

new south wales

L. Scott and L. Burns

NSW TRENDS IN ECSTASY AND RELATED DRUG MARKETS 2009

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

Australian Drug Trends Series No. 47

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TRENDS IN ECSTASY AND
RELATED DRUG MARKETS
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Ecstasy and Related Drugs Reporting
System (EDRS)**

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National Drug and Alcohol Research Centre
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Australian Drug Trends Series No. 47

ISBN 978 0 7334 2848-7

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ACKNOWLEDGEMENTS

In 2009, the NSW Ecstasy and Related Drugs Reporting System (EDRS) was funded by the Australian Government Department of Health and Ageing (AGDH&A), and was coordinated by the National Drug and Alcohol Research Centre (NDARC). The NSW EDRS team would like to thank Ms Kerry Howard, Ms Kim McLachlan, Ms Jaime Reynolds, Ms Angela McNally and colleagues of the AGDH&A for their continued assistance with and support of the EDRS.

We are indebted to the 100 regular ecstasy users (REU) interviewed for the 2009 NSW EDRS for their open discussion of illicit and stigmatised activities. The detail in this report would not be possible without the information they provide. We would like to also thank the 19 key experts (KE) who agreed to be involved in the 2009 NSW EDRS. KE participate in 45 minute interviews and receive no compensation for their time and effort, and we gratefully acknowledge their expert input.

We thank Amanda Roxburgh for assistance with indicator data. Her tireless efforts each year in collecting indicator data, and her assistance in the analysis and interpretation of indicator data, are greatly appreciated. We thank Karina Sindicich for her assistance interviewing participants.

The EDRS depends on a large number of people who generously give their time and support to the project. In 2009 the EDRS relied upon many, including:

- Mr Christopher Bourke, Division of Analytical Laboratories, Institute of Clinical Pathology and Medical Research;
- Mr Tony Trimmingham and Ms Jennifer Chapman, Family Drug Support (FDS);
- Ms Katrina Burgess, Australian Institute of Health and Welfare (AIHW);
- Ms Shannon Maxwell, Alcohol and Drug Information Service (ADIS), St Vincent's Hospital;
- Mr Kieron McGlone, Ms Judith Burgess, Mr John Agland, Ms Lee Taylor and Mr Owen Westcott, NSW Department of Health; and
- Detective Superintendent, Nicholas Bingham, State Crime Command, NSW Police.

We also wish to thank the following agencies that provided indicator data for the 2009 NSW EDRS:

- Alcohol and Drug Information Service, St Vincent's Hospital;
- Australian Crime Commission (formerly the Australian Bureau of Criminal Intelligence);
- Australian Institute of Health and Welfare (AIHW);
- Family Drug Support;
- NSW Police Service;
- NSW Bureau of Crime Statistics and Research;
- NSW Department of Health;
- National Centre in HIV Epidemiology and Clinical Research; and

Finally, we are grateful to Paul McElwee from Turning Point Alcohol & Drug Centre in Victoria who created the database for the EDRS. His tireless efforts and capacity to respond to requests in a short timeframe were greatly appreciated.

ABBREVIATIONS

1,4-B	1,4-butanediol
2-CB	4-bromo-2,5-dimethoxyphenethylamine
2-CI	2,5-dimethoxy-4-iodophenethylamine
5-HTP	5-hydroxy-tryptophan
ABCI	Australian Bureau of Criminal Intelligence
ABS	Australian Bureau of Statistics
ACC	Australian Crime Commission
ACON	AIDS Council of NSW
ACPR	Australasian Centre for Policing Research
ADIS	Alcohol and Drug Information Service
AFP	Australian Federal Police
AGDH&A	Australian Government Department of Health and Ageing
A&TSI	Aboriginal and/or Torres Strait Islander
AIHW	Australian Institute of Health and Welfare
ATS	amphetamine type stimulant
AUDIT	Alcohol Use Disorders Identification Test
BBVI	blood-borne viral infections
BOCSAR	Bureau of Crime Statistics and Research
CNS	central nervous system
DASSA	Drug and Alcohol Services South Australia
DMS	dimethyl sulfone
DMT	dimethyl tryptamine
DOB	2,5-dimethoxy-4-bromoamphetamine
DOM	2,5-dimethoxy-4-methylamphetamine
DXM	dextromethorphan
EDRS	Ecstasy and Related Drug Reporting System
ERD	ecstasy and related drugs
FDS	Family Drug Support
GHB	gamma-hydroxy butyrate
GBL	gamma butyrolactone
GLBTQ	gay/lesbian/bisexual/transgender/queer
GP	general practitioner
HBV	hepatitis B virus
HCV	hepatitis C virus

