30). Snorting (13%, n=4) and smoking (n=1) were the only other ROA reported. Median days used was two days (range =1-24 days) in the last six months.

BZP Effects Comments

Unanimously the effects of BZP were reported as negative with comments pertaining to a bad drug experience with unfavourable symptoms including “shakiness, codness, felt faint, vomiting”. The comedown was also mentioned by many as ‘bad’.

Table 39: Use of BZP by jurisdiction, 2010

(%)	National N=693	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
Ever used	5	2	4	1	5	1	37	4	2
Used last 6 months	4.5	0	3	1	2	0	25	0	2

Source: EDRS REU interviews

4.10.3.3 Ivory Wave (MDPV)

Ivory wave is reported from limited forensic testing to have contained the active drug methylenedioxypyrovalerone (MDPV), along with cutting agents such as the common local anaesthetic Lidocaine. MDPV is a cathinone derivative, it is more potent than other cathinones, so users that may be used to taking mephedrone or other similar drugs may be increasing the risk to their health by taking too much, in the mistaken belief that it will behave the same. Using MDPV can lead to the overstimulation of both the cardiac system and the nervous system,

causing heart problems, agitation, hallucinations and fits. Lidocaine is a common local anaesthetic frequently used as a cutting agent, to give users the numbing sensation in the mouth or nose which is associated with drugs of high purity (i.e. high-purity cocaine; Drugscope: www.drugscope.org.uk/ourwork/pressoffice/pressreleases/ivory_wave_MDP).

Use in the REU 2010 sample was small about 1% and limited to four participants (Table 40). Smoking followed by injecting were the only routes of administration reported in the last six months by recent users. Ivory wave was used on a median of 1.5 days (range 1-5 days).

Ivory Wave Effects Comments (interpret with caution as small numbers n=3 commenting)
The experience was likened to effects of crack cocaine, it was also described as short acting and psychotropic.

Table 40: Use of Ivory Wave by jurisdiction, 2010

(%)	National N=693	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
Ever used	1	0	0	1	3	1	0	0	0
Used last 6 months	<1	0	0	1	2	1	0	0	0

Source: EDRS REU interviews

4.10.4 Natural occurring substances

4.10.4.1 *Datura/Angel's Trumpet*

There are many different species in the *Datura* genus. Probably the two most well-known are the devil's weed (*Datura innoxia*) and the thornapple or jimson weed (*Datura stramonium*). The plant's effects are mainly stupefying. That is, they make the user feel drowsy, drunk-like and detached from things around them. They can also bring on hallucinations. Doses are difficult to judge and can easily cause unconsciousness and death (Drugscope: www.drugscope.org.uk/resources/drugsearch/drugsearchpages/datura).

Recent use was reported by three participants and the only route of administration reported was swallowing. Median days of recent use was one day (no range; Table 41).

Datura Effects Comments (interpret with caution as small numbers n=3 commenting)
Dissociation effects were reported, “disconnected, no motor functions” and one negative experience reported was “takes you to hell”.

Table 41: Use of Datura by jurisdiction, 2010

(%)	National N=693	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
Ever used	3	1	1	2	5	7	4	0	1
Used last 6 months	<1	0	0	1	1	1	0	0	0

Source: EDRS REU interviews

4.10.5 Other drugs

4.10.5.1 DXM

Dextromethorphan is a semisynthetic opiate derivative which is legally available over the counter in the United States. It is most commonly found in cough suppressants, especially those with "DM" or "Tuss" in their names. It is almost always used orally, although pure DXM powder is occasionally snorted. The effects of DXM generally fall into the category of dissociatives, along with ketamine, PCP, and nitrous. As with many psychoactive substances, dosages of DXM vary greatly, depending on the individual and the desired level of effects. Recreational doses range from 100 mg to 1200 mg or more (Erowid: www.erowid.org/chemicals/dxm/dxm_basics.shtml).

Seven participants reported using DXM recently (Table 42). DXM was swallowed by all recent users in the last six months, this was the only ROA reported. Median days of recent use was two days (range = 1-4 days) in the last six months.

DXM Effects Comments (interpret with caution as small numbers $n=5$ commenting)
Comments regarding experience of use were limited, the effects reported were of detachment to reality and dissociation.

Table 42: Use of DXM by jurisdiction, 2010

(%)	National N=693	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
Ever used	5	2	10	5	8	0	7	0	3
Used last 6 months	1	0	1	1	0	0	3	0	2

Source: EDRS REU interviews

4.10.5.2 PMA

Para-methoxyamphetamine (PMA) has been used as a recreational psychoactive drug, primarily in the 1970s, and in Australia since late 1994. More recently, it has been sold as MDA or MDMA (ecstasy). Pure PMA is a white powder, but street products can also be beige, pink or yellowish. Today it is usually made into pressed pills.

The effects of PMA include increase in energy, visual distortions and a general change in consciousness. Symptoms after ingestions can be pupil dilation, erratic eye movements, muscles spasms, increase in body temperature, nausea and vomiting. In some cases ingestion can lead to convulsions, coma and death. PMA has caused a number of deaths in Canada and Australia and has been implicated in two recent deaths in Chicago, USA. Most PMA deaths have been in users who have taken tablets sold as 'ecstasy' (Drugscope: www.drugscope.org.uk/resources/drugsearch/drugsearchpages/pma).

Five participants reported using PMA recently (Table 43). In REU, swallowing was the main ROA reported and snorting was reported by one participant. Median days used PMA recently was three days (range 1-3 days);.

PMA Effects Comments (interpret with caution as small numbers $n=2$ commenting)
Comments regarding experience of use were likened to a 'weak MDMA effect' and 'like acid'.

Table 43: Use of PMA by jurisdiction, 2010

(%)	National N=693	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
Ever used	4	2	7	3	2	8	7	0	1
Used last 6 months	<1	0	4	0	1	0	0	0	1

Source: EDRS REU interviews

5 DRUG MARKET: PRICE, PURITY, AVAILABILITY & SUPPLY

5.1 Ecstasy

- The median price of a tablet of ecstasy ranged from \$23 in SA to \$35 in WA and the NT. This is a slight increase from the price of \$20 reported across most jurisdictions in 2009. The majority of the REU in all jurisdictions reported that the price of ecstasy had remained stable in the preceding six months.
- Reports of ecstasy purity had changed from previous years. There had been a significant increase in participants reporting that ecstasy purity was low (24% versus 56%) and that the purity had decreased (29% versus 50%) over the last six months.
- The majority continued to report that ecstasy was easy to very easy to obtain, however, significantly more participants in 2010 reported ecstasy to be difficult to very difficult to obtain than was reported in 2009 (26% versus 12%). The majority in all jurisdictions reported that availability had remained stable in the six months prior to interview.
- Ecstasy was purchased from a range of people (median=3 people), most commonly from friends, on a monthly basis (less frequently than 2009) with a median of five pills purchased in one session.

5.1.1 Price

The median price of ecstasy ranged from \$23 in SA to \$35 in WA and the NT. In the Mode price reported was \$25. This is a slight increase from the decrease in price reported across most states in 2009 (\$20 per tablet in NSW, SA and QLD). The median price of capsules used mostly in TAS and the NT was reported at between \$30-\$35 across jurisdictions. The price of powder per gram varied across jurisdictions with a national median price of \$200 per gram (caution small numbers reporting across jurisdictions) (Table 44). Whilst the majority of ecstasy users in all jurisdictions reported that the price of ecstasy had remained stable in the preceding six months, there was a change in the proportion reporting the price had increased. A significant difference was detected in those that reported the price had increased from 2009 to 2010 (10% versus 26%; CI -0.11, -0.19, $p < 0.05$) (Table 45).

Table 44: Median last price paid for ecstasy tablet and participants' reports of price change, by jurisdiction, 2010

	National N=693	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
Median price (\$) per tablet (range)	N=648 25 (1-60)	25 (1-50)	25 (10-40)	25 (6-35)	35 (24-45)	23 (1-60)	35 (2-50)	35 (25-50)	25 (10-40)
Median price (\$) per capsule (range)	N=175 30 (15-60)	30 (15-60)	30 [^] (25-35)	30 (17-50)	30 (20-50)	30 (20-35)	35 [^] (24-35)	30 (20-40)	30 (18-50)
Median price (\$) per gram powder (range)	N=23 200 (20-400)	105 [^] (30-180)	200 [^] (-)	200 [^] (25-300)	200 [^] (120-250)	20 [^] (-)	-	400 [^] (-)	250 [^] (250-300)

Source: EDRS REU interviews

Table 45: Price changes reported by REU, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=713	2010 N=663	n=94	n=70	n=99	n=91	n=90	n=97	n=25	n=97
Price change										
Increased	10	26	20	16	35	42	30	19	20	18
Stable	59	55	61	63	55	44	46	58	64	58
Decreased	21	9	15	4	6	4	8	19	8	5
Fluctuated	10	11	4	17	4	10	17	5	8	20

Source: EDRS REU interviews

Note: Response 'don't know' has been excluded from analysis.

Table 46 presents the median price of ecstasy across time. Although prices do vary across jurisdictions, the price of ecstasy appears to be higher in more remote jurisdictions, such as the NT, WA and TAS, whilst larger jurisdictions such as NSW and VIC have traditionally reported lower prices. In most jurisdictions, (exception of the NT), the price of ecstasy has steadily declined across time.

Table 46: Median price of ecstasy per tablet, 2000-2010

	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
2000	40	n.a.	n.a.	n.a.	45	n.a.	n.a.	40
2001	35	n.a.	n.a.	n.a.	40	n.a.	n.a.	40
2002	35	n.a.	n.a.	n.a.	35	n.a.	n.a.	n.a.
2003	35	35	30	50	35	40	50	35
2004	35	35	30	40	35	50	50	32
2005	30	35	30	45	30	40	50	32
2006	30	35	30	40	30	40	50	30
2007	30	30	30	40	30	40	50	30
2008	30	30	27.50	35	25	40	50	25
2009	20	25	25	35	20	35	50	20
2010	25	25	25	35	23	35	35	25

Source: EDRS REU interviews

Note: Data first collected in NSW, SA and QLD in 2000; data not collected in QLD for 2002; data first collected in ACT, VIC, TAS, WA and NT in 2003. From 2009, participants reported last price paid for ecstasy tablet not market price

Table 47 illustrates the change in prices reported when ecstasy tablets (pills) are purchased in larger quantities.

Table 47: Median price of ecstasy tablets bought in larger quantities, 2010

	Per pill/10 pills	Per pill/20 pills	Per pill/50 pills	Per pill/100 pills
NSW	\$20/\$200	\$20/\$380	\$16.50/\$700 [^]	\$13/ \$1000 [^]
ACT	\$20/\$200	\$18/\$350	\$15.50 [^] /\$750 [^]	\$14.50 [^] /\$1525 [^]
VIC	\$20/\$205	\$18.50 [^] /\$420 [^]	\$17 [^] /\$1025 [^]	\$16/\$1600 [^]
TAS	\$30/\$300	\$26.25/\$330 [^]	\$21/ n.a	\$18 [^] /\$1250 [^]
SA	\$20/\$200	\$15 [^] /\$375	\$16/ n.a	\$14.50/\$1200 [^]
WA	\$31/\$400 [^]	\$30/\$500 [^]	\$25/n.a	\$20/\$2500 [^]
NT	\$36.50 [^] /\$350	\$35 [^] /\$800 [^]	\$24 [^] /n.a	\$26 [^] / \$2500 [^]
QLD	\$20/\$200	\$18/\$310	\$15/\$550 [^]	\$15/1200

Source: EDRS REU interviews

Note: [^] small numbers reporting, interpret with caution

Table 48: Median price of ecstasy capsules bought in larger quantities, 2010

	Per 10 pills	Per pill/100 pills
TAS	\$250 [^]	\$900 [^]
NT	\$350	\$2500 [^]

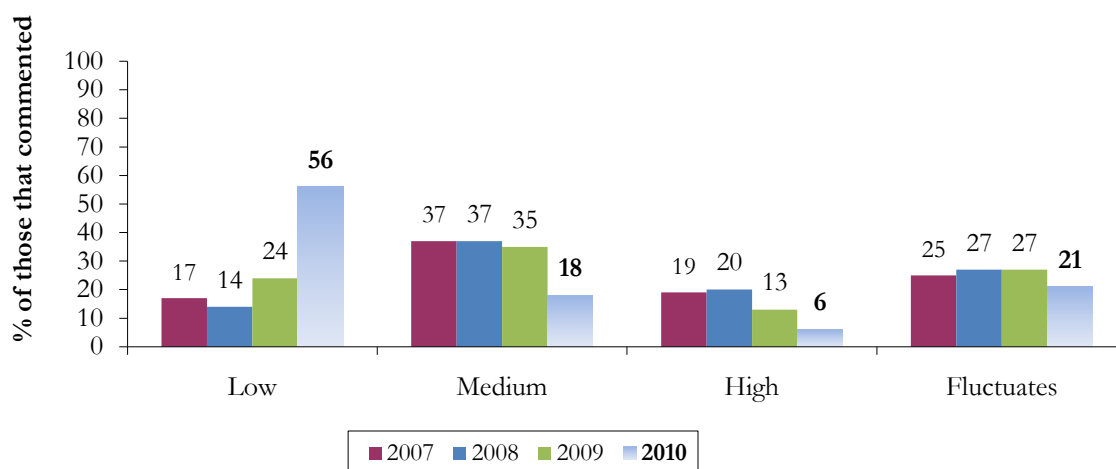
Source: EDRS REU interviews

Note: [^] small numbers reporting, interpret with caution

5.1.2 Purity

Participants' perceptions of ecstasy purity had changed markedly in 2010 from earlier years, with most participants reporting that ecstasy purity had decreased with significantly more participants reporting purity as low in 2010 compared with 2009 (56% in 2010 vs 23% in 2009; CI -0.27, -0.37, $p < 0.01$). This trend appeared to be substantially different than results achieved in previous years (see Figure 12).

Figure 12: National REU reports of current ecstasy purity, 2007-2010



Source: EDRS REU interviews

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Generally there was consensus across jurisdictions that current purity was considered low by the majority. Just under one-third that commented reported that the purity fluctuated (Table 49).

Table 49: Participant reports of current ecstasy purity, by jurisdiction, 2010

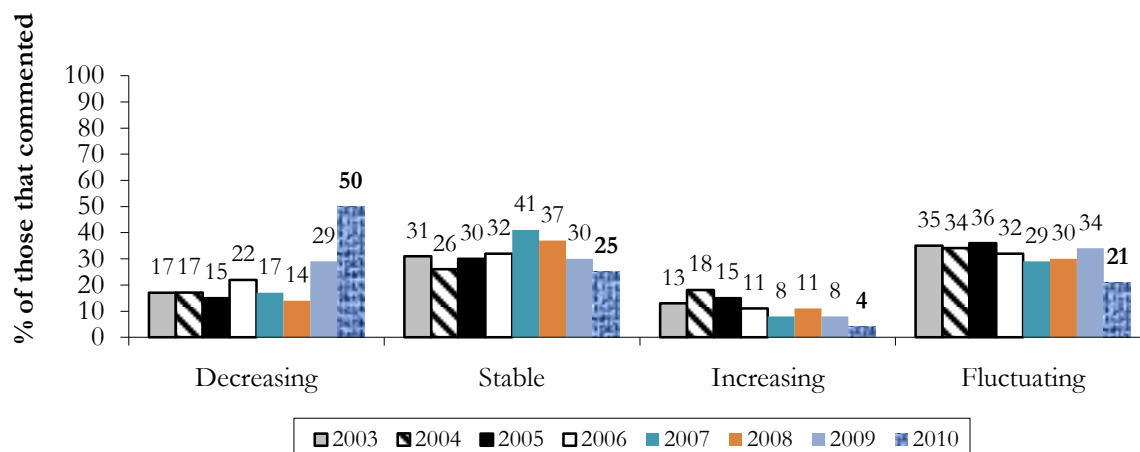
Current purity (%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=739	2010 N=683	n=100	n=72	n=98	n=97	n=92	n=100	n=26	n=99
Low	24	56	52	51	65	41	75	45	54	60
Medium	36	18	15	26	17	23	7	11	42	19
High	13	6	4	6	6	13	7	5	0	2
Fluctuates	28	21	29	17	11	23	12	39	4	19

Source: EDRS REU interviews

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Participants were asked to comment on the change of ecstasy purity in the preceding six months. The result is consistent with reports that the purity of ecstasy is low with half of the sample (50%) reporting that the purity had decreased in the last six months. This is a substantial increase from the proportion of the sample that reported that ecstasy had decreased in purity in previous years (Figure 13). Previously, most participants have reported that the purity of ecstasy tablets had been stable.

Figure 13: National REU reports of recent (last six months) change in ecstasy purity, 2003-2010



Source: EDRS REU Interviews

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Table 50 presents jurisdictions' reports and variability of perceived purity change of ecstasy in the six months preceding interview. Supportive of the data above in the purity table, the majority of participants have reported that purity of ecstasy has decreased.

Table 50: Participant reports of changes in ecstasy purity in the past six months, by jurisdiction, 2010

National (%)	National		NSW n=98	ACT n=68	VIC n=98	TAS n=94	SA n=90	WA n=96	NT n=25	QLD n=99
	2009 N=717	2010 N=668								
Current purity change										
Increasing	8	4	2	6	3	7	3	4	0	3
Stable	30	25	33	19	18	29	30	22	52	15
Decreasing	29	50	49	53	68	34	51	44	28	60
Fluctuating	34	21	16	22	10	30	16	30	20	22

Source: EDRS REU interviews

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Estimates of purity by users are necessarily subjective and depend, among other factors, on users' tolerance to the drug. Laboratory analyses of the purity of seizures provide more objective evidence regarding purity changes, and should, therefore, be considered in addition to the subjective reports of users. However, it is also important to note the limitation of the average purity figures – namely, that not all illicit drugs seized by Australia's law enforcement agencies are analysed for purity. In some instances, seized drugs will be analysed only in a contested court matter. The purity figures, therefore, relate to an unrepresentative sample of the illicit drugs available in Australia. Notwithstanding this limitation, the purity figures provided remain the most objective measure of changes in purity levels available in Australia.

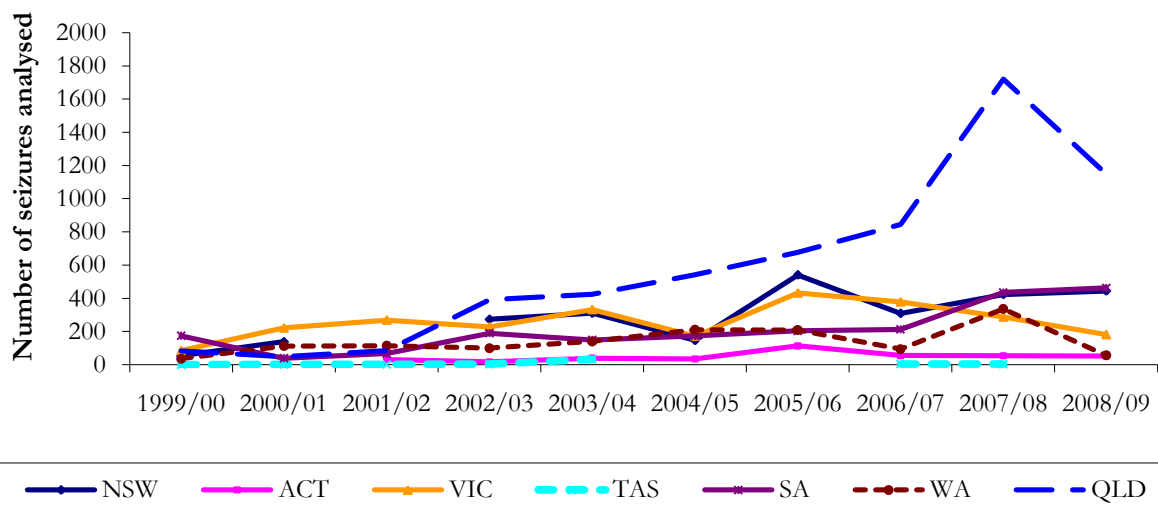
The purity data presented in this report are provided by the ACC and the former Australian Bureau of Criminal Intelligence (ABCI). The ACC provided data on state/territory police and Australian Federal Police (AFP) seizure data, including the number and weight of seizures. In

1999/00, the purity was reported as ‘ecstasy’ seizures. Since 2000/01, ecstasy seizures have been reported under ‘phenethylamines’. Ecstasy belongs to the phenethylamine family of drugs. Other drugs such as 4-bromo-2,5-dimethoxyamphetamine (DOB), 2,5-dimethoxy-4-methylamphetamine (DOM), MDA, 3,4-methylenedioxyethylamphetamine (MDEA), Paramethoxyamphetamine (PMA), and 4-methylthioamphetamine (4-MTA) also belong to the phenethylamine family and seizures of these drugs are included in the seizure data from 1999/00.

The following caveat applies to Error! Reference source not found.14 through to 18 elow: Figures do not represent the purity levels of all phenethylamine seizures – only those who have been analysed at a forensic laboratory. Figures for WA, TAS and those supplied by the Australian Forensic Drug Laboratory represent the purity levels of phenethylamines received at the laboratory in the relevant quarter; figures for all other jurisdictions represent the purity levels of phenethylamines seized by police in the relevant quarter. The period between the date of seizure by police and the date of receipt at the laboratory can vary greatly. No adjustment has been made to account for double counting joint operations between the AFP and state/territory police.

In 2008/09, the number of state seizures analysed has dropped across many jurisdictions. Most apparent is the decrease in the number of seizures in QLD from 1721 in 2007/08 to 1149 in 2008/09. NSW and SA were the two jurisdictions that remained stable. The NT is not included on the graph, and there were no seizures analysed in TAS in 2005/06 and 2008/09 (Figure 14).

Figure 14: Number of phenethylamine state police seizures, by jurisdiction, 1999/00-2009/10

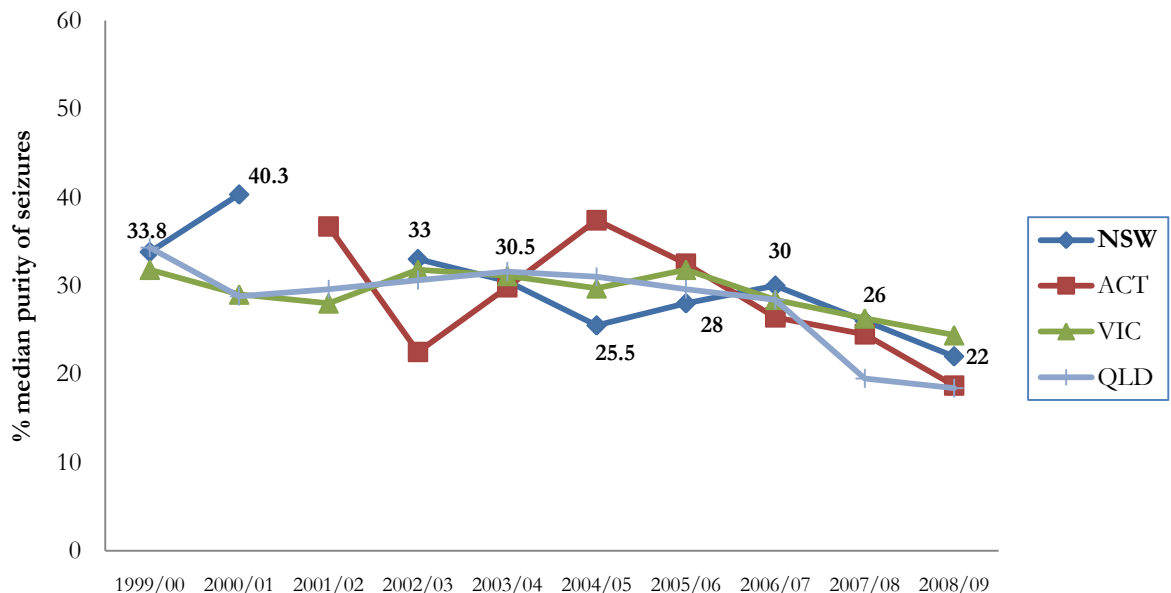


Source:(Australian Bureau of Criminal Intelligence, 2000, Australian Bureau of Criminal Intelligence, 2001, Australian Bureau of Criminal Intelligence, 2002, Australian Crime Commission, 2003, Australian Crime Commission, 2004, Australian Crime Commission, 2005, Australian Crime Commission, 2006, Australian Crime Commission, 2007, Australian Crime Commission, 2008, Australian Crime Commission, 2009, Australian Crime Commission, 2010)

Note: Data for 2009/10 were not available at time of publication.

The analysed median purity of the state police seizures indicates that, generally, purity of phenylethylamine seizures in the eastern states with the larger populations has been on a slight declining trend since 1999/00 with relatively stability in the more recent years at approximately 22% purity (Figure 15, NSW trend figures highlighted).

Figure 15: Median purity of state police phenethylamine seizures, eastern jurisdictions, 1999/00-2008/09

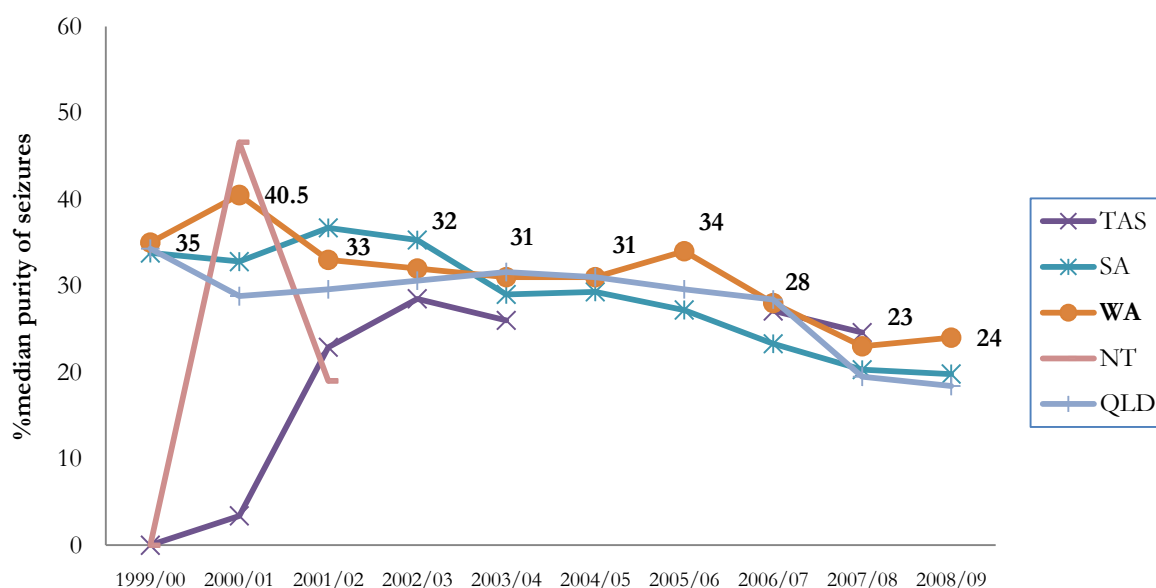


Source: (Australian Bureau of Criminal Intelligence, 2000, Australian Bureau of Criminal Intelligence, 2001, Australian Bureau of Criminal Intelligence, 2002, Australian Crime Commission, 2003, Australian Crime Commission, 2004, Australian Crime Commission, 2005, Australian Crime Commission, 2006, Australian Crime Commission, 2007, Australian Crime Commission, 2008, Australian Crime Commission, 2009, Australian Crime Commission, 2010)

Note: Data for 2009/10 were not available at time of publication.

In smaller jurisdictions, the analysed median purity of the state police seizures are at a similar level to the larger jurisdictions above at approximately 22% purity. The trend also illustrates a decline in purity over time. TAS and the NT did not have any data recorded (Figure 16, WA trend figures highlighted).

Figure 16: Median purity of state police phenethylamine seizures, smaller jurisdictions, 1999/00-2008/09

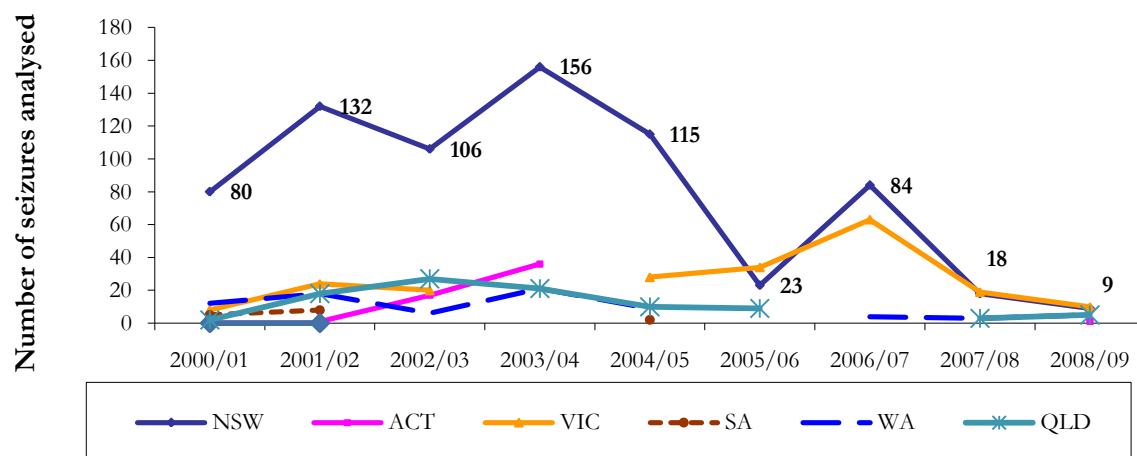


Source: (Australian Bureau of Criminal Intelligence, 2000, Australian Bureau of Criminal Intelligence, 2001, Australian Bureau of Criminal Intelligence, 2002, Australian Crime Commission, 2003, Australian Crime Commission, 2004, Australian Crime Commission, 2005, Australian Crime Commission, 2006, Australian Crime Commission, 2007, Australian Crime Commission, 2008, Australian Crime Commission, 2009, Australian Crime Commission, 2010)

Note: Data for 2009/10 were not available at time of publication.

In 2008/09, NSW, the ACT, VIC, WA and QLD were the only states that recorded any AFP phenethylamine seizures that were analysed, and numbers were much lower than for state police seizures and in NSW have fluctuated over time. In recent years, all recorded jurisdictions have reported a decrease (Figure 17, NSW trend highlighted). NT and TAS are not shown.

Figure 17: Number of AFP phenethylamine seizures, by jurisdiction, 1999/00-2008/09

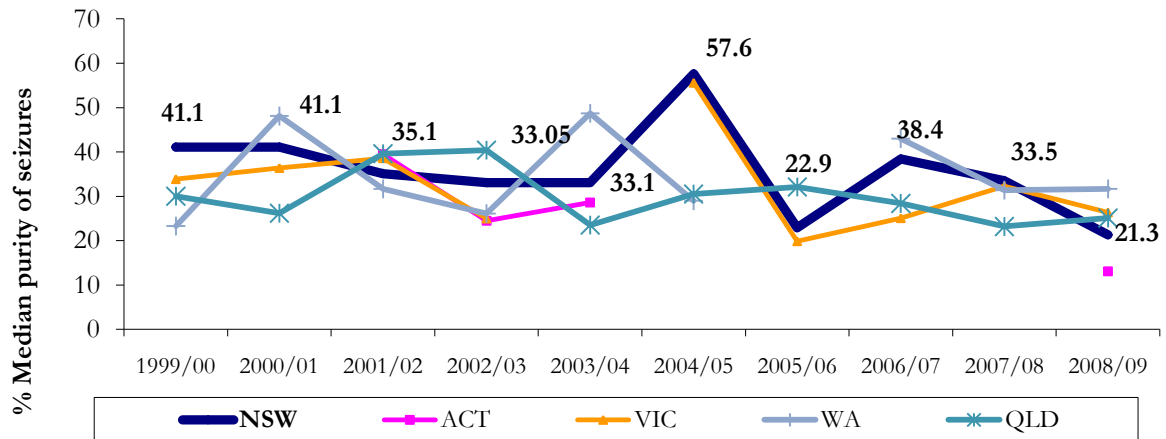


Source: (Australian Bureau of Criminal Intelligence, 2000, Australian Bureau of Criminal Intelligence, 2001, Australian Bureau of Criminal Intelligence, 2002, Australian Crime Commission, 2003, Australian Crime Commission, 2004, Australian Crime Commission, 2005, Australian Crime Commission, 2006, Australian Crime Commission, 2007, Australian Crime Commission, 2008, Australian Crime Commission, 2009, Australian Crime Commission, 2010)

Note: Data for 2009/10 were unavailable at time of publication.

The median purity of AFP phenethylamine seizures remained relatively stable across time with slight decreases reported in 2008/09 across recorded jurisdictions. TAS, SA and the NT figures are not reported due to no data available or very small numbers (Figure 18, NSW trend highlighted).

Figure 18: Median purity of AFP phenethylamine seizures, by jurisdiction, 1999/00-2008/09



Source: (Australian Bureau of Criminal Intelligence, 2000, Australian Bureau of Criminal Intelligence, 2001, Australian Bureau of Criminal Intelligence, 2002, Australian Crime Commission, 2003, Australian Crime Commission, 2004, Australian Crime Commission, 2005, Australian Crime Commission, 2006, Australian Crime Commission, 2007, Australian Crime Commission, 2008, Australian Crime Commission, 2009, Australian Crime Commission, 2010)

Note: Data for 2009/10 were unavailable at time of publication.

A further analysis of the content of illicit tablets seized in VIC may be found in the September 2009 Drug Trends Conference presentation by Victoria Police Forensic Services Department: [http://ndarc.med.unsw.edu.au/NDARCWeb.nsf/resources/Conference/\\$file/DTC+2009+Quinn.pdf](http://ndarc.med.unsw.edu.au/NDARCWeb.nsf/resources/Conference/$file/DTC+2009+Quinn.pdf).

5.1.3 Availability

While the majority of the REU national sample continued to report ecstasy as being easy to very easy to obtain (74%), significantly more participants in 2010 reported ecstasy to be difficult to very difficult to obtain compared with 2009 results (26% in 2010 versus 12% in 2009; CI -0.10, -0.18, $p < 0.01$). The majority in all jurisdictions except the NT, reported that availability had remained stable in the six months prior to interview, however nationally there was a significant increase in the proportion that reported that ecstasy had become more difficult to obtain (31% in 2010 versus 16% in 2009; CI -0.11, -0.19, $p < 0.01$ (Table 51).

Table 51: REU reports of availability of ecstasy in the preceding six months, 2010

National (%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=746	2010 N=686	n=100	n=73	n=99	n=96	n=91	n=100	n=27	n=100
Availability of ecstasy										
Very easy	43	29	41	37	27	25	33	22	22	25
Easy	45	45	41	44	46	39	40	58	37	48
Difficult	11	22	14	15	23	28	24	16	41	24
Very difficult	1	4	4	4	4	8	3	4	0	3
Change in availability	N=731	N=681	n=100	n=72	n=99	n=94	n=91	n=99	n=27	n=99
More difficult	16	31	25	24	36	39	24	33	37	32
Stable	61	54	59	50	54	46	64	55	30	54
Easier	17	9	10	15	8	10	7	7	15	6
Fluctuates	6	7	6	11	2	5	6	5	19	8

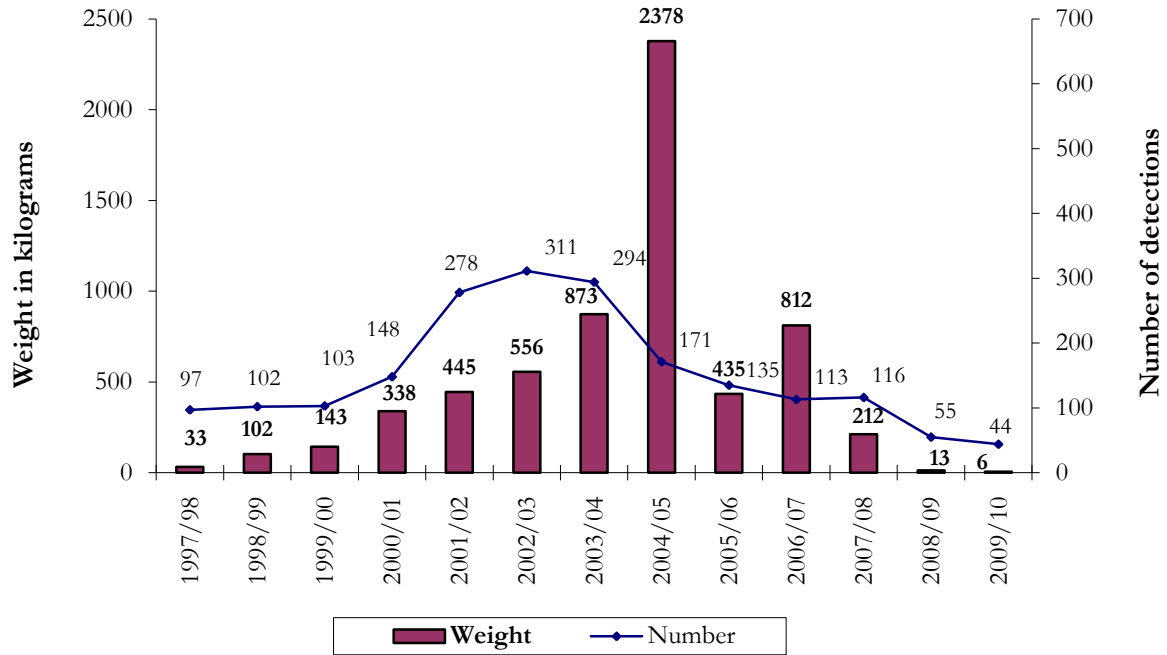
Source: EDRS REU interviews

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

5.1.3.1 Ecstasy detected at the Australian border

The weight of MDMA presented here is the weight of the tablets, not the weight of the active drug. While the number of seizures have remained similar over the last four years, the weight of seizures have fluctuated (Figure 19).

Figure 19: Number and weight of detections of MDMA detected at the border by the Australian Customs and Border Protection Service, financial years 1997/98-2009/10



Source: (Australian Customs Border and Protection Service, 2010)

5.1.4 Supply: Purchasing patterns and locations of use

Ecstasy was reportedly purchased from a median of three people (range=0-24 people), and just over two-thirds (70%) reported typically purchasing for themselves and friends on those occasions. Among this group, there was a decrease in the frequency of purchasing ecstasy with the majority purchasing monthly or less (51%) compared with 2009 when figures were comparable between monthly and fortnightly purchasing. The median number of ecstasy pills purchased at a time was five (range=1-2500 pills; Table 52).

Table 52: Purchasing patterns related to ecstasy use, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=756	2010 N=693	n=100	n=73	n=100	n=100	n=92	n=100	n=27	n=101
Median no. people bought ecstasy from (n; range)	3 (1-70)	3 (0-24)	3.5	3	3	3	3	3	3	3
Last time purchased ecstasy for:										
Yourself	31	29	42	16	23	36	14	30	22	36
Yourself and others	67	70	58	84	73	60	85	69	74	64
Others only	2	1	0	0	1	3	0	1	4	0
Frequency of purchase:										
<=Monthly (1-6 times)	38	51	49	45	40	54	58	61	52	47
<=Fortnightly (7-12 times)	40	33	35	33	40	36	25	31	22	35
<=Weekly	20	14	10	21	18	9	15	8	26	17
<=Three times per week (25-181+)	2	2	6	1	2	1	1	0	0	1
Median no. pills usually purchased (n; range)	5 (1-3000)	5 (1-2500)	5	5	5	3	10	5	5	5

Source: EDRS REU interviews

Ecstasy was purchased from a range of sources and from a variety of public and private locations, with the most common sources at the national level being friends and known dealers (Table 53). 'Other score venue' was nominated by 2% (n=12) of participants which included in car parks, restaurants and educational institutions.

Ecstasy was reportedly most commonly used in a nightclub setting (44%) followed by private settings such as own home and friends home (11%), own home (9%) and private parties (10%; Table 53). 'Other last use location' (1%, n=9) included in vehicles, at work, in venues such as casinos.

Table 53: Last source, purchase location and use location of ecstasy, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Source	2009 N=756	2010 N=693	n=100	n=73	n=100	n=100	n=92	n=100	n=27	n=101
Friends	66	65	74	63	57	73	53	63	82	66
Known dealers	20	17	15	22	17	18	12	15	15	18
Acquaintances	9	12	6	6	12	7	26	17	4	9
Unknown dealers	3	4	3	4	12	2	1	2	0	4
Workmates	1	2	1	4	0	0	5	2	00	0
Location scored										
Friend's home	33	34	38	41	19	39	21	36	63	36
Nightclub	15	15	11	19	24	13	11	10	4	18
Dealer's home	9	7	4	10	6	5	11	8	7	4
Own home	15	15	11	4	17	18	16	18	11	17
Agreed public location	9	10	11	8	8	6	18	14	0	8
Raves*	2	1	2	1	2	1	1	0	0	0
Private party	3	4	5	0	6	3	6	3	4	1
Pubs	6	7	9	3	7	13	8	1	11	4
Acquaintance's home	1	1	1	1	1	0	2	4	0	0
Street	2	3	1	7	3	1	3	3	0	4
Work	1	1	2	1	2	0	1	0	0	1
Live music event/festival	n.a	2	3	1	2	1	0	1	0	3
Last use venue										
Nightclub	46	44	42	49	44	41	48	41	41	48
Home	10	9	8	7	16	9	3	12	15	7
Friend's home	11	11	13	19	5	10	10	8	26	8
Live music event/festival	9	8	5	12	6	6	6	14	0	12
Private party	9	10	13	4	12	11	13	10	4	9
Raves*	5	4	5	6	4	3	6	3	4	4
Pub	6	10	10	0	9	20	13	7	7	8
Outdoors [◇]	2	<1	1	0	0	0	1	0	4	0

Source: EDRS REU interviews

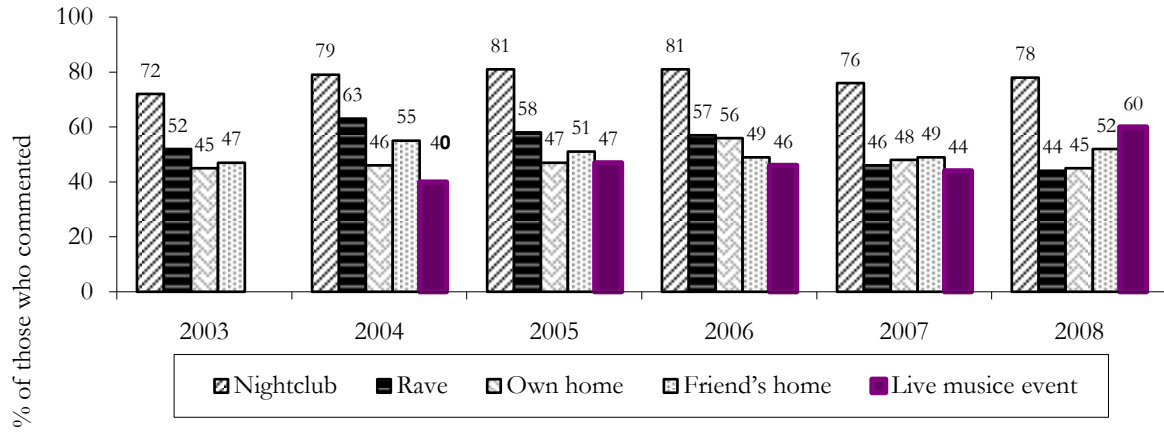
* Includes 'doofs' and dance parties

[◇] Examples include at a beach, bushwalking, camping

Note: In 2009, participants responded to source, location of use and location spent most time intoxicated based on the 'last occasion' in which they used ecstasy not the 'usual' or 'common' source or location

Figure 20 presents trends over time in the locations of usual ecstasy use. Nightclubs have been, and remain, the most common location of usual ecstasy use across time, followed by raves. However, despite the traditional association of ecstasy with these venues, more than two-fifths of the national sample across time has reported that their own homes and friends' homes are also locations of usual use. Most noticeably in 2008, there was a rise in participants reporting usual use in live music events. This question was not asked in 2009 onwards.

Figure 20: Location of usual ecstasy use, 2003-2008



Source: EDRS REU interviews

5.2 Methamphetamine

Speed:

- Consistency was observed in relation market characteristics for speed compared with 2009 results. Price of speed ranged from \$55-\$350 per gram, with the majority reporting the price remained stable. Speed was reported by the majority at medium purity and this was reported to have remained stable. It was also reported to be easy to very easy to obtain and the availability change was reported as stable.

Base:

- Price of base ranged from \$35-55 per point (most purchased quantity), with the majority reporting the price had remained stable. Base was reported at high purity a change from medium purity in 2009 and this was reported to have both remained stable. Base was reported as being easy to very easy to obtain by a larger proportion of participants in 2010 compared with 2009, availability was reported as being stable, with more participants reporting that it had become easier to obtain since 2009.

Ice/Crystal:

- Price of ice/crystal ranged from \$50-\$100 per point, an increase from the price in 2009 (\$50 in all jurisdictions but the NT), reported price change reflected this with the majority reporting price had increased. Purity of ice/crystal was reported as high and remaining stable and it was considered easy to very easy to obtain and this had reportedly remained stable.
- All three forms of methamphetamine were most commonly obtained from friends and known dealers, and were used in a range of public and private locations.

5.2.1 Price

Participants were asked to comment on the price of all three forms of methamphetamine and whether these had changed over the six months preceding interview. A degree of caution should be exercised when considering these figures, as fewer than 10 participants in each jurisdiction reported recent purchase of different forms of methamphetamine. The median prices, by jurisdiction, are presented in Table 54 and perceptions of price changes are shown in Table 55.

The price of speed was recorded in terms of a gram and a point (0.1 gram). The median price of a gram ranged from \$55 in NSW to \$350 in the NT. Prices reported were considered to have remained stable over the six months prior to interview by the majority of participants that commented.

The price of base was commonly reported in points, last purchase price of a point of base was between \$25 per point (ACT) to \$50 per point in SA and the NT. The majority of those commenting in the national sample reported that the price of base had remained stable in the six months prior to interview.

The median price for a point of ice/crystal was \$50 in NSW and QLD to \$100 in WA and the NT. This is an increase from 2009 given that ice/crystal was \$50 all jurisdictions, except in the NT (where it was \$100). The price per gram was typically higher than for speed or base. Interestingly, participants reported this increase with 47% of the national sample reporting that there had been a price increase six months prior to interview.

Table 54: Median of last price paid of various forms of methamphetamine, by jurisdiction, 2010

	Median price \$ per point (range)						Median price \$ per gram (range)					
	Speed powder 2009 2010		Base 2009 2010		Ice/crystal 2009 2010		Speed powder 2009 2010		Base 2009 2010		Ice/crystal 2009 2010	
NSW	- -	- -	30 [^] (20-60)	35 [^] (10-300)	50 [^] (50-80)	50 (40-90)	47.50 (10-100)	55 (30-150)	100 [^] (65-200)	200 [^] (60-450)	275 [^] (250-300)	200 [^] (no range)
ACT	30 [^] (20-60)	30 [^] (25-50)	40 [^] (25-300)	25 [^] (no range)	50 [^] (30-50)	70 [^] (50-80)	200 (30-300)	200 (40-300)	150 [^] (100-200)	200 [^] (150-600)	400 [^] (200-450)	300 [^] (200-400)
VIC	25 [^] (20-30)	60 [^] (20-100)	- -	- -	50 [^] (40-400)	85 [^] (50-100)	190 (27.50-320)	200 (90-250)	300 [^] (no range)	- -	250 [^] (150-600)	625 [^] (180-1000)
TAS	40 (20-60)	40 [^] (20-50)	60 [^] (50-80)	50 [^] (no range)	50 [^] (no range)	- -	255 (170-300)	250 (150-300)	150 [^] (150-400)	150 [^] (257-300)	250 [^] (150-600)	- -
SA	50 (1-100)	50 [^] (25-50)	50 [^] (40-80)	50 [^] (50-350)	50 (25-100)	75 [^] (20-300)	350 [^] (25-500)	200 [^] (20-400)	200 [^] (no range)	250 [^] (17-400)	350 [^] (250-400)	240 [^] (80-300)
WA	50 [^] (50-100)	50 (50-150)	50 [^] (no range)	- -	50 [^] (no range)	100 [^] (no range)	275 (50-400)	300 [^] (50-400)	400 [^] (no range)	200 [^] (no range)	400 [^] (50-500)	225 [^] (200-700)
NT	50 [^] (no range)	100 [^] (50-150)	55 [^] (50-60)	50 [^] (no range)	100 [^] (50-100)	100 [^] (no range)	300 (100-800)	350 (50-400)	350 [^] (300-400)	100 [^] (no range)	1000 [^] (no range)	1800 [^] (no range)
QLD	45 [^] (20-50)	30 [^] (20-100)	40 [^] (20-50)	35 [^] (no range)	50 (40-50)	50 [^] (no range)	180 (30-450)	200 (60-800)	200 [^] (180-550)	200 [^] (120-250)	350 [^] (200-450)	350 [^] (180-450)

Source: EDRS REU interviews

[^] Small numbers (n<10); interpret with caution

Table 55: Methamphetamine price changes, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Speed price changes (among those who commented)	2009 N=157	2010 N=146	n=15	n=20	n=31	n=17	n=10	n=19	n=9 [^]	n=25
Increased	15	19	20	15	19	0	30	11	33	28
Stable	71	70	67	60	77	88	60	90	56	52
Decreased	8	3	7	10	0	6	10	0	0	0
Fluctuated	6	8	7	15	3	6	0	0	11	20
Base price changes (among those who commented)	2009 N=61	2010 N=43	n=12	n=5 [^]	n=0	n=4 [^]	n=14	n=2 [^]	n=1 [^]	n=5 [^]
Increased	23	12	17	0	-	0	14	50	0	0
Stable	66	74	75	100	-	100	79	50	100	20
Decreased	7	2	8	0	-	0	0	0	0	0
Fluctuated	5	12	0	0	-	0	7	0	0	80
Ice/crystal price changes (among those who commented)	2009 N=76	2010 N=60	n=17	n=5 [^]	n=6 [^]	n=1 [^]	n=10	n=14	n=4 [^]	n=3 [^]
Increased	26	47	47	60	67	100	20	43	75	33
Stable	65	43	41	40	33	0	70	50	25	0
Decreased	3	0	0	0	0	0	0	0	0	0
Fluctuated	7	10	12	0	0	0	10	7	0	67

Source: EDRS REU interviews

[^] Small numbers commenting (n<10); interpret with caution

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

The median price per gram of speed has remained substantially lower in NSW compared to other jurisdictions over time, with the exception of SA until 2007 when it increased (Table 56).

Table 56: Median price per gram of methamphetamine powder (speed), by jurisdiction, 2000-2010

	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
2000	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	60
2001	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2002	60	n.a.	n.a.	n.a.	43	n.a.	n.a.	n.a.
2003	55	175	180	200	40	200	60	200
2004	60	80	180	300	50	300	100	180
2005	60	80	180	325	65	300	200	180
2006	60	200	200	325	50	300	122.75	150
2007	50	200	195	300	200	350	250	200
2008	50	225	200	300	200 [^]	100	300 [^]	165
2009	47.50	200	190	255	350	275	300	180
2010	55	200	200	250	200[^]	300[^]	350	200

Source: EDRS REU interviews

[^] Small numbers commenting (n<10); interpret with caution

Note: Data not collected in QLD in 2002; data first collected in ACT, VIC, TAS, WA and NT in 2003. In 2000, in NSW and SA, price was reported for 'methamphetamine' with no differentiation between forms, and as such is not reported here; no participants reported on the price of speed in QLD in 2001. In 2009 onward, only last price paid for gram of speed was reported.

Very few participants in 2010 across jurisdictions were able to comment on the price per point of base. In 2010, apart from the decrease in price reported in ACT and QLD, most other jurisdictions reported stability in price (Table 57).

Table 57: Median price per point of methamphetamine base (base), by jurisdiction, 2000-2010

	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
2000	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	30
2001	50	n.a.	n.a.	n.a.	30	n.a.	n.a.	30
2002	40	n.a.	n.a.	n.a.	25	n.a.	n.a.	n.a.
2003	40	40	32.5	50	25	50	50	25
2004	37.5	40	29	50	25	50	50	27.5
2005	30	40	22.5	50	25	50	75	25
2006	37.5	42.5	(no purchases)	40	22.5	50	80 [^]	25
2007	40 [^]	50 [^]	50 [^]	40	40	50 [^]	35 [^]	25
2008	42.5 [^]	30	30 [^]	40 [^]	50	50 [^]	(no purchases)	25
2009	30 [^]	40 [^]	(no purchases)	60 [^]	50 [^]	50 [^]	55 [^]	40 [^]
2010	35 [^]	25 [^]	(no purchases)	50 [^]	50 [^]	(no purchases)	50 [^]	35 [^]

Source: EDRS REU interviews

[^] Small numbers commenting (n<10); interpret with caution.

Note: Data not collected in QLD in 2002; data first collected in ACT, VIC, TAS, WA and NT in 2003. No participant commented on the price of a point of base in VIC in 2006. In 2000 in NSW and SA, price was reported for 'methamphetamine' with no differentiation between forms, and as such is not reported here. In 2009 onward, only last price paid for point of base was reported

In 2010, the median price for a point of ice/crystal remained stable or increased across jurisdictions. The ACT, VIC and SA reported an increase in price. Please interpret with caution as small numbers in all jurisdictions apart from NSW (Table 58).

Table 58: Median price per point of crystalline methamphetamine (ice/crystal) by jurisdiction, 2000-2010

	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
2000	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	35
2001	50	n.a.	n.a.	n.a.	35	n.a.	n.a.	40
2002	50	n.a.	n.a.	n.a.	25	n.a.	n.a.	n.a.
2003	50	45	40	50 [^]	25	50	65	40
2004	40	47.5	40	50 [^]	25	50	50	40
2005	50	35	40	50 [^]	25	50	80	47.5
2006	50	50	47.5	50 [^]	50	50	80 [^]	50
2007	50	50 [^]	40 [^]	50 [^]	50	50	50 [^]	50
2008	50	50	50 [^]	40 [^]	50	50	(no purchases)	50
2009	50 [^]	50 [^]	50 [^]	50 [^]	50	50 [^]	100 [^]	50
2010	50	70 [^]	85 [^]	(no purchases)	75 [^]	50 [^]	100 [^]	50 [^]

Source: EDRS REU interviews

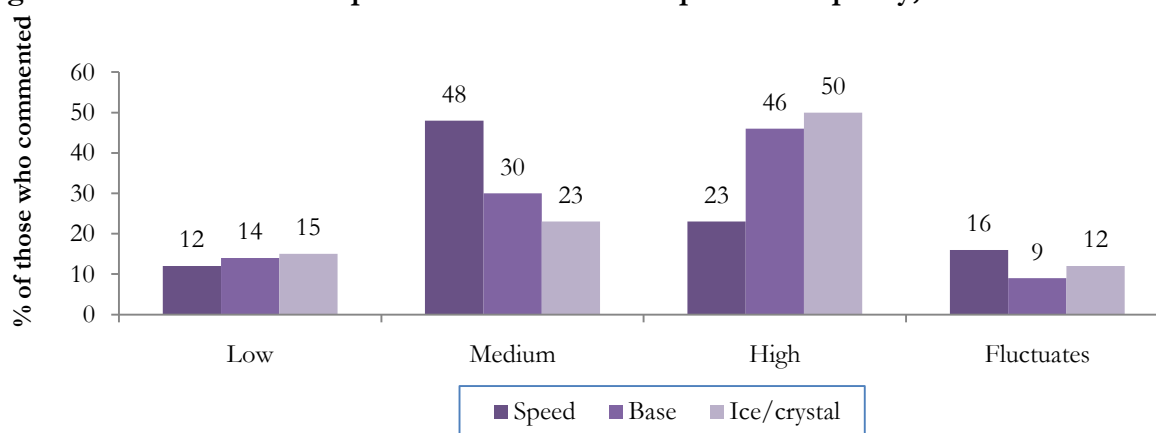
[^] Small numbers commenting (m<10); interpret with caution

Note: Data not collected in QLD in 2002; data first collected in ACT, VIC, TAS, WA and NT in 2003. In 2000 in NSW and SA, price was reported for 'methamphetamine' with no differentiation between forms, and as such is not reported here. In 2009, only last price paid for point of ice/crystal was reported.

5.2.2 Purity

Participants were asked about their perceptions of speed, base and ice/crystal purity currently and also whether this had changed over the last six months. Ice/crystal and base were most commonly perceived to be of high purity, whilst speed was most commonly reported to be of medium purity (Figure 21).

Figure 21: National REU reports of current methamphetamine purity, 2010



Source: EDRS REU interviews

Note: Among those who commented

National differences noted from 2009 include fewer REU commenting on market characteristics across forms. Speed had slightly more REU comment that it was of high purity than was reported in 2009, however, the majority of reports remained that it was considered of ‘medium’ purity. Base saw a change with the majority of participants reporting that it was of ‘high’ purity in 2010 as opposed to ‘medium’ purity in 2009. Ice/Crystal also saw an increase in participants reporting that it was of ‘high’ purity (Table 59).

Table 59: Participant reports of current methamphetamine purity, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Current purity Speed	2009 N=199	2010 N=177	n=19	n=20	n=33	n=29	n=15	n=21	n=12	n=28
Low	25	12	16	35	12	3	0	14	8	11
Medium	48	48	47	50	36	62	27	71	50	39
High	18	23	16	15	33	31	40	10	33	11
Fluctuates	9	16	21	0	18	3	33	5	8	39
Current purity Base	2009 N=62	2010 N=56	n=15	n=7 [^]	n=0	n=8 [^]	n=15	n=2 [^]	n=2 [^]	n=7 [^]
Low	26	14	7	43	-	0	7	50	50	14
Medium	42	30	33	14	-	50	33	50	0	14
High	24	46	47	43	-	50	53	0	50	43
Fluctuates	8	9	13	0	-	0	7	0	0	29
Current purity Ice/Crystal	2009 N=82	2010 N=66	n=17	n=5 [^]	n=7 [^]	n=2 [^]	n=11	n=15	n=4 [^]	n=5 [^]
Low	29	15	6	20	0	0	18	13	25	60
Medium	27	23	29	40	14	50	9	27	25	0
High	39	50	35	40	86	50	73	40	50	40
Fluctuates	5	12	29	0	0	0	0	20	0	0

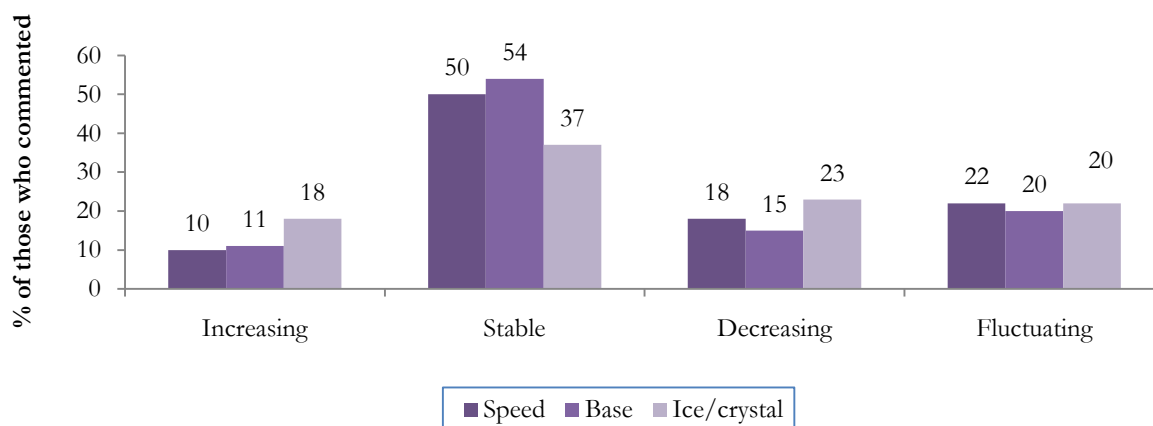
Source: EDRS REU interviews

Note: the response option ‘don’t know’ was excluded from analysis from 2009 onwards

[^] small numbers commenting (n<10); interpret with caution

The largest proportion of users of all forms of methamphetamine reported that the purity remained stable in the six months preceding interview (Figure 22)(Table 60).

Figure 22: National REU reports of recent (last six months) change in methamphetamine purity, 2010



Source: EDRS REU interviews

Note: Among those who commented.

Table 60: Participant reports of methamphetamine purity change, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Current purity Speed	2009 N=170	2010 N=153	n=18	n=16	n=30	n=21	n=13	n=21	n=9 [^]	n=25
Increasing	9	10	11	0	17	14	0	5	11	12
Stable	51	50	50	44	50	71	46	62	44	28
Decreasing	21	18	28	38	10	5	8	19	22	24
Fluctuating	19	22	11	19	23	10	46	14	22	36
Current purity Base	2009 N=55	2010 N=46	n=12	n=6 [^]	n=0	n=3 [^]	n=15	n=2 [^]	n=1 [^]	n=7 [^]
Increasing	13	11	8	0	-	33	13	0	0	14
Stable	42	54	58	67	-	0	67	50	100	28
Decreasing	27	15	8	33	-	67	0	50	0	14
Fluctuating	18	20	25	0	-	0	20	0	0	43
Current purity Ice/Crystal	2009 N=79	2010 N=60	n=14	n=5 [^]	n=7 [^]	n=1 [^]	n=10	n=14	n=4 [^]	n=5 [^]
Increasing	6	18	14	40	14	0	30	7	25	20
Stable	43	37	14	20	57	0	40	57	75	0
Decreasing	33	23	21	40	0	100	10	21	0	80
Fluctuating	18	22	50	0	29	0	20	14	0	0

Source: EDRS REU interviews

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

[^] small numbers commenting (n<10); interpret with caution

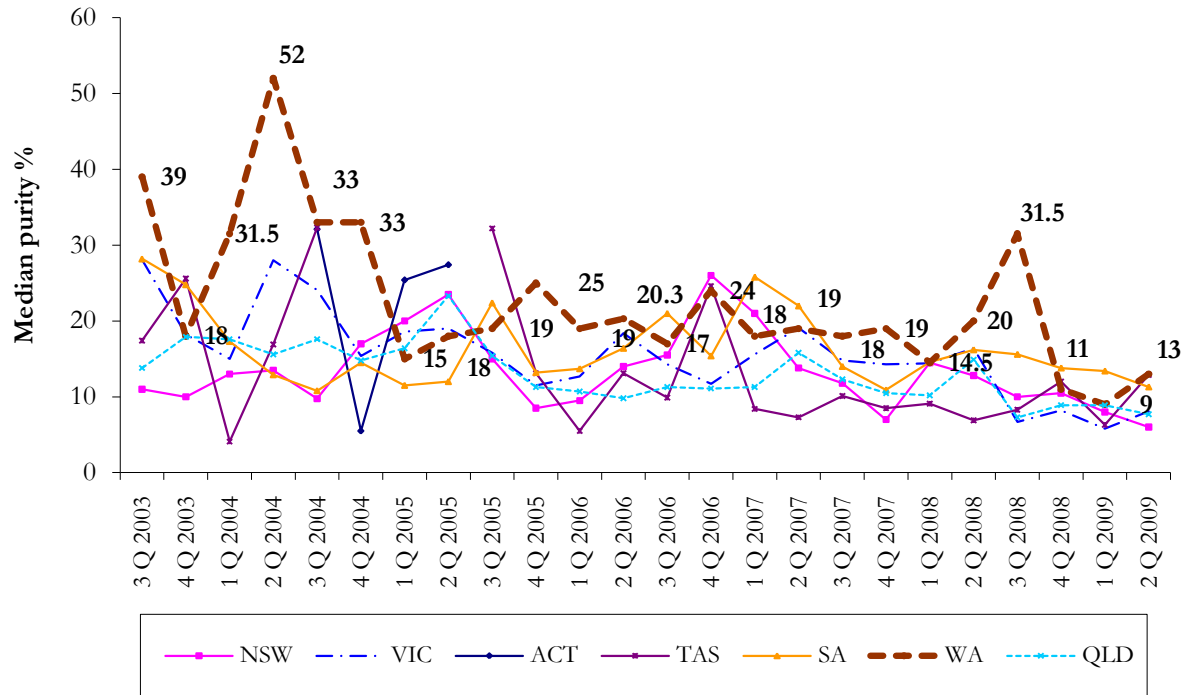
As mentioned previously, user reports of purity are subjective and depend on a number of factors including the user's tolerance to the drug. An objective measure of purity is provided by examination of seizures analysed. There are important caveats to consider when interpreting the methylamphetamine purity data. The ACC has provided the purity figures for state police and AFP seizures.

Secondly, not all illicit drugs seized by Australia's law enforcement agencies are subjected to forensic analysis. The purity figures, therefore, relate to an unrepresentative sample of the illicit drugs available in Australia, and drawing meaningful conclusions from these purity data remains difficult (Australian Customs Service, 2007).

Finally, the purity of methylamphetamine fluctuates widely in Australia as a result of a number of factors, including the type and quality of chemicals used in the production process, the expertise of the 'cooks' involved, as well as whether the seizure was locally manufactured or imported.

Figure 23 shows the median purity across jurisdictions of methylamphetamine seizures (respectively) by quarter from 2003/04. As there were few AFP seizures analysed in most jurisdictions, only state/territory police seizures are shown. There is no clear trend in the purity of methylamphetamine or amphetamine seizures that are analysed. Only data for methylamphetamine seizures are presented here. Amphetamine purity is available from the latest Illicit Drug Data Report available online (<http://www.crimecommission.gov.au/>). In the past five years, the median purity of methylamphetamine has generally remained lower than 25% and has been decreasing except in WA where the purity reached a high of 31.5% in the second quarter of 2008 (WA and VIC figures are bolded). No methylamphetamine seizures were analysed for purity in the ACT or the NT in 2008/09 (Australian Crime Commission, 2010). Data for 2009/10 were not available at the time of publication of this report.

Figure 23: Median purity of methylamphetamine seizures analysed by state/territory police, by jurisdiction, 2003/04-2008/09



Source: (Australian Bureau of Criminal Intelligence, 2000, Australian Bureau of Criminal Intelligence, 2001, Australian Bureau of Criminal Intelligence, 2002, Australian Crime Commission, 2003, Australian Crime Commission, 2004, Australian Crime Commission, 2005, Australian Crime Commission, 2006, Australian Crime Commission, 2007, Australian Crime Commission, 2008, Australian Crime Commission, 2009, Australian Crime Commission, 2010)

Note: Data for 2009/10 were not available at the time of publication; WA figures highlighted

5.2.3 Availability

Twenty-seven percent of the national sample commented on the current availability of speed and whether this had changed in the preceding six months. The majority of participants in all jurisdictions reported that speed had remained easy to very easy (80%) to obtain and that this had remained stable (Table 61).

Table 61: Availability of methamphetamine powder (speed), by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Availability (among those who commented)	2009 N=212	2010 N=187	n=23	n=23	n=33	n=34	n=14	n=21	n=12	n=30
Very easy	51	28	30	39	42	24	21	29	17	17
Easy	21	52	50	39	49	56	57	57	67	50
Difficult	21	18	15	22	9	21	21	10	17	27
Very difficult	1	2	5	0	0	0	0	5	0	7
Availability changes (among those who commented)	2009 N=192	2010 N=178	n=20	n=22	n=31	n=32	n=14	n=21	n=11	n=27
More difficult	15	13	15	9	13	9	21	0	9	26
Stable	69	71	70	73	68	81	79	81	82	44
Easier	10	13	15	18	13	9	0	19	0	19
Fluctuates	5	3	0	0	7	0	0	0	9	11

Source: EDRS REU interviews

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Eight percent of the national sample commented on the current availability of base and whether this had changed over the past six months. Overall, base remained easy to very easy (82%) to obtain and this was reported to have remained stable (Table 62).

Table 62: Availability of methamphetamine base, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Availability	2009	2010								
(among those who commented)	N=65	N=58	n=16	n=7 [^]	n=0	n=8 [^]	n=15	n=2 [^]	n=2 [^]	n=8 [^]
Very easy	22	29	25	0	-	25	60	0	0	25
Easy	43	53	50	57	-	75	33	50	50	75
Difficult	34	17	25	43	-	0	7	50	50	0
Very difficult	2	0	0	0	-	0	0	0	0	0
Availability changes	2009	2010								
(among those who commented)	N=59	N=50	n=14	n=6 [^]	n=0	n=5 [^]	n=14	n=2 [^]	n=1 [^]	n=8 [^]
More difficult	25	8	7	17	-	20	0	50	0	0
Stable	63	64	57	67	-	80	86	50	100	25
Easier	10	24	29	17	-	0	14	0	0	63
Fluctuates	2	4	7	0	-	0	0	0	0	13

Source: EDRS REU interviews

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

[^] small numbers (n<10); interpret with caution

Ten percent of the national sample commented on the availability of ice/crystal. The majority of participants considered it easy or very easy to obtain (78%) with a smaller proportion to 2009 reporting it to be difficult to obtain. The majority reported that availability had remained stable over the preceding six months (Table 63).

Table 63: Availability of crystalline methamphetamine (ice/crystal), by jurisdiction, 2010

	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Availability	2009	2010								
(among those who commented)	N=84	N=66	n=18	n=5 [^]	n=7 [^]	n=2 [^]	n=10	n=15	n=4 [^]	n=5 [^]
Very easy	31	42	50	60	29	0	50	40	25	40
Easy	36	36	28	20	29	50	50	53	25	20
Difficult	30	21	22	20	43	50	0	7	50	40
Very difficult	4	0	0	0	0	0	0	0	0	0
Availability changes	2009	2010								
(among those who commented)	N=80	N=64	n=18	n=5 [^]	n=7 [^]	n=1 [^]	n=10	n=14	n=4 [^]	n=5 [^]
More difficult	28	17	22	0	29	0	10	7	25	40
Stable	56	61	39	80	43	100	60	93	75	40
Easier	9	14	22	20	29	0	10	0	0	20
Fluctuates	8	8	17	0	0	0	20	0	0	0

Source: EDRS REU interviews

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

[^] small numbers (n<10); interpret with caution

As with ecstasy, speed use was reported most commonly to have been bought from friends and known dealers, and obtained from friends' homes and used in nightclubs (Table 64).

Table 64: Last source, purchase location and use location of methamphetamine powder (speed), 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Scored from (among those who commented)	2009 N=218	2010 N=192	n=19	n=24	n=32	n=39	n=14	n=22	n=12	n=30
Friends	59	63	53	42	56	67	50	64	75	63
Known dealers	27	20	26	46	19	18	14	23	17	20
Acquaintances	6	3	11	0	6	5	14	9	0	3
Unknown dealers	2	0	5	8	3	0	7	0	0	0
Workmates	2	3	0	4	0	3	0	0	0	3
Locations scored (among those who commented)	2009 N=217	2010 N=192	n=19	n=24	n=32	n=39	n=14	n=22	n=12	n=30
Friend's home	33	35	53	21	31	26	29	32	50	50
Dealer's home	13	15	11	46	13	8	0	23	8	7
Own home	20	16	11	4	22	26	29	32	0	3
Nightclub	7	4	5	8	3	3	7	5	0	3
Agreed public location	9	10	11	8	6	8	21	9	17	13
Raves*	<1	1	0	4	3	0	0	0	0	0
Acquaintance's home	1	1	5	0	3	0	0	0	0	0
Private party	5	1	0	4	0	3	0	0	0	0
Pubs	5	4	0	0	3	13	0	0	8	0
Street	1	0	0	0	0	0	0	0	0	0
Work	<1	1	0	4	0	0	7	0	0	0
Last use venue (among those who commented)	2009 N=217	2010 N=193	n=19	n=24	n=33	n=39	n=14	n=22	n=12	n=30
Nightclub	21	23	26	38	18	13	21	21	17	30
Home	21	14	0	8	21	3	36	36	8	17
Friend's home	18	16	37	13	15	18	0	0	25	7
Private party	10	10	16	4	9	8	7	7	0	13
Live music event	11	13	5	21	6	15	14	14	8	20
Raves*	3	5	0	13	6	0	21	21	8	0
Pubs	5	9	5	0	6	33	0	0	17	0
Work	2	2	0	0	9	0	0	0	0	0

Source: EDRS REU interviews

* Includes 'doofs' and dance parties

Note: Numbers may not add to 100% due to small proportions reporting that they haven't obtained base recently but were able to comment on market characteristics or the option of a 'street dealer'

As with ecstasy and speed, base was also most commonly reported to have been bought from friends and known dealers. Interestingly, in 2010, it was reportedly obtained by most from dealer's homes, contrary to friend's homes as was reported in 2009. This suggests that it may be a drug that is sought out, as opposed to shared with friends, or this may be due to the scarcity of this particular form of methamphetamine (base is the least common form reportedly used by REU). Base was also last used predominantly in private locations (own home and friend's home; Table 65). Jurisdictional differences should be interpreted with caution due to small numbers.

Table 65: Last source, purchase location and use location of methamphetamine base, 2010

	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Scored from (among those who commented)	2009 N=67	2010 N=60	n=16	n=7 [^]	n=0	n=10	n=15	n=2 [^]	n=2 [^]	n=8 [^]
Friends	49	62	50	29	-	60	73	100	100	75
Known dealers	22	18	19	43	-	10	13	0	0	25
Acquaintances	10	10	13	14	-	10	13	0	0	0
Unknown dealers	3	0	0	0	-	0	0	0	0	0
Workmates	2	2	0	14	-	10	0	0	0	0
Locations scored (among those who commented)	2009 N=67	2010 N=60	n=16	n=7 [^]	n=0	n=10	n=15	n=2 [^]	n=2 [^]	n=8 [^]
Friend's home	37	8	38	0	-	20	40	50	50	50
Dealer's home	16	33	13	14	-	0	7	0	0	13
Own home	16	20	6	43	-	30	27	0	0	13
Agreed public location	9	10	6	29	-	0	13	50	0	0
Nightclub	2	8	0	0	-	20	7	0	0	25
Acquaintance's home	5	3	13	0	-	0	0	0	0	0
Pubs	5	2	0	0	-	0	0	0	50	0
Last use venue (among those who commented)	2009 N=85	2010 N=60	n=16	n=7 [^]	n=0	n=10	n=15	n=2 [^]	n=2 [^]	n=8 [^]
Home	36	18	19	0	-	20	27	50	0	13
Friend's home	21	25	31	14	-	20	33	0	50	13
Live music event	5	10	6	57	-	0	7	0	0	0
Pub	5	5	6	0	-	20	0	0	0	0
Nightclub	9	22	13	14	-	0	27	50	50	50
Private party	3	3	6	0	-	10	0	0	0	0
Raves*	2	2	0	14	-	0	0	0	0	0
Work	6	0	0	0	-	0	0	0	0	0

Source: EDRS REU Interviews

* Includes 'doofs' and dance parties

[^] Small numbers commenting (n<10); interpret with caution

Note: Numbers may not add to 100% due to small proportions reporting that they have not obtained base recently but were able to comment on market characteristics or the option of 'street dealer' or 'outdoors'

As with the other forms of methamphetamine, friends and known dealers were the most common sources of ice/crystal. It was most commonly scored and used in private locations, including at friends' homes and at participants' own homes. It was most commonly used at a private venue such as friend's home, own home or a private party (Table 66).

Table 66: Last source, purchase location and use location of crystalline methamphetamine (ice/crystal), 2010

	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Scored from (%) (among those who commented)	2009 N=85	2010 N=68	n=18	n=5 [^]	n=8 [^]	n=3 [^]	n=11	n=15	n=3 [^]	n=5 [^]
Friends	51	53	28	40	38	67	82	67	100	53
Known dealers	29	25	33	60	38	0	0	27	0	25
Acquaintances	8	10	17	0	13	0	9	7	0	10
Unknown dealers	2	2	0	0	0	0	9	0	0	2
Street dealers	1	0	0	0	0	0	0	0	0	0
Mobile dealers	1	0	0	0	0	0	0	0	0	0
Locations scored (among those who commented)	2009 N=85	2010 N=67	n=18	n=5 [^]	n=8 [^]	n=3 [^]	n=10	n=15	n=3 [^]	n=5 [^]
Friend's home	38	36	11	40	38	67	20	47	100	60
Dealer's home	24	19	22	20	25	0	20	20	0	20
Own home	14	12	22	0	0	0	30	7	0	0
Agreed public location	7	10	17	40	0	0	0	13	0	0
Nightclub	4	5	6	0	0	0	20	0	0	0
Acquaintance's home	2	1	0	0	13	0	0	0	0	0
Street	1	0	0	0	0	0	0	0	0	0
Last use venue (among those who commented)	2009 N=84	2010 N=68	n=18	n=5 [^]	n=8 [^]	n=3 [^]	n=11	n=15	n=3 [^]	n=5 [^]
Home	31	24	22	60	25	67	9	20	0	60
Friend's home	29	18	6	20	25	0	18	27	0	0
Nightclub	17	21	11	0	13	0	46	33	33	0
Private party	2	6	6	0	0	0	0	13	33	0
Raves*	1	2	0	0	13	0	0	0	0	0
Work	2	0	0	0	0	0	0	0	0	0
Live music event	1	0	0	0	0	0	0	0	0	0
Pub	1	9	11	0	0	0	27	0	0	20
Public place (street/park)	2	2	0	20	0	0	0	0	0	0

Source: EDRS REU interviews

* Includes 'doofs' and dance parties

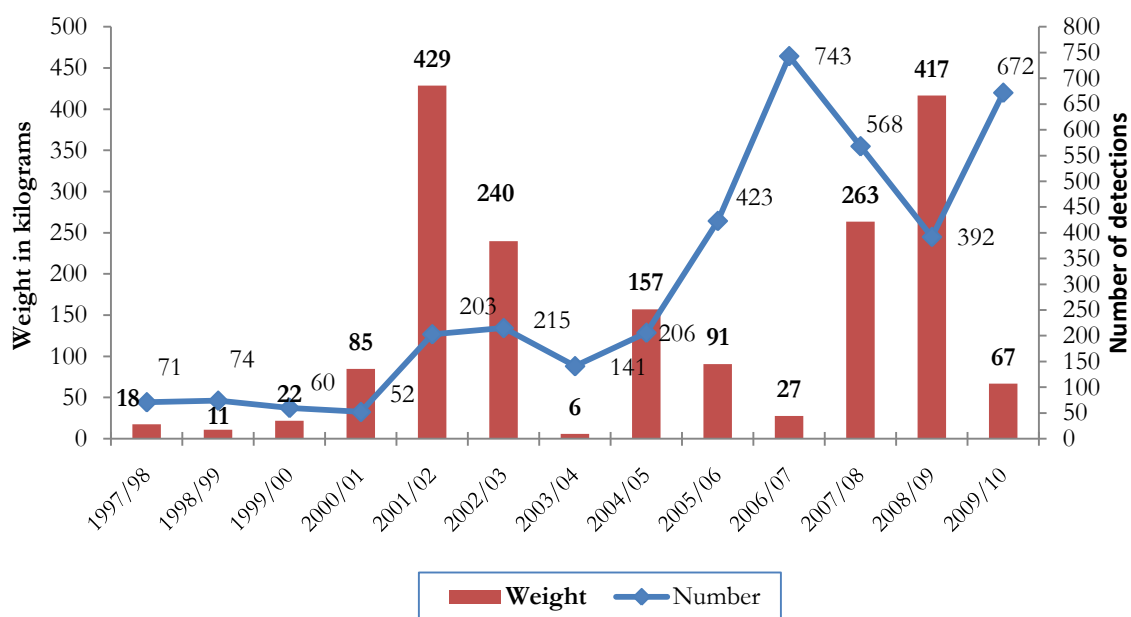
[^] Small numbers commenting (n<10); interpret with caution

Note: Numbers may not add to 100% due to small proportions reporting that they have not obtained base recently but were able to comment on market characteristics or the option of 'acquaintance's house', 'dealer's home', 'outdoors' or 'other'

5.2.4 Amphetamine-type stimulants detected at the Australian border

Figure 24 shows the weight and number of amphetamine-type stimulants (ATS) detected at the Australian border by the ACS. In 2009/10, the number (672) of detections increased, while the weight of seizures decreased substantially (67 kilograms), suggesting a scattergun pattern to importation.