HIV	human immunodeficiency virus
ICD-9-CM	International Statistical Classification of Disease and Related Problems – 9 th revision, clinical modification
ICD-10-AM	International Statistical Classification of Disease and Related problems – 10 th revision, Australian Modification
IDRS	Illicit Drug Reporting System
IDU	injecting drug user(s)
K10	Kessler Psychological Distress Scale
KE	key expert(s)
LSD	<i>d</i> -lysergic acid diethylamide
MDA	3,4-methylenedioxyamphetamine
MDEA	3,4-methylenedioxyethylamphetamine
MDMA	3,4-methylenedioxymethamphetamine
MDS DATS	Minimum Data Set for Drug and Alcohol Treatment Services
MSM	methylsulfonylmethane
NDARC	National Drug and Alcohol Research Centre
NDLERF	National Drug Law Enforcement Research Fund
NDSHS	National Drug Strategy Household Survey
NNDSS	National Notifiable Diseases Surveillance System
NSP	Needle and Syringe Program
NSW	New South Wales
P2P	phenyl-2-propanone
PDI	Party Drugs Initiative
PMA	para-methoxyamphetamine
PNS	peripheral nervous system
RSA	responsible service of alcohol
REU	regular ecstasy user(s)
SDS	Severity of Dependence Scale
SPSS	Statistical Package for the Social Sciences
STI	sexually transmitted infections
TMA	3,4,5-trimethoxyamphetamine

GLOSSARY

1,4-B	Acronym for 1,4-butanediol. It is a GHB precursor and substitute, which metabolises into GHB in the stomach
2-CB	Street term for 4-bromo-2,5-dimethoxyphenethylamine. It is a synthetic psychedelic of moderate duration
2-CI	Street term for 2,5-dimethoxy-4-iodophenethylamine. It is a short-acting synthetic psychedelic
Bump	A bump refers to a small amount of powder, typically measured and snorted from the end of a key, the corner of a plastic card or a 'bumper'
Bumper	A bumper is a small glass nasal inhaler, purchased from tobacconists, used to store and administer powdered substances such as ketamine
Cap	Capsule
Cocaine	A central nervous system stimulant, obtained from the cocoa plant. Cocaine hydrochloride, the salt, is the more common form used in Australia. The freebase form is called 'crack'; little or no crack is available or used in Australia
Crystal	Street term for crystal methamphetamine, a potent form of methamphetamine. Also known as 'ice'.
Daily use	Use occurring on each day in the past six months, based on a maximum of 180 days
Ecstasy	Street term for MDMA (3,4-methylenedioxymethamphetamine), which may contain a range of other substances. It is an hallucinogenic amphetamine
GBL	Acronym for gamma butyrolactone. It is a GHB precursor and substitute, which metabolises into GHB in the stomach
GHB	Acronym for gamma-hydroxy butyrate. It is a central nervous system depressant. Other known terms include 'GBH' and 'liquid ecstasy'; however, the latter is misleading as GHB is a depressant, not a stimulant
Ketamine	It is a dissociative psychedelic used as a veterinary and human anaesthetic
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: inject, smoke, snort, swallow and/or shaft/shelve.
LSD	Acronym for <i>d</i> -lysergic acid diethylamide. It is a powerful hallucinogen
MDA	Acronym for 3,4-methylenedioxyamphetamine. It is classed as a stimulant hallucinogen. It is closely related to MDMA (and is sometimes found in ecstasy tablets); however, its effects are said to be slightly more psychedelic
Mephedrone	Mephedrone (2-methylamino-1-p-tolylpropane-1-one), also known as 4-methylmethcathinone (4-MMC) or 4-methylephedrone, is a stimulant and entactogen drug of the phenethylamine, amphetamine, and cathinone chemical classes
Methamphetamine	An analogue of amphetamine, it is a central nervous system stimulant. The three main forms of methamphetamine in Australia are methamphetamine powder ('speed'), methamphetamine base ('base') and crystalline methamphetamine ('crystal', 'ice')
PMA	Acronym for para-methoxyamphetamine. It is an amphetamine-type drug with both stimulant and hallucinogenic properties
Point	0.1 gram
Recent injection	Injection (typically intravenous) in the last six months
Recent use	Use in the last six months via one or more of the following routes of administration: inject, smoke, snort, swallow and/or shaft/shelve