Figure 24: Total weight and number of ATS detected by the ACS, financial years 1997/98-2009/10

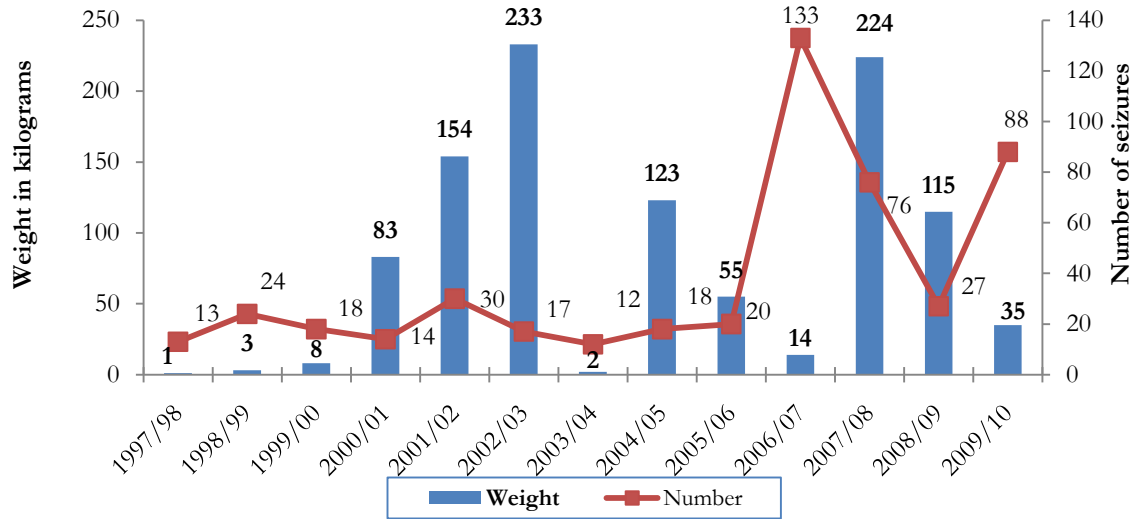


Source: (Australian Customs Border and Protection Service, 2010)

Note: Includes amphetamine detections, methamphetamine and methamphetamine (ice) detections, excluding MDMA.

The number of crystal methamphetamine seizures detected at the Australian border increased in 2009/10, while the weight continued to decrease from 224 kilograms in 2007/08 to 36 kilograms in 2009/10 (Figure 25). The majority of seizures were detected coming through international mail, involving small quantities (Australian Customs Border and Protection Service, 2010).

Figure 25: Total number and weight of crystalline methamphetamine detected by the ACS, 1997/98-2009/10



Source: (Australian Customs Border and Protection Service, 2010)

5.3 Cocaine

- The price of cocaine remained stable in NSW, ACT, VIC and QLD at \$300 per gram.
- Cocaine purity was reported as medium, a contrast to previous years where it had been reported as low by the majority of the sample. Purity was reported as remaining stable over the preceding six months.
- Availability reports were consistent with 2009 results with cocaine reported as easy to very easy to obtain, and availability was reported as being stable.
- Cocaine was predominantly purchased from private sources, i.e. friends at friends' homes, and was reportedly last used in public locations such as nightclubs.
- Approximately n=40 more participants in 2010 were able to comment on market characteristics compared with 2009, indicative of wider use (across more jurisdictions) in this sample of REU.

5.3.1 Price

Cocaine was most commonly purchased in grams and ranged from a median of \$300 in most eastern states to \$365 in WA and \$400 in the NT (Table 67).

Table 67: Median price per gram of cocaine, by jurisdiction, 2010

(\$)	NSW n=38	ACT n=21	VIC n=18	TAS n=13	SA n=15	WA n=4 [^]	NT n=1 [^]	QLD n=20
Gram (range)	300 (200-400)	300 (150-400)	300 (80-400)	350 (80-350)	350 (150-500)	365 (300-500)	400 (no range)	300 (160-600)

Source: EDRS REU interviews

[^] Small numbers commenting (n<10), interpret with caution

The majority of those commenting on cocaine considered that the price had remained stable over the preceding six months (Table 68).

Table 68: Price changes of cocaine, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Cocaine price changes	2009	2010								
(Of those who responded)	N=115	N=145	n=44	n=19	n=23	n=17	n=17	n=5 [^]	n=3 [^]	n=21
Increased	15	15	16	16	9	6	6	0	33	24
Stable	71	68	66	58	79	70	70	60	67	71
Decreased	9	9	11	21	4	12	12	20	0	0
Fluctuated	6	9	7	5	9	12	12	20	0	5

Source: EDRS REU interviews

[^] Small numbers commenting (n<10); interpret with caution

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

The majority of jurisdictions reported an increase in the median price per gram of cocaine between 2003 and 2006, with figures remaining stable in most jurisdictions between 2008 and 2009 (Table 69).

Table 69: Median price of cocaine, by jurisdiction, 2003-2010

Median price per gram (\$)	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
2003	200	250	250	250	210	325	280	250
2004	200	250	277.50	325 [^]	250	400	250	237.50
2005	270	250	300	350	300	350	375	300
2006	300	300	300	350	300 [^]	350	275 [^]	300
2007	300	300	300	350	337.5	400	350 [^]	300
2008	300	300	300	350	375	325	450	300
2009	300	300	300	300	350	375	325	300
2010	300	300	300	350	350	365[^]	400[^]	300

Source: EDRS REU interviews

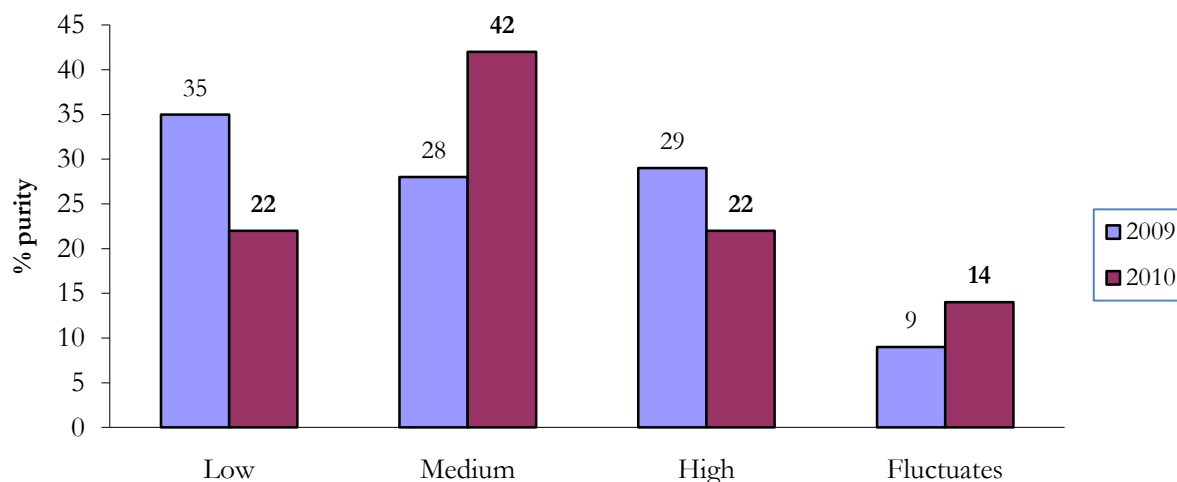
[^] Small numbers commenting (n<10); interpret with caution

Note: The price of cocaine was first collected in 2003

5.3.2 Purity

Participants were asked what the current purity or strength of cocaine was and if the purity had changed in the six months preceding interview. Twenty-four percent (n=166) of the national sample commented on the purity of cocaine. In comparison to 2009 results, there were more reports of cocaine being of a medium purity. The results remained mixed in relation to low, high and fluctuating purity reports (Figure 26).

Figure 26: National REU reports of current cocaine purity, 2009-2010



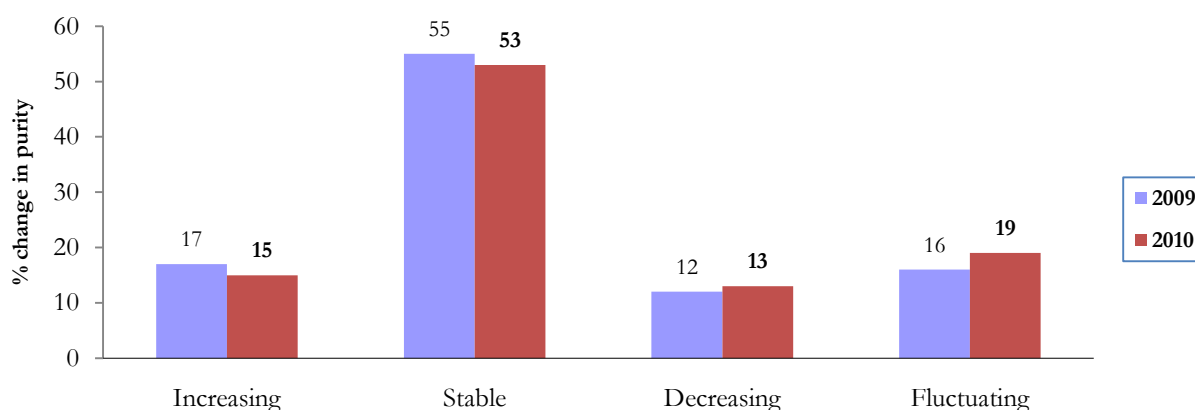
Source: EDRS REU interviews

Note: Among those who commented

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Of those who commented (21% of the national sample, n=148) on whether the purity of cocaine had changed in the six months preceding interview, the largest proportion reported that it had remained stable (Figure 27).

Figure 27: National REU reports of recent (last six months) change in cocaine purity, 2010



Source: EDRS REU interviews

Note: Among those who commented

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

There were no AFP cocaine seizures analysed in the ACT, TAS, SA or the NT, and no TAS or NT state/territory police cocaine seizures analysed in 2008/09. Data for 2009/10 were unavailable at the time of publication.

The purity of analysed state/territory police seizures varied in each state/territory in 2008/09, though purity levels appeared to be higher between jurisdictions than in previous years. Purity levels ranged from 28.1% in QLD to 61.4% in the ACT. In 2008/09, most of the cocaine seizures analysed were from NSW, QLD, SA and VIC. The AFP seizures of cocaine were generally higher in purity; however, with the exception of NSW, these figures were based on very small numbers of seizures analysed (Table 70).

Table 70: Median purity of cocaine seizures, by jurisdiction, 2000/01-2008/09

	Median purity %															
	State/Territory police								AFP							
	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
NSW	n.a.	27.0 n=52	32.0 n=97	64.3 n=92	56.3 n=108	61.5 n=119	37.0 n=84	42.0 n=133	73.0 n=233	72.3 n=271	72.3 n=348	69.9 n=63	74.3 n=98	76.4 n=491	71.7 n=93	70.3 n=78
ACT	35.9 n=5	-	48.0 n=3	47.7 n=5	30.6 n=5	-	36.6 n=7	61.4 n=2	-	-	-	-	-	-	-	-
VIC	37.0 n=47	31.0 n=39	32.6 n=27	48.8 n=33	31.7 n=43	46.0 n=60	18.3 n=50	49.9 n=54	72.4 n=24	61.6 n=36	75.3 n=34	58.9 n=9	55.3 n=7	75.5 n=25	75.6 n=16	75.9 n=37
TAS	44.0 [^] n=1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SA	-	20.6 n=24	38.5 n=10	30.7 n=64	32.8 n=9	48.2 n=35	48.2 n=21	53.3 n=50	-	-	-	-	-	59.9 n=2	-	-
WA	30.5 n=16	59.0 n=6	3.0 n=4	44.0 n=27	21 n=12	55.0 n=22	46.5 n=16	52.0 n=14	72.4 n=4	-	59.4 n=9	77.4 [^] n=1	53.8 n=6	52.7 n=1	68.6 n=2	67.2 n=5
NT	24.0 [^] n=1	-	-	-	-	-	n.a.	n.a.	-	-	-	-	-	-	-	n.a.
QLD	-	41.1 n=46	14.9 n=30	35.2 n=90	38 n=109	40.2 n=106	35.2 n=133	28.1 n=214	63.1 n=15	-	71.7 n=24	79.9 n=7	42.7 n=4	76.1 n=63	84.6 n=6	41.7 n=6

Source:(Australian Bureau of Criminal Intelligence, 2000, Australian Bureau of Criminal Intelligence, 2001, Australian Bureau of Criminal Intelligence, 2002, Australian Crime Commission, 2003, Australian Crime Commission, 2004, Australian Crime Commission, 2005, Australian Crime Commission, 2006, Australian Crime Commission, 2007, Australian Crime Commission, 2008, Australian Crime Commission, 2009, Australian Crime Commission, 2010)

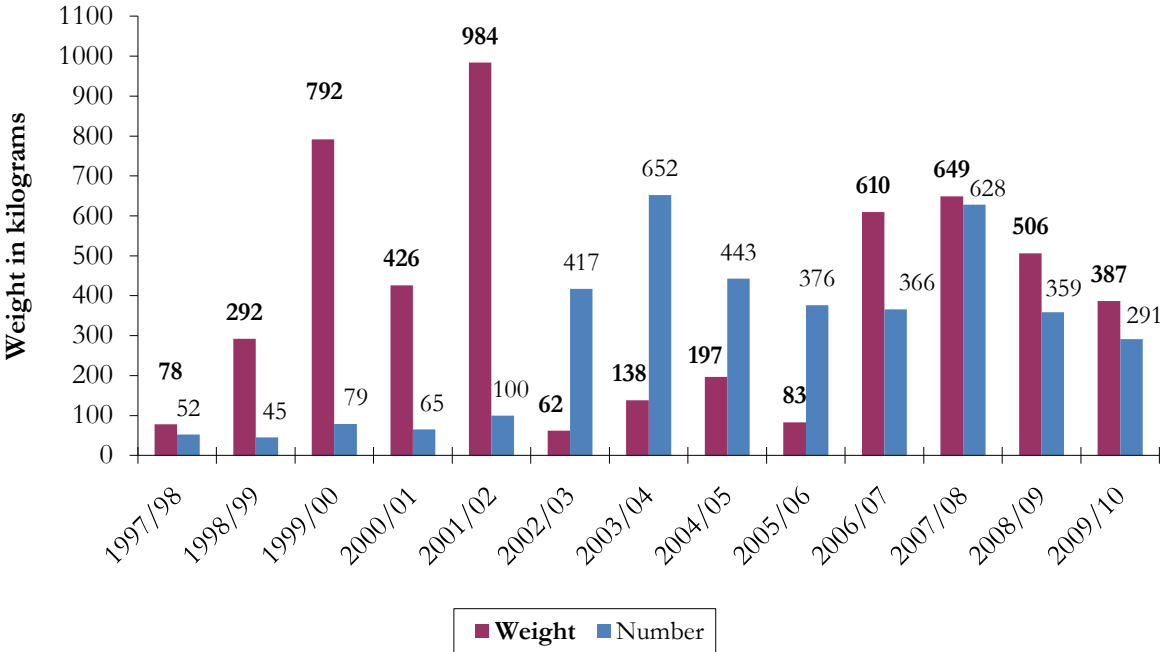
[^] Median purity based on one seizure.

Notes: Seizures ≤2g and >2g combined. Dashes represent no seizures analysed. Figures do not represent the purity levels of all cocaine seizures, only those that were analysed at a forensic laboratory. Figures for WA, TAS and those supplied by the Australian Forensic Drug Laboratory represent the purity levels of cocaine received at the laboratory in the relevant quarter; figures for all other jurisdictions represent the purity levels of cocaine seized by state/territory police in the relevant quarter. The period between the date of seizure by state/territory police and the date of receipt at the laboratory can vary greatly. No adjustment has been made to account for double counting joint operations between the AFP and state/territory police

5.3.3 Cocaine seized at the Australian border

During 2009/10, the Australian Customs and Border Protection Service made 291 detections of cocaine at the Australian border, a decrease from 359 in 2008/09 (Figure 28). The detections weighed a total of 387 kilograms a decrease from 506 kilograms in 2008/09. There was a significant increase in the weight of cocaine seized through the air passengers and crew stream, however, there was one significant detection of 240kg seized through the cargo stream coming in from Mexico (Australian Customs and Border Protection Service, 2010).

Figure 28: Number and weight of detections of cocaine detected at the border by the ACS, financial years 1997/98-2009/10



Source: Australian Customs and Border Protection Service

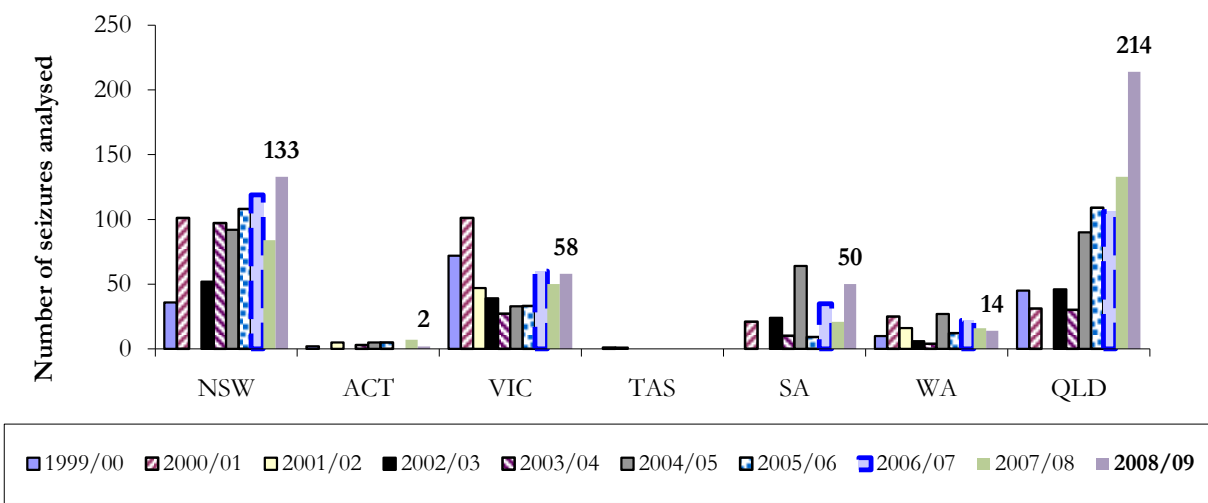
As user reports are subjective and depend on a number of factors, including the tolerance of the individual, objective data from forensic analysis of seizures are also presented. The purity data are provided by the ACC.

As previously mentioned, not all illicit drugs seized by Australia’s law enforcement agencies are subjected to forensic analysis. In some instances, the seized drug will be analysed only in a contested court matter. The purity figures, therefore, relate to an unrepresentative sample of the illicit drugs available in Australia, and drawing meaningful conclusions from purity data remains difficult (Australian Crime Commission, 2006).

Figures reported include seizures ≤2 grams and >2 grams, reflecting both street and larger seizures. The following caveat applies to Figures 28 and 29: these do not represent the purity levels of all cocaine seizures – only those that have been analysed at a forensic laboratory. Figures for WA (and TAS), and those supplied by the Australian Forensic Drug Laboratory, represent the purity levels of cocaine received at the laboratory in the relevant quarter; figures for all other jurisdictions represent the purity levels of cocaine seized by police in the relevant quarter. The period between the date of seizure by state police and the date of receipt at the laboratory can vary greatly. No adjustment has been made to account for double counting joint operations between the AFP and state/territory police.

There were no AFP cocaine seizures analysed in TAS and the NT, and no TAS or NT state police cocaine seizures analysed in 2008/09. QLD reported its highest number of seizures to date (Figure 29), while other states all reported an increase in the number of seizures.

Figure 29: Number of state/territory police cocaine seizures, by jurisdiction, 1999/00-2008/09

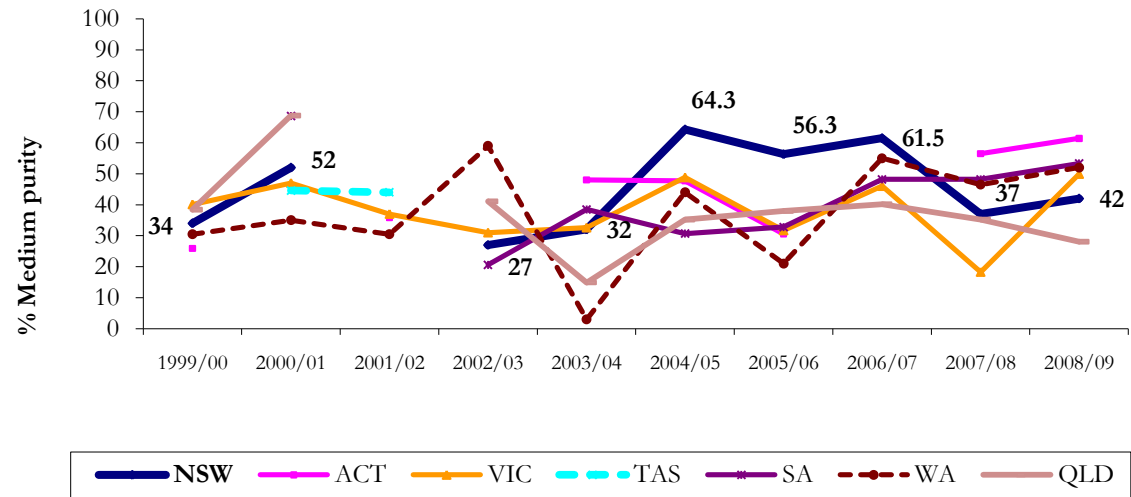


Source:(Australian Bureau of Criminal Intelligence, 2000, Australian Bureau of Criminal Intelligence, 2001, Australian Bureau of Criminal Intelligence, 2002, Australian Crime Commission, 2003, Australian Crime Commission, 2004, Australian Crime Commission, 2005, Australian Crime Commission, 2006, Australian Crime Commission, 2007, Australian Crime Commission, 2008, Australian Crime Commission, 2009, Australian Crime Commission, 2010)

Note: Data for 2009/10 were unavailable at time of publication.

Median purity of state police seizures was highest in the ACT at 61.4%. The NSW trend figures are highlighted (Figure 30).

Figure 30: Median purity of state/territory police cocaine seizures, by jurisdiction, 1999/00-2008/09



Source:(Australian Bureau of Criminal Intelligence, 2000, Australian Bureau of Criminal Intelligence, 2001, Australian Bureau of Criminal Intelligence, 2002, Australian Crime Commission, 2003, Australian Crime Commission, 2004, Australian Crime Commission, 2005, Australian Crime Commission, 2006, Australian Crime Commission, 2007, Australian Crime Commission, 2008, Australian Crime Commission, 2009, Australian Crime Commission, 2010). Note: Data for 2009/10 were unavailable at time of publication.

5.3.4 Availability

Reports of availability were mixed, with the slight majority of those commenting considering it to be easy to obtain. This is a change from previous years whereby it has predominantly been considered difficult to obtain. Most participants considered the ease of access to cocaine to have remained stable in the last six months prior to interview (Table 71).

Table 71: Availability of cocaine, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Availability	2009	2010								
(among those who commented)	N=147	N=182	n=47	n=26	n=25	n=28	n=19	n=7 [^]	n=4 [^]	n=26
Very easy	16	21	40	23	24	0	16	43	0	8
Easy	42	39	38	42	60	21	37	43	0	42
Difficult	35	34	21	35	16	61	42	14	50	42
Very difficult	7	6	0	0	0	18	5	0	50	8
Availability changes	2009	2010								
(among those who commented)	N=130	N=171	n=45	n=23	n=25	n=26	n=17	n=7 [^]	n=4 [^]	n=24
More difficult	9	9	9	13	4	8	0	14	250	13
Stable	64	69	71	57	80	62	88	71	75	58
Easier	22	18	18	30	16	23	6	14	0	17
Fluctuates	5	4	2	0	0	8	6	0	0	13

Source: EDRS REU interviews

[^] Small numbers commenting (n<10); interpret with caution

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Cocaine was most commonly acquired through friends and known dealers. Very small numbers n<5 reported sourcing cocaine through street dealers or mobile dealers. It was most commonly obtained in private locations, (friends' homes, and/or participants' own homes) for use in public locations (nightclubs, pubs and raves; Table 72).

Table 72: Last source, purchase location and use location of cocaine, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Scored from (among those who commented)	2009 n=149	2010 N=186	n=47	n=27	n=25	n=29	n=19	n=7 [^]	n=5 [^]	n=27
Friends	60	55	49	52	48	62	68	57	60	59
Known dealers	19	19	28	26	20	14	11	0	0	19
Acquaintances	9	9	11	7	4	3	16	29	0	11
Unknown dealers	2	2	2	0	8	0	0	0	0	0
Workmates	1	2	2	7	0	0	0	0	0	4
Used, but not scored	5	11	9	4	20	21	0	14	40	7
Locations scored (among those who commented)	2009 n=148	2010 N=183	n=47	n=27	n=25	n=29	n=17	n=7 [^]	n=5 [^]	n=26
Friend's home	35	32	26	41	16	38	29	14	60	46
Dealer's home	9	10	6	19	12	7	12	0	0	15
Own home	22	13	17	7	8	10	24	29	0	8
Agreed public location	5	6	13	4	4	0	18	0	0	0
Acquaintance's home	1	3	4	0	4	3	0	14	0	0
Private party	5	2	4	0	0	3	0	0	0	0
Nightclub	6	12	15	11	12	3	6	29	0	15
Pubs	7	7	4	0	20	14	6	0	0	0
Raves*	1	<1	0	4	0	0	0	0	0	0
Street	<1	<1	0	4	0	0	0	0	0	0
Educational institution	<1	0	0	0	0	0	0	0	0	0
Used, but not scored	5	11	9	4	20	21	0	14	40	7
Last use venue (among those who commented)	n=149	N=183	n=46	n=27	n=25	n=28	n=19	n=7 [^]	n=5 [^]	n=26
Nightclub	26	27	26	26	36	14	21	71	20	27
Friends home	13	19	22	30	8	21	5	0	20	23
Private party	15	7	9	7	4	14	5	0	20	0
Home	15	13	15	11	20	0	21	14	0	12
Raves*	3	2	0	7	0	4	5	0	0	0
Pub	9	14	13	4	16	21	26	14	0	8
Live music event	7	6	0	7	8	4	5	0	20	15
Public place (street/park)	<1	2	2	4	0	0	0	0	0	4
Used, but not scored	-	6	7	0	4	18	0	0	20	4

Source: EDRS REU interviews

* Includes 'doofs' and dance parties

[^] Small numbers commenting (n<10); interpret with caution

5.4 Ketamine

- Very small numbers of the national sample commented on the ketamine market characteristics, please interpret results with caution.
- Price of a gram of ketamine ranged from a median of \$170 in the ACT to \$350 in the NT. The price was reported as stable by three-quarters of the participants that commented.
- 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 reported as difficult to very difficult by the majority (67%), a change from the mixed reports in 2009. Participant availability had remained stable in the preceding six months.
- Ketamine was predominantly obtained from friends, purchase typically occurred in private locations, such as friends' homes. Locations of last use were divided between public locations (nightclubs) and private locations (friends' homes).

5.4.1 Price

Only a small proportion of the sample was able to comment on the price of a gram of ketamine in all jurisdictions and, therefore, the results should be interpreted with caution. Three percent of the national sample (n=18) commented on the price of a gram of ketamine. The median price of a gram of ketamine ranged from \$150 in NSW (n=7) to \$350 in NT (n=1; Table 73).

Table 73: Median price of ketamine, by jurisdiction, 2010

Median price (\$)	NSW n=7 [^]	ACT n=2 [^]	VIC n=2 [^]	TAS n=0	SA n=2 [^]	WA n=1 [^]	NT n=1 [^]	QLD n=3 [^]
Gram (range)	\$150 (100-280)	\$170 (40-300)	\$220 (no range)	-	\$125 (100-150)	\$250 (no range)	\$350 (no range)	\$150 (no range)

Source: EDRS REU interviews

[^] Small numbers commenting (n<10), interpret with caution

Three percent (n=24) of the national sample commented on whether the price of ketamine had changed in the preceding six months. The majority of these commenting participants reported that the price had remained stable (Table 74).

Table 74: Price changes of ketamine, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Ketamine price changes	2009	2010								
(among those who commented)	n=21	n=24	n=8 [^]	n=2 [^]	n=8 [^]	n=1 [^]	n=2 [^]	n=1 [^]	n=1 [^]	n=1 [^]
Increased	29	21	38	0	25	0	0	0	0	0
Stable	43	71	63	50	75	100	100	0	100	100
Decreased	19	0	0	0	0	0	0	0	0	0
Fluctuated	10	8	0	50	0	0	0	100	0	0

Source: EDRS REU interviews

[^] Small numbers commenting (n<10); interpret with caution.

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Table 75 presents data across time regarding the price of a gram of ketamine. In most jurisdictions across years, the proportion of REU able to comment on the price of ketamine has been low, so caution should be made when interpreting results. The majority of use has been reported to occur in NSW where the price has remained stable at \$150 per gram.

Table 75: Median price of ketamine, by jurisdiction, 2000-2010

Median price per gram (\$)	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
2000	200	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	50
2001	150	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	142.50
2002	160	n.a.	n.a.	n.a.	40	n.a.	n.a.	n.a.
2003	150	n.a.	200	100 [^]	200	n.a.	n.a.	180
2004	200	200 [^]	195	50 [^]	200	n.a.	200 [^]	n.a.
2005	100	65 [^]	180	190 [^]	200	150	80 [^]	150 [^]
2006	175 [^]	40 [^]	100 [^]	180 [^]	300 [^]	160 [^]	50 [^]	180 [^]
2007	150	172.5 [^]	200 [^]	300 [^]	200	n.a.	n.a.	n.a.
2008	150	n.a.	200	300 [^]	225 [^]	n.a.	n.a.	n.a.
2009	150 [^]	n.a.	200 [^]	300 [^]	200 [^]	n.a.	400 [^]	200 [^]
2010	150 [^]	170 [^]	220 [^]	n.a.	125 [^]	250 [^]	350 [^]	150 [^]

Source: EDRS REU interviews

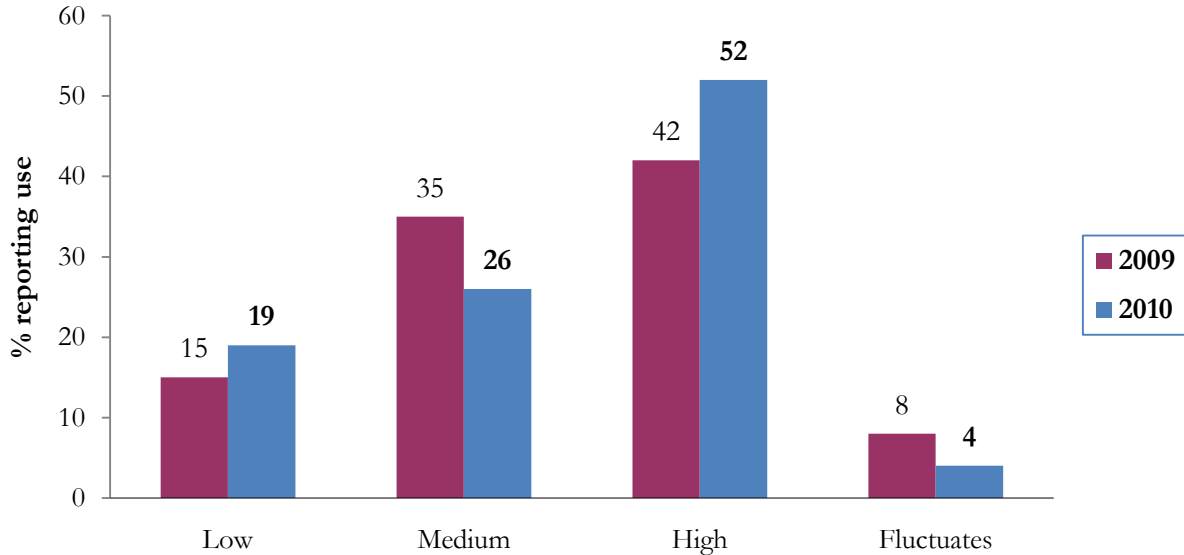
[^]A small number of participants commented; interpret with caution.

Note: Data first collected in NSW, SA and QLD in 2000; data not collected in QLD in 2002, data first collected in ACT, VIC, TAS, WA and NT in 2003. In 2009, only the last price paid for ketamine was collected.

5.4.2 Purity

Participants were asked what the current purity or strength of ketamine was, and if the purity had changed in the six months preceding interview. Four percent (n=27) of the national sample commented on the purity of ketamine. Half of those that commented reported ketamine purity to be high (Figure 31).

Figure 31: National REU reports of current ketamine purity, 2009-2010



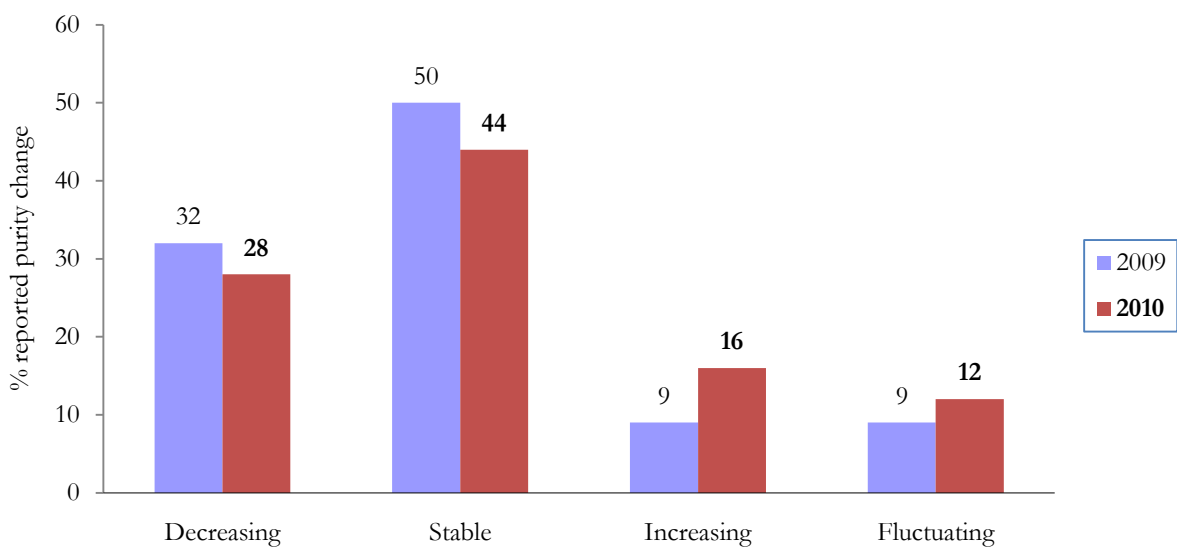
Source: EDRS REU interviews

Note: Among those who commented (n=26 in 2009, n=27 in 2010).

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Of those who commented on whether the purity of ketamine had changed in the six months preceding interview, 44% (n=11) reported that the purity of ketamine had remained stable. A higher proportion of recent ketamine users reported that the purity had increased (Figure 32).

Figure 32: National REU reports of recent (last six months) change in ketamine purity, 2009-2010



Source: EDRS REU interviews

Note: Among those who commented (n=22 in 2009, n=25 in 2010).

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

5.4.3 Availability

Four percent of the national sample commented on the recent availability of ketamine. Overall, ketamine was reported as difficult to very difficult to obtain (67%) which may be a reason that use remained low in this group (Table 76).

Interestingly, reports of recent availability change saw half (55%) of those who commented reporting that the availability of ketamine had remained stable over the preceding six months, while 31% reported that ketamine was easier to obtain (Table 76).

Table 76: Availability of ketamine, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Availability	2009	2010								
(among those who commented)	N=26	N=30	n=11	n=2 [^]	n=8 [^]	n=2 [^]	n=2 [^]	n=1 [^]	n=1 [^]	n=3 [^]
Very easy	21	13	9	0	0	0	50	100	0	33
Easy	31	20	36	0	25	0	0	0	0	0
Difficult	42	37	18	0	63	100	0	0	100	33
Very difficult	15	30	36	100	13	0	50	0	0	33
Availability changes										
(among those who commented)	n=24	n=29	n=10	n=2 [^]	n=8 [^]	n=2 [^]	n=2 [^]	n=1 [^]	n=1 [^]	n=3 [^]
Easier	17	31	40	0	25	50	50	0	0	33
Stable	63	55	40	50	75	50	50	100	100	33
More difficult	17	10	20	0	0	0	0	0	0	33
Fluctuates	4	3	0	50	0	0	0	0	0	0

Source: EDRS REU interviews

[^] small numbers commenting (n<10); interpret with caution.

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Ketamine was predominantly obtained from friends (58%) or known dealers (16%). It was predominantly obtained from private locations, such as friends' homes (35%) and participants' own homes (delivered; 25%). Last use venue, where participants reported spending the most time intoxicated, included public venues such as nightclubs (36%) followed closely by private venues such as friends' homes (23%; Table 77).

Table 77: Last source, purchase location and use location of ketamine, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Scored from (among those who commented)	2009 n=26	2010 n=31	n=11	n=2 [^]	n=8 [^]	n=2 [^]	n=2 [^]	n=1 [^]	n=1 [^]	n=4 [^]
Friends	58	58	73	0	38	100	50	0	100	75
Known dealers	15	16	9	100	13	0	0	100	0	0
Acquaintances	19	10	9	0	13	0	50	0	0	0
Workmates	4	0	0	0	0	0	0	0	0	0
Unknown dealers	0	7	9	0	0	0	0	0		25
Used, but not scored	4	10	0	0	38	0	0	0	0	0
Locations scored (among those who commented)	2009 n=26	2010 n=31	n=11	n=2 [^]	n=8 [^]	n=2 [^]	n=2 [^]	n=1 [^]	n=1 [^]	n=4 [^]
Friend's home	35	29	46	50	13	0	0	0	0	50
Dealer's home	4	7	9	0	13	0	0	0	0	0
Own home	15	25	9	0	13	50	50	0	100	19
Agreed public location	15	3	0	0	0	0	50	0	0	0
Acquaintance's home	8	3	9	0	0	0	0	0	0	0
Private party	4	7	9	0	13	0	0	0	0	0
Nightclub	12	13	18	0	13	50	0	0	0	0
Work	4	0	0	0	0	0	0	0	0	0
Pubs	0	3	0	0	0	0	0	0	0	25
Used, but not scored	4	9	0	0	38	0	0	0	0	10
Last use venue (among those who commented)	2009 n=26	2010 n=31	n=11	n=2 [^]	n=8 [^]	n=2 [^]	n=2 [^]	n=1 [^]	n=1 [^]	n=4 [^]
Nightclub	27	36	36	0	50	50	50	0	0	25
Friends home	23	23	18	0	38	0	50	0	0	25
Private party	12	10	9	50	13	0	0	0	0	0
Home	19	19	27	0	0	6	0	0	100	25
Dealers Home	0	3	9	0	0	0	0	0	0	0
Live music event	4	3	0	0	0	0	0	0	0	25
Educational institution	0	3	0	0	0	0	0	100	0	0
Used, but not scored	4	3	0	50	0	0	0	0	0	0

Source: EDRS REU interviews

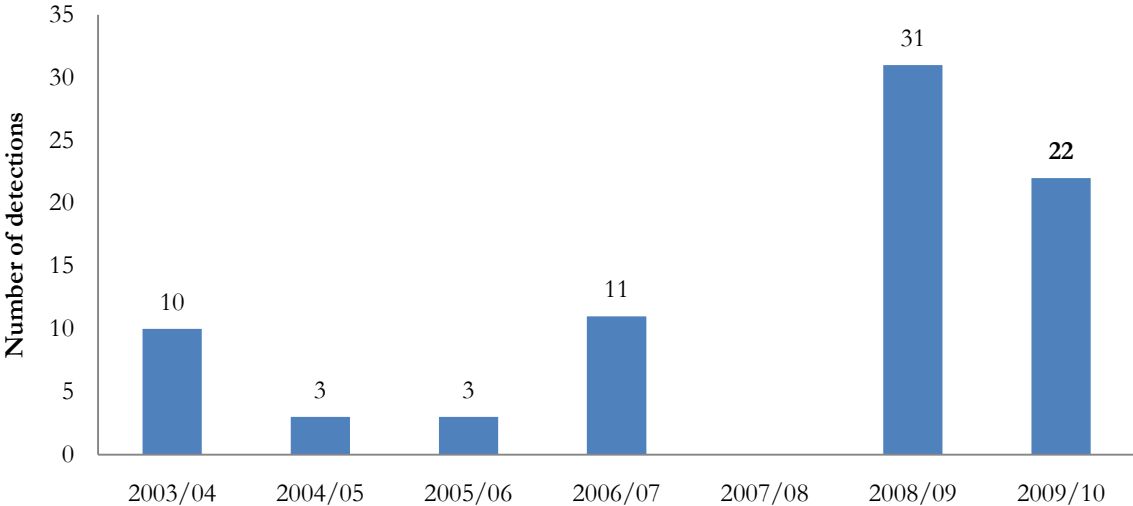
[^] Small numbers commenting (n<10); interpret with caution

Note: For columns that do not add up to 100%, responses such as 'other' were not reported

5.4.4 Ketamine detected at the Australian border

As mentioned previously, diversion from legitimate sources is an issue for ketamine. Border controls for ketamine were introduced in March 2002; prior to this, suspected ketamine importations were referred to police for investigation under state and territory laws. Given that ketamine is available in various forms such as powder, liquid or pharmaceutical preparations, it is difficult to provide accurate data on the weights of seizures detected. There were 22 seizures detected in 2009/10, representing a slight decline from 31 in 2008/09 (Figure 33).

Figure 33: Number of detections of ketamine detected at the border by the ACS, 2003/04-2009/10



Source: (Australian Customs Border and Protection Service, 2010)

5.5 GHB

- Only eight participants were able to comment on the price of a millilitre of GHB of between \$4.35 (VIC) to \$10 (NSW). There were mixed reports between whether the price had remained stable, increased, decreased or fluctuated.
- Purity was predominantly reported as high, a change from the reports of medium purity in 2009. Comments about purity change were that it was stable.
- Of those who commented on GHB availability, reports were considered easy to very easy to obtain. Availability change was reported as stable.
- GHB was scored from friends and known dealers. Location where GHB was last used was nightclubs.

5.5.1 Price

The median price per millilitre in each jurisdiction is presented in Table 78. Only eight participants from the national sample were able to comment on the current price per millilitre of GHB and, as such, the results should be interpreted with caution.

Table 78: Median price per ml of GHB, by jurisdiction, 2010

Price (\$)	NSW n=3 [^]	ACT n=0	VIC n=4 [^]	TAS n=0	SA n=0	WA n=0	NT n=0	QLD n=1 [^]
Per ml (range)	\$10 (8-12)	n.a.	\$4.25 (3-5)	n.a.	n.a.	n.a.	n.a.	\$5 (no range)

Source: EDRS REU interviews

[^] Small numbers commenting (n<10), interpret with caution

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Fifteen participants were able to comment on whether the price of GHB had changed. Most participants reported that the price had remained stable (33%; Table 79).

Table 79: Price changes of GHB, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
GHB price changes (among those who commented)	2009 n=15	2010 n=15	n=8 [^]	n=0	n=5 [^]	n=0	n=1 [^]	n=0	n=0	n=1 [^]
Increased	33	20	0	0	20	0	100	0	0	100
Stable	53	33	25	0	60	0	0	0	0	0
Decreased	13	20	25	0	20	0	0	0	0	0
Fluctuates	-	27	50	0	0		0		0	0

Source: EDRS REU interviews

[^] small numbers commenting (n<10); interpret with caution

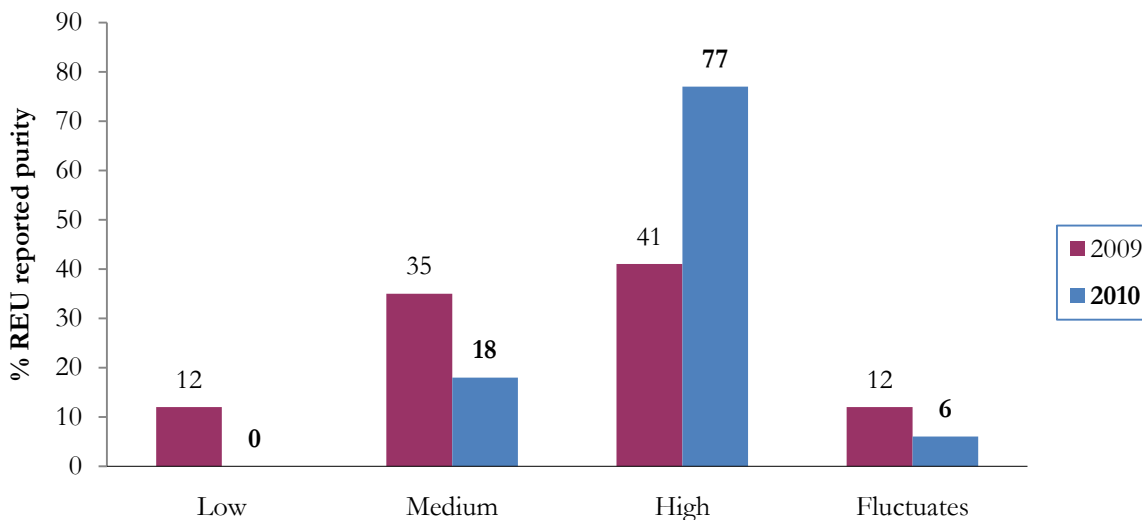
Note: There were no reports that the price of GHB had fluctuated in the last six months.

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

5.5.2 Purity

Participants were asked what the current purity or strength of GHB was, and if the purity had changed in the six months preceding interview. Fifteen participants commented on the purity of GHB. Purity was considered to be high (77%, n=13) by the majority of commenting participants (Figure 34).

Figure 34: National REU reports of current GHB purity, 2009-2010



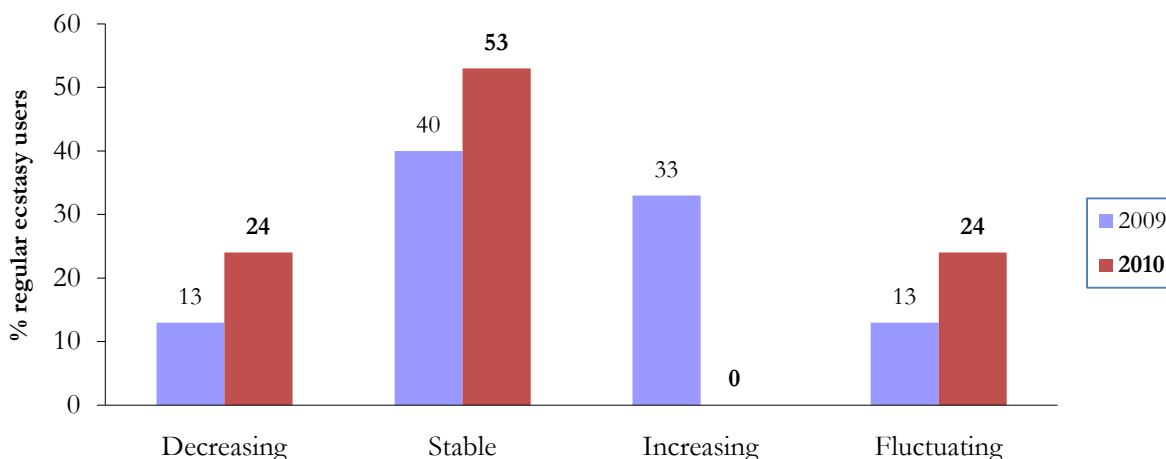
Source: EDRS REU interviews

Note: Among those who commented (n=17 in 2009, n=17 in 2010).

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Of those who commented (n=17) on whether the purity of GHB had changed in the six months preceding interview, the majority of participants reported that the purity was stable (53%, n=9) (Figure 35).

Figure 35: National REU reports of recent (last six months) change in GHB purity, 2009-2010



Source: EDRS REU interviews

Note: Among those who commented (n=15 in 2009, n=17 in 2010).

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

5.5.3 Availability

Nineteen participants of the national sample commented on the recent availability of GHB. Again, small numbers were reported in all states/territories, and these data should, therefore, be interpreted with caution.

Nationally, reports on availability were easy to very easy to obtain (n=13). Six participants reported availability to be difficult to obtain (Table 80).

The majority (53%) reported that availability of GHB had remained stable in the six months preceding interview (Table 80).

Table 80: Availability of GHB, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Availability	2009	2010								
(among those who commented)	n=17	n=19	n=12	n=0	n=5 [^]	n=0	n=1 [^]	n=0	n=0	n=1 [^]
Very easy	29	37	42	0	40	0	0	0	0	0
Easy	18	32	33	0	20	0	100	0	0	0
Difficult	47	32	25	0	40	0	0	0	0	100
Very difficult	6	0	0	0	0	0	0	0	0	0
Availability changes	2009	2010								
(among those who commented)	n=15	n=17	n=10	n=0	n=5 [^]	n=0	n=1 [^]	n=0	n=0	n=1 [^]
More difficult	33	12	10	0	0	0	0	0	0	100
Stable	40	53	50	0	60	0	100	0	0	0
Easier	27	29	30	0	40	0	0	0	0	0
Fluctuates	0	6	0	0	0	0	0	0	0	0

Source: EDRS REU interviews

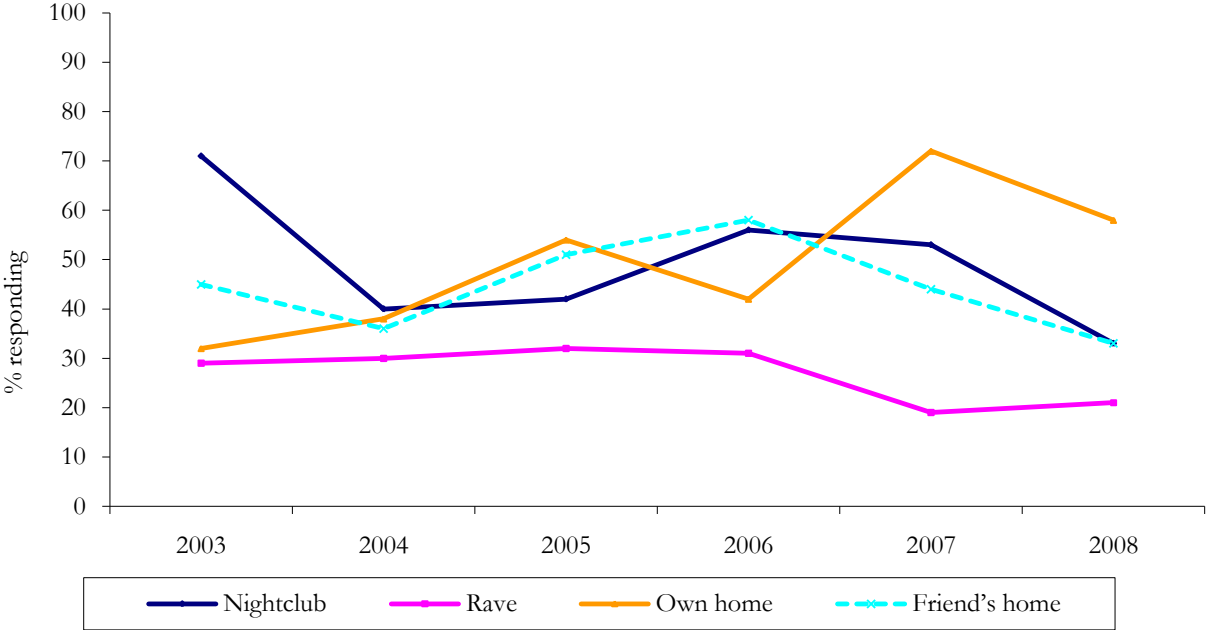
[^] Small numbers commenting (n<10); interpret with caution

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

In all jurisdictions except NSW, fewer than 10 participants were able to comment on the source, purchase location of GHB and last use venue. GHB was obtained from friends (58%, n=11) and known dealers (26%, n=5) and acquaintances (5%, n=1). The purchase location was predominantly private locations (47%, n=9). Most participants reported the last venue of intoxication was a nightclub (53%, n=10).

Figure 36 presents trends over time in the locations of usual GHB use. Prior to 2008, there had been mixed reports in the usual location of use of GHB between public locations (nightclubs) and private locations (own home/friends' homes). In 2008, it was clear that the majority of recent GHB users reported using at their own homes, but equal proportions reported use at nightclubs and friends' homes. Usual location of use was not collected from 2009 onwards.

Figure 36: Location of usual GHB use, 2003-2008



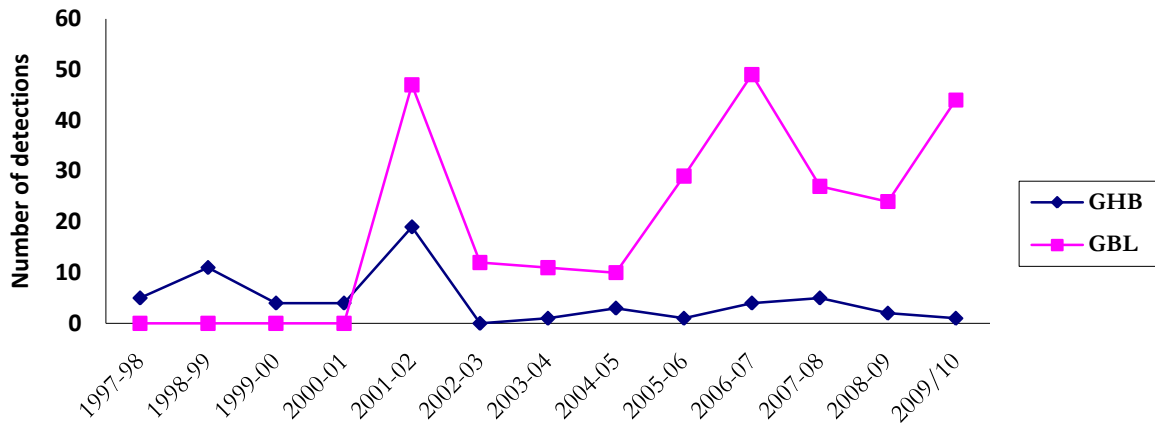
Source: EDRS REU interviews

5.5.4 GHB and GBL detected at the Australian border

Although the number of detections for GHB and GBL are relatively low compared to other drugs, Figure 37 indicates an increase in recent years in the number of detections of GBL at the Australian border, and these continue to outnumber seizures for GHB. There were 44 detections of GBL in 2009/10, representing an increase from 24 in 2008/09. The higher number of GBL detections may be an indication that it is being imported for production of GHB in Australia, and/or that it is being imported for use as a substitute for GHB itself. Only one seizure for GHB was reported in 2009/10.

It must be remembered that it is possible to obtain the precursors from legitimate sources in Australia. It is likely that some manufacturers of GHB source the precursors for the drug in this country. The relatively small number of GHB/GBL detections at the border, comparative to other drug types, may also be a reflection of this fact.

Figure 37: Number of GHB and GBL detections at the border by ACS, financial years 1997/98-2009/10



Source: (Australian Customs Border and Protection Service, 2010)

5.6 LSD

- The median price per tab of LSD ranged from \$10 in VIC and SA to \$25 in TAS and WA. Seventy-six percent of those commenting reported that the price had remained stable in the six months prior to interview.
- Current purity of LSD was high. Most of those who commented reported that purity had remained stable, in the six months preceding interview.
- Overall LSD was reported to have remained easy to obtain and this has remained stable (61%) 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 friends homes.

5.6.1 Price

One-quarter (24%, n=166) of the national sample commented on the price of a tab of LSD. The median price of a tab of LSD ranged from \$10 in VIC and SA to \$25 in TAS, WA and the NT (Table 81). Prices across time have remained relatively stable across jurisdictions with minor fluctuations of up to \$10 or less.

Table 81: Median price per tab of LSD, by jurisdiction, 2010

	NSW n=31	ACT n=23	VIC n=17	TAS n=18	SA n=13	WA n=29	NT n=6 [^]	QLD n=29
Median price (\$)								
Per tab (range)	\$20 (2-30)	\$20 (10-30)	\$10 (10-25)	\$25 (10-25)	\$10 (10-25)	\$25 (10-40)	\$25 (25-30)	\$20 (10-30)

Source: EDRS REU interviews

[^] Small numbers commenting (n<10); interpret with caution

Twenty-five percent (n=170) of the national sample commented on whether the price of LSD had changed in the preceding six months. The price of LSD was generally considered to be stable (76%) in the preceding six months (Table 82).

Table 82: Price changes of LSD, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
LSD price changes	2009	2010								
(among those who commented)	n=170	n=170	n=29	n=23	n=24	n=21	n=16	n=27	n=5 [^]	n=25
Increased	17	12	14	17	17	14	0	11	20	8
Stable	64	76	79	61	71	81	94	78	60	76
Decreased	10	5	3	4	4	0	6	7	20	4
Fluctuated	9	7	3	17	8	5	3	4	0	12

Source: EDRS REU interviews

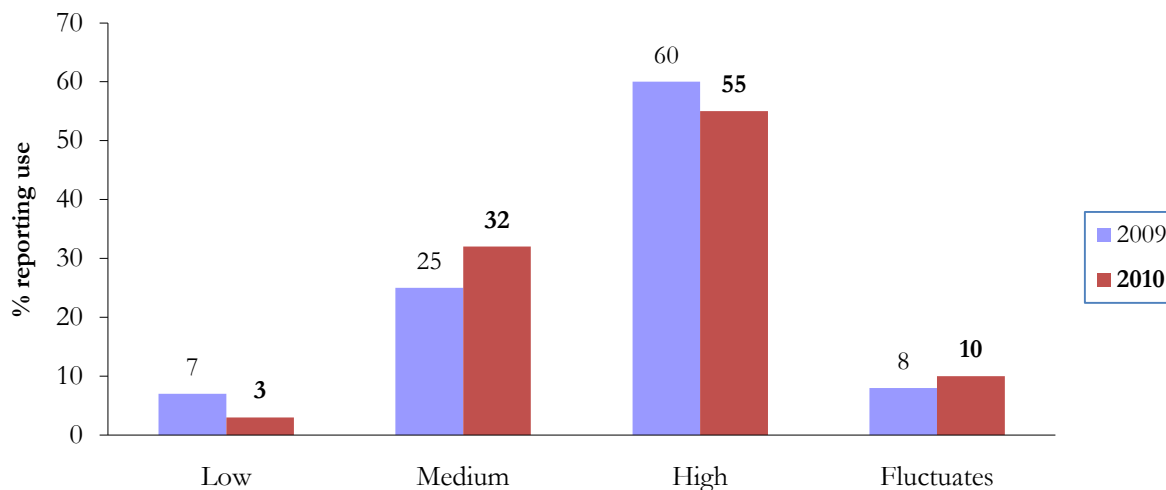
[^] Small numbers commenting (n<10); interpret with caution

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

5.6.2 Purity

Participants were asked what was the current purity or strength of LSD, and if the purity had changed in the six months preceding interview. Over half of the participants that commented reported the purity of LSD to be high (55%; Figure 38).

Figure 38: National REU reports of current LSD purity, 2009-2010



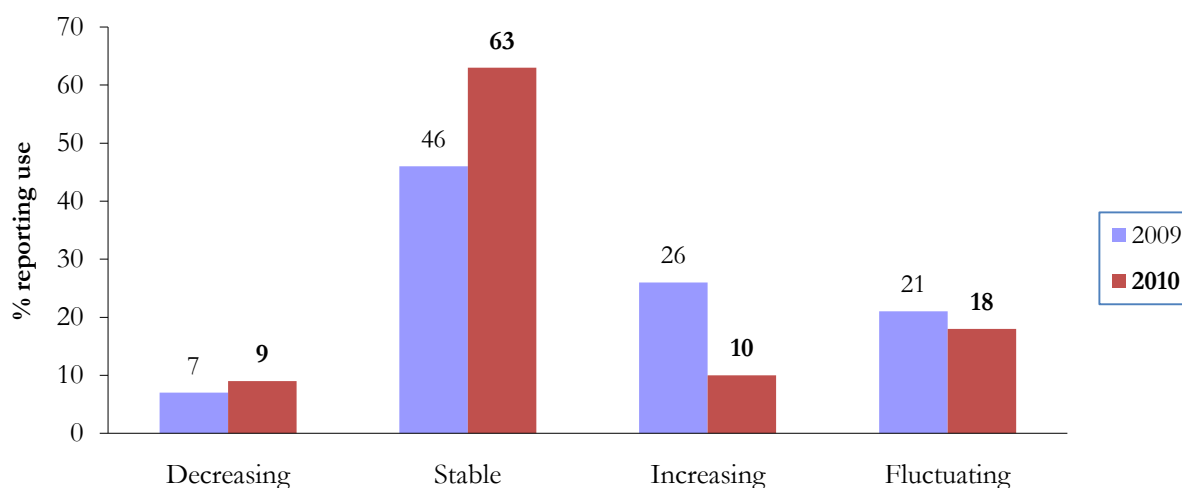
Source: EDRS REU interviews

Note: Among those who commented (n=192 in 2009, n=184 in 2010).

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Of those who commented on whether the purity of LSD had changed in the six months preceding interview, 63% reported that it had remained stable (Figure 39).

Figure 39: National REU reports of recent (last six months) change in LSD purity, 2009-2010



Source: EDRS REU interviews

Note: Among those who commented (n=147 in 2009, n=160 in 2010).

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

5.6.3 Availability

Twenty-eight percent (n=195) of the national sample commented on the recent availability of LSD; the majority reported LSD to be easy to very easy (70%) to obtain. Of those who commented, the availability of LSD was reported to have remained stable (61%) in the six months preceding interview (Table 83).

Table 83: Availability of LSD, by jurisdiction, 2009-2010

	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Availability (among those who commented)	2009 n=207	2010 n=195	n=32	n=23	n=25	n=28	n=16	n=31	n=7 [^]	n=33
Very easy	23	25	31	30	40	29	6	19	14	15
Easy	38	45	38	39	32	50	3263	52	43	46
Difficult	33	28	22	30	28	21	31	29	43	28
Very difficult	6	3	9	0	0	0	0	0	0	3
Availability changes (among those who commented)	2009 n=175	2010 n=176	n=30	n=23	n=23	n=25	n=16	n=27	n=4 [^]	n=28
Easier	22	22	23	30	30	12	6	19	29	29
Stable	47	61	67	44	57	72	56	67	75	61
More difficult	20	13	7	22	9	16	25	15	25	4
Fluctuates	6	4	3	4	4	0	13	0	0	7

Source: EDRS REU interviews

[^] Small numbers commenting (n<10); interpret with caution

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

5.6.4 Source and locations of use

LSD had predominantly been obtained from friends (60%) or known dealers (14%). LSD source venue was primarily friends' homes (32%) or home delivered to participants' own homes (17%). LSD was most frequently used private locations such as friends' homes (21%) and own homes (20%; Table 84).

Table 84: Last source, purchase location and use location of LSD, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Scored from (of those who commented)	2009 n=210	2010 n=202	n=33	n=23	n=25	n=30	n=16	n=32	n=8 [^]	n=35
Friends	64	60	70	52	40	63	69	66	75	57
Known dealers	17	14	13	35	16	7	6	6	0	20
Acquaintances	5	11	6	13	8	10	19	16	13	11
Unknown dealers	3	6	9	0	20	0	0	3	0	9
Workmates	1	2	3	0	0	0	0	6	13	0
Used but not scored	8	5	0	0	16	20	0	0	0	3
Locations scored (of those who commented)	2009 n=210	2010 n=201	n=33	n=23	n=25	n=30	n=16	n=32	n=7 [^]	n=35
Friend's home	34	32	49	44	16	33	19	28	29	29
Own home	11	17	15	0	12	13	38	28	43	14
Dealer's home	9	9	3	13	16	3	0	6	0	17
Raves*	7	8	9	9	8	7	13	13	0	3
Agreed public location	9	8	9	17	0	3	13	6	0	9
Private party	7	7	9	4	12	3	6	6	14	6
Nightclub	3	3	0	4	0	8	0	4	0	3
Pubs	2	3	0	4	4	7	6	0	0	3
Acquaintances home	1	5	3	4	12	0	6	0	0	3
Other	7	3	3	4	0	0	0	9	0	0
Used but not scored	8	9	3	0	4	10	0	0	0	5
Last use venue (of those who commented)	2009 n=211	2010 n=202	n=33	n=23	n=25	n=30	n=16	n=32	n=8 [^]	n=35
Own home	18	20	18	4	12	10	13	41	38	26
Friend's home	21	21	15	26	16	17	25	25	13	26
Live music event	6	7	12	0	16	3	6	0	0	11
Raves*	7	11	6	26	8	17	19	13	0	3
Outdoors	18	10	15	9	12	13	13	6	25	0
Private party	3	7	15	9	8	3	13	6	13	0
Public place	3	6	12	17	12	0	0	0	0	6
Nightclub	4	7	6	9	12	7	6	0	13	11
Pubs	1	3	3	0	4	7	0	3	0	0
Other	5	4	3	0	0	3	6	3	0	11
Used but not scored	8	5	6	3	0	20	0	3	0	6

Source: EDRS REU interviews

* Includes 'doofs' and dance parties

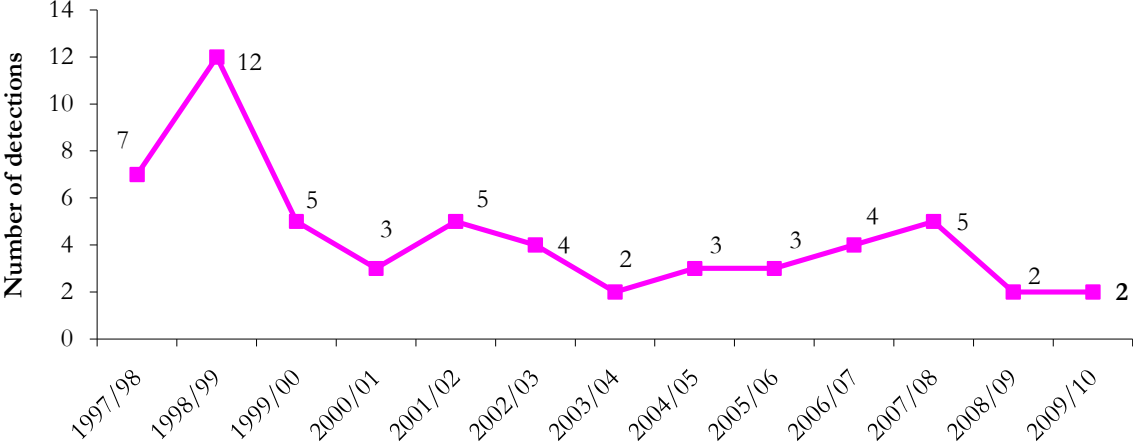
[^] Small numbers commenting (n<10); interpret with caution

Note: Response options of 'street dealer' and 'other' have not been reported due to very small numbers.

5.6.5 LSD detected at the Australian border

There have only been a small number of seizures of LSD in recent years, with only two recorded in 2009/10 (Figure 40).

Figure 40: Number of LSD detections at the border by the Australian Customs and Border Protection Service, financial years 1997/98-2009/10



Source: (Australian Customs Border and Protection Service, 2010)

5.7 Cannabis

- The majority of respondents were able to differentiate between hydro and bush cannabis when being asked about cannabis market characteristics.
- Nationally, prices for hydro were generally slightly more expensive than those for bush cannabis. Prices were reported to have remained stable over the preceding six months.
- As in 2009, participants in all jurisdictions generally perceived the potency of hydro to be high and bush was most commonly reported to be medium. The potency for both forms was generally reported to have remained stable over the last six months.
- Hydro and bush were both reported by the majority to be easy or very easy to obtain, and the availability of both forms was reported to have remained stable.
- Both hydro and bush cannabis were most commonly bought from friends, and used in private locations.

5.7.1 Price

Prices in Table 85 represent the median last price paid for the most commonly reported purchase amounts (quarter-ounces and ounces) of bush and hydro by jurisdiction. Nationally, 109 participants reported having purchased an ounce of hydro in the preceding six months (n= 67 purchased an ounce of bush), while 103 reported purchase of a quarter-ounce of hydro (n= 50 purchased a quarter-ounce of bush). Prices last paid per quarter ounce of hydro were either reported as constant or having had a slight increase. The median last price paid per ounce of hydro ranged from \$230 in SA to \$425 in the NT. The median last price paid per ounce of bush ranged from \$220 in SA, to \$400 in the NT (Table 85).

Table 85: Median last price paid per quarter ounce and ounce of hydroponically and outdoor grown cannabis, by jurisdiction, 2009-2010

	Median last price \$ per quarter-ounce (range)				Median last price \$ per ounce (range)			
	Hydro		Bush		Hydro		Bush	
	2009	2010	2009	2010	2009	2010		
NSW	90 (80-100)	95 (50-100)	80 (50-100)	80^ (70-100)	297.50 (100-350)	300 (150-450)	200^ (150-300)	235^ (150-300)
ACT	90 (50-300)	90 (80-300)	80 (50-100)	90^ (50-210)	300 (250-1500)	300^ (250-350)	250 (150-360)	280^ (220-300)
VIC	80 (70-95)	80 (70-280)	70^ (50-90)	80^ (70-85)	250 (200-280)	250 (200-300)	200^ (150-250)	270^ (65-300)
TAS	80 (25-110)	90 (75-100)	67.50 (50-90)	70^ (65-90)	280 (100-350)	275^ (250-350)	225 (150-250)	235^ (200-300)
SA	55 (25-75)	60^ (50-70)	50 (45-65)	70^ <i>(no range)</i>	220 (180-275)	230 (200-280)	200 (150-250)	220 (100-280)
WA	86.25 (75-125)	100^ (75-100)	75^ (70-150)	90^ (80-100)	350 (250-380)	350 (300-380)	280 (200-350)	300 (100-350)
NT	105^ (90-120)	150^ <i>(no range)</i>	200^ <i>(no range)</i>	150^ <i>(no range)</i>	360^ (150-500)	425^ (250-480)	320^ (250-400)	400^ (350-450)
QLD	90 (50-120)	90 (50-120)	70 (50-90)	75 (50-100)	300 (160-800)	325 (150-370)	250 (80-350)	260 (200-300)

Source: EDRS REU interviews

^ Small numbers reporting (n<10); interpret with caution

Consistent with the reporting of other drug types, participants were asked whether the price of cannabis had changed in the six months preceding interview, again making the distinction between hydro and bush cannabis. Prices for both were largely reported to have remained stable over the preceding six months (Table 86).

Table 86: Cannabis price changes, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Hydro price changes	2009	2010								
Of those who responded	n=362	n=295	n=51	n=32	n=36	n=36	n=43	n=36	n=14	n=47
Increased	23	23	12	9	19	17	40	31	50	23
Stable	68	70	77	91	75	72	47	67	43	72
Decreased	4	1	2	0	0	3	0	3	0	0
Fluctuated	5	6	10	0	6	8	14	0	7	4
Bush price changes	2009	2010								
Of those who responded	n=264	n=189	n=27	n=19	n=17	n=30	n=34	n=25	n=7 [^]	n=30
Increased	13	13	15	5	24	7	12	12	29	17
Stable	76	77	78	79	71	67	77	84	71	83
Decreased	6	6	7	11	6	20	0	4	0	0
Fluctuated	4	4	0	5	0	7	12	0	0	0

Source: EDRS REU interviews

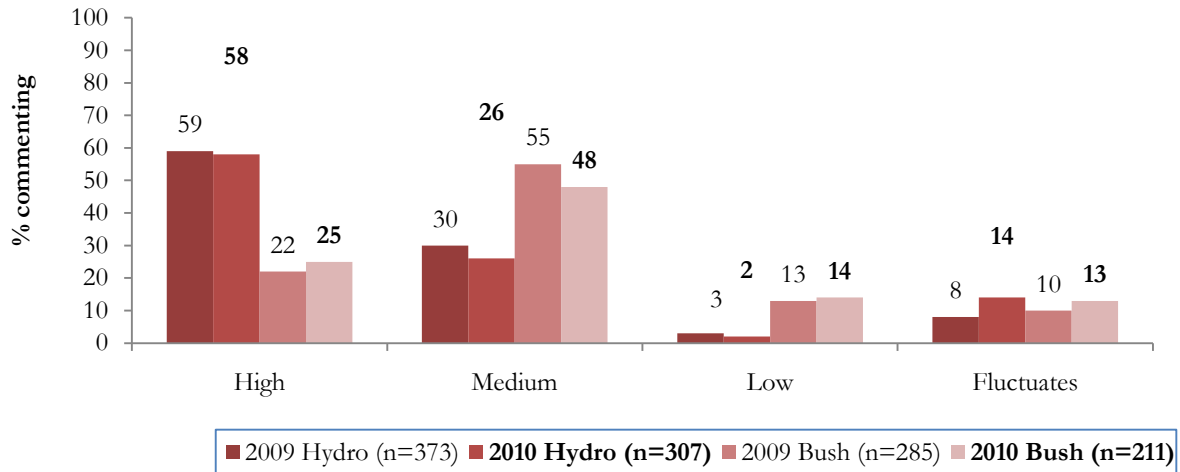
[^] Small numbers reporting (n<10); interpret with caution

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

5.7.2 Potency

Less participants overall, regardless of cannabis form, were able to comment on potency and potency change compared to 2009. Of those who commented, the majority reported that the current potency of hydro cannabis was high. In contrast, bush cannabis was most commonly reported to be of medium potency (Figure 41). Reports on whether potency had changed were similar for both hydro and bush, with the majority reporting that they had remained stable in the preceding six months (Figure 42).

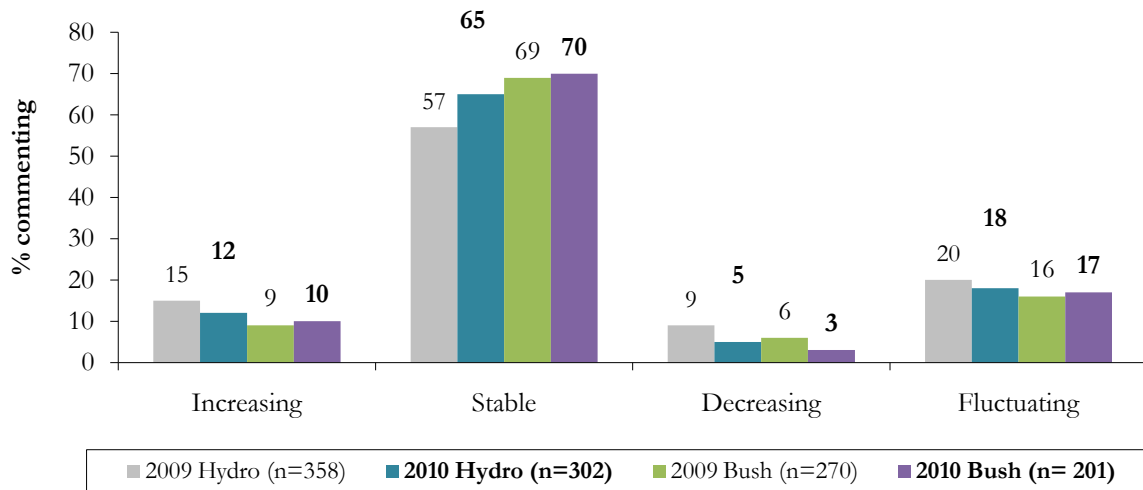
Figure 41: National REU reports of current cannabis potency among those who commented, 2009-2010



Source: EDRS REU interviews

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Figure 42: National REU reports of recent (last six months) change in cannabis potency, 2009-2010



Source: EDRS REU interviews

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

5.7.3 Availability

REU were asked to comment on the current availability of hydro, and whether this had changed in the six months preceding interview. Hydro was commonly reported to be easy or very easy to obtain (87%). Over half of the sample that commented reported access to hydro cannabis to have remained stable (72%; Table 87).

Table 87: Availability of hydro, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Availability	2009	2010								
(among those who commented)	n=381	n=312	n=55	n=34	n=35	n=39	n=47	n=38	n=14	n=50
Very easy	48	50	60	62	43	59	28	53	0	62
Easy	34	37	31	35	40	39	49	37	50	28
Difficult	16	13	7	3	17	3	23	11	50	10
Very difficult	2	<1	2	0	0	0	0	0	0	0
Availability changes	2009	2010								
(among those who commented)	n=376	n=310	n=55	n=34	n=36	n=37	n=46	n=38	n=14	n=50
More difficult	18	14	11	3	17	11	20	11	29	18
Stable	56	72	78	79	72	70	65	79	50	68
Easier	17	10	7	15	8	14	7	11	21	6
Fluctuates	9	5	4	3	3	5	9	0	0	8

Source: EDRS REU interviews

Note: the response option 'don't know' was excluded from analysis from 2009 onwards

Reports of bush availability also indicated that bush tended to be easy or very easy to obtain (73%), with approximately one-quarter of the national sample considering it to be difficult to obtain. NSW was the jurisdiction that had the highest proportion that reported bush as being ‘difficult’ to obtain. Availability was most commonly reported to have remained stable in the past six months by the national sample, a finding reflected across all jurisdictions except the NT (Table 88).

Table 88: Availability of bush, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Availability	2009	2010								
(among those who commented)	N=286	N=216	n=37	n=22	n=19	n=34	n=38	n=27	n=8 [^]	n=31
Very easy	35	38	30	59	26	68	21	48	0	26
Easy	34	35	24	36	47	24	42	41	50	32
Difficult	28	26	46	5	26	9	29	11	50	39
Very difficult	3	2	0	0	0	0	8	0	0	3
Availability changes										
(among those who commented)	N=279	N=210	n=36	n=21	n=18	n=32	n=37	n=27	n=8 [^]	n=31
More difficult	17	9	8	5	6	3	8	7	38	16
Stable	59	72	75	62	94	63	78	70	38	74
Easier	16	13	11	24	0	28	11	15	13	3
Fluctuates	9	6	6	10	0	6	3	7	13	7

Source: EDRS REU interviews

Note: the response option ‘don’t know’ was excluded from analysis from 2009 onwards

Hydro was most commonly reported to have been scored from friends and known dealers and was the most commonly reported to have been obtained at friends' homes. Participants' own homes and friends' homes were most frequently reported as last locations of use (Table 89).

Table 89: Last source person and purchase locations and use locations of hydro, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Scored from (among those who commented)	2009 N=386	2010 N=315	n=55	n=34	n=36	n=41	n=47	n=38	n=14	n=50
Friends	59	62	55	50	58	76	64	63	57	70
Known dealers	24	22	35	50	25	5	11	5	21	24
Acquaintances	6	7	9	0	11	2	15	13	7	0
Workmates	2	1	0	0	0	2	0	5	0	2
Unknown dealers	2	1	0	0	0	2	0	3	7	0
Street dealer		2	2	0	0	2	9	3	0	0
Other	3	2	0	0	0	2	0	8	7	2
Used, but not scored	4	2	0	0	6	7	2	0	0	2
Locations scored (among those who commented)	2009 N=386	2010 N=314	n=55	n=34	n=36	n=40	n=47	n=39	n=13	n=50
Friend's home	44	45	40	47	39	48	49	49	46	42
Dealer's home	17	15	11	44	17	5	9	5	23	16
Own home	19	22	22	9	17	25	23	26	31	28
Agreed public location	8	6	15	0	11	8	6	0	0	4
Acquaintance's home	4	4	6	0	8	3	6	5	0	0
Work		2	0	0	0	3	2	3	0	4
Street market		1	2	0	0	0	2	3	0	0
Other	3	4	6	0	3	3	0	10	0	4
Used, but not scored	3	2	0	0	6	8	2	0	0	2
Last use venue (among those who commented)	2009 N=388	2010 N=316	n=55	n=34	n=36	n=41	n=47	n=39	n=14	n=50
Friend's home	31	25	33	29	25	24	19	31	21	18
Own home	56	61	51	56	72	59	70	59	50	68
Dealer's home	1	<1	0	0	0	2	0	0	0	0
Public place	1	1	2	6	0	0	0	0	0	0
Pub	1	1	4	0	0	0	0	0	0	0
Outdoors	2	3	4	3	0	2	2	3	0	0
Nightclub		2	2	0	0	2	0	5	0	2
Live music event		1	4	3	0	0	0	0	0	2
Other	2	2	2	0	0	0	2	0	0	8
Have not used	3	2	0	0	3	5	2	0	7	2

Source: EDRS REU interviews

As with hydro and other drug types investigated by the EDRS, REU most commonly reported scoring bush from friends and known dealers and this most commonly occurred in private locations (at friends' homes and at their own homes). Participants' own homes followed by friends' homes were most commonly reported as last use venues (Table 90).