EXECUTIVE SUMMARY

The 2009 NSW Trends in Ecstasy and Related Drug Markets report represents the tenth year in which data has been collected in NSW on the markets for ecstasy and related drugs. The Ecstasy and Related Drugs Reporting System (EDRS; formerly the Party Drugs Initiative, or PDI) is the most comprehensive and detailed study of ecstasy and related drug markets in NSW. Using a similar methodology to the Illicit Drug Reporting System (IDRS), the EDRS monitors the price, purity and availability of 'ecstasy' (MDMA) and other related drugs such as methamphetamine, cocaine, GHB 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 ecstasy and other drugs. Regular ecstasy users are recruited as they are considered a sentinel group to detect illicit drug trends. The information from the REU is therefore not representative of ecstasy and other drug users in the general population, but is indicative of emerging trends that may warrant further monitoring.

The findings from each year not only provide a snapshot of the drug markets in NSW, but also help to provide an evidence base for policy decisions; inform harm reduction messages; and provide directions for further investigation when issues of concern are detected. Continued monitoring of the ecstasy and related drug markets in NSW 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.

Demographic characteristics of regular ecstasy users

Regular ecstasy users, a population defined in this study by at least monthly use of tablets, powder or capsules sold as ecstasy, were predominantly young, with most participants aged in their early to mid-20s. From 2008 to 2009 there was a significant decline in the median age of participants interviewed from 25 to 21 years of age. Participants were predominantly male, born in Australia, most had completed the Higher School Certificate and many were either undertaking or had completed tertiary education. Participants all had stable living arrangements and few reported previous contact with the criminal justice system. The majority of participants identified as heterosexual and this proportion was significantly higher than that from 2008. The lower median age and higher proportion heterosexual are likely due to subtle changes in recruitment rather than reflecting changes in the demographics of the wider REU community. These changes should be kept in mind when interpreting some of the other changes noted from 2008 to 2009.

Key expert reports regarding demographic characteristics of this group were in keeping with participant data. REU were reported to be aged in their early-to-mid-20s, well educated and largely employed or studying. KE generally agreed that demographic characteristics of REU varied according to several factors including (but not limited to) type of venue/event, music preference, sexual preference and other drug use.

Patterns of drug use among REU

As in previous years, participants were extensive polydrug users – however, not necessarily frequent users of these drugs. Participants reported having used a median of 11 different drugs in their lifetimes and 7 in the six months preceding the interview. In 2009, fewer participants reported the recent use of crystal, GHB or MDA compared with 2008. Higher proportions had recently used tobacco, LSD and mushrooms. There was a decline in the proportion reporting that they had ever injected a drug compared with both 2008 and 2007.

One-third of the sample had recently binged on ecstasy and/or related drugs. This figure was comparable to that reported in 2008. The drugs most commonly used in the last binge episode were ecstasy, alcohol and cannabis.

Key experts opined that many REU were beginning to experiment with other drugs such as ketamine and hallucinogens (including LSD, mushrooms and 2CB/2CI) because they had become frustrated at the low purity of ecstasy in Sydney.

Ecstasy

Ecstasy was the drug of choice for just under half of those interviewed. Participants had first used ecstasy in their late teens and moved to regular (i.e. monthly) use within one or two years. REU had used ecstasy on approximately a fortnightly basis over the preceding six months; however, this was quite variable. Participants used a median of 2.5 tablets in typical episodes of use and 5 tablets during the ‘heaviest’ occasion of use. Swallowing was the most common route of administration; however, more than half the sample reported recently snorting the drug.

It is common for REU to use other drugs both with ecstasy and to come down from it. Those most commonly used in both cases are alcohol, tobacco and cannabis. Several participants also reported having last used cocaine with ecstasy. Ecstasy continues to be most frequently used in nightclubs; however, it is also commonly used in private settings and at festivals and other live music events.

The prevalence of lifetime use of ecstasy has increased in the general Australian population since 2001; however, the proportion of the population reporting recent usage has remained relatively stable. The reported recent use of ecstasy among the gay men interviewed for the gay community periodic survey¹ has remained stable from 2008 to 2009.