Table 90: Last source person, purchase location and use location of bush, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Scored from (among those who commented)	2009 N=292	2010 N=218	n=38	n=22	n=19	n=34	n=38	n=27	n=8 [^]	n=32
Friends	66	64	63	59	58	68	66	74	50	63
Known dealers	16	16	21	27	16	15	13	0	25	16
Acquaintances	7	8	8	5	11	3	16	11	0	3
Unknown dealers	2	1	0	0	11	0	0	0	0	3
Street dealer	1	2	0	5	0	0	3	0	0	6
Workmates	<1	1	0	0	0	0	0	0	4	3
Other	2	2	0	5	0	0	3	7	13	0
Used but not scored	4	6	8	0	5	15	0	4	13	6
Locations scored (among those who commented)	2009 N=292	2010 N=217	n=38	n=22	n=19	n=34	n=38	n=27	n=7 [^]	n=32
Friend's home	44	48	47	55	47	41	47	63	57	41
Own home	21	18	13	14	5	27	21	19	14	25
Dealer's home	13	12	11	27	16	9	11	0	14	16
Agreed public location	6	6	13	0	11	3	11	0	0	3
Acquaintance's home	5	6	8	0	11	3	8	11	0	0
Street market	1	<1	0	0	0	0	0	0	0	3
Work	<1	1	0	0	0	0	0	4	0	3
Other	7	2	0	5	5	3	3	0	0	3
Used but not scored	4	6	8	0	5	15	0	4	14	6
Last use venue (among those who commented)	2009 N=292	2010 N=219	n=38	n=22	n=19	n=34	n=39	n=27	n=8 [^]	n=32
Friend's home	30	33	42	46	26	38	26	33	13	28
Own home	54	54	34	41	58	47	72	56	75	63
Dealer's home	1	0	0	0	0	0	0	0	0	0
Private party	2	1	0	0	0	6	0	0	0	0
Pub	2	<1	0	0	5	0	0	0	0	0
Outdoors	3	2	5	0	5	0	3	0	0	0
Public place	0	1	5	5	0	0	0	0	0	0
Other	1	4	5	9	5	0	0	11	0	3
Live music event	1	<1	0	0	0	0	0	0	0	3
Have not used	3	4	8	0	0	9	0	0	13	3

Source: EDRS REU interviews

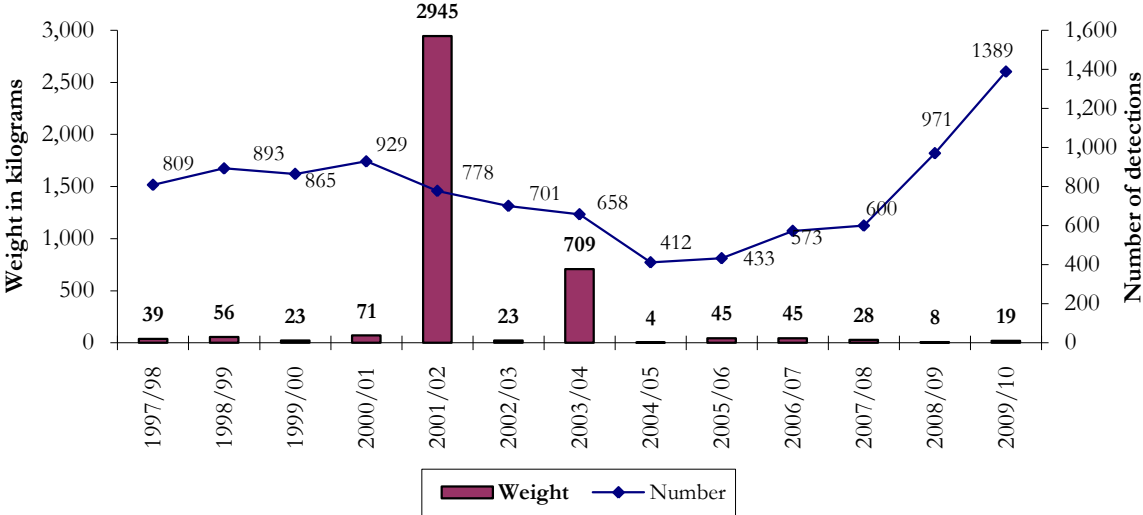
- 'Other' last use venue includes: restaurants/cafes, raves/doofs/dance parties, educational institutions and acquaintances house.

5.7.4 Cannabis detected at the Australian border

Cannabis production occurs in many parts of Australia and much of the cannabis consumed in Australia is believed to be domestically produced. However, there are also numerous cannabis detections made by the Australian Customs and Border Protection Service each year.

The number of cannabis detections continued to increase in 2009/10 to 1,389 (up from 971 in 2008/09), while weights of seizures continues to fluctuate (Figure 43).

Figure 43: Weight and number of detections of cannabis made at the border by the Australian Customs and Border Protection Service, financial years 1997/98-2009/10



Source: (Australian Customs Border and Protection Service, 2010)

5.8 Emerging psychoactive substances

5.8.1 Psychedelic phethylamines

5.7.1.1 2C-I

The price of 2C-I was \$20 per tablet (range \$15-\$40); interpret with caution as small numbers commented n<10. Four participants reported that they obtained the drug as a gift (free).

Comments

In terms of availability, comments themed around the substance being “hard to come by”.

5.8.1.2 2C-B

The national median price was \$25 per tablet (range \$10-\$35); n=14 commented. Four participants reported that they obtained the drug as a gift (free).

Comments

In terms of availability, generally most comments were that the substance was “easy to find”, another theme was that the substance was sold as “ecstasy”.

5.8.1.3 2C-E

The national median price was \$20 per tablet (range \$20-\$25); interpret with caution as small numbers n<10 commented. Six participants reported that they obtained the drug as a gift (free).

Comments

No comments were made regarding availability.

5.8.1.4 Death On Impact (DOI)

The national median price was \$20 per gram (range \$10-\$25); interpret with caution as small numbers n<10 commented. One participant reported obtaining the drug as a gift (free).

Comments

Comments were mixed in relation to availability between being “easy to get” and “not available at present”.

5.8.1.5 Mescaline

The national median price was \$20 per tablet (no range); interpret with caution as small numbers n<10 commented. Six participants reported that they obtained the drug as a gift (free).

Comments

Comments suggested mescaline was “easy to obtain” when sought.

5.8.2 Psychedelic tryptamines EPS

5.8.2.1 5-MeO-DMT

The national median price was \$50 per gram (no range)^ interpret with caution as small numbers n<10 commented. Two participants reported that they obtained the drug as a gift (free).

Comments

No comments were made regarding availability.

5.8.2.2 DMT

The national median price was \$17.50 per tablet (\$15-\$20), \$100 per gram (range \$60-\$300); interpret both figures with caution as small numbers n<10 commented. Twenty-four participants reported that they obtained the drug as a gift (free).

Comments

Comments were mixed in relation to availability with an equal number reporting that it was easy or difficult to access DMT.

5.8.3 Stimulant EPS

5.8.3.1 Mephedrone

The national median price was \$150 per gram (range \$16-\$320) and \$30 per tablet/capsule (range \$1-\$40). Twenty-six participants reported that they obtained the drug as a gift (free).

Comments

Most comments were themed around mephedrone being “easy to get”, however, a small number reported that mephedrone was difficult to access.

5.8.3.2 BZP

The national median price was \$30 per tablet (range \$10-\$78). Ten participants reported that they obtained the drug as a gift (free).

Comments

All comments related to availability reported that BZP availability was high or easy to obtain.

5.8.3.3 Ivory Wave

The national median price was \$150 per capsule (no range); interpret with caution as small numbers n<10 commented. Three participants reported that they obtained the drug as a gift (free).

Comments

No comments were made regarding availability.

5.8.4 Natural occurring substances

5.8.4.1 *Datura/Angel's Trumpet*

No price data was reported. One participant reported obtaining the drug as a gift (free).

Comments

No comments were made regarding availability.

5.8.5 Other drugs

5.8.5.1 *DXM*

The national median price was \$30 per tablet (no range)^ and \$15 per bottle (range \$10-\$20) interpret both figures with caution as small numbers n<10 commented. No participants reported that they obtained the drug as a gift (free).

Comments

All comments regarding availability were that it was easy to obtain DXM.

5.8.5.2 *PMA*

The national median price was \$25 per tablet (range \$10-\$30); interpret with caution as small numbers n<10 commented. No participants reported that they obtained the drug as a gift (free).

Comments

No comments were made regarding availability.

6 HEALTH-RELATED TRENDS ASSOCIATED WITH ERD USE

- Of the national sample, 21% reported having ever **overdosed** on a **stimulant** drug and, of those, 59% had done so in the preceding 12 months. Ecstasy was the main drug to which participants attributed the stimulant overdose. Most stimulant OD occurred in private locations, which has major health implications. The most common symptoms reported were increased body temperature and nausea. Of those that sought treatment, most were taken to an emergency department.
- Thirty-one percent of the national sample reported having ever **overdosed** on a **depressant** drug and, of those, 62% reported recent (last 12 months) overdose. Recent overdoses were most commonly attributed to alcohol (85%). Most depressant OD occurred in private locations, and the main drug attributed to the OD was alcohol. The most commonly reported symptom was vomiting. Of those that sought treatment, most were taken to an emergency department.
- Twenty-four percent (19% in 2009) had **accessed either a medical or health service** in relation to their drug use during the six months preceding interview. The services most commonly accessed by these participants were GPs (n=77). In terms of immediate medical emergencies (e.g. overdoses), the emergency department was the source reportedly most accessed. For other health services GPs, followed by psychologists, were the services most accessed primarily for dependence.
- In 2008/09, **treatment seeking** for ecstasy use (as the principal drug of concern) remained low in the general population at 1.0% of closed treatment episodes.
- A small proportion of participants (7%) were classified as currently experiencing very high psychological distress on the **Kessler Psychological Distress Scale**. The majority reported no or low distress (37%).
- Almost a third (29%) of the sample reported experiencing a **mental health problem** in the preceding six months; depression and anxiety were the most commonly reported. Almost two-thirds of those that reported experiencing a mental health problem sought help from a mental health professional.

6.1 Overdose and drug-related fatalities

As in previous years⁵, participants were surveyed regarding their experience of overdose. ‘Overdose’ was defined as experiencing symptoms consistent with either stimulant toxicity (e.g. nausea and vomiting, chest pains, tremors, increased body temperature or heart rate, seizure, extreme paranoia, anxiety or panic, hallucinations) or symptoms consistent with a depressant overdose (e.g. reduced level of consciousness, respiratory depression, turning blue, collapsing and being unable to be roused). It should be noted that the following data refer to participants’ understandings of these definitions and do not represent medical diagnoses. Forty-two percent of

⁵ Note however that in 2007 a distinction was drawn between self-reported overdose of stimulant drugs and of depressant drugs (in previous years these drug types were combined).

the national sample reported having ever experienced either a stimulant and/or a depressant overdose⁶.

6.1.1 Non-fatal stimulant overdose

Twenty-one percent of the national sample reported having ever overdosed on a stimulant drug on an average (mean) number of three occasions (range=1-20 occasions). Of those who had ever overdosed on a stimulant drug, 59% (n=86, representing 12% of the entire sample) reported having overdosed in the past 12 months.

Participants reporting an overdose in the last 12 months were asked which stimulant drug they considered to be the main drug causing their last overdose. The most commonly reported main drug was ecstasy, with smaller proportions nominating speed, cocaine and ice/crystal (Table 91). Polydrug use was common, with 79% reporting that they had been under the influence of one or more other drugs (stimulants or depressants) in addition to the 'main' drug at the time of last overdose. These were typically alcohol (53% of past year stimulant overdoses, n=45) and cannabis (27% of past year stimulant overdoses, n=23).

Of those who had overdosed in the past 12 months, private locations such as friend's home, own home and private party were the locations that most participants reported the stimulant OD taking place (52% of those that had had a recent stimulant OD). This has health implications given that the likelihood of there being access to acute health services is dependent on their being people of sound mind fit and able to treat the OD or contact services. Another issue with private OD is that services may not be as immediate (readily available) as they would be at a public location whereby a professional by way of law, security staff or first aid would be onsite to assist (Table 91).

Symptoms which participants reported on their last stimulant overdose occasion (if it occurred within the last 12 months) included increased body temperature (58%), nausea (59%) and increased heart rate (73%) see Table 91. Other symptoms reportedly experienced included: tremors (37%), shallow irregular breathing (21%), chest pain (20%), extreme agitation (22%), tactile hallucinations (9%), auditory hallucinations (13%), visual hallucinations (26%), agitation (21%), passed out (19%).

At their last occasion of overdose (of those who had overdosed in the preceding 12 months), most did not receive any medical treatment (38%). Of those that received treatment, small numbers reported the following forms of treatment: attended the emergency department (10%, n=8); got oxygen administered (n=2); attended an ambulance (n=3); saw a GP (n=3); saw a counsellor (n=3); one saw a psychiatrist, two saw a psychologist, one participant visited a health service; contacted a phone information service (n=2) and obtained CPR from a health professional (n=1). Eleven percent reported another form of treatment such as consulting the internet for information and being monitored by friends.

Of those that had a stimulant overdose in the last 12 months, participants reported having been partying for a median of eight hours (range= 0.5 hours to 5 days).

⁶ Comparisons with previous years should be undertaken with caution due to changes in survey items on overdose.

Table 91: Stimulant overdose in the last six months among REU, by jurisdiction, 2010

(%)	National		NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
	2009 N=756	2010 N=693								
Ever overdosed on stimulant drug	15	21	34	18	32	6	10	21	48	17
Mean number times ever overdosed* (n)	2	3	2	2.5	3	2	1	1	14	3
Overdosed last 12 months*	50	59	50	77	59	50	44	48	92	65
Main drug)**	(n=57)	(n=85)	(n=17)	(n=10)	(n=19)	(n=3^)	(n=4^)	(n=10)	(n=11)	(n=11)
Ecstasy	75	67	47	60	79	33	50	60	100	73
Ice/crystal	4	5	18	0	0	0	0	10	0	0
Speed	7	7	0	10	11	0	25	10	0	9
Cocaine	4	6	12	10	11	0	0	0	0	0
Other	11	13	23	20	0	66	25	20	0	18
More than one drug in last OD**	67	79	65	80	90	67	75	50	100	91
Symptoms experienced last OD**										
Increased body temperature	49	58	71	30	47	67	75	40	75	73
Nausea	44	59	47	80	58	33	25	60	58	82
Increased heart rate	42	73	94	20	74	100	50	60	75	100
Dizziness	39	31	29	50	32	67	0	50	0	64
Muscle twitches	33	33	53	10	11	0	50	20	42	64
Panic	32	43	65	40	32	100	25	30	17	64
Delirium/confusion	30	35	59	10	11	33	50	20	42	64
Extreme anxiety	28	42	65	50	37	67	0	40	25	36
Rapid irregular breathing	26	30	47	20	26	67	25	20	17	36
Paranoia	25	37	59	40	37	33	0	20	42	27
Headache	25	30	29	40	21	33	0	40	17	55
Last OD location**	(n=57)	(n=84)	(n=17)	(n=10)	(n=19)	(n=3^)	(n=4^)	(n=9^)	(n=11)	(n=11)
Nightclub	23	16	12	20	21	0	0	0	18	27
Own home	12	19	18	20	11	100	25	11	18	18
Friend's home	25	27	24	30	26	0	0	44	36	27
Live music event	12	10	6	10	5	0	0	33	0	18
Rave/dance party	9	13	24	10	21	0	50	0	0	0
Outdoors	7	2	6	0	0	0	0	11	0	25
Private party	7	6	0	0	11	0	0	0	27	0
Other	4	7	12	10	16	0	25	0	0	0

Source: EDRS REU interviews

* Of those who ever overdosed ** Of those who had overdosed in the past 12 months

^ Small numbers n<10; interpret with caution

Note: 'Other drug' includes MDA, PMA, Pharmaceutical stimulants, DMT, GHB, LSD.

6.1.2 Non-fatal depressant overdose

Thirty-one percent of the national sample reported having ever overdosed on a depressant drug on a median of five occasions (mean=15 occasions; range=1-200 occasions). Participants reported that their last depressant overdose had occurred a median of eight months ago (mean = 26 months ago, range=<1 month-27 years ago). Of those who had ever overdosed on a depressant drug, 62% (n=130) reported having overdosed in the past 12 months on a median of three months ago (mean = 4 months, range = < 1 month – 12 months) see Table 92.

Participants were asked to report the main drug to which they attributed their last depressant overdose. The most commonly reported main drug was alcohol (85%); smaller proportions reported heroin (6%) and GHB (3%). Two participants reported overdosing on benzodiazepines. Just over half (52%, n=67) of those who reported recent depressant overdose had been under the influence of more than one drug at that time. In addition to the main drug, the most commonly reported 'other' drugs taken when recently overdosed were cannabis, ketamine, opium and poppy seeds (all n<3).

As with stimulant overdose, of those that had had a depressant overdose in the past six months, locations of last overdose reported were predominantly private locations such as friends' homes and own home (60%). This has implications in terms of access to treatment. Symptoms which participants reported on their last overdose occasion included vomiting (79%) and losing consciousness (52%) and collapsing (31%). See Table 92 for other symptoms experienced.

At their last occasion of overdose (of those who had overdosed in the preceding six months), over half (56%) received treatment and two-fifths (42%) did not. Of the treatment that was obtained, the following were the measures taken: attended the emergency department (n=10); CPR administered by a friend (n=3) or by a health professional (n=2); consulted a phone information service (n=1); attended a GP (n=1); got oxygen (n=2); can't remember/unsure (n=1).

Table 92: Depressant overdose in the last 12 months among REU, by jurisdiction, 2010

	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=756	2010 N=693	n=100	n=73	n=100	n=100	n=92	n=100	n=27	n=101
Ever overdosed on depressant drug	26	31	19	36	88	12	9	29	37	19
Mean number times ever overdosed* (n)	12	15	2	9	26	6	5	8	20	4
Overdosed last 12 months*	62	62	26	58	77	33	50	55	70	63
Main drug**	(n=121)	(n=130)	(n=4^)	(n=15)	(n=68)	(n=4^)	(n=4^)	(n=16)	(n=7^)	(n=12)
Alcohol	85	85	50	67	90	75	75	88	100	92
Heroin	4	6	0	27	4	0	25	0	0	0
GHB	3	3	50	0	3	0	0	0	0	0
Benzodiazepines	<1	2	0	7	2	0	0	0	0	0
Other opiates	<1	0	0	0	0	0	0	0	0	0
Other	7	4	0	0	2	25	0	13	0	8
Last OD location**	(n=121)	(n=130)	(n=4^)	(n=15)	(n=68)	(n=4^)	(n=4^)	(n=16)	(n=7^)	(n=12)
Friends home	22	32	50	40	24	50	25	75	14	8
Own home	22	28	0	27	31	0	25	13	43	42
Nightclub	17	10	25	7	13	0	0	0	14	8
Private party	16	9	0	0	10	25	0	6	14	8
Pub	7	12	0	7	15	0	25	6	0	25
Live music event	7	2	0	0	2	25	0	0	0	8
Public place (street/park)	3	4	0	13	3	0	25	0	0	0
Other		3	25	7	3	0	0	0	14	0
More than one drug in last OD**	57	52	50	27	53	25	67	38	86	83
Symptoms experienced last OD**										
Vomiting	84	79	60	67	82	75	50	75	100	83
Losing consciousness	46	52	80	87	37	50	50	63	43	75
Collapsing	36	31	60	27	21	25	25	31	43	83
Suppressed breathing	11	12	20	13	10	0	0	6	14	33
Turning blue	7	2	0	0	0	0	25	0	0	17
Other	26	15	20	13	7	25	25	7	29	58

Source: EDRS REU interviews

* Of those who ever overdosed

** Of those who had overdosed in the past 12 months

Drug-related fatalities

The ABS has changed the way it collates deaths data, making comparisons to earlier overdose bulletins published by NDARC difficult. Since 2003, the ABS has progressively ceased visiting jurisdictional coronial offices to manually update causes of death that had not been loaded onto the computerised National Coronial Information System (NCIS). It was in 2006 that the ABS began to rely solely on data contained on NCIS at the time of closing the deaths data file. In addition, a number of jurisdictions, notably NSW and QLD, reported backlogs in cases that *had* been finalised by the coroner (i.e. cases where the coroner has determined the cause of death), but not yet loaded onto NCIS. This is likely to have an impact on the number of opioid-related deaths recorded at a national level in 2006, given that NSW and QLD recorded the highest number of opioid-related deaths in Australia during the period 2000 to 2005. Accordingly, only drug-related deaths for 2008 are reported here. These data should be interpreted in conjunction with the ABS Technical Note 2: Coroner Certified Deaths, 3303.0 2007. Excerpt taken from: (Roxburgh and Burns, in press-a).

6.1.3 Methamphetamine-related fatalities

There are fewer deaths attributable to methamphetamine than are attributable to opioids. There is a limited understanding of the role of methamphetamine in death, and, therefore, mortality data may under-represent cases where methamphetamine has contributed to death, such as premature death related to cerebral vascular pathology (e.g. haemorrhage or thrombosis in the brain).

In 2008, there was a total of 55 'drug induced' deaths in which methamphetamine was mentioned among those aged 15-54 years. Methamphetamine was determined to be the underlying cause of death in thirteen of all methamphetamine related deaths in 2008 (Roxburgh and Burns, in press-a). The 2009 ABS data on methamphetamine-related deaths were not available at the time of publication.

6.1.4 Cocaine

Eleven drug-related deaths in which cocaine was mentioned occurred among the 15-54 year age group in 2008, with two deaths mentioning cocaine as an underlying cause (Roxburgh and Burns, in press-a). The 2009 ABS data on methamphetamine-related deaths were not available at the time of publication.

6.1.5 Fatal and non-fatal ketamine overdose

Ketamine users may be at risk of experiencing a range of acute side effects that place them at risk of harm. In an Australian study of ketamine users, effects such as an inability to speak, blurred vision, lack of co-ordination and increased body temperature were often reported (Dillon et al., 2003), and the experience of a 'k-hole' may lead some to experience symptoms of paranoia, hallucinations and distress (Jansen, 2000). These effects may increase the acute risks of ketamine, particularly because it is often used in nightclubs or dance parties, where the confusion and dissociation induced by ketamine may lead to unintended harms such as falls, traffic accidents (when leaving venues), and the unpleasant event of being taken advantage of by others.

No national data could be collected on non-fatal or fatal overdoses where ketamine was implicated. It is problematic to monitor deaths due to ketamine in existing data collections. See individual state/territory reports for jurisdictional-level information, where available.

6.1.6 Fatal and non-fatal GHB overdose

One of the reasons for the considerable media attention around GHB has arisen from numerous anecdotal and case reports of GHB overdose. GHB is known as a drug with a steep dose-response curve, which means that the difference between a 'desired' dose and one that renders the users unconscious is very small (Nicholson and Balster, 2001). In recreational settings, the additional factors of inconsistent potency, variable individual response to GHB, environmental conditions and polydrug use may increase risks of GHB overdose, despite the best intentions of users to reduce these risks. In one Australian study, half (53%) of a sample of GHB users had overdosed at some time (overdosing was defined as losing consciousness and being unable to be woken) (Degenhardt et al., 2003).

Concerted media attention on GHB-related overdoses has certainly existed in Australia, with wide media reporting of occasions where multiple GHB overdoses have occurred. Recent analysis of data from coronial records has suggested that 10 cases had been confirmed in this country to be associated with the use of GHB, with eight of these cases confirmed as primarily caused by the drug (Caldicott et al., 2004).

It is not possible at this time, however, to report statistics on the numbers of GHB overdoses presenting to emergency departments and hospitals in Australia. This is because GHB is not a separately recorded drug type in ICD-9 or ICD-10 (the classification system used in these settings), and no alternative mechanism for routinely documenting GHB overdoses has yet been developed around the country.

Given that anecdotal reports suggest continued occurrence of GHB overdoses, and reports from hospitals in increasing locations and jurisdictions around the country reinforcing this suggestion, it would be desirable for some simple mechanism for collecting and reporting these adverse events to be developed.

6.2 Help-seeking behaviour

Participants were asked if they had accessed any medical or health services in relation to their ERD use in the last six months. Of the national sample, 24% (n=166) had accessed either a medical or health service in the six months preceding interview. Of those who had accessed emergency services, the majority had accessed the emergency room (n=34; 21%). Of those that had accessed longer-term treatments the majority had accessed their GP (n= 77; 46%), followed by a psychologist (n=44; 24%; Table 93).

Table 93 and Table 94 present the proportion of participants who accessed medical and health services, categorised by immediate medical emergencies versus longer-term health therapy services for issues such as dependence. The tables are also categorised by main drug and reason for the use of the service. Alcohol followed by ecstasy were the most commonly cited drugs that lead participants to access acute emergency, hospital and/or an ambulance services. Alcohol and cannabis were the drugs most cited for participants that were seeking longer-term treatment services with dependence nominated as the main reason for this access.

Table 93: Proportion of REU who accessed immediate medical services for emergencies by main drug type used and main reason, 2010

Service accessed	Main drug	Other drugs	Main reason
Emergency (n=34)	Alcohol (36%), Ecstasy (24%)	Heroin, cannabis, GHB, all forms meth (all n=2) Antidepressants, benzodiazepines, pharm. Stimulants (all n=1)	Overdose (42%), Other (26% including physical accident such as fall down stairs, car accident)
First aid (n=28)	Ecstasy (35%), Alcohol (31%)	Heroin & Other opiates (16%), speed, ice/crystal, cocaine, LSD (all n=1)	Acute physical problems (56%), overdose (16%)
Ambulance (n=20)	Alcohol (42%), Heroin (32%)	Ecstasy (11%), GHB, Benzodiazepines and Pharmaceutical stimulants (all n=1)	Overdose (58%), Other (21% including physical accident such as fall down stairs, car accident)
Hospital (n=13)	Alcohol (67%), polydrug use (17%)	Ecstasy, GHB (both n=1)	Overdose (42%), Acute physical problems (17%), aggression/violent behaviour (17%)

Source: EDRS REU interviews

Note: Multiple responses were permitted

Table 94: Proportion of REU who accessed health services by main drug type used and main reason, 2010

Service accessed	Main drug	Other drugs	Main reason
GP (n=77)	Alcohol (22%), Ecstasy (17%), Heroin (12%)	Any form meth (9%), Cannabis (7%)	Dependence (25%), Anxiety/Depression (23%)
Psychologist (n=40)	Cannabis (23%), poly drug use (18%)	Any form meth (16%), Ecstasy (15%), Alcohol (10%)	Dependence (31%), Other (18%) including multiple mental health and social issues.
Drug and Alcohol worker (n=37)	Ecstasy (25%), Heroin (22%), Cannabis (17%), Alcohol (17%)	Any form meth (9%), poly drug use (6%)	Dependence (50%), social/relationship issues (14%), information/advice (6%)
Counsellor (n=34)	Cannabis (18%), Poly drug use (18%), Heroin (15%), Ecstasy (15%)	Alcohol (9%), Speed (6%), ice/crystal (6%)	Dependence (33%), Depression/Anxiety (21%)
Psychiatrist (n=16)	Cannabis (20%), Alcohol (20%), Poly drug use (20%)	Speed (13%), Ecstasy, Heroin, Methadone (n=1)	Dependence (33%), Depression/anxiety (33%)
Social/welfare worker (n=9)	Alcohol (38%)	Ecstasy, cannabis, Heroin, Alcohol (all n=1)	Overdose, dependence, depression/anxiety, medication prescription and cutting down drug use (all n=1)

Source: EDRS REU interviews

Note: Multiple responses were permitted

6.3 Drug treatment

6.3.1 Ecstasy

Although ecstasy users do not typically come into contact with health professionals for problems related to drug use, and few of the REU were currently in drug treatment, there is some evidence that there are people experiencing problems with their ecstasy use and have sought treatment.

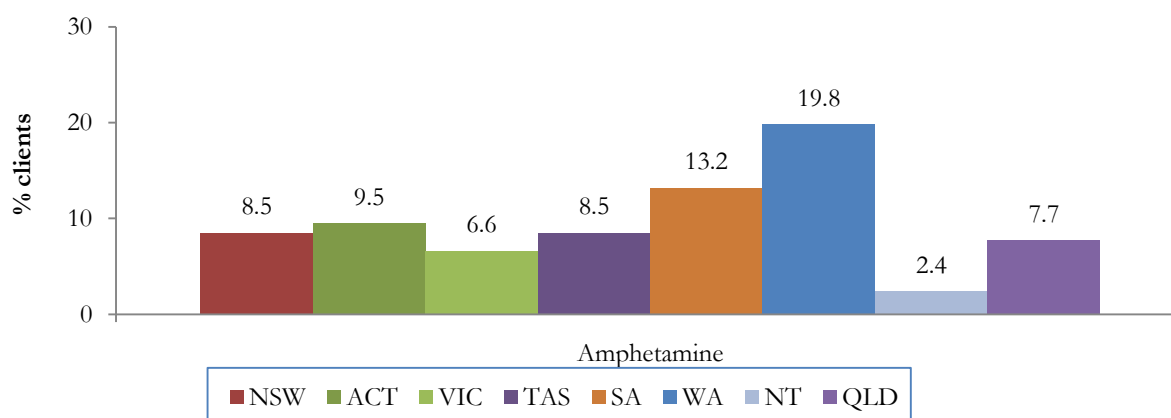
Of the 138, 027 closed drug treatment episodes in Australia in 2008/09, 1% nominated ecstasy as their principal drug of concern: a total of 1,397 treatment episodes for the treatment of ecstasy-related problems. QLD⁷ recorded the highest proportion of treatment episodes (2.3%) followed by SA (1.5%). The proportion of episodes where ecstasy was reported as the principal drug of concern have consistently increased in number since 2001–02, but remained relatively minor at less than 1% of treatment episodes. Sixty-three percent of episodes included at least one other drug of concern in addition to ecstasy, most commonly alcohol (33%). When other drugs of concern are also considered, 7% of treatment episodes included ecstasy in 2008–09 (Australian Institute of Health and Welfare, 2010).

Males (80%) were the clients mostly seeking treatment. People seeking treatment for ecstasy tended to be younger than those seeking treatment for other drugs, with the median age for ecstasy-related episodes at 22 years. Ecstasy-related episodes had a relatively low rate of self-referrals (18%) compared with other drug types. More episodes were initiated by a referral from a diversion program (59%), including police (16%) and court-based (42%) diversion. Counselling was the most common main treatment type received (38% of episodes). Information and education only at 34% were higher for ecstasy than for any other principal drug of concern.

6.3.2 Methamphetamine

In 2008/09, WA had the highest proportion of closed treatment episodes for people who identified amphetamines as their drug of concern (19.8%), followed by SA (13.2%), and NSW and TAS (8.5%; Figure 44). These proportions have remained relatively stable compared with 2007/08 (Australian Institute of Health and Welfare, 2010).

Figure 44: Proportion of closed treatment episodes for clients who identified amphetamine as their principal drug of concern (excluding pharmacotherapy), by jurisdiction, 2008/09



Source: AODTS-NMDS (Australian Institute of Health and Welfare, 2009)

Note: Excludes closed treatment episodes for clients seeking treatment for the drug use of others. Treatment utilisation depends on demand and jurisdictional funding; data do not include clients from methadone maintenance treatments, NSP, correctional institutions, halfway houses or sobering up shelters

⁷ The total number of closed treatment episodes for QLD may be under-counted due to exclusion of a number of non-government agencies.

6.3.3 Cocaine

Consistent with previous collections, cocaine as a principal drug of concern accounted for a very small proportion of episodes in 2008–09 (less than 1% or 479 episodes). NSW recorded the highest proportion (0.8%) across jurisdictions. The majority (76%) of episodes were for male clients. The median age of persons receiving treatment was 30 years. Six percent of episodes involved clients who identified as Indigenous Australians. Self-referral was the most common source of referral (37% of episodes). Counselling was the most common main treatment received (40% of episodes), and treatment was most likely to take place in a non-residential treatment facility (71% of episodes), or a residential treatment facility (21%) (Australian Institute of Health and Welfare, 2010).

6.3.4 Ketamine

No specific ketamine data were available in 2008/09. Closed treatment episodes for ‘other drugs’ accounted for 2.6% of total Australian treatment episodes (3,609) of which ketamine was included (Australian Institute of Health and Welfare, 2010). Case studies of ketamine dependence in the medical literature are accumulating (Moore and Bostwick, 1999, Hurt and Ritchie, 1994, Soyka et al., 1993, Jansen, 1990, Kamaya and Krishna, 1987, Ahmed and Petchovsky, 1980). Treatment-seeking for problems associated with ketamine use is low compared to other drugs.

6.3.5 GHB

No specific data were available for 2008/09. As with ketamine, treatment-seeking for problems associated with GHB use is relatively uncommon. There has been a total of 19 episodes where GHB was identified as the principal drug of concern during the period 2002/03 and 2005/06, with seven of these episodes occurring in 2005/06 (AODTS-NMDS unpublished data, 2002/03 to 2005/06). These data are based on closed treatment episodes, and episodes that are not completed within the annual collection period are not included in the collection for that period.

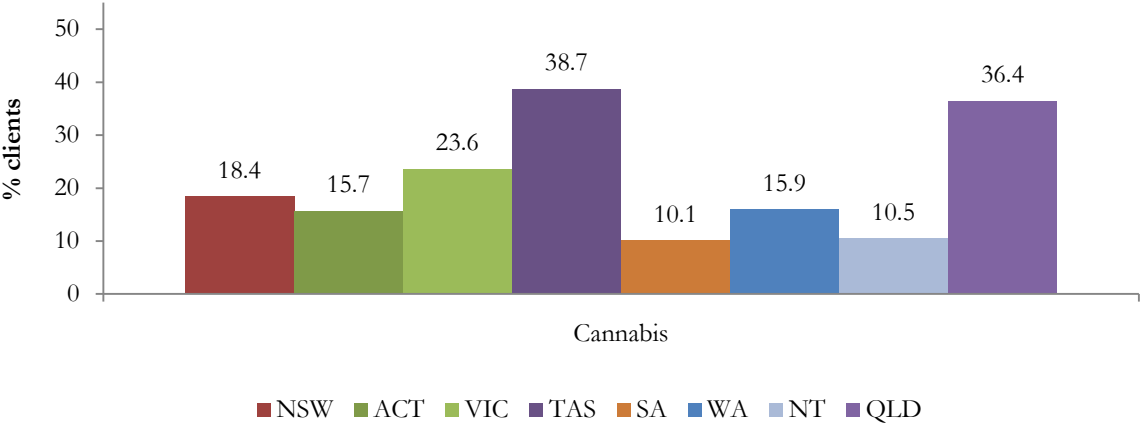
6.3.6 Cannabis

Data from the AODTS-NMDS indicate that in 2008/09, TAS⁸ had the highest proportion of closed treatment episodes for clients who identified cannabis as their principal drug of concern (38.7%) followed by QLD⁹ (36.4%; Figure 45). There has been little change in these figures from 2008/09. Cannabis is the principal drug of concern for 22.5% of closed treatment episodes in Australia (Australian Institute of Health and Welfare, 2009, Australian Institute of Health and Welfare, 2010).

⁸ The total number of closed treatment episodes for TAS may be under-counted because two agencies only supplied drug diversion data.

⁹ The total number of closed treatment episodes for QLD may be under-counted due to the exclusion of a number of non-government agencies.

Figure 45: Proportion of closed treatment episodes for clients who identified cannabis as their principal drug of concern (excluding pharmacotherapy), by jurisdiction, 2008/09



Source: AODTS-NMDS

Note: Excludes closed treatment episodes for clients seeking treatment for the drug use of others.

6.4 Other self-reported problems associated with ERD use

6.4.1 Self-reported drug related problems

Participants in 2010 were asked about a range of other problems associated with their drug use. Participants were asked if, in the past six months, their drug use had caused repeated problems with family, friends or people at work or school; if they had any recurrent drug-related legal problems; if they had recurrently found themselves in situations where they were under the influence of any drug and someone (themselves or another person) could have been hurt or put at risk; or if their drug use had recurrently interfered with their responsibilities at home, work or school. Table 95 presents the proportion experiencing these problem and Table 96 the main drugs responsible. There has been a reported increase in all four categories regarding alcohol use.

Table 95: Self-reported drug-related problems, by jurisdiction, 2010

National (%)	National		NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
	2009 N=756	2010 N=693								
Drugs caused repeated problems with family, friends or colleagues	24	20	26	25	21	13	21	22	15	18
Had recurrent drug-related legal problems last six months	6	5	7	0	0	3	8	8	4	7
Recurrently found self in at-risk situations when under influence	38	38	34	51	38	22	38	42	63	35
Drugs recurrently interfered with responsibilities at home/work/school	39	34	40	37	43	23	23	36	33	37

Source: EDRS REU interviews

Table 96: Main drug attributed to self-reported problem, 2010

(%)	Drugs caused repeated problems with family, friends or colleagues		Had recurrent drug-related legal problems last six months		Recurrently found self in at-risk situations when under influence		Drugs recurrently interfered with responsibilities at home/work/school	
	2009 N=183	2010 N=140	2009 N=42	2010 N=33	2009 N=284	2010 N=260	2009 N=292	2010 N=234
Ecstasy	37	21	17	18	29	22	35	19
Speed	6	3	0	0	3	2	5	3
Ice/crystal	6	6	7	9	3	1	3	4
Cannabis	25	19	29	9	11	9	25	21
Alcohol	17	31	37	49	48	55	27	39

Source: EDRS REU interviews

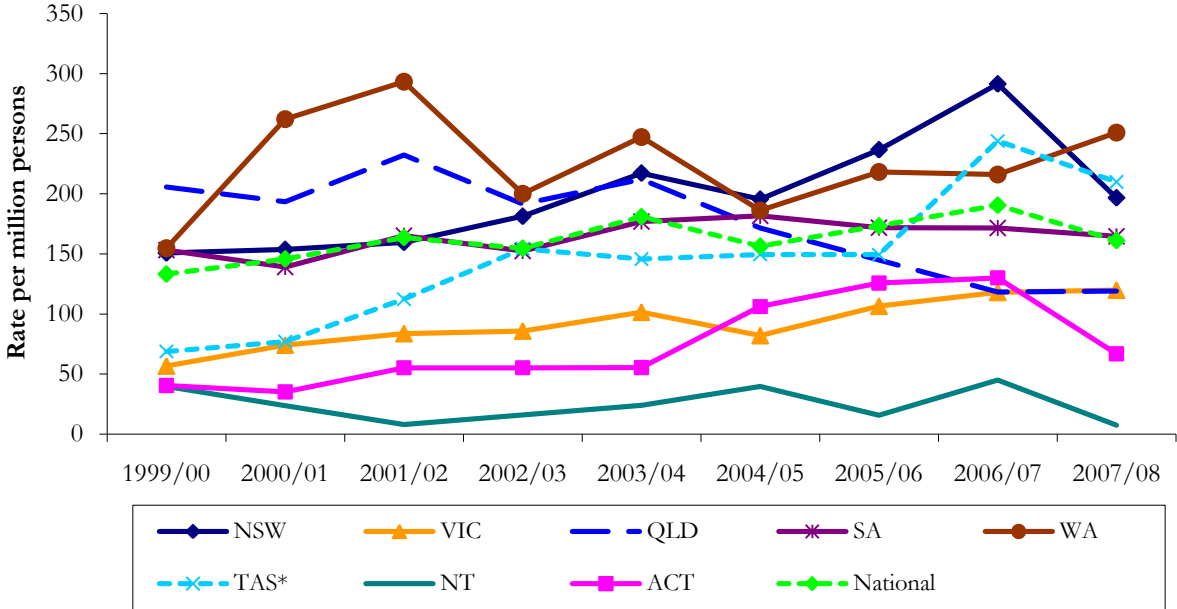
6.5 Hospital admissions

Please note: Data for 2008/09 was not available at the time of print. Please see PDF on NDARC website for updated data.

6.5.1 Methamphetamine

Figure 46 shows the number of in-patient hospital admissions per million persons, since 1999/00, with a principal diagnosis relating to amphetamines among persons aged 15-54 years. Figures steadily increased at a national level between 1999/00 and 2006/07 (from 133 admissions per million persons to 191 admissions per million persons) and reduced to 161 admissions per million persons in 2007/08. WA recorded the highest number of amphetamine-related hospital admissions in 2007/08 at 251 admissions per million persons, representing an increase from 216 admissions per million persons in 2006/07. NSW, the ACT and the NT reported a decrease in amphetamine-related hospital admissions in 2007/08. The other states remained relatively stable.

Figure 46: Number of principal amphetamine-related hospital admissions per million persons among people aged 15-54 years, by jurisdiction, 1999/00-2007/08



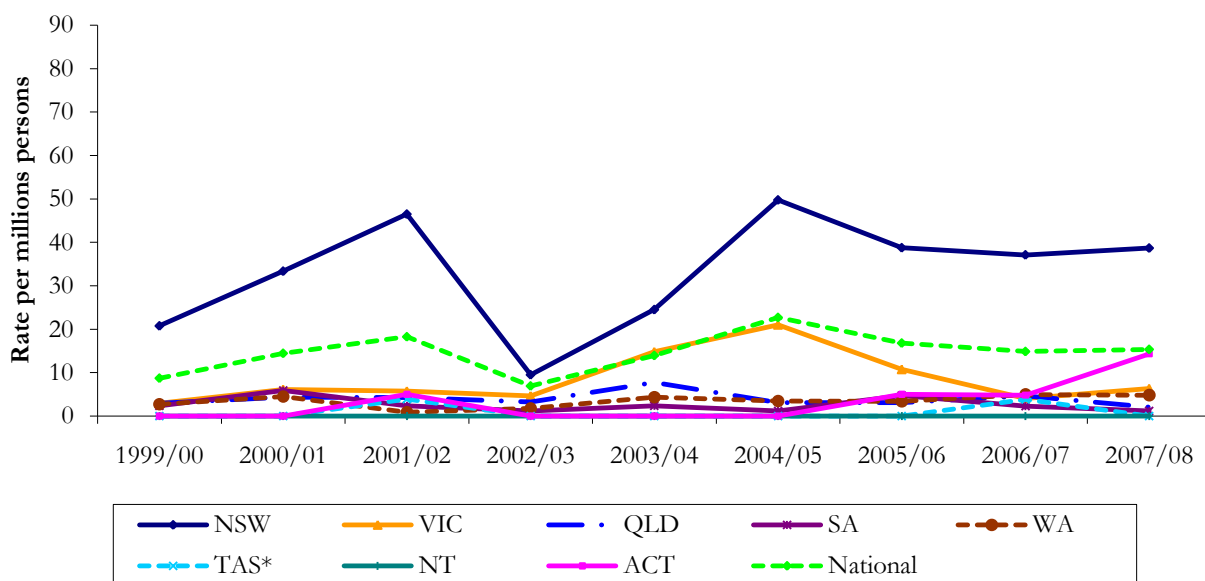
Source: AIHW, ACT, TAS, NT, QLD, SA, NSW, VIC and WA Health Departments (Roxburgh and Burns, in press-b)

* From 2001, numbers in TAS included admissions from an additional drug withdrawal unit

6.5.2 Cocaine

Figure 47 shows the number of in-patient hospital admissions per million persons with a principal diagnosis relating to cocaine. These figures have fluctuated at a national level over the nine-year period, ranging from seven admissions per million persons in 2002/03 to 23 admissions per million persons in 2004/05. In 2007/08, the number of inpatient hospital admissions was 15 admissions per million persons. It should be noted, however, that relative to opioids and amphetamines, these figures are small. NSW has consistently had the highest number of cocaine-related hospital admissions, which reached a peak of 49 admissions per million persons in 2004/05. In 2007/08, NSW recorded 39 admissions per million persons. Figures were relatively lower in all other jurisdictions.

Figure 47: Number of principal cocaine-related hospital admissions per million persons among people aged 15-54 years, by jurisdiction, 1999/00-2007/08



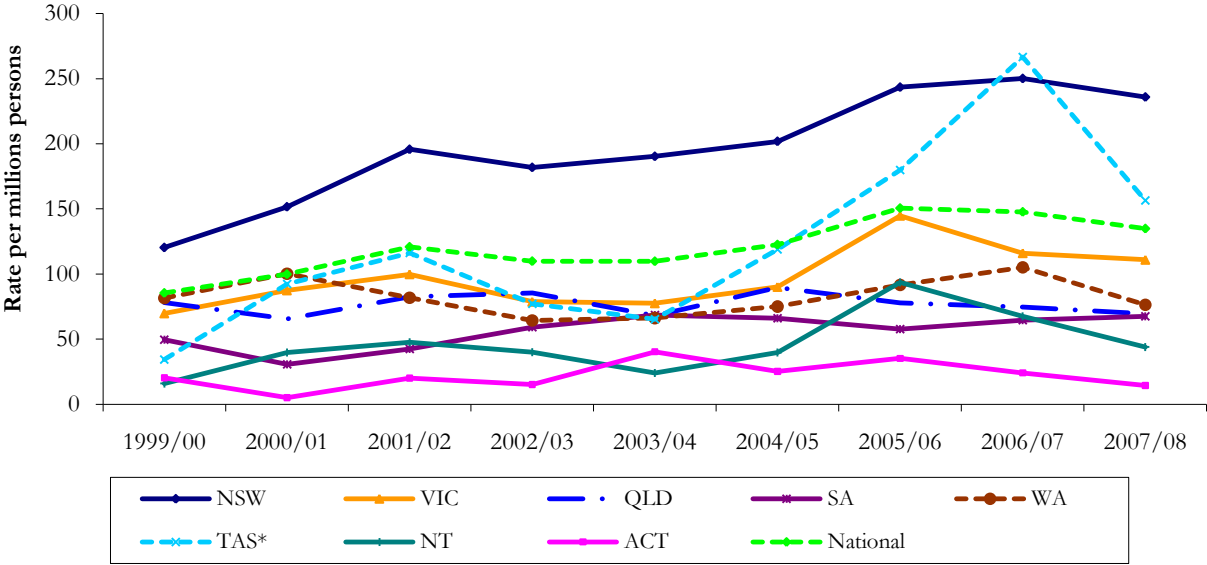
Source: AIHW; ACT, TAS, NT, QLD, SA, NSW, VIC and WA Health Departments (Roxburgh and Burns, in press-b)

* From 2001, numbers in TAS included admissions from an additional drug withdrawal unit

6.5.3 Cannabis

Figure 48 shows the number of inpatient hospital admissions per million persons (among those aged 15-54 years) with a principal diagnosis related to cannabis. At a national level, these figures have steadily increased over the nine-year period from 85 admissions per million persons in 1999/00 to 135 per million persons in 2007/08. NSW recorded the highest number of admissions per million persons among people aged 15-54 years in 2007/08 (236 admissions per million persons) A number of the jurisdictions recorded decreases in cannabis-related hospital admissions in 2007/08.

Figure 48: Number of principal cannabis-related hospital admissions per million persons among people aged 15-54 years, by jurisdiction, 1999/00-2007/08



Source: AIHW; ACT, NSW, NT, QLD, SA, NSW, VIC and WA Health Departments (Roxburgh and Burns, in press-b)

* From 2001, numbers in TAS included admissions from an additional drug withdrawal unit

6.6 Mental and physical health problems

6.6.1 Mental health problems and psychological distress (K10)

The Kessler Psychological Distress Scale 10 (K10) was administered to obtain a measure of psychological distress. It is a 10-item standardised measure that has been found to have good psychometric properties and to identify clinical levels of psychological distress as measured by the Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV)/the Structured Clinical Interview for DSM disorders (Kessler et al., 2002, SCID; Andrews and Slade, 2001).

The minimum score was 10 (indicating no distress) and the maximum was 50 (indicating very high psychological distress). Among participants who completed the full scale (n=693), the mean score was 18.4 (median=17, SD=6.07, range=9-40). Among the general population, scores of 30 or more have been demonstrated to indicate a high likelihood of having a mental health problem (Andrews and Slade, 2001, Furukawa et al., 2003), and work conducted at the Clinical Research Unit For Anxiety Disorders (CRUFAD) found that those scoring 30 or more have 10 times the population risk of meeting criteria for an anxiety or depressive disorder¹⁰.

The 2007 NDSHS (Australian Institute of Health and Welfare, 2008) provided the most recent Australian population norms available for the K10, and used four categories to describe degree of distress: scores from 10-15 were considered to be low; 16-21 as moderate; 22-29 as high; and 30-50 as very high. Using these categories, a similar proportion of EDRS participants reporting very high distress was similar to those in the NDSHS (Table 97).

Table 97: K10 scores, by jurisdiction (method used in ABS National Health Survey), 2010

(%)	NDSHS	EDRS								
K10 category	National	National N=689	NSW n=100	ACT n=72	VIC n=100	TAS n=99	SA n=91	WA n=99	NT n=27	QLD n=101
reporting no or low distress (score 10-15)	69	37	30	32	28	37	39	58	41	34
reporting moderate distress (score 16-21)	21	37	38	44	40	43	39	19	37	38
reporting high distress (score 22-29)	8	19	24	15	22	14	17	16	22	22
reporting very high distress (score 30-50)	2	7	8	8	10	5	6	7	0	7

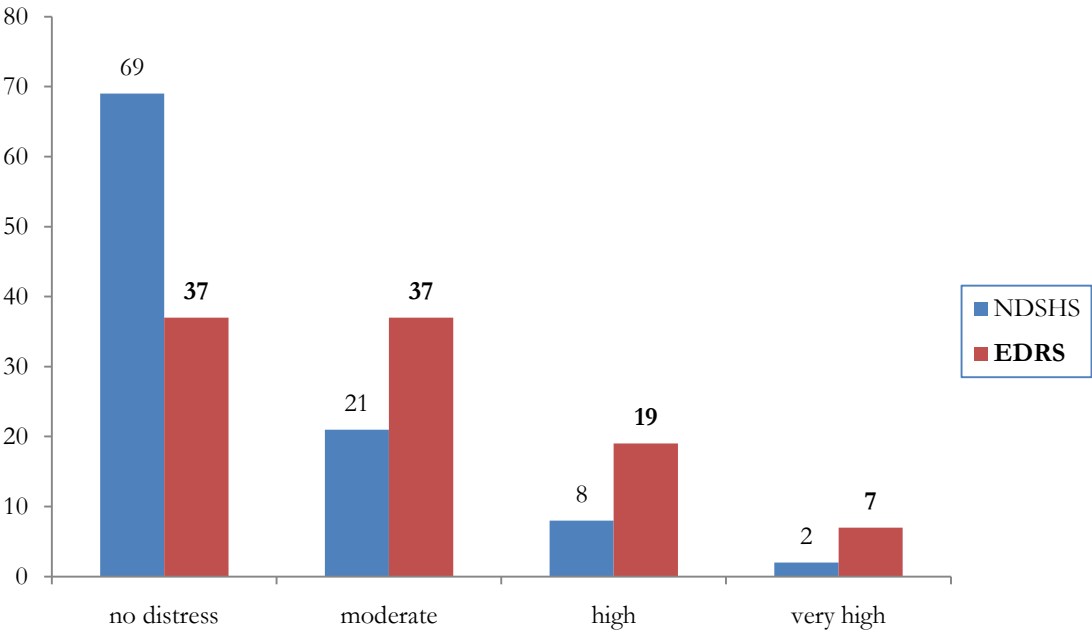
Source: EDRS REU interviews; (ABS, (2006))

Note: The extent to which cut-offs derived from population samples can be applied to the REU population is yet to be established and therefore these findings should be taken as a guide only

¹⁰ See www.crufad.unsw.edu.au/k10/k10info.htm for details.

As is evident (Figure 49), the proportion of the REU sample in the moderate, high and very high distress categories is greater than that of the general population.

Figure 49: Proportion of population (ABS National Health Survey) and REU sample of K10 categories, 2010



Source: EDRS REU interviews; (ABS, (2006)

Note: The extent to which cut-offs derived from population samples can be applied to the REU population is yet to be established and therefore these findings should be taken as a guide only

6.7.2 Self-reported mental problems and medication

Almost one-third (29%) of REU national participants reported experiencing a mental health problem in the six months preceding interview. Of these, the primary issue of concern was depression (66%), followed by anxiety (61%) and paranoia (10%). For jurisdictional breakdowns, see Table 98. Other mental health problems reported, but not listed due to small numbers, included phobias (3%), mania (3%) and any personality disorders (3%), eating disorders, sleep disorders and PTSD (Table 98).

Table 98: Self reported mental health problem in the last six months, 2010

(%)	National N=693		NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
	2009	2010								
Experienced a mental health problem	28	29	22	26	29	30	40	27	15	32
Of those that had mental health problem	N=214	N=199	n=22	n=19	n=29	n=30	n=36	n=27	n=4 [^]	n=32
Depression	65	66	55	74	72	60	64	78	100	59
Anxiety	48	61	46	53	66	60	67	48	75	78
Paranoia	15	10	0	16	7	17	14	7	0	6
Panic	10	8	0	21	3	7	17	7	0	3
OCD	4	5	5	11	0	3	11	4	0	3
Manic-depression/Bipolar disorder	7	7	9	5	3	10	6	7	0	9
Drug induced psychosis	6	2	0	0	0	3	3	0	0	3
Schizophrenia	5	2	0	0	3	0	3	0	0	6

Source: REU participant interviews

Participants that reported experiencing a mental health problem were also asked whether they had visited a mental health professional for a mental health problem in the last six months to which 61% participants reported doing so. Of these, 69% had medication prescribed, primarily antidepressants (76%; Table 99). The most common antidepressants prescribed were: Efexor (n=11), Zoloft (n=8) and Lexapro (n=6). Antipsychotics were the least commonly prescribed medication to this sample (22%). The most common antipsychotic prescribed to participants was Seroquel (n=7). The most common benzodiazepines reportedly prescribed to participants were: Valium (n=16) and Xanax (n=8; Table 99).

Table 99: Mental health assistance and medication, 2009-2010

(%)	National	
	2009 N=214	2010 N=197
Attend a mental health professional	49	61
Had medication prescribed*	72	69
Antidepressants [#]	77	76
Antipsychotics [#]	9	22
Benzodiazepines [#]	38	47

Source: REU participant interviews, 2009

* Of those who attended a mental health professional

Of those who were prescribed medication

7 RISK BEHAVIOUR

- Sixteen percent of the national sample reported having **injected** at some time in their lives; 10% of the national sample reported injecting in the six months preceding interview. The mean age of first injection was 20 years of age. Among those who had injected in the preceding six months, the last drug injected was heroin (29%) a change from speed in 2009.
- Syringes were typically obtained from a Needle and Syringe Program (NSP) (56%). Of those who had injected in the preceding six months a total of four respondents reported using a needle after someone else in the month preceding interview. Thirty-one recent injecting participants reported **sharing** of other injecting equipment.
- Fifty-one percent of the national sample reported they had completed the **vaccination** schedule for hepatitis B virus, the most common reason for the vaccination was being vaccinated as a child. The majority of the sample (83%) reported not ever being diagnosed with a sexually transmitted infection.
- Three-fifths (62%) of participants reported penetrative sex in the six months preceding interview with at least one **casual partner**. A fifth (19%) of those who had had casual sex reported never using a condom. The majority (86%) of those reporting recent penetrative sex reported using drugs during sex in the previous six months, predominantly alcohol, ecstasy and cannabis were the drugs most commonly reported.
- Just over three-quarters (77%) had **driven a car** in the last six months, 75% of those had reported having been over the legal limit, and 56% had driven shortly after taking an illicit drug on a median of four occasions. The most commonly reported illicit drugs after which these participants had driven were ecstasy and cannabis. A number reported positive notifications were from being saliva drug tested.
- The Alcohol Quantity Frequency and Variability (AQFV) found that males reported a significantly higher number of average **drinks** per session than females. In the Alcohol Use Disorders Identification Test (AUDIT) males were found to have a significantly higher score than females. Higher scores are indicative of greater likelihood of hazardous drinking.

7.1 Injecting risk behaviour

As in previous years, the EDRS asked participants about injecting and associated risk behaviours. Previous research has shown that REU who had ever injected a drug were significantly older, more likely to be unemployed and have a prison history, while participants who had completed high school and those who identified as heterosexual were less likely to have injected. Participants in the EDRS have been found to be demographically different to other samples of people who inject drugs (White et al., 2006).

In the 2010 EDRS, 16% of the national sample reported having injected at some time in their lives and, of those, 61% reported injecting in the six months preceding interview (Table 100).

Table 100: Injecting risk behaviour among REU, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 (N=756)	2010 (N=693)	n=100	n=73	n=100	n=100	n=92	n=100	n=27	n=101
Ever injected	16	16	21	23	14	8	20	10	19	17
Mean age first injected any drug (n; range)	20 (12-36)	20 (9-42)	23 (14-42)	18 (9-30)	20 (13-29)	20^ (17-23)	21 (15-40)	20 (15-26)	21^ (17-24)	20 (14-29)
Injected last six months*	67	61	67	88	50	38	44	60	40	69

Source: EDRS REU interviews

*Among those who had injected

^ Small numbers interpret with caution

Note: Means have been rounded to whole numbers

7.1.1 Recent injectors

Participants who had injected in the last six months reported injecting a median of 15 times in that time (mean= 50, range=1-500 times). The frequency of injection was approximately once per fortnight. Methamphetamine (any form) was the most commonly last injected drug in the preceding six months, followed by heroin. Other drugs reported in small numbers (n<5) included benzodiazepines, steroids and pharmaceutical stimulants. Heroin and speed were the drugs most recently injected (Table 101).

Fourteen percent of recent injectors had injected under the influence of ERD in the past six months, 14% had injected while coming down and 23% had injected both while under the influence and while coming down during that time.

Table 101: Recent injecting drug use patterns among those who had recently injected, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=80	2010 N=65	n=14	n=15	n=7	n=3	n=8	n=6	n=2	n=10
Median number of times injected last 6 months (n; range)	12 (1-500)	15 (1-500)	17 (1-180)	15 (1-180)	100 [^] (7-252)	6 [^] (2-40)	15 [^] (1-500)	15 [^] (10-180)	51 [^] (12-90)	7 (1-180)
Last drug injected*										
Speed	30	25	0	13	14	33	25	50	50	60
Base	25	9	14	7	0	0	38	0	0	0
Heroin	19	29	36	47	57	67	0	0	0	10
Ice/crystal	13	8	14	7	0	0	13	17	0	0
Ecstasy	3	8	7	13	0	0	13	0	0	10
Other opiates	3	3	0	0	0	0	0	33	0	0
Cocaine	0	6	21	7	0	0	8	0	0	0
Other	8	6	0	7	14	0	13	0	0	10
Injected while under influence/coming down*										
Neither	41	33	8	20	29	33	50	50	100	50
Not intoxicated	5	5	0	7	0	0	0	17	0	10
Under influence	15	14	15	7	14	33	25	17	0	10
Coming down	20	25	31	40	29	33	0	0	0	30
Both	19	23	46	27	29	0	25	17	0	0
Median number of times injected while under influence/coming down (n; range)**	N=41 4 (1-120)	N=34 4 (1-15)	n=12 4 (1-15)	n=11 5 (1-90)	n=5 5 [^] (2-180)	n=2 2 [^] (1-2)	n=4 12 [^] (2-20)	n=2 6 [^] (1-10)	n.a	n=3 6 (2-24)

Source: EDRS REU interviews

* Of those who had injected each drug in the preceding six months

** Of those who had injected whilst under the influence and/or coming down

[^] Small numbers; interpret with caution

7.1.1.1 Context of injecting

The majority of participants obtained their needles for injecting recently from an NSP or from a pharmacy or chemist. Other areas mentioned in small numbers n<5 included a hospital and an outreach program.

The majority of participants who had injected usually did so in the presence of others, typically close friends and/or a regular sex partner. The majority of those who had recently injected reported having injected at home or at a friend's home, although public locations such as in a car, on the street or in a public toilet were also reported (Table 102). Comparisons across jurisdictions should be made with a degree of caution due to small numbers commenting in many states/territories.

7.1.1.2 Sharing of needles/syringes and other injecting equipment

Of those who injected in the preceding six months (n=66), four respondents reported using a needle after one other person in the month preceding interview. These included a regular and/or casual sex partner (n=2) and a close friend (n=1).

Sharing of other injecting equipment in the preceding month was reported by 49% (n=31) of recent (past six months) injectors. Of those who reported sharing any equipment, 65% (n=20) reported sharing spoons, 32% (n=10) shared water, 32% (n=10) reported sharing tourniquets, 13% (n=4) shared filters and swabs 3% (n=1) (Table 102).

Table 102: Context and patterns of recent (last six months) injection, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=79	2010 N=66	n=14	n=15	n=7 [^]	n=3 [^]	n=8 [^]	n=6 [^]	n=2 [^]	n=11
Needle sources										
NSP	61	56	43	53	86	0	50	83	100	55
Vending machines	5	27	50	60	0	0	13	0	0	9
Chemist	37	39	43	47	14	100	50	17	50	27
Partner	1	6	7	13	0	0	13	0	0	0
Friend	17	17	36	20	0	0	25	0	0	9
Dealer	8	8	21	7	14	0	0	0	0	0
People usually inject with*										
Close friends	51	41	46	47	14	67	63	0	50	40
Regular sex partner	15	31	15	33	43	0	50	33	50	30
Casual sex partner	3	11	0	13	14	33	25	0	0	10
Acquaintance	3	6	0	0	0	33	25	0	0	0
No one	28	20	31	7	29	33	13	67	0	0
Locations injected last 6 months*										
Own home	59	64	62	40	86	100	62	100	100	50
Friend's home	23	20	8	27	14	0	38	0	0	40
Dealer's home	1	5	8	13	0	0	0	0	0	0
Street/park/bench	8	3	0	13	0	0	0	0	0	0
Public toilet/Venue toilet	1	3	16	0	0	0	0	0	0	0
Car	6	5	17	7	0	0	0	0	0	10

Source: EDRS REU interviews

* Multiple responses allowed

[^] Small numbers; interpret with caution

7.1.2 Injecting drug use in the general population

It has been estimated that a very low proportion of the Australian general population aged 14 years and over have ever injected or recently injected drugs. In 2007, 1.9% of the population had ever injected a drug, with 0.5% having injected a drug in the past year. Those in the 30-39 year age group had a higher proportion of both lifetime and past-year injecting drug use (Australian Institute of Health and Welfare, 2008).

Methamphetamine (any form) was the most common first drug injected (50.4%), followed by heroin (30.0%), then steroids (7.2%). The most common drugs injected among recent injecting drug users was methamphetamine (67.2%), followed by heroin (39.7%), then other opiates (14.6%) (Australian Institute of Health and Welfare, 2008).

Another recent prevalence estimate of injecting in Australia in 15-64 year olds is 1.09% (range =0.65%-1.50%) which equates to approximately 149,591 persons (range =89,253 - 204,564) (Mathers et al., 2008).

7.2 Blood-borne viral infections (BBVI)

Forty-one percent of the national sample reported that they have never been vaccinated for hepatitis B virus (HBV), 51% reported that they had completed the vaccination schedule and 8% did not finish the vaccination schedule. Reasons for seeking HBV vaccination included being vaccinated as a child (40%), going overseas (32%), for work (7%), at risk due to injecting drug use (6%) and at risk due to sexual practices (2%; Table 103).

Participants were asked if they had been tested for hepatitis C virus (HCV). Of the national sample, 62% reported that they had never been tested for HCV, while 25% had been tested in the last year and 13% were tested more than a year ago. Five percent of those tested reported positive diagnoses of HCV (Table 103).

Participants were asked if they had been tested for human immunodeficiency virus (HIV). Of the national sample, 58% had never been tested for HIV, 28% had been tested in the past year and 15% had been tested more than one year ago. Two percent reported that they were HIV positive (Table 103).

Forty-four percent of the sample reported having a sexual health check-up (such as a swab, urine, or other blood test) in the past year, while 19% reported having had their last sexual health check-up more than one year ago. Thirty-seven percent had never had a sexual health check-up (Table 103).

The majority (83%) reported that they had never been diagnosed with a sexually transmitted infection (STI).

Table 103: Blood borne virus vaccination and testing among REU, 2010

(%)	National N=693	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
Vaccinated for Hepatitis B	N=589	n=90	n=62	n=87	n=88	n=78	n=81	n=21	n=82
No	41	42	23	37	39	37	70	43	35
Yes, didn't complete	8	8	10	7	5	8	5	5	12
Yes, completed	51	50	68	56	57	55	25	52	52
Main reason for Hepatitis B vaccination*									
At risk (IDU)	6	10	11	4	4	4	13	0	4
At risk (sexual)	2	4	2	0	0	2	0	0	6
Going overseas	32	33	28	24	52	23	29	8	35
Vaccinated as a child	40	26	47	66	28	36	33	42	37
Work	7	8	9	4	11	9	8	8	2
Don't know/can't remember	4	0	0	2	2	9	8	0	12
Other	10	20	4	2	4	17	8	42	6
Tested for Hepatitis C	n=632	n=94	n=69	n=94	n=95	n=81	n=87	n=25	n=87
No	62	62	59	55	72	49	84	52	55
Yes, in last year	25	21	29	30	19	36	8	28	35
Yes, > year ago	13	17	12	15	10	15	8	20	10
Hepatitis C positive**	5	14	14	0	0	2	0	0	3
Tested for HIV	n=665	n=99	n=70	n=98	n=99	n=82	n=95	n=27	n=95
No	58	48	60	54	60	52	77	48	58
Yes, in last year	28	29	31	35	22	38	12	33	26
Yes, > year ago	15	23	9	11	18	10	12	19	16
HIV positive#	2	6	0	2	0	0	0	0	0
Other sexual health checkups	n=676	n=99	n=72	n=100	n=99	n=84	n=98	n=27	n=97
No	37	49	33	41	29	38	32	19	40
Yes, in last year	44	30	51	44	52	42	43	59	46
Yes, > year ago	19	21	15	15	19	20	26	22	13
Sexually transmitted infection (STI) positive	N=669	n=99	n=69	n=100	n=99	n=82	n=97	n=27	n=96
	17	15	16	15	22	12	22	19	15
STI diagnosis###									
Gonorrhoea	7	0	50	0	0	33	0	0	0
Chlamydia	70	100	0	80	83	67	80	100	57
Syphilis	0	0	0	0	0	0	0	0	0
HPV (genital warts)	17	0	50	20	0	0	20	0	29
Other	10	0	0	0	17	0	0	0	29

Source: EDRS Regular ecstasy user interviews

^caution small numbers n<10

* among those who had been vaccinated for Hepatitis B

** among those tested for hepatitis C

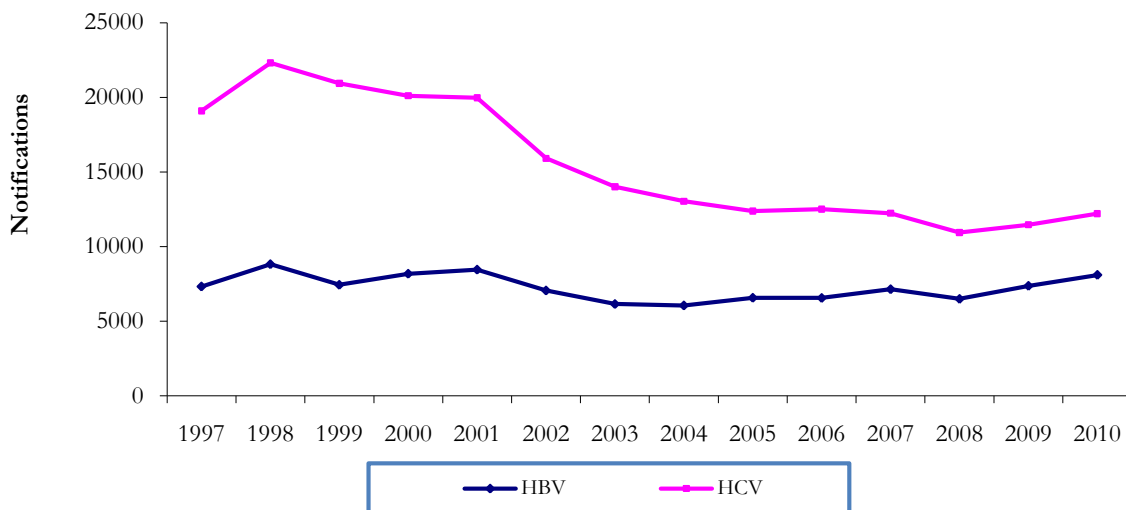
among those tested for HIV

among those who tested positive for STI in the last year

7.2.1 The National Notifiable Diseases Surveillance System

Figure 50 presents the total number of notifications for the hepatitis B virus (HBV) and the hepatitis C virus (HCV) in Australia from the Communicable Diseases Network – NNDSS. Incident or newly acquired infections, and unspecified infections (i.e. where the timing of the disease acquisition is unknown) are presented. HCV continued to be more commonly notified than HBV, with a gradual decreasing trend in notifications of HCV since 2001. HBV notifications have remained relatively stable over the past five years.

Figure 50: Total notifications for HBV and HCV (unspecified and incident) infections, Australia, 1997-2010



Source: Communicable Diseases Network – NNDSS¹¹ date accessed: 3rd March, 2011

Note: Figures are updated on an ongoing basis

¹¹ Notes on interpretation

There are several caveats to the NNDSS data that need to be considered. As no personal identifiers are collected, duplication in reporting may occur if patients move from one jurisdiction to another and are notified in both. In addition, notified cases are likely to only represent a proportion of the total number of cases that occur, and this proportion may vary between diseases, between jurisdictions, and over time.

7.3 Sexual risk behaviour

7.3.1 Recent sexual activity

Three-fifths (62%) of the national sample reported having casual sex with at least one casual partner in the six months preceding interview. Penetrative sex was defined as ‘penetration by penis or hand of the vagina or anus’. Given the sensitive nature of these questions, participants were given the option of self-completing this section of the questionnaire. Fifteen percent reported having three to five casual sexual partners during the preceding six months and 16% reported having one partner (Table 104).

Participants were asked about the use of ‘protective barriers’ which were defined as ‘condoms, dams or gloves’ with casual partners, to which higher proportions reported they used these every time and often across every state and territory. However, a fifth (19%) reported that they never used protection in these instances.

Table 104: Prevalence of sexual activity and number of sexual partners in the preceding six months, by jurisdiction, 2010

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 (-)	2010 (n=485)	n=76	n=55	n=68	n=76	n=54	n=65	n=20	n=71
Use of protection during sex with regular partner when under the influence *										
Every time	-	14	11	20	18	13	17	14	0	11
Often	-	12	11	18	10	5	9	15	0	17
Sometimes	-	9	7	16	7	7	15	5	10	11
Rarely	-	13	24	6	9	11	15	9	20	16
Never	-	52	49	40	56	65	44	57	70	45
No. casual sexual partners	(N=745)	(N=651)	(n=94)	(n=65)	(n=100)	(n=100)	(n=79)	(n=94)	(n=22)	(n=97)
No casual partner	38	38	36	46	48	40	38	38	41	24
1 person	16	16	22	23	4	15	19	17	14	19
2 people	18	15	6	15	10	17	10	25	18	23
3-5 people	20	20	23	9	28	21	22	14	14	24
6-10 people	6	7	7	5	8	5	8	6	9	6
10 or more	2	3	4	2	2	2	4	0	5	5
Use of protection during sex with casual partner when sober	(N=459)	(N=400)	(n=60)	(n=35)	(n=52)	(n=60)	(n=49)	(n=58)	(n=13)	(n=73)
Every time	41	35	35	49	39	27	37	41	23	29
Often	15	17	17	9	33	12	6	14	8	26
Sometimes	15	14	17	11	15	10	12	19	15	10

(%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Rarely	9	8	5	3	4	12	18	5	15	8
Never	19	19	18	26	6	28	16	19	31	16
Not applicable	-	8	8	3	4	12	10	2	8	11

Source: EDRS REU interviews

* Of those who had a casual partner

7.3.2 Drug use during sex

The majority (86%) of those reporting recent penetrative sex with a casual partner reported using drugs during sex in the previous six months (Table 105). Most participants reported that drug use during sex with a casual partner had occurred between one and five times in the preceding six months.

The most commonly used drugs used during sex were alcohol (81%), ecstasy (57%) and cannabis (34%). Other drugs nominated can be seen in Table 105. The NT was the only jurisdiction to have a higher proportion nominate being under the influence of ecstasy during sex with a casual partner than alcohol. In previous years, ecstasy was nominated as the drug that most participants nominated being under the influence of during sex with a casual partner. Similar to protective barrier use when not under the influence of drugs, the use of any barrier when under the influence of drugs every time (30%) during sex, combined with never (21%), were the most common responses reported.

Table 105: Drug use during sex with a casual partner in the preceding six months, by jurisdiction, 2010

National (%)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=459	2010 N=400	n=60	n=35	n=52	n=60	n=49	n=58	n=13	n=73
Penetrative sex with casual partner while on drugs *	83	86	83	71	94	92	83	83	83	88
No. times had sex while on drugs with casual partner	(N=37)	(N=27)	(n=57)	(n=6 [^])	(n=1 [^])	(n=1 [^])	(n=2 [^])	(n=2 [^])	(n=0)	(n=7 [^])
Once	18	19	38	17	0	0	0	0	-	14
Twice	15	19	13	0	0	100	50	0	-	29
3-5 times	32	15	13	0	100	0	0	0	-	29
6-10 times	17	4	0	0	0	0	50	0	-	0
Eleven +	18	11	25	0	0	0	0	0	-	14
Drug used last time**	N=378	N=333	n=45	n=24	n=47	n=55	n=40	n=47	n=10	n=65
Ecstasy	70	57	55	75	40	53	63	62	90	58
Alcohol	78	81	69	79	83	91	80	75	80	88
Cannabis	38	34	47	38	21	24	38	36	30	39
Speed	11	11	7	17	21	4	5	13	20	14
Ice/Crystal	6	5	4	4	6	0	8	9	10	2
Cocaine	10	11	11	29	6	7	18	11	0	6
Base	4	3	9	0	0	0	13	2	0	2
LSD	5	7	7	13	2	4	5	9	10	12
Ketamine	2	1	7	0	0	0	0	2	0	0
Amyl nitrite	5	3	7	17	0	0	3	0	0	5
Nitrous oxide	1	2	0	0	0	2	5	4	0	3
GHB	1	2	9	4	2	0	5	0	0	0
Use of protection during sex with casual partner under influence of drugs**	(N=378)	N=322	n=44	n=24	n=47	n=55	n=31	n=47	n=9 [^]	n=65
Every time	37	30	32	46	36	22	23	34	11	26
Often	16	20	27	21	26	11	10	17	0	26
Sometimes	12	18	14	8	15	16	32	21	44	14
Rarely	12	13	16	4	11	18	16	11	11	11
Never	22	21	11	21	13	33	19	17	33	23

Source: EDRS REU interviews

* Of those who had a casual partner

** Among those who had a casual partner while under the influence of a drug

7 Driving risk behaviour

Participants were asked a series of questions regarding driving under the influence of alcohol and other drugs. Seventy-seven percent of the national sample reported having driven a car in the six months preceding interview. Of these, 49% had driven under the influence of alcohol (Table 106).

Table 106: REU reports of alcohol driving risk behaviour in the last six months, by jurisdiction, 2010

(%)	National	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2010 N=693	n=100	n=73	n=100	n=100	n=92	n=100	n=27	n=101
Driven a vehicle in the last six months	77	65	77	62	88	79	84	96	79
Driven under influence of alcohol[#]	n=534 64	n=65 49	n=56 68	n=62 78	n=88 66	n=73 66	n=84 61	n=26 81	n=80 50
Driven while over the limit of alcohol[#]	n=341 70	n=65 75	n=56 66	n=62 62	n=88 61	n=73 75	n=84 73	n=26 91	n=80 78
Median number of times driven over limit of alcohol^{##} (n; range)	3 (1-180)	2 (1-6)	4 (1-180)	2 (1-20)	3 (1-24)	3 (1-180)	4 (1-24)	4 (1-24)	2 (1-130)

Source: EDRS REU interviews

[#] Of those who had driven a vehicle in the last six months

^{##} Of those who had driven over the limit of alcohol in the last six months

Experiences of RBT and roadside drug driving testing in the preceding six months were also recorded. Almost half of those who had driven a car in the last six months had been required to perform a RBT during that time. Of those, a tenth (11%) had been found to be over the legal alcohol limit (Table 107)¹².

Table 107: Random breath testing among those who had driven in the preceding six months, by jurisdiction, 2010

(%)	National N=533	NSW n=65	ACT n=56	VIC n=62	TAS n=88	SA n=73	WA n=84	NT n=26	QLD n=80
Random breath tested (RBT) last six months*	46	35	34	52	61	45	45	50	43
RBT positive result over the legal alcohol limit†	11	13	16	0	7	24	14	15	6

Source: EDRS REU interviews

* Among those who had driven a car in the last six months

† Among those who had been random breath tested

¹² Participants may not necessarily have been under the influence of alcohol when they were random breath tested.

Half (56%) of those who had driven in the previous six months had driven after taking an illicit drug and had done so on a median of four occasions in the preceding six months (range=1-180 times); this was reported to have occurred most in SA. Ecstasy and cannabis were the drugs most frequently nominated as having been consumed prior to driving a car in the preceding six months; such findings are likely, at least in part, to reflect the relative prevalence of use of these drugs amongst this group (Table 108). Cannabis was the drug most reported to have been used last time this action occurred (Table 109).

Table 108: REU reports of drug driving risk behaviour in the last six months, by jurisdiction, 2010

(%)	National N=534	NSW n=65	ACT n=56	VIC n=62	TAS n=88	SA n=73	WA n=84	NT n=26	QLD n=80
Driven soon after taking an illicit drug*	56	59	61	61	39	64	58	77	46
Median number of times driven after taking an illicit drug** (n; range)	4 (1-180)	3 (1-180)	6 (1-180)	3 (1-50)	3 (1-180)	4 (1-180)	5 (1-180)	6 (1-180)	3 (1-180)
All drugs used in last 6 months**	(n=297)	(n=38)	(n=34)	(n=38)	(n=34)	(n=47)	(n=49)	(n=20)	(n=37)
Ecstasy	57	40	53	42	62	55	71	80	57
Cannabis	62	68	79	61	59	60	55	45	68
Speed	18	5	21	26	12	4	18	45	24
Ice/crystal	8	5	3	3	0	15	18	10	3
Base	3	0	3	0	6	9	0	5	5
Cocaine	13	13	27	8	3	13	16	20	3
LSD	8	5	21	11	9	2	6	0	8
Mushrooms	3	0	15	3	6	0	0	0	5
Heroin	2	3	6	8	0	0	0	0	0

Source: EDRS REU interviews

* Among those who had driven a car in the last six months

** Of those that had driven soon after taking an illicit drug

Table 109: REU reports of drug driving risk behaviour last time in the last six months, by jurisdiction, 2010

(%)	National N=297	NSW n=38	ACT n=34	VIC n=38	TAS n=34	SA n=47	WA n=49	NT n=20	QLD n=37
Drugs used last time**									
Ecstasy	38	26	44	34	41	34	37	60	38
Cannabis	59	68	79	53	50	60	53	30	65
Speed	7	0	15	13	3	0	4	20	11
Ice/crystal	4	5	3	3	0	6	4	10	0
Base	2	0	0	0	3	9	0	0	3
Cocaine	7	11	15	8	3	9	8	5	0
LSD	5	3	12	11	9	2	2	0	0
Mushrooms	2	0	9	3	3	0	0	0	0
Heroin	2	3	6	5	0	0	0	0	0

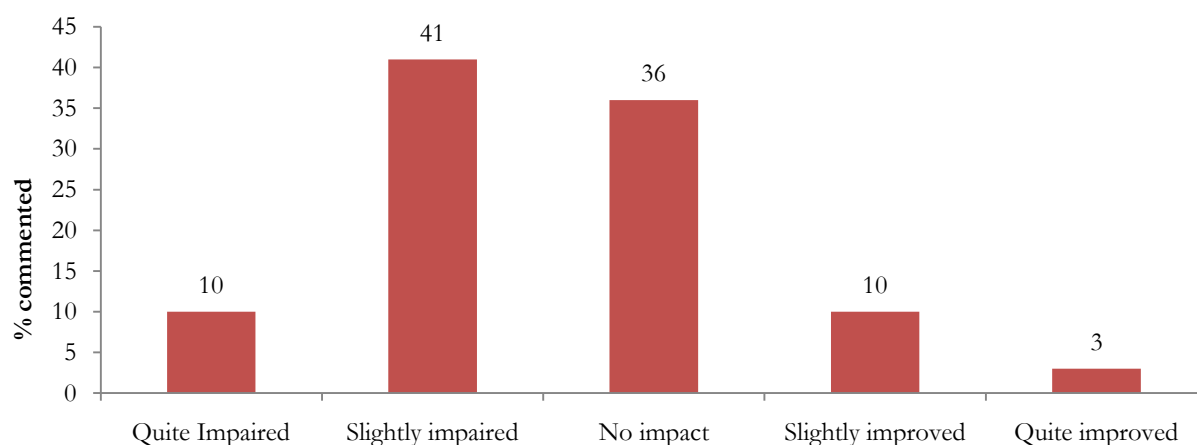
Source: EDRS REU interviews

Of those who had driven a vehicle in the last six months

Of those who had driven over the limit of alcohol in the last six months

Participants who had driven under the influence of illicit drugs in the past six months were asked to indicate how impaired they felt their driving had been on the last occasion that they had engaged in this behaviour. The majority of those who commented thought that they had either been slightly impaired (41%) or that the drugs had had no impact (36%) on their driving ability (Figure 51). This trend has been consistent over time.