Key experts generally agreed that ecstasy continues to be widely used and available among all subgroups of REU (i.e. clubbers, ravers, festival goers, GLBTQ REU). However, several KEs noted that many members of the GLBTQ community had become “bored” with ecstasy, and while they would continue to use it, they were in the process of trying new drugs (such as ketamine, crystal and mephedrone) to find another alternative “to get into”.

¹ The Sydney Gay Community Periodic Survey is a biannual cross-sectional survey of gay and homosexually active men. The first survey was conducted in February 1996 and the most recently published survey was completed in February 2008. The major aim of the survey is to provide data on levels of sexual, STI and HIV related practices, though the survey also asks about drug use in the past six months.

Price, purity and availability of ecstasy

The median price of ecstasy tablets (pills) was reported to be \$20. This figure was \$10 less than that reported in 2008. This is the first time the price of a pill has changed since 2005. It is common for REU to purchase ecstasy for others, at the same time that they purchase it for themselves, and it is usually purchased from a friend.

Both participant and key expert reports of ecstasy purity indicate that it is currently low and has decreased over the last 6-12 months. The median purity of ecstasy seizures analysed by the AFP and by NSW Police appears to have declined from 2006/07 to 2007/08; however, data for 2008/09 was unavailable at the time of printing.

Ecstasy continues to be easily accessible to REU, with the majority of respondents indicating that it is currently 'easy' or 'very easy' to obtain. This was supported by KE comments.

Methamphetamine

The 2009 EDRS distinguished between three different forms of methamphetamine: methamphetamine powder ('speed'), methamphetamine base ('base') and crystal methamphetamine ('crystal'). Speed was the form of methamphetamine most commonly used among REU, although recent use of speed has been gradually declining across time.

Recent base use remained relatively stable from last year at approximately one-fifth of respondents. Lifetime and recent use of crystal were both significantly lower in 2009 than 2008.

Speed and base were both used infrequently by REU (i.e. less than monthly); however, crystal had been used on a median of 12 days (by recent users) over the preceding six months (i.e. fortnightly). Recent users reported using a median of 1 gram of speed, 2 points of base or 1 point of crystal in a typical episode of use of these drugs.

Speed was purchased at approximately \$47.50 a gram; base at \$30 a point or \$150 a gram; and crystal at \$65 a point. These prices have remained relatively stable from 2008 to 2009. Speed was reportedly currently of medium purity and had remained stable over the preceding six months. While base was reported to be currently of medium to high purity, there was uncertainty regarding changes in purity over the preceding six months. There were mixed reports regarding the current purity of crystal; however, most who commented, both among users and key experts, agreed that it had recently declined.

In the first half of 2008, the median purity of methamphetamine seizures analysed by NSW Police was low (i.e. <15%) and the number of seizures was low compared with the end of 2007. Seizures analysed by the AFP were generally of higher and fluctuating purity; however, none were recorded for the first half of 2008.

While speed and base were generally reported to be easy or very easy to obtain, reports on the current availability of crystal were mixed. Users noted that the availability of speed had remained stable and that crystal had become more difficult to access; however, reports on changes in base availability were mixed.

All forms of methamphetamine were commonly used in private settings such as the participants' own homes, friends' homes or private parties. However, consistent with KE reports, speed was also often used in public venues such as live music events and

pubs/bars. Speed and base were most commonly purchased from friends, while crystal was most commonly purchased from dealers.

Methamphetamine use appears to have declined in the general Australian population. Similarly, while speed use has remained stable, crystal use has declined among gay men interviewed for the Sydney gay community periodic survey.

Key experts generally agreed that there was a negative stigma associated with the use of crystal. It was also noted that mental health and behavioural problems tended to occur among REU who used methamphetamines, even if they did so infrequently.

Cocaine

In 2009, most REU interviewed had used cocaine (85%) and approximately two-thirds had used it recently. The proportions of REU reporting the lifetime or recent use of cocaine have remained stable from 2008 to 2009. Cocaine continued to be used relatively infrequently (i.e. on a median of 3 days over the preceding six months). Recent users of cocaine had used a median of 0.5 grams in a typical occasion of use and a median of 1 gram in the heaviest occasion of use (over the preceding six months). Snorting continued to be the main route of administration for cocaine. Cocaine was most commonly used in private, social settings such as friends' homes, participants' own homes and private parties.

The price of cocaine remained stable at \$300 for 1 gram, consistent with KE reports. User reports of cocaine purity indicate that it was of medium to high purity at the time of interviewing and had remained stable in the six months preceding this. Toxicological data from cocaine seizures for 2007/08 are relatively consistent with this as are KE reports. Cocaine was primarily purchased from friends in private locations such as a friend's house, the participant's own house or a private party.

Both user reports and KE reports of cocaine availability were inconsistent. There appears to be a generally declining trend in the proportions of REU reporting that cocaine was currently very easy to obtain and an increase in those reporting it was difficult to obtain. However, most REU who commented indicated the availability of cocaine had remained stable and one-quarter reported it had become 'easier' to obtain. Similarly, KE comments indicate that while there seems to be more interest in cocaine among REU, many were unsure whether there was indeed a greater availability of the drug.

Cocaine use among the general population in NSW appears to have remained relatively low and stable, while among gay men in Sydney there has been an increase in use from 2008 to 2009, consistent with KE reports of increasing cocaine use among the wider GLBTQ community.

Ketamine

In 2009, approximately half the sample had ever used ketamine and one-in-five had used it recently. These figures have been fluctuating over time. Recent users of ketamine had used it relatively infrequently (i.e. on a less than monthly basis). They reported using a median of 4 bumps² on a typical occasion of use and 4.5 on the heaviest occasion in the

² A bump refers to a small amount of powder, typically measured and snorted from the end of a key, the corner of a plastic card or a 'bumper'. A bumper is a small glass nasal inhaler, purchased from tobacconists, used to store and administer powdered substances such as ketamine.

preceding six months. These figures were both higher than those reported in 2008. Ketamine continues to be most commonly snorted by REU. Ketamine use has been low and stable in the general population of NSW, and, from 2004 to 2009, has declined among gay men in Sydney.

The price of ketamine appears to have remained stable at \$150 a gram. The purity of ketamine was reportedly medium to high and several REU indicated that this had decreased over the preceding six months³. Ketamine is generally difficult to obtain and both user reports and KE reports indicate that its availability is variable.

Key experts indicated that many experienced users of ecstasy were beginning to use ketamine as an alternative to ecstasy, following a large decline in the purity of ecstasy over the past few years.

GHB

Approximately one-quarter of participants in 2009 had ever used GHB; however, only six participants reported recent use of the drug. The number of REU who had recently used GHB was significantly lower in 2009 (6%) than in 2008 (24%). GHB was relatively infrequently used (i.e. a median of 4 days over the preceding six months). Recent users reported using a median of 7 mL on a typical occasion of use and 8 mL in the heaviest occasion of use over the preceding six months.

The median price of a 'fish' or vial of GHB was \$12 and \$7 for 1 mL. These figures are inconsistent with those reported in 2008 and also with KE estimates and should be interpreted with caution given the small numbers reporting. GHB was most commonly purchased from either known dealers or acquaintances in private locations. User reports of the purity of GHB were consistent with KE reports indicating that it was currently of medium to high purity. However, reports of changes in the purity of GHB over the preceding six months were inconsistent. REU reports indicate that GHB was currently difficult to access and had become more difficult over the preceding six months. However, KE reports indicated that GHB was still relatively available.

While the use of GHB has remained relatively low and stable among the general population of NSW, its use increased among gay men in Sydney from 2008 to 2009.

Key experts indicated that GHB tended to be used more commonly among REU in their late 20s and early 30s. This may partly account for the apparent reduction in the proportion of REU reporting recent use of GHB in 2009 given the significant reduction in median age from 2008.

³ Small numbers reporting – interpret with caution.

LSD

Almost two-thirds of the sample reported the lifetime use of LSD and almost two-fifths had used it recently. There was a significant increase in recent use of LSD from 2008 (18%) to 2009 (37%). Recent users of LSD had used it on a median of 2 days over the preceding six months. They reported using a median of 1 tab on both typical and heavy occasions of use. The frequency and quantity of use of LSD remained stable from 2008 to 2009. LSD was most commonly swallowed and used either outdoors or in public places.

The price per tab of LSD was \$20 in 2009, a \$5 increase from 2008. LSD was mainly purchased from friends in private settings. Recent users indicated that LSD was currently of 'high' purity and had remained stable over the preceding six months. There was little agreement regarding the current availability of LSD.