Figure 51: Perceived impairment on driving ability last time after taking illicit drugs, 2010



Source: EDRS REU interviews

Seven percent (n=37) of those who had driven a vehicle in the past six months had been saliva drug tested at some stage during that time (Table 110). Five participants from VIC, SA and the NT had been saliva drug tested more than once in their lifetime. The median time since participants were last tested was five months (range <1 to 4 years ago). Four participants reported positive results from being tested for driving under the influence of illicit drugs¹³, three participants were found positive for cannabis and one participant for MDMA. One participant reported the result was inconclusive.

Table 110: Drug driving (saliva) testing among those who had driven in the preceding six months, by jurisdiction, 2010

	National N=526	NSW n=64	ACT n=55	VIC n=61	TAS n=88	SA n=72	WA n=82	NT n=26	QLD n=78
% Drug driving (saliva) test last six months*	7	6	0	13	6	13	5	12	5

Source: EDRS REU interviews

* Among those who have driven a vehicle in the last six months

¹³ Participants may not necessarily have been under the influence of drugs at the time(s) they were drug tested.

7.5 Risky alcohol use among REU

In 2009, a new measure of alcohol consumption was included in the EDRS as a way of more accurately measuring the quantity and frequency of alcohol use while taking into account variability of this over the course of the past year. The measure was retained in the 2010 EDRS questionnaire. The AQFV¹⁴ is a self-report measure which examines alcohol use over the preceding six months. It has three categories: (a) typical drinking; (b) regular changes, e.g. weekends; and (c) occasional changes, e.g. festivals, parties. Respondents are able to indicate a range for the number of drinks they consume for each section and then indicate on how many days per week, month or year they drink this amount. For example, a participant may report for the 'typical drinking' section that they consume 'two to three standard drinks, three days per week' or 'five to six standard drinks, two days per month' etc.

Using the information obtained from the AQFV assessment, the number of days that each participant consumed alcohol over the course of a year and the amount of alcohol consumed on each drinking day was computed. Each drinking day was then defined as either (a) low risk (up to six drinks for men or four for women); (b) risky (from seven to 10 drinks for men or five to six for women); or (c) high risk (11 drinks and above for men or seven and above for women) (National Health and Medical Research Council, 2001). The categories have been derived based on the 2003 National Alcohol Strategy guidelines.

Table 111 presents the frequency and quantity of alcohol consumption for REU across jurisdictions in 2010. Compared with results of 2009, nationally participants retained the same median number days in the low risk category (52 days in both 2009 and 2010), similar proportions were also reported for those who were defined as drinking in the risky category (8 days in 2009 versus 7 days in 2010). Median number of days of drinking in the high risk category has slightly risen from 32 days in 2009 to 39 days in 2010. The average number of drinks per session for males and females has increased from 8 drinks to 9 drinks in 2010. When separated by gender, males are found to report a significantly higher number of average drinks per session than females (9.3 versus 7.4) $t_{(630.5)} = 4.365, p = 0.000$ (Table 111).

Table 111: Frequency and quantity of alcohol consumption among REU, nationally, 2010

(n)	National		NSW	ACT	VIC	TAS	SA	WA	NT	QLD
	2009 N=756	2010 N=693	n=100	n=73	n=100	n=100	n=92	n=100	n=27	n=101
Median number of drinking days per year										
Low risk	52	52	29	12	52	86	52	60	42	0
Risky	8	7	12	10	12	25	4	11	6	1
High risk	32	39	21	35	37	35	35	33	64	52
Average no. drinks per session	8	9	8	9	8	9	8	8	10	9

Source: EDRS interviews 2010

¹⁴ Many thanks to Dr. James Lemon, previously of NDARC, for his kind permission to use the AQFV assessment in the 2009 EDRS.

7.6 The Alcohol Use Disorders Identification Test (AUDIT)

The AUDIT (Saunders et al., 1993) was completed by REU participants in the EDRS for the third year running. The AUDIT was designed by the World Health Organisation (WHO) as a brief screening scale to identify individuals with alcohol problems, including those in early stages. It is a 10-item scale, designed to assess three conceptual domains: alcohol intake; dependence; and adverse consequences (Reinert and Allen, 2002). Total scores of eight or more are recommended as indicators of hazardous and harmful alcohol use and may also indicate alcohol dependence (Babor et al., 1992). Higher scores indicate greater likelihood of hazardous and harmful drinking; such scores may also reflect greater severity of alcohol problems and dependence, as well as a greater need for more intensive treatment (Babor and Higgins-Biddle, 2000).

The overall sample mean score on the AUDIT was 14.8 (median=14, range=0-38). There was a significant difference in female and male AUDIT scores, with males having the significant higher scores (13.61 vs. 15.56; $t_{(672)}=-3.606$, $p<0.05$). Eighty-four percent of the national sample scored eight or more; these are levels at which alcohol intake may be considered hazardous. Jurisdictional scores of eight or more illustrate that half or more of the participants in each state/territory reported scores at this level. There were no gender differences in those drinking at risky levels. Table 83 presents a jurisdictional overview of AUDIT scores.

The total AUDIT score places respondents into one of four 'zones' or risk levels. At a national level, sixteen percent in 2010 (23% in 2008) scored in Zone 1 (low-risk drinking or abstinence), 39% (41% in 2008) scored in Zone 2 (alcohol use in excess of low-risk guidelines), a fifth (20%; 15% in 2008) scored in Zone 3 (harmful or hazardous drinking) and 26% (compared with 20% in 2008) scored in Zone 4 (those in this zone may be referred to evaluation and possible treatment for alcohol dependence). Jurisdictional overviews for the four zones are presented in Table 112.

Table 112: AUDIT total scores and proportion of REU scoring above recommended levels indicative of hazardous alcohol intake, by jurisdiction, 2010

	NSW		ACT		VIC		TAS		SA		WA		NT		QLD	
	2008	2010	2008	2010	2008	2010	2008	2010	2008	2010	2008	2010	2008	2010	2008	2010
Mean AUDIT total score, SD (range)	12.7, 8.1 (0-35)	14.4, 7.9 (0-38)	13.6, 6.9 (1-28)	16.2, 7.4 (0-36)	14.7, 6.6 (0-26)	13.9, 7.3 (0-30)	16, 5.9 (5-33)	14.6, 5.4 (1-28)	12.1, 6.5 (0-28)	14.9, 6.8 (2-29)	13.8, 6.3 (0-25)	12.5, 6.9 (0-28)	8.6, 6.4 (0-27)	16.0, 6.2 (5-29)	13.5, 7.1 (0-30)	17.0, 6.6 (0-36)
Score 8 or above (%)	69	81	78	87	84	77	93	93	73	86	81	71	50	92	78	94
Zone 1	31	19	22	13	16	23	7	7	27	14	19	28	50	8	22	6
Zone 2	34	39	45	37	39	30	46	52	43	42	45	35	36	39	43	37
Zone 3	16	18	13	17	21	23	15	20	18	19	16	16	8	31	16	23
Zone 4	19	25	21	34	23	21	32	21	12	25	21	20	6	23	19	33

Source: EDRS REU interviews

Note: Zone 1 refers to low risk drinking or abstinence; Zone 2 consists of alcohol use in excess of low-risk guidelines; Zone 3 may refer to harmful or hazardous drinking; and Zone 4 may be indicative of those warranting evaluation or treatment for alcohol dependence.

8 LAW ENFORCEMENT-RELATED TRENDS ASSOCIATED WITH ERD USE

- One-third of the sample reported engaging in some form of **criminal activity** in the month prior to interview.
- Drug dealing was the most common crime reported across all jurisdictions, with smaller proportions reported having committed fraud or a violent crime in the last month.
- Reports of recent **police activity** were that it was stable. One-quarter (26%) responded that police activity had made it more difficult for them to score drugs.
- Over half the national sample (62%) – a rise from (36%) in 2008 – reported seeing **sniffer dogs** on a median of two occasions in the six months preceding interview, with two-fifths (41%) reporting that they were in possession of drugs at the time of seeing the sniffer dog.
- Fourteen percent of the national sample had been arrested in the past year, compared with 7% in 2008. The most common charge reported was in the ‘other’ category which centred around public orders.
- **Consumer arrests** had increased in relation to cocaine and hallucinogen use. All other drug arrests appeared to have remained stable.

8.1 Reports of criminal activity among REU

A third of the national sample reported engaging in some form of criminal activity in the month prior to interview (Table 113). A quarter (24%) of the national sample reported that they had dealt drugs in the last month and, of these, three-fifths (61%) reported doing so less than once per week, 19% once per week, 10% more than once per week but less than daily, and 10% reported dealing on a daily basis. Thirteen percent of the national sample reported that had committed a property crime in the last month and, of those, the majority (61%) reported doing so less than once per week, 20% once per week, 12% more than once per week but less than daily, and 7% reported property crime on a daily basis. Five percent (n=32) reported committing a violent crime in the past month. Two percent (n=15) reported having committed fraud in the month prior to interview (Table 113).

Table 113: Criminal activity among REU, by jurisdiction, 2010

(%)	National 2009 N=693	National 2010 N=756	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
In the last month										
Any crime	38	33	35	48	44	24	22	35	26	29
Drug dealing	28	24	26	33	33	15	19	24	19	23
Property crime	15	13	18	25	18	8	4	13	11	11
Fraud	3	2	4	1	1	0	4	2	0	3
Violent crime	4	5	4	6	4	5	4	3	15	4

Source: EDRS REU interviews

8.2 Perceptions of police activity towards REU and drug detection ‘sniffer’ dogs

Participants were asked whether there had been changes in police activity towards REU in the six months preceding interview. The majority of reports of recent police activity was that activity was stable (58%) or had increased (40%). REU were also asked if police activity had made it more difficult for them to obtain drugs. Of the national sample, 26% reported that police activity did make scoring drugs more difficult for them (Table 114).

Table 114: Perceptions of police activity towards REU, 2010

(%)	National		NSW n=100	ACT n=73	VIC n=100	TAS n=64	SA n=72	WA n=73	NT n=19	QLD n=65
	2009 N=501	2010 N=509								
Recent police activity										
Decreased	2	2	2	2	1	2	3	3	0	5
Stable	49	58	54	78	60	67	26	47	47	59
Increased	49	40	43	20	39	33	46	51	53	37
Police activity made scoring more difficult	19	26	21	14	22	27	39	33	47	17

Source: EDRS REU interviews

Note: the response option ‘don’t know’ was excluded from analysis from 2009 onwards

Participants were asked about their experiences with drug detection ‘sniffer’ dogs. Two thirds (62%) of the national sample had seen detection dogs in the past six months. Of the national sample, two-fifths (41%) reported seeing sniffer dogs when in possession of drugs. Of those (n=287), 78% kept going about their business, 8% consumed their drugs, 2% gave their drugs to another person to carry, 1% threw away their drugs and 11% reported taking another action.

Twenty participants (3% of the national sample) reported being searched by police in the preceding six months due to a positive notification from a sniffer dogs. The majority of participants had no drugs found on them and were let go (75%, n=15). Four participants were found to be in possession of drugs and two participants were arrested and charged, two participants were fined and/or cautioned (Table 115).

Table 115: Sniffer dog activity reported by REU, 2010

(%)	National		NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
	2009 N=402	2010 N=693								
Seen sniffer dogs past six months	53	62	94	58	51	52	74	51	56	54
Median number of times seen sniffer dogs past six months(n)#	2	n.a								
Festival/music event	n.a	2	3	3	2	1	2	1	2	2
Nightclub	n.a	2	2	1	1	6	2	1	1	2
On/near public transport	n.a	2	2	1	1	1	1	2	0	1
Other areas	n.a	2	4	1	1	1	2	1	1	2
In possession of drugs when observed dogs	65	41	66	55	31	40	49	34	48	28

Source: EDRS REU interviews

Of those who reported having observed drug detection dogs recently

8.3 Arrests

Fourteen percent (7% in 2008, 13% in 2009) of the national REU sample reported that they had been arrested in the past year (Table 116). Of those arrested in the past year, the charge most commonly reported in this sample was alcohol and driving related offences (19%), followed closely by drug use/possession charges (18%) and violent crime (assault; 16%). The charges reportedly incurred were similar to those reported in 2009 with the most notable difference being a decrease in property crime charges and an increase in alcohol and driving charges from 2009 to 2010 (Table 117).

Table 116: Proportion of REU reporting arrest in the past year, by jurisdiction, 2010

(%)	National N=693	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
Arrested last 12 months	14	24	8	9	13	12	13	19	16

Source: EDRS REU interviews

Table 117: Charges of arrest in the past year, national 2010

(%)	National 2009 N=99	National 2010 N=97
Charge arrested for last 12 months		
Alcohol and driving offences	14	19
Use/possession	19	18
Violent crime	17	16
Property crime	30	14
Other driving offences	4	6
Dealing	1	5
Fraud	3	1
Other offences*	28	40

Source: EDRS REU interviews

* 'Other offences' included: public orders (55%, 'drunk in public, drunkards behaving in riotous or disorderly manner, persons found drunk and disorderly, public nuisance).

In addition to EDRS REU participant data on arrest over the past year, population level statistics related to drug use are also available from the ACC (latest available year 2008/09). These are reported in the following sub-sections by drug type.

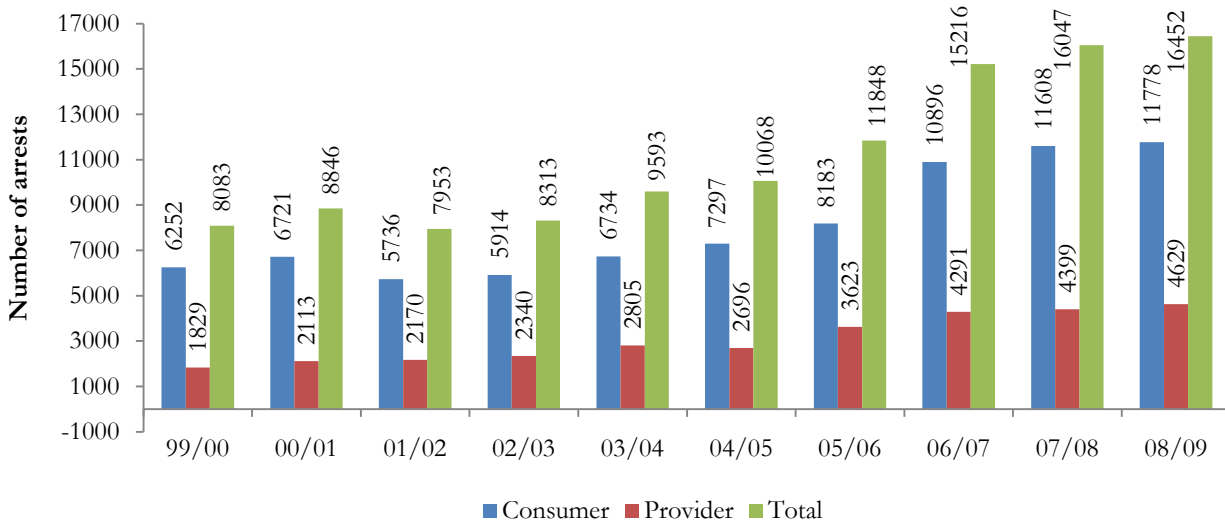
8.3.1 Ecstasy

A number of jurisdictions do not differentiate between arrests associated with ATS and phenylethylamines, the class of drug to which ecstasy belongs; ecstasy arrests are, therefore, included under ATS. These data are presented below in the methamphetamine section.

8.3.2 Methamphetamine

It should be noted that a number of jurisdictions do not differentiate between arrests connected with ATS and phenethylamines (the class of drugs to which ecstasy belongs), so these classes have been aggregated. Consumer and provider arrests for ATS have experienced a large increase since 2005/06, though only a slight increase is reported in 2008/09 (Figure 52). Data for 2009/10 were not available at the time of publication of this report.

Figure 52: Amphetamine-type stimulants: consumer and provider arrests, 1999/00-2008/09

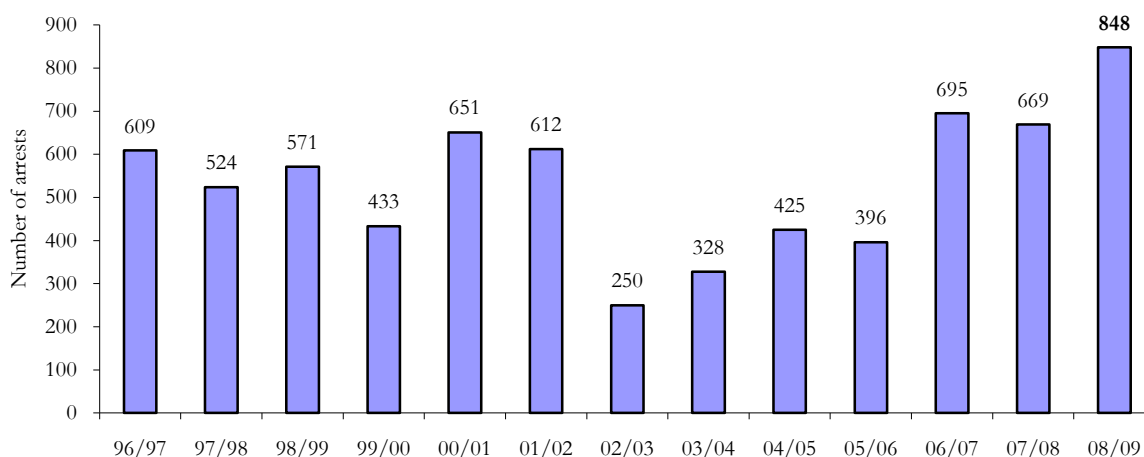


Source:(Australian Bureau of Criminal Intelligence, 2000, Australian Bureau of Criminal Intelligence, 2001, Australian Bureau of Criminal Intelligence, 2002, Australian Crime Commission, 2003, Australian Crime Commission, 2004, Australian Crime Commission, 2005, Australian Crime Commission, 2006, Australian Crime Commission, 2007, Australian Crime Commission, 2008, Australian Crime Commission, 2009, Australian Crime Commission, 2010)

8.3.3 Cocaine

In 2008/09, the number of cocaine arrests Australia wide has increased to the highest level recorded to date. This finding is consistent with the finding that cocaine consumption in the REU group has increased. The majority of these arrests (55%) continued to occur in NSW (Figure 53). Data for 2009/10 were not available at the time of publication of this report.

Figure 53: Total number of cocaine consumer and provider arrests, 1996/97- 2008/09



Source:(Australian Bureau of Criminal Intelligence, 2000, Australian Bureau of Criminal Intelligence, 2001, Australian Bureau of Criminal Intelligence, 2002, Australian Crime Commission, 2003, Australian Crime Commission, 2004, Australian Crime Commission, 2005, Australian Crime Commission, 2006, Australian Crime Commission, 2007, Australian Crime Commission, 2008, Australian Crime Commission, 2009, Australian Crime Commission, 2010)

Note: The arrest data for each state and territory include AFP data. Data for 2009/10 were not available at the time of publication.

8.3.4 Ketamine

Ketamine is scheduled differently in different jurisdictions across Australia, but some jurisdictions (such as NSW) have recently attempted to make ketamine a more tightly scheduled substance. Although it is an offence in jurisdictions such as NSW and VIC to be in the possession of ketamine for personal use or in amounts suggesting an individual is supplying others, ketamine is not separately recorded in police databases. Therefore, no data are available on the number of police apprehensions for possession or supply of this controlled substance.

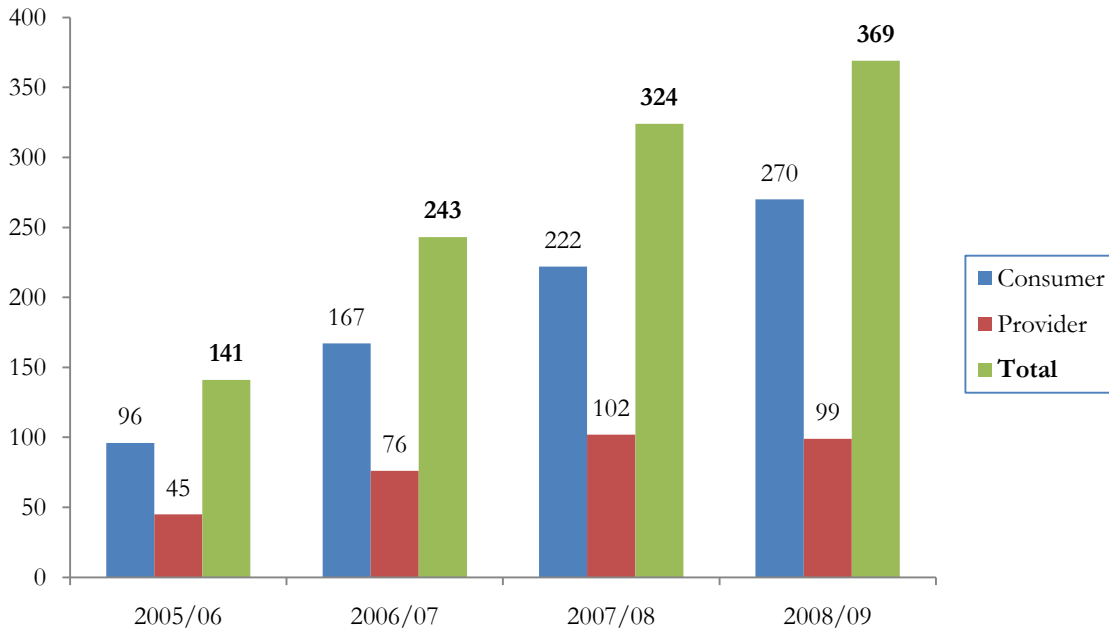
8.3.5 GHB

GHB is a controlled substance in Australia, and possession of GHB is an offence. However, it is not currently possible to obtain data on any police apprehensions of persons caught supplying, manufacturing or in the possession of GHB, because GHB is not separately recorded in police databases.

8.3.6 LSD

Nationally, a total of 369 total arrests were made in relation to hallucinogens including LSD and psilocybin (mushrooms). Consumer arrests slightly increased from 2008 compared to 2009 (Figure 54), whilst provider arrests remained stable (102 in 2008 vs 99 in 2009). The majority of these arrests continued to be recorded in QLD, followed by WA and NSW. The total number of arrests in relation to this class of drug appear to be increasing at a marginal rate.

Figure 54: Number of hallucinogen consumer and provider arrests, 2005/06-2008/09



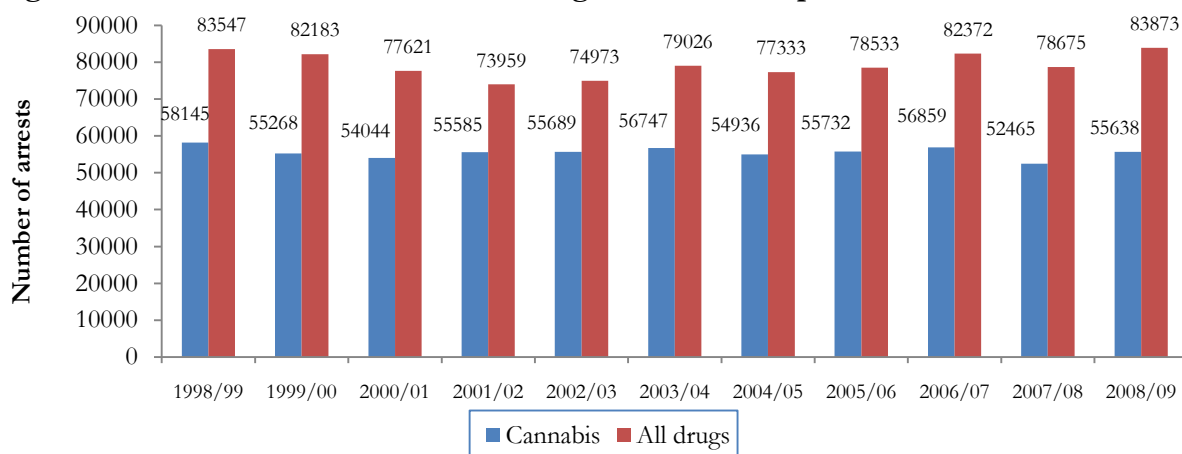
Source:(Australian Bureau of Criminal Intelligence, 2000, Australian Bureau of Criminal Intelligence, 2001, Australian Bureau of Criminal Intelligence, 2002, Australian Crime Commission, 2003, Australian Crime Commission, 2004, Australian Crime Commission, 2005, Australian Crime Commission, 2006, Australian Crime Commission, 2007, Australian Crime Commission, 2008, Australian Crime Commission, 2009, Australian Crime Commission, 2010)

Note: Data for 2009/10 were not available at the time of publication.

8.3.7 Cannabis

Cannabis arrests continue to account for the majority (66%) of all drug-related arrests in Australia. Numbers have remained relatively stable in the past eight years, indicating little change in enforcement of cannabis-related offences during this period. As in previous years, the number of cannabis arrests in QLD (16,588) accounted for almost one-third (29%) of the national total. Numbers increased slightly in NSW from 10,699 in 2007/08 to 12,201 in 2008/09 while they remained stable in the other states (Figure 55).

Figure 55: Number of cannabis and all drug consumer and provider arrests, 1998/99-2008/09



Source:(Australian Bureau of Criminal Intelligence, 2000, Australian Bureau of Criminal Intelligence, 2001, Australian Bureau of Criminal Intelligence, 2002, Australian Crime Commission, 2003, Australian Crime Commission, 2004, Australian Crime Commission, 2005, Australian Crime Commission, 2006, Australian Crime Commission, 2007, Australian Crime Commission, 2008, Australian Crime Commission, 2009, Australian Crime Commission, 2010)

Note: Data for 2009/10 were not available at the time of publication

9 SPECIAL TOPICS OF INTEREST

- **Body Mass Index** was calculated for participants for the first time in 2010. Of the sample 6.8% were classified as ‘under weight’ compared to 2.6% of the general population and males in the REU sample were more likely to be classified as ‘overweight’ when compared to females in the sample.
- In 2010, participants were asked questions regarding **dependence on ecstasy**. For further information, please contact Dr Raimondo Bruno (raimondo.bruno@utas.edu.au).
- The majority of the sample reported consuming **energy drinks** (70%) as a weekly to monthly practice for the purposes of liking the taste and helping participants to ‘party for longer. The drugs consumed most with energy drinks was ecstasy and cannabis. Sixty-two percent of recent users had experienced a negative effect after the consumption of energy drinks with alcohol, ecstasy or all three.
- Just over half of the number of participants that commented (56%) were tested in the past two years for an **STI** with the main reason being unprotected sexual practice. The majority were tested by their GP or in a Sexual Health Clinic.

9.1 Body Mass Index

Eating disorders and drug use disorders are significant public health problems. However epidemiological research examining their associations yields ambiguous results. Evidence on a relationship between obesity and alcohol use is found in some studies (Wannamethee et al., 2005). As to the relationships between overweight/obesity and nicotine dependence, some studies have found overweight and obese men, but not women, were more likely to be former daily smokers than non-smokers (John et al, 2006; (Zimlichman et al., 2005). In a nationally representative sample, overweight, obesity and extreme obesity were associated with lower risk for past-year nicotine dependence in men but not in women (Pickering et al., 2007).

Relationships between body mass index (BMI) and illicit drug use disorders is also unclear. For instance, marijuana can stimulate appetite whereas cocaine is a stimulant and appetite suppressant, but one study found similar prevalence of overweight in individuals with illicit drug use disorders as that found in the general population (Rajs et al., 2004) and another study found both positive and negative associations of BMI with various substance use disorders, and significant gender differences in those relationships (Barry and Petry, 2009). Finally, BMI and drug use are both associated with mental health problems (Kemp et al., 2009).

For the first time in 2010 participants were asked their height and weight. With this information BMI was calculated among the national sample to determine the relationship between BMI, drug use and the risk of disease. BMI is calculated from height and weight information, using the formula weight (kg) divided by the square of height (m). BMI is divided into 4 groups (1) ‘underweight’ less than 18.5, (2) ‘normal weight’ 18.5 to less than 25.0, (3) ‘overweight’-25.0 to less than 30.0 or (4) ‘obesity’ 30.0 and greater, in adults to measure prevalence. BMI values are grouped according to the groups reported by WHO (http://apps.who.int/bmi/index.jsp?introPage=intro_3.html).

Among the national EDRS sample the mean height was 1.74 metres and weight 70.9 kilograms. The mean BMI for the national sample was 23.4. Of those who commented nationally, 6.8% had a BMI which was considered 'underweight' (BMI <18.5), this compares to 2.6% of the general population aged 18-64 years (Australian Bureau of Statistics, 2009). Males in the national sample were more likely to be 'overweight' compared to females (26.2% versus 10.2%). Both genders reported a higher percentage as 'underweight' and a smaller percentage as 'obese' compared to the general population (Table 118). Jurisdictional differences were noted.

Table 118: Self-reported Height, Weight and Body Mass Index by jurisdiction, 2010

	National Health Survey 2007-2008	National	NSW	ACT	VIC	TAS	SA	WA	NT	QLD
Mean Height (metres)	-	N=672 1.74	n=98 1.75	n=73 1.72	n=92 1.76	n=100 1.72	n=91 1.74	n=91 1.71	n=26 1.74	n=101 1.76
Mean Weight (Kilograms)	-	N=671 70.9	n=98 70.9	n=72 69.5	n=97 69.5	n=99 70.7	n=91 73.4	n=88 71.8	n=27 72.0	n=99 70.2
Mean Body Mass Index (BMI)	-	N=660 23.4	n=96 22.8	n=72 23.4	n=91 22.5	n=99 24.1	n=90 24.1	n=87 24.6	n=26 23.5	n=99 22.5
BMI - Males (%)		N=386	n=72	n=36	n=57	n=55	n=56	n=42	n=10	n=58
Underweight	1.4	5.4	4.2	0	10.5	3.6	3.6	7.1	0	8.6
Normal range	35.8	63.2	65.3	69.4	61.4	69.1	73.2	42.9	30.0	63.8
Overweight	40.2	26.2	27.8	25.0	21.1	25.5	17.9	45.2	60.0	19.0
Obese	22.6	5.2	2.8	5.6	7.0	1.8	5.4	4.8	10.0	8.6
BMI - Females (%)		N=274	n=24	n=36	n=34	n=44	n=34	n=45	n=16	n=41
Underweight	3.7	8.8	12.5	8.3	5.9	9.1	8.8	4.4	0	17.1
Normal range	49.1	73.4	83.3	72.2	91.2	81.8	52.9	64.4	81.3	68.3
Overweight	27.2	10.2	4.2	8.3	2.9	6.8	23.5	8.9	18.8	12.2
Obese	20.0	7.7	0	11.1	0	2.3	14.7	22.2	0	2.4
BMI - All (%)		N=660	n=96	n=72	n=91	n=99	n=90	n=87	n=26	n=99
Underweight	2.6	6.8	6.3	4.2	8.8	6.1	5.6	5.7	0	12.1
Normal range	42.2	67.4	69.8	70.8	72.5	74.7	65.6	54.0	61.5	65.7
Overweight	33.9	19.5	21.9	16.7	14.3	7.2	20.0	26.4	34.6	16.2
Obese	21.3	6.2	2.1	8.3	4.4	2.0	8.9	13.8	3.8	6.1

Source: EDRS participant interviews, (Australian Bureau of Statistics, 2009)

9.2 Ecstasy dependence

In 2010, participants were asked questions regarding dependence on ecstasy. For further information, please contact Dr Raimondo Bruno (raimondo.bruno@utas.edu.au).

9.3 Energy drink consumption

Caffeinated energy drinks came onto the world market in 1997 with the introduction of Red Bull. The drinks are marketed at the 18-35 age group claiming to deliver a jolt of energy, through the combination of stimulant ingredients primarily caffeine, herbal extracts (such as guarana, and ginseng)

and amino acids (such as taurine). Sugar or artificial flavouring is added for taste as caffeine is a bitter ingredient.

Research suggests energy drinks do deliver on their promise of more ‘energy’ with the strongest energising effects being 30 to 60 minutes after consumption and lasting at least 90 minutes. However, while caffeine in smaller doses has been shown to improve cognitive performance and mood (Beyrer et al., 2004), it can also have detrimental health consequences. Acute caffeine consumption reduces insulin sensitivity (Kalyoncu et al., 2005) and increases mean arterial blood pressure (Bichler et al., 2006). High caffeine consumption is associated with chronic daily headaches particularly in women aged less than 40 years and has been known to be associated with central nervous system dysfunction, cardiovascular, gastrointestinal and renal dysfunction (Carillo and Benitez, 2000). Caffeine intake more generally can promote diuresis¹⁵ and natriuresis¹⁶ (Riesenhuber et al., 2006). Daily caffeine intake remains safe at under 600mg per day, however, doctors recommend during times of stress, anxiety or pregnancy that caffeine intake be limited to less than 200mg per day. Energy drinks on average can now contain between 80-160mg per serving.

Of particular concern is the recently reported ‘partying practice’ of mixing energy drinks with alcohol and/ or other substances such as ecstasy or prescribed medications such as stilnox or benzodiazepines. The aim of this mixing is to enhance the ‘high’ associated with these substances.

In 2010, the EDRS included questions examining the use of energy drinks (e.g. ‘V’ and ‘Red Bull’) in the context of alcohol and/or ecstasy and other illicit substance use. Nearly three quarters of participants (70%) had consumed an energy drinks mixed with alcohol over the preceding six months. In relation to frequency, it is apparent that of recent consumers of the energy drink and alcohol cocktail, most engage in the practice between weekly (19%) to monthly (26%) and less often (28%). On their last occasion, respondents had consumed a median of three (range=1-13) energy drinks mixed with alcohol.

The studies that have been conducted would suggest that consumers hold beliefs that consuming energy drinks will reduce the fatigue, cognitive and motor impairments of alcohol and as a result they may be more likely to engage in risky behaviours such as operating a car or a motorcycle, in the erroneous belief that they are alert (Ferreira et al., 2004a, Ferreira et al., 2004b). The motivation recent REU energy drink and alcohol consumers gave for choosing that beverage over another was mainly due to liking the taste (28%), and as mentioned above the belief that consuming energy drinks help you to party for a longer time period (23%) see Table 119

Despite the negative consequences of consuming energy drinks in combination with other substances, to date there has been minimal research on the topic. In the REU sample, of recent energy drink and alcohol consumers, the majority had reported consuming energy drinks with an illicit substance primarily ecstasy (73%), cannabis (26%), speed (21%) and cocaine (15%). Many also reported the regular practice of combining energy drinks, an illicit substance and alcohol on every occasion (35%) see Table 119.

¹⁵ Diuresis is the increased production of urine by the kidney.

¹⁶ Natriuresis is the process of excretion of sodium in the urine via action of the kidneys.

Table 119: Use of energy drinks, alcohol and/or ecstasy and other illicit substance among REU, 2010

(%)	National N=693	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
Recent consumption of energy drinks and alcohol	70	69	75	68	81	63	55	74	74
How often consume energy drink with alcohol*	N=478	n=69	n=55	n=68	n=81	n=58	n=54	n=20	n=73
> weekly	3	3	2	7	1	7	0	0	3
Weekly	19	22	24	12	20	16	9	40	21
Fortnightly	25	22	16	22	22	38	30	20	26
Monthly	26	16	26	27	30	22	33	25	29
< monthly	28	38	33	32	27	17	28	15	22
Median number of recent energy and alcohol drinks (n)*	3	2	3	2	3	3	3	3	3
Main reason for mixing energy drink with alcohol*	N=479	n=69	n=54	n=68	n=81	n=58	n=54	n=20	n=75
Taste	28	28	20	28	38	21	28	30	28
Combined effect	10	0	15	6	9	16	11	25	9
Helps party longer	23	17	30	40	16	26	9	35	19
Lessens hangover	<1	0	0	0	0	2	0	0	0
Keep me straight	2	1	2	0	4	3	4	0	0
Feeling tired	16	22	17	6	16	9	30	0	20
Other [†]	22	32	17	21	17	24	19	10	24
Recent consumption of energy drinks and another substance (not including alcohol)*	N=479	n=69	n=54	n=68	n=81	n=58	n=54	n=20	n=75
None	19	26	19	27	17	17	15	20	11
Ecstasy	73	64	78	68	74	74	72	80	79
Speed	21	13	26	32	17	14	7	45	28
Base	4	3	4	0	0	14	0	20	4
Ice	5	3	2	4	0	9	13	5	5
Cocaine	15	22	24	13	19	9	2	25	13
Cannabis	26	30	30	37	16	31	13	20	28
LSD	9	15	15	15	1	10	2	0	12
Other	8	10	9	6	11	3	9	5	9
Use of energy drinks with another substance and alcohol**	N=374	n=51	n=44	n=50	n=64	n=46	n=43	n=16	n=61
All of the time	35	43	32	26	66	24	23	38	20
Most of the time	16	10	16	14	6	17	7	38	34
Some of the time	25	22	32	26	6	28	56	19	16
A little of the time	17	12	7	30	16	17	14	6	23
None of the time	8	14	14	4	6	16	0	0	7

Source: EDRS Regular ecstasy user interviews

*among those who had consumed energy drinks with alcohol in the last 6 months

** among those who had consumed energy drinks with another substance

[†]Other includes reasons such as: availability; the drink was bought for them by a friend; because it was more affordable (cheaper due to a promotional evening); the novelty/wanting to try it; and peer/social pressure

Sixty-two percent of the national sample reported that they had experienced a negative effect which they related to the consumption of energy drinks with alcohol, energy drinks with ecstasy or all three substances. The most common negative symptoms across all three groups were headaches, nausea, heart palpitations and vomiting (Table 120).

Table 120: Negative effects experienced related to energy drink consumption among recent energy drink consumers, 2010

(%)	National N=479	NSW n=69	ACT n=54	VIC n=68	TAS n=81	SA n=58	WA n=54	NT n=20	QLD n=75
Any negative effects from consuming energy drinks and/or alcohol and/or ecstasy									
Recent users	62	39	74	40	54	71	70	95	84
Energy drinks mixed with alcohol									
Headaches	24	9	37	13	17	28	22	65	33
Heart palpitations	21	12	20	16	22	12	20	45	33
Nausea	19	4	33	10	22	19	11	35	27
Vomiting	18	7	35	9	14	19	17	40	23
On edge	15	7	11	12	6	12	22	25	29
Heart burn	8	1	9	4	4	7	2	40	16
Stressed out	9	3	15	10	4	9	6	5	17
Other	5	13	4	2	1	5	7	5	7
Energy drinks mixed with ecstasy									
Headaches	10	1	19	7	3	14	11	30	11
Heart palpitations	12	1	11	12	5	16	11	40	23
Nausea	6	0	6	3	1	14	7	15	9
Vomiting	4	1	9	2	1	5	6	15	5
On edge	8	1	15	3	5	5	15	25	12
Heart burn	3	0	2	4	1	5	0	15	7
Stressed out	7	0	11	9	5	9	7	15	7
Other	1	1	0	0	0	0	6	0	1
Energy drinks mixed with ecstasy and alcohol									
Headaches	20	6	24	15	14	26	19	35	33
Heart palpitations	23	6	20	16	19	28	28	55	33
Nausea	15	1	17	7	19	22	7	25	25
Vomiting	13	1	20	7	9	16	11	30	20
On edge	17	3	13	13	9	21	32	35	27
Heart burn	7	0	7	6	5	9	2	15	15
Stressed out	12	1	13	16	9	16	15	15	17
Other	4	9	2	0	0	3	9	0	5

Source: EDRS Regular ecstasy user interviews

Currently there is very little data available on quantity of general caffeinated energy drink consumption (without alcohol or other substances). In this sample of REU of the recent energy drink with alcohol consumers, three-quarters (75%) reported consuming energy drinks outside the party scene in their daily routine. Of those, the majority reported the frequency of consuming solely energy drinks as being between weekly or more (see Table 121). The median number of cans consumed nationally was one (range 1-6).

Table 121: Consumption patterns of energy drinks only in daily routine among recent energy drink consumers, 2010

(%)	National N=479	NSW n=69	ACT n=54	VIC n=68	TAS n=81	SA n=58	WA n=54	NT n=20	QLD n=75
Energy drinks outside the party scene									
Recent consumption	75	64	78	78	72	69	76	80	85
Frequency of consumption									
More than weekly	43	25	26	17	12	43	13	19	27
Weekly	33	11	17	25	10	33	20	38	23
Fortnightly	8	18	5	13	26	8	20	13	16
Monthly	13	21	24	23	29	13	15	13	22
Less than monthly	5	25	29	23	22	5	33	19	13

Source: EDRS Regular ecstasy user interviews

9.4 Sexual Health

Population studies have shown that younger age groups had engaged in sexual relationships with more partners in their lifetime than older age groups (Johnson et al., 2001). Amongst the regular ecstasy user sample participants of a younger age have been found to be more likely to engage in risky behaviours (Cogger and Kinner, 2008). Furthermore, studies have shown that younger individuals who frequent night clubs are likely to report multiple sexual partners and incidence of STIs (Wells et al., 2010).

In Australia, approximately ten percent of young women and three percent of young men (aged under 30 years) report having been tested for Chlamydia (Kong et al., in press). The issues surrounding sexual health prompted questions to be developed for the EDRS survey to investigate reasons why, or why, not participants choose to have STI screening. The responses to these questions were formulated by considering results of previous research (Dixon-Woods et al., 2001, Tilson et al., 2004, Balfe and Brugha, 2009).

In 2010, REU participants were asked if they had been tested for a sexually transmitted infection (STI) in the last two years. Among the national sample who commented, over half (56%) reported that they had been tested in the last two years for a STI by means of a blood test, urine sample or swab, while one-third (34%) reported that they had not considered taking a sexual health test (Table 122).

Among those who were tested, the main reasons given for testing were; due to unprotected sex to be clear of an infection after a relationship had ended and to be clear of an infection before a new relationship began. The majority of participants (63%) were tested by a General Practitioner (GP) (Table 122).

Table 122: Sexual Health Testing among REU, 2010

(%)	National N=693	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
Tested for a sexually transmitted infection (STI) last two years?	N=672	n=99	n=72	n=100	n=99	n=81	n=97	n=27	n=97
No, don't think about it									
No, I didn't want to be tested	34	47	39	35	21	27	36	11	40
No, another reason	2	2	0	1	0	3	3	7	1
Yes, I was tested by means of a blood test, urine sample or swab	8	8	3	8	12	16	7	4	5
	56	43	58	56	66	54	54	78	54
Reason for test*	N=376	n=43	n=42	n=56	n=66	n=44	n=52	n=21	n=52
Clear of infection after relationship									
Clear of infection before new relationship	21	26	33	2	9	25	39	19	23
Unprotected sex	15	16	19	5	23	11	8	19	21
Symptoms of infection	33	35	31	36	36	23	25	54	35
Health provider suggested	9	5	7	9	12	5	10	5	15
Friend suggested	9	14	10	7	6	5	15	5	8
Partner suggested	4	5	10	2	2	5	0	5	4
Partner had symptoms	4	5	10	2	0	0	2	5	8
Ex-partner told me to get tested	2	0	2	0	2	5	4	5	2
Access to clinic was easy	2	2	7	0	3	2	0	0	4
Routine/general check up	9	9	29	2	5	9	0	19	10
Other [†]	10	9	2	38	8	2	6	5	2
	12	28	21	7	2	20	6	10	10
Place last tested for STI*									
GP	63	61	48	64	75	48	79	43	67
Sexual Health Clinic	32	23	45	27	25	48	19	52	33
Hospital	2	5	5	6	0	0	0	5	0
Other	3	12	2	4	0	5	2	0	0

Source: EDRS interviews

* Among those who were tested for a sexually transmitted infections in the last 2 years

[†]Other includes peace of mind, immigration, occupational or prison requirement

Over half (69%) of the female sample reported a pap smear test in the last two years. The main reasons given for not having a pap smear test were 'didn't think of it' or an 'other' reason e.g. 'laziness', 'could not be bothered' were the main other reasons reported. The main reasons for having a pap smear test were 'due for a test', 'general check-up' and 'health provider suggested it'. The majority of participants (80%) were tested by a GP (Table 123).

Table 123: Pap smear testing among REU, 2010

(%)	National N=693	NSW n=100	ACT n=73	VIC n=100	TAS n=100	SA n=92	WA n=100	NT n=27	QLD n=101
Had a pap smear test last two years**	69	50	74	69	71	67	67	80	75
Reasons for no pap smear test last two years#									
Wasn't sexually active	4	0	22	0	0	10	0	0	0
No symptoms	12	15	11	9	8	0	13	0	30
Don't like them	8	8	0	9	17	0	0	33	20
Didn't think of it	42	31	22	46	50	30	56	67	40
Embarrassed/uncomfortable	17	23	22	9	17	10	19	0	20
Financial cost	6	7	0	9	0	0	13	0	10
Other	19	23	22	27	17	40	6	0	10
Reasons for having a pap smear test##									
Symptoms	3	8	0	4	0	0	9	0	3
Reminder letters	28	0	35	4	60	25	24	8	37
Health provider suggested	16	39	12	24	10	15	21	0	13
Friend suggested	4	0	19	0	3	0	0	8	0
Partner suggested	<1	0	0	0	0	0	0	0	3
Due for a test	53	54	62	72	37	45	46	75	50
Family history of cervical cancer	3	8	0	4	0	5	6	8	0
Other	6	0	4	4	0	15	15	0	3
Place last tested for pap smear###									
Sexual Health Clinic	16	23	35	20	11	5	12	17	7
GP	80	77	58	60	89	90	88	83	93
Hospital	1	0	4	4	0	0	0	0	0
Other	3	0	4	16	0	5	0	0	0

Source: EDRS interviews

** among females only

among those who had not had a pap smear test in the last 2 years

among those who had a pap smear test in the last 2 years

REFERENCES

- AHMED, S. N. & PETCHOVSKY, L. (1980) Abuse of ketamine (Letter). *British Journal of Psychiatry*, 137, 303.
- ANDREWS, G. & SLADE, T. (2001) Interpreting scores on the Kessler Psychological Distress Scale (K10). *Australian and New Zealand Journal of Public Health*, 25, 494-497.
- AUSTRALIAN BUREAU OF CRIMINAL INTELLIGENCE (2000) Australian Illicit Drug Report 1998-99. Canberra, Australian Bureau of Criminal Intelligence.
- AUSTRALIAN BUREAU OF CRIMINAL INTELLIGENCE (2001) Australian Illicit Drug Report 1999-2000. Canberra, Australian Bureau of Criminal Intelligence.
- AUSTRALIAN BUREAU OF CRIMINAL INTELLIGENCE (2002) Australian Illicit Drug Report 2000-2001. Canberra, Australian Bureau of Criminal Intelligence.
- AUSTRALIAN BUREAU OF STATISTICS (2009) National Health Survey: Summary of Results 2007-2008. Canberra, Australian Bureau of Statistics.
- AUSTRALIAN CRIME COMMISSION (2003) Australian Illicit Drug Report 2001-02. Canberra, Australian Crime Commission.
- AUSTRALIAN CRIME COMMISSION (2004) Australian Illicit Drug Data Report 2002-03. Canberra, Australian Crime Commission.
- AUSTRALIAN CRIME COMMISSION (2005) Australian Illicit Drug Data Report 2003-04. Canberra, Australian Crime Commission.
- AUSTRALIAN CRIME COMMISSION (2006) Australian Illicit Drug Data Report 2004-05. Canberra, Australian Crime Commission.
- AUSTRALIAN CRIME COMMISSION (2007) Australian Illicit Drug Data Report 2005/06. Canberra, Australian Crime Commission.
- AUSTRALIAN CRIME COMMISSION (2008) Australian Illicit Drug Data Report 2006-07. Canberra, Australian Crime Commission.
- AUSTRALIAN CRIME COMMISSION (2009) Australian Illicit Drug Data Report 2007-08. Canberra, Australian Crime Commission.
- AUSTRALIAN CRIME COMMISSION (2010) Illicit Drug Data Report 2008-09. Canberra, Australian Crime Commission.
- AUSTRALIAN CUSTOMS BORDER AND PROTECTION SERVICE (2010) Australian Customs and Protection Service Annual Report 2009-10. Canberra, Commonwealth of Australia.
- AUSTRALIAN CUSTOMS SERVICE (2007) Australian Customs Service Annual Report 2006-07. Canberra, Commonwealth of Australia.
- AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE (2002) 2001 National Drug Strategy Household Survey: Detailed findings. Canberra, Australian Institute of Health and Welfare.
- AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE (2005) National Drug Strategy Household Survey 2004 - detailed findings. Canberra, Australian Institute of Health and Welfare.

- AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE (2008) 2007 National Drug Strategy Household Survey: detailed findings. *Drug statistics series no. 22. Cat. no. PHE 107*. Canberra, AIHW.
- AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE (2009) Alcohol and other drug treatment services in Australia 2007-08: Report on the national minimum data set. *Drug treatment series no. 9. Cat. no. HSE 73*. Canberra, Australian Institute of Health and Welfare.
- AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE (2010) Alcohol and other drug treatment services in Australia 2008-09: report on the National Minimum Data Set. *Drug treatment series no. 10. Cat. no. HSE 92.*, Australian Institute of Health and Welfare.
- BABOR, T., DE LA FLUENTE, J., SAUNDERS, J. & GRANT, M. (1992) The Alcohol Use Disorders Identification Test: Guidelines for use in Primary Health Care.
- BABOR, T. & HIGGINS-BIDDLE, J. (2000) Alcohol screening and brief intervention: Dissemination strategies for medical practice and public health. *Addiction*, 95, 677-86.
- BALFE, M. & BRUGHHA, R. (2009) What prompts young adults in Ireland to attend health services for STI testing? *BMC Public Health*, 9, 311.
- BARRY, D. & PETRY, N. M. (2009) Associations between body mass index and substance use disorders differ by gender: Results from the National Epidemiologic Survey on Alcohol and Related Conditions Addictive Behaviours. 34, 51-60.
- BEYRER, C., RAZAK, M. H., JITTIWUTIKARN, J., SURIYANON, V., VONGCHAK, T., SRIRAK, N., KAWICHAI, S., TOVANABUTRA, S., RUNGRUENGTHANAKIT, K., SAWANPANYALERT, P., SRIPAIPAN, T. & CELENTANO, D. D. (2004) Methamphetamine users in northern Thailand: changing demographics and risks for HIV and STD among treatment-seeking substance abusers. *International Journal of STD & AIDS*, 15, 697-704.
- BICHLER, A., SWENSON, A. & HARRIS, M. A. (2006) A combination of caffeine and taurine has no effect on short term memory but induces changes in heart rate and mean arterial blood pressure. *Amino Acids*, 471-476.
- BIERNACKI, P. & WALDORF, D. (1981) Snowball sampling: Problems, techniques and chain referral sampling. *Sociological Methods for Research*, 10, 141-163.
- BOYS, A., LENTON, S. & NORCOSS, K. (1997) Polydrug use at raves by a Western Australian sample. *Drug and Alcohol Review*, 16, 227-234.
- BREEN, C., DEGENHARDT, L., ROXBURGH, A., BRUNO, R., FETHERSTON, J., FISCHER, J., JENKINSON, R., KINNER, S., MOON, C., WARD, J. & WEEKLEY, J. (2004) Australian Drug Trends 2003: Findings from the Illicit Drug Reporting System (IDRS). . Sydney, National Drug and Alcohol Research Centre, University of NSW.
- BREEN, C., TOPP, L. & LONGO, M. (2002) Adapting the IDRS methodology to monitor trends in party drug markets: Findings of a two- year Feasibility trial. Sydney, National Drug and Alcohol Research Centre, University of New South Wales.
- CALDICOTT, D., CHOW, F., BURNS, B., FELGATE, P. & BYARD, R. W. (2004) Fatalities associated with the use of gamma-hydroxybutyrate and its analogues in Australiasia. *Medical Journal of Australia*, 181, 310-313.
- CARILLO, J. A. & BENITEZ, J. (2000) Clinically significant pharmacokinetic interactions between dietary caffeine and medications. *Clinical Pharmacokinetics*, 127-153.

- COGGER, S. & KINNER, S. A. (2008) Age related differences in patterns of drug use and risk behaviour among regular ecstasy users. Sydney, National Drug and Alcohol Research Centre, University of New South Wales.
- COMMONWEALTH DEPARTMENT OF COMMUNITY SERVICES AND HEALTH (1988) Statistics on Drug Abuse in Australia 1988: An information document for use in association with the National Campaign Against Drug Abuse. Canberra, Australian Government Publishing Service.
- COMMONWEALTH DEPARTMENT OF HEALTH AND FAMILY SERVICES (1996) 1995 National Drug Strategy Household Survey: Survey Results. Canberra, Commonwealth Department of Health and Family Services.
- COMMONWEALTH DEPARTMENT OF HEALTH, H., LOCAL GOVERNMENT AND COMMUNITY SERVICES, (1993) 1993 National Drug Household Survey. Canberra, Commonwealth Department of Health, Housing, Local Government and Community Services.
- DALGARNO, P. J. & SHEWAN, D. (1996) Illicit use of ketamine in Scotland. *Journal of Psychoactive Drugs*, 28, 191-199.
- DARKE, S., COHEN, J., ROSS, J., HANDO, J. & HALL, W. (1994) Transitions between routes of administration of regular amphetamine users. *Addiction*, 89, 1077-1083.
- DILLON, P., COPELAND, J. & JANSEN, K. L. R. (2003) Patterns of use and harms associated with non-medical ketamine use. *Drug and Alcohol Dependence*, 69, 23-28.
- DIXON-WOODS, M., STOKES, T., YOUNG, B., PHELPS, K., WINDRIDGE, K. & SHUKLA, R. (2001) Choosing and using services for sexual health: a qualitative study of women's views. *Sex Transm Infect*, 77, 335-339.
- FERREIRA, S. E., MELLO, M. T., ROSSI, M. V. & SOUZA-FORMIGONI, M. L. O. (2004b) Does any energy drink modify the effects of alcohol in a maximal effort test? . *Alcoholism: Clinical and Experimental Research* 1048-1412.
- FERREIRA, S. E., MELLO, M. T. & SOUZA-FORMIGONI, M. L. O. (2004a) Can energy drinks affect the effects of alcoholic beverages? A study with users. . *Revista da Associação Médica Brasileira*, 48-51.
- FORSYTH, A. J. M. (1996) Places and patterns of drug use in the Scottish dance scene. *Addiction*, 91, 511-521.
- FURUKAWA, T. A., KESSLER, R. C., SLADE, T. & ANDREWS, G. (2003) The performance of the K6 and K10 screening scales for psychological distress in the Australian National Survey of Mental Health and Well-being. *Psychological Medicine*, 33, 357-362.
- HALL, W. & SWIFT, W. (2000) The THC content of cannabis in Australia: Evidence and implications. *Australian & New Zealand Journal of Public Health*, 24, 503-508.
- HANDO, J. & HALL, W. (1993) Amphetamine use among young adults in Sydney, Australia. Sydney, NSW Health Department.
- HANDO, J., TOPP, L. & HALL, W. (1997) Amphetamine-related harms and treatment preferences of regular amphetamine users in Sydney, Australia. *Drug and Alcohol Dependence*, 46, 105-113.
- HIGGINS, K., COOPER-STANBURY, M. & WILLIAMS, P. (2000) Statistics on Drug Use in Australia, 1998. Canberra, Australian Institute of Health and Welfare.
- HURT, P. H. & RITCHIE, E. C. (1994) A case of ketamine dependence (Letter). *American Journal of Psychiatry*, 151, 779.

- JANSEN, K. L. R. (1990) Ketamine: can chronic use impair memory? *International Journal of Addictions*, 25, 133-139.
- JANSEN, K. L. R. (2000) *Ketamine, Dreams and Realities*, Florida, Multidisciplinary Association for Psychedelic Studies.
- JOHNSON, A. M., MERCER, C. H., ERENS, B., COPAS, A. J., MCMANUS, S., WELLINGS, K., FENTON, K. A., KOROVISSIS, C., MACDOWALL, W., NANCHAHAL, K., PURDON, S. & FIELD, J. (2001) Sexual behaviour in Britain: partnerships, practices, and HIV risk behaviours. *The Lancet*, 358, 1835-1842.
- KALYONCU, O. A., TAN, D., MIRSAL, H., PEKTAS, O. & BEYAZYUREK, M. (2005) Major depressive disorder with psychotic features induced by interferon- α treatment for hepatitis C in a polydrug abuser. *Journal of Psychopharmacology*, 19, 102-105.
- KAMAYA, H. & KRISHNA, P. R. (1987) Ketamine addiction (Letter). *Anaesthesia*, 67, 861-862.
- KEMP, D. E., GAO, K. E., GANOCY, S. J., CALDES, E., FELDMAN, K., CHAN, P. K. & AL., E. (2009) Medical and substance use comorbidity in bipolar disorder. *Journal of Affective Disorders*, 116, 64-69.
- KERLINGER, F. N. (1986) *Foundations of Behavioral Research*, Japan, CBS Publishing Limited.
- KESSLER, R. C., ANDREWS, G., COLPE, L. J., HIRIPI, E., MROCZEK, D. K., NORMAND, S.-L. T., WALTERS, E. E. & ZASLAVSKY, A. M. (2002) Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine*, 32, 959-976.
- KONG, F., HOCKING, J. S., LINK, C. K., CHEN, M. Y. & HELLARD, M. E. (in press) Sex and sport: sexual risk behaviour in young people in rural and regional Victoria. *Sexual Health*.
- LETCHER, T. & WHITE, V. (1999) Australian secondary students' use of over-the-counter and illicit drugs in 1996 IN VICTORIA, C. F. B. R. I. C. A.-C. C. O. (Ed.). Canberra, Centre for Behavioural Research in Cancer Anti-Cancer Council of Victoria.
- MATHERS, B., DEGENHARDT, L., PHILLIPS, B., WEISSING, L., HICKMAN, M., STRATHDEE, S., WODAK, A., PANDA, S., TYNDALL, M., TOUFIK, A., MATTICK, R. & AND THE REFERENCE GROUP TO THE UNITED NATIONS ON HIV AND INJECTING DRUG USE (2008) Global epidemiology of injecting drug use and HIV among people who inject drugs: a systematic review. *The Lancet*, 372.
- MCLAREN, J., SWIFT, W., DARKE, S. & ALLSOPP, S. (2008) Cannabis potency and contamination: A review of the literature. *Addiction*, 103, 1100-1109.
- MOORE, N. N. & BOSTWICK, J. M. (1999) Ketamine dependence in anesthesia providers. *Psychosomatics*, 40, 356-359.
- NATIONAL HEALTH AND MEDICAL RESEARCH COUNCIL (2001) *Australian Alcohol Guidelines: Health risks and benefits*, Canberra, Commonwealth of Australia.
- NICHOLSON, K. & BALSTER, R. (2001) GHB: A new and novel drug of abuse. *Drug and Alcohol Dependence*, 63, 1-22.
- OVENDON, C. & LOXLEY, W. (1996) Bingeing on psychostimulants in Australia: Do we know what it means (and does it matter)? *Addiction Research*, 4, 33-43.
- PETERS, A., DAVIES, T. & RICHARDSON, A. (1997) Increasing popularity of injection as the route of administration of amphetamine in Edinburgh. *Drug and Alcohol Dependence*, 48, 227-237.

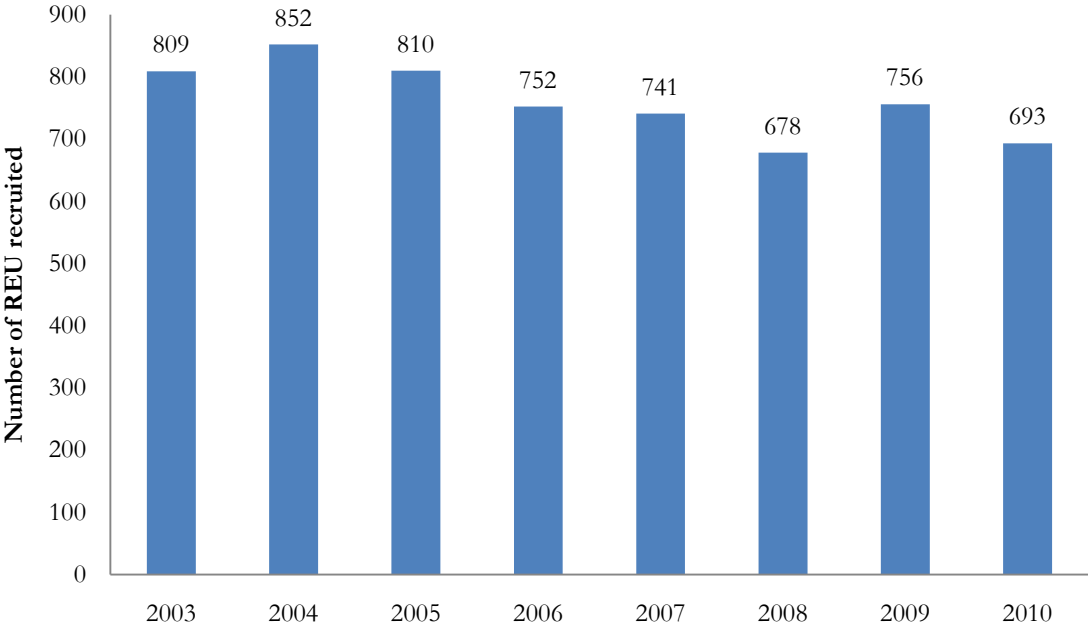
- PICKERING, R. P., GRANT, B. F., CHOU, S. P. & COMPTON, W. M. (2007) Are overweight, obesity, and extreme obesity associated with psychopathology? Results from the national epidemiologic survey on alcohol and related conditions. *Journal of Clinical Psychiatry* 68, 998-1009.
- RAJS, J., PETERSSON, A., THIBLIN, I., OLSSON-MORTLOCK, C., FREDRIKSSON, A. & EKSBORG, S. (2004) Nutritional status of deceased illicit drug addicts in Stockholm, Sweden-A longitudinal medicolegal study. *Journal of Forensic Sciences*, 49, 320-329.
- REINERT, D. F. & ALLEN, J. P. (2002) The Alcohol Use Disorders Identification Test (AUDIT): A review of the recent research. *Alcoholism: Clinical & Experimental Research*, 26, 272-279.
- RIESENHUBER, A., BOEHM, M., POSCH, M. & AUFRICHT, C. (2006) Diuretic potential of energy drinks. *Amino Acids*, 81-83.
- ROXBURGH, A. & BURNS, L. (in press-a) Drug-induced deaths in Australia, 2008. National Drug and Alcohol Research Centre, University of New South Wales.
- ROXBURGH, A. & BURNS, L. (in press-b) Drug-related hospital stays in Australia, 1993-2008. Sydney, National Drug and Alcohol Research Centre, University of New South Wales.
- SAUNDERS, J. B., AASLAND, O. G., BABOR, T. F., DE LA FUENTE, J. R. & GRANT, M. (1993) Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO collaborative project on early detection of persons with harmful alcohol consumption. *Addiction*, 88, 791-804.
- SIEGEL, S. & CASTELLAN, N. J. (1988) *Nonparametric Statistics for the Behavioural Sciences*, Singapore, McGraw-Hill.
- SOLOWIJ, N., HALL, W. & LEE, N. (1992) Recreational MDMA use in Sydney: A profile of 'Ecstasy' users and their experiences with the drug. *British Journal of Addiction*, 87, 1161-1172.
- SOYKA, M., KRUPINSKI, G. & VOLKI, G. (1993) Phenomenology of ketamine induced psychosis. *Sucht*, 5, 327-331.
- STAFFORD, J., DEGENHARDT, L., BLACK, E., BRUNO, R., BUCKINGHAM, K., FETHERSTON, J., JENKINSON, R., KINNER, S., MOON, C. & WEEKLEY, J. (2005) Australian Drug Trends 2004: Findings from the Illicit Drug Reporting System (IDRS). Sydney, National Drug and Alcohol Research Centre, University of New South Wales.
- STATISTICS, A. B. O. (2006) National Health Survey: Summary of Results 2004-2005. Canberra, Australian Bureau of Statistics.
- TILSON, E. C., SANCHEZ, V., FORD, C. L., SMURZYNSKI, M., LEONE, P. A., FOX, K. K., IRWIN, K. & MILLER, W. C. (2004) Barriers to asymptomatic screening and other STD services for adolescents and young adults: focus group discussion. *BMC Public Health*, 4.
- TOPP, L., BREEN, C., KAYE, S. & DARKE, S. (2004) Adapting the Illicit Drug Reporting System (IDRS) methodology to examine the feasibility of monitoring trends in party drug markets. *Drug and Alcohol Dependence*, 73, 189-197.
- TOPP, L. & DARKE, S. (2001) NSW Party Drug Trends 2000: Findings of the Illicit Drug Reporting System Party Drugs Module. Sydney, National Drug and Alcohol Research Centre, University of New South Wales.
- TOPP, L., HANDO, J., DEGENHARDT, L., DILLON, P., ROCHE, A. & SOLOWIJ, N. (1998) Ecstasy Use in Australia. Sydney, National Drug and Alcohol Research Centre, University of New South Wales.

- TOPP, L., HANDO, J., DILLON, P., ROCHE, A. & SOLOWIJ, N. (2000) Ecstasy use in Australia: Patterns of use and associated harms. *Drug and Alcohol Dependence*, 55, 105-115.
- WANNAMETHEE, S. G., SHAPER, A. G. & WHINCUP, P. H. (2005) Alcohol and adiposity: Effects of quantity and type of drink and time relation with meals, . *International Journal of Obesity*, 29, 1436-1444.
- WELLS, B. E., KELLY, B. C., GOLUB, S. A., GROV, C. & PARSONS, J. T. (2010) Patterns of Alcohol Consumption and Sexual Behavior among Young Adults in Nightclubs. *The American Journal of Drug and Alcohol Abuse*, 36, 39-45.
- WHITE, B., DAY, C., DEGENHARDT, L., KINNER, S., FRY, C., BRUNO, R. & JOHNSTON, J. (2006) Prevalence of injecting drug use and associated risk behaviour among regular ecstasy users in Australia. *Drug and Alcohol Dependence*, 83.
- WHITE, V. & HAYMAN, J. (2001) Australian Secondary school students' use of over-the-counter and illicit substances in 1999. . *Canberra, Commonwealth Department of Health and Aged Care*.
- ZIMLICHMAN, E., KOCHBA, I., MIMOUNI, F. B., SHOCHAT, T., GROTTTO, I., KREISS, Y. & MANDEL, D. (2005) Smoking habits and obesity in young adults. *Addiction*, 100, 1021-1025.

APPENDICES

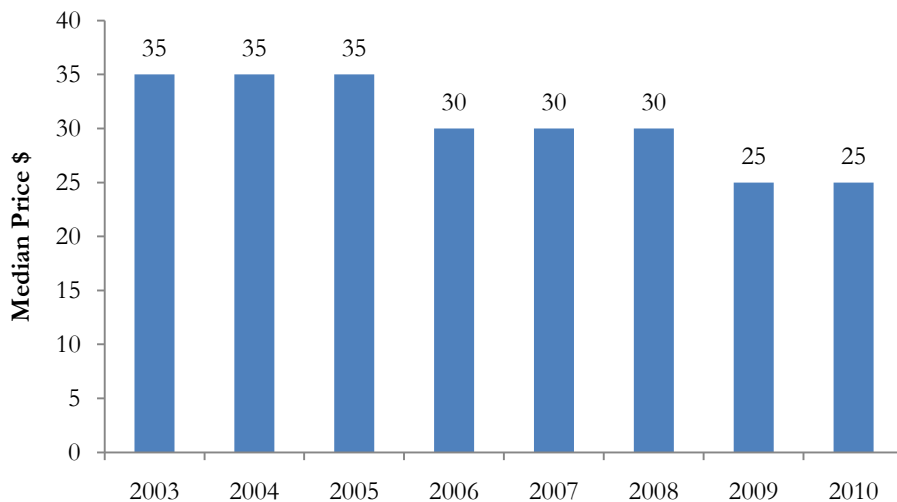
Appendix A: Recruitment of REU over time, 2003-2010

Figure A1: Recruitment of REU over time, 2003-2010



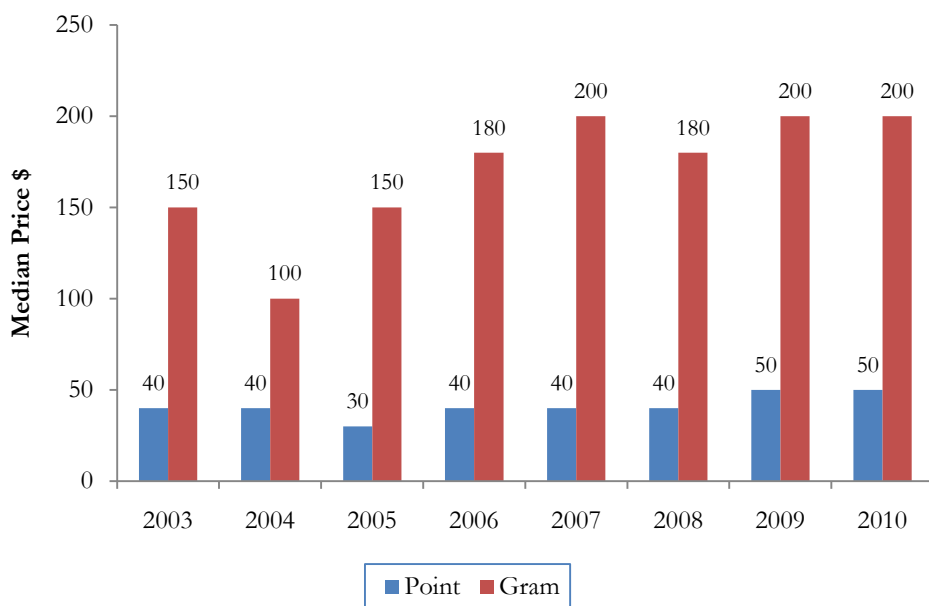
Appendix B: Price trends of ecstasy and related drugs, 2003-2010

Figure B1: Median price of an ecstasy pill, 2003-2010



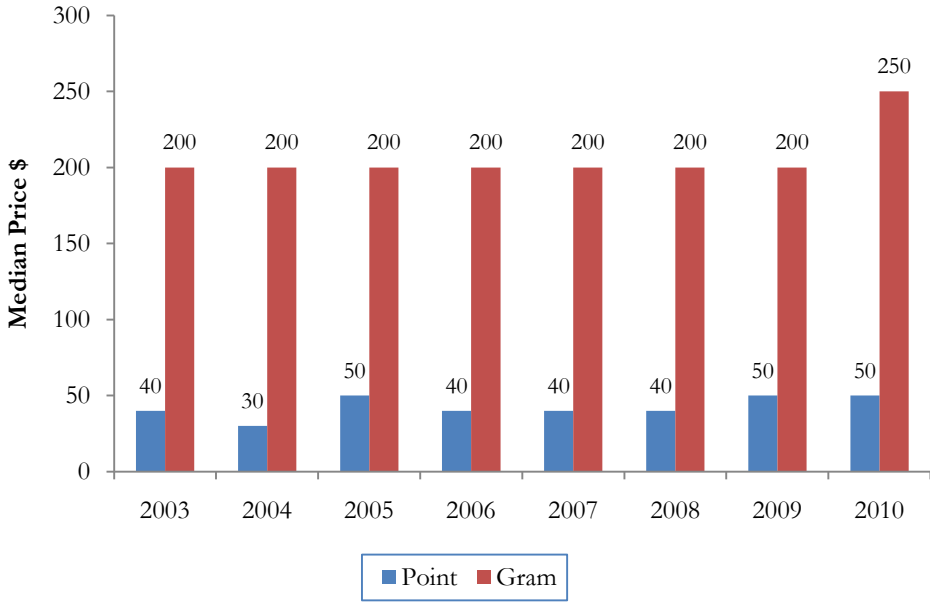
Source: REU participant interviews, 2003-2010

Figure B2: Median price of methamphetamine powder (speed), 2003-2010



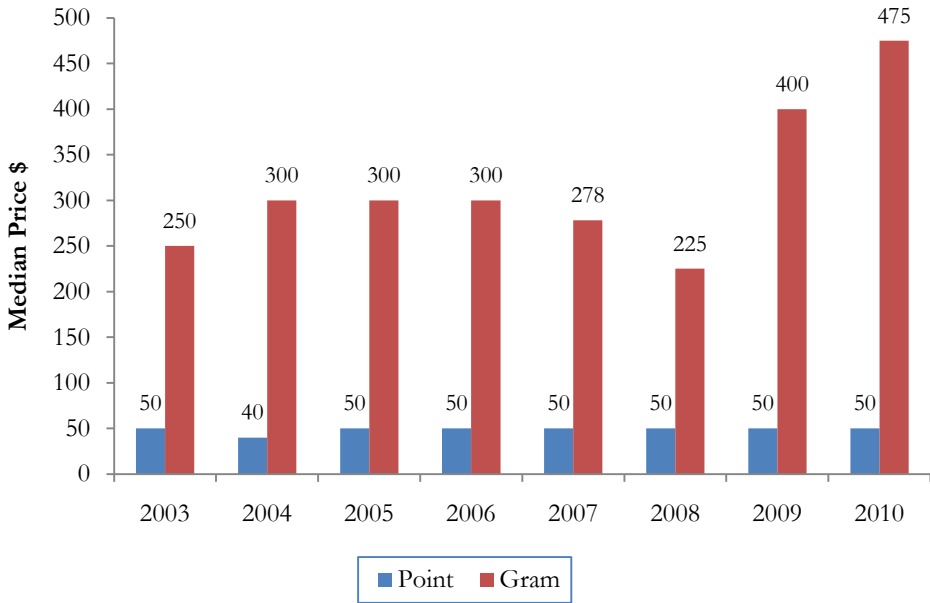
Source: REU participant interviews, 2003-2010

Figure B3: Median price of methamphetamine base, 2003-2010



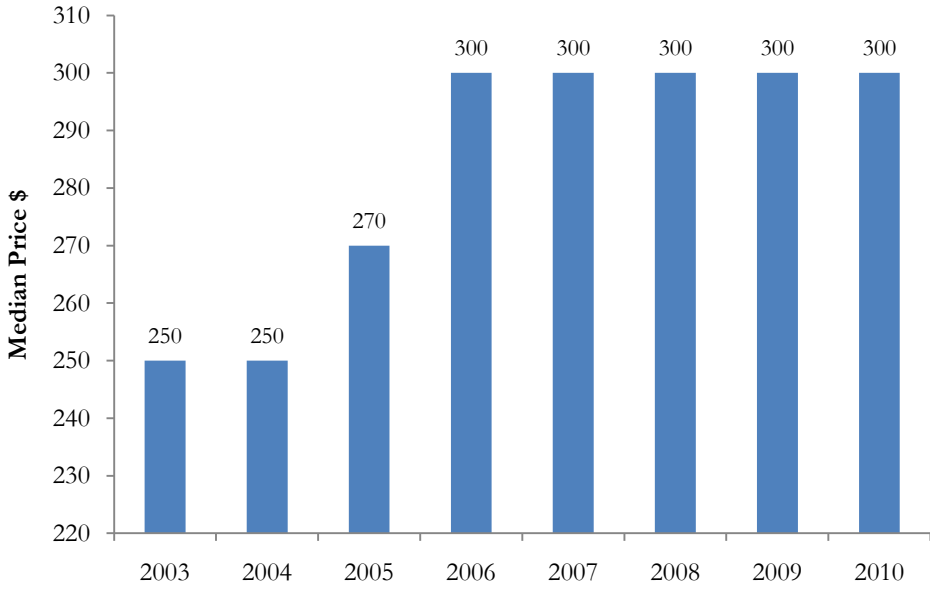
Source: REU participant interviews, 2003-2010

Figure B4: Median price of ice/crystal, 2003-2010



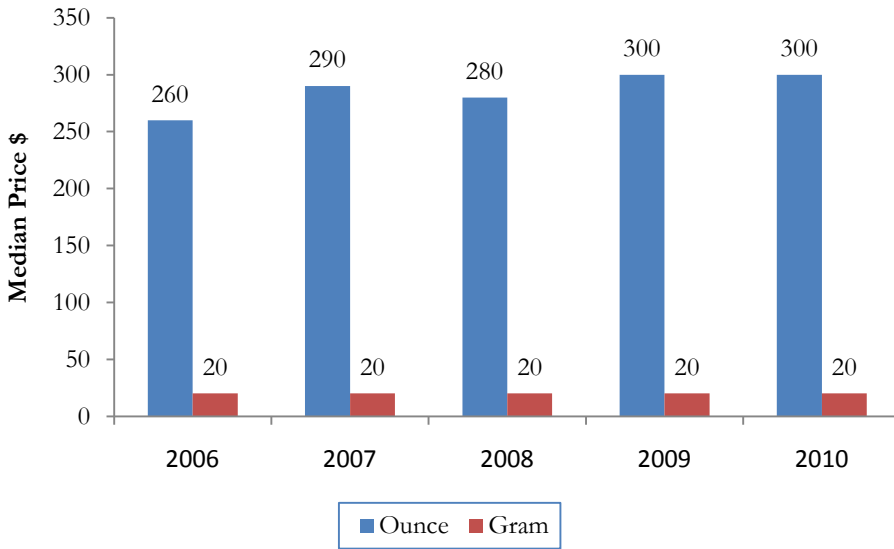
Source: REU participant interviews, 2003-2010

Figure B5: Median price of one gram of cocaine, 2003-2010



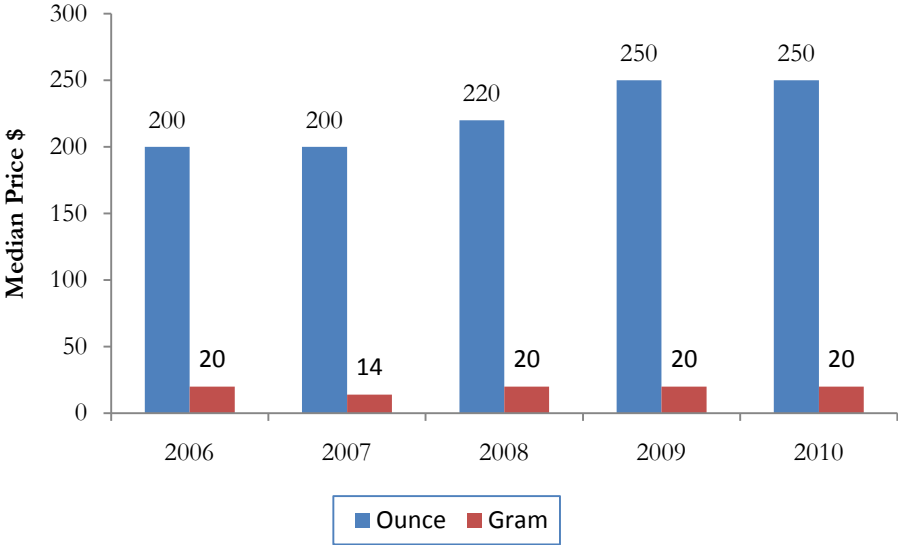
Source: REU participant interviews, 2003-2010

Figure B6: Median price of hydroponic cannabis, 2006-2010



Source: REU participant interviews, 2006-2010

Figure B7: Median price of bush cannabis, 2006-2010



Source: REU participant interviews, 2006-2010