The proportions reporting recent LSD use among the general population in NSW and also among gay men in Sydney has remained low and stable.

Key experts reported that there had been more interest in and increased use of LSD among REU over the preceding 6-12 months. One KE suggested that this was partly due to it being cheap and partly that it was not detectable by drug detection dogs.

Cannabis

Almost all REU interviewed in 2009 had ever used cannabis and four-fifths had done so recently. While the proportion of REU reporting lifetime use of cannabis has been high and relatively stable across time, there was an increase in the proportion reporting recent use from 71% in 2008 to 83% in 2009. Cannabis had been used on a median of 25.5 days over the preceding six months. All recent users had smoked cannabis; smoking a median of 4 cones or 1 joint on their last occasion of use.

The median price per gram of hydro was equal to that of bush, \$20; however, the price differed in larger quantities where hydro was reported to cost \$295 per ounce and bush \$200 per ounce. Both hydro and bush cannabis were primarily purchased from either friends or known dealers in private locations. Hydro was reported to be of high potency while bush was of medium potency. The potency of bush was reported to be stable; however, there were inconsistent reports regarding changes in the potency of hydro over the preceding six months. Hydro was reportedly very easy to access and appears to have remained so over the preceding six months. There were mixed reports about the availability of bush; however, the largest proportion reported that it was difficult to access in Sydney. The availability of hydro was reportedly stable. The use of cannabis in the general population of NSW and also among the gay male community in Sydney has been in decline.

Few KE commented on cannabis; however, one noted that cannabis use is very widespread among REU. Law enforcement KE indicated that the number of plants per seizure had increased for hydroponic cultivations and that there had been an increase in the importation of cannabis seeds from overseas.

Patterns of other drug use

Every REU interviewed reported the lifetime and recent use of alcohol. Two-thirds of the sample had consumed alcohol on their last occasion of use of ecstasy. Several KE commented on alcohol, indicating that it is a major drug of concern. They noted, in particular, issues surrounding a) the concomitant use of alcohol and illicit drugs and b) alcohol-related aggression.

The majority of REU reported both lifetime (95%) and recent (84%) use of tobacco.

Approximately half of the sample had ever used benzodiazepines and one-quarter had used them recently. Participants more commonly reported using illicitly obtained benzodiazepines rather than licitly obtained ones. KE noted it was difficult for REU to gain prescriptions for benzodiazepines and so purchased them from dealers instead.

One-fifth of REU had ever used antidepressants and one-tenth had done so recently. Those most frequently reported were licitly obtained antidepressants, commonly used on a daily basis.

Three-quarters of the sample had ever used amyl nitrite and almost two-fifths had done so recently. Over one-quarter had ever used nitrous oxide and five participants had used it recently. Use of inhalants continued to be infrequent, with amyl nitrite used more commonly than nitrous oxide.

Use of opiates continued to be low with one in ten having ever used heroin and three participants having used it recently. Small proportions reported the lifetime and recent use of methadone and buprenorphine.

Half of REU interviewed had ever used mushrooms and one-fifth had done so recently. The recent use of mushrooms was significantly higher in 2009 than 2008.

Half the sample had ever used pharmaceutical stimulants and over one in ten had done so recently. Illicitly obtained pharmaceutical stimulants were used by a greater proportion of REU than licitly obtained pharmaceutical stimulants.

While over one in ten had ever used MDA, only two participants had done so recently. The 'other drugs' most commonly reported were 2CB and DMT.

A few key experts noted an increased use of prescription drugs such as valium among REU. It was noted that these were likely purchased from dealers since it was reportedly difficult to get a prescription for these types of drugs from a GP.

Drug information-seeking behaviour

Approximately one-third of REU interviewed in 2009 reported 'never' attempting to find out the content or purity of ecstasy tablets. Among those who did, the most common sources of information regarding the content and purity of ecstasy were friends who had already taken the drug, dealers and websites. More than 80% of participants reported having purchased ecstasy which turned out to have a different content or purity than expected. The majority of participants (85%) suspected they had consumed ecstasy which contained substances other than MDMA; those most commonly reported were methamphetamines, ketamine and hallucinogens.

Health-related harms associated with ecstasy and related drug use

Approximately one-fifth of participants had ever experienced a stimulant overdose. Among those who had overdosed within the past year, ecstasy was the drug to which the last overdose was most commonly attributed. More than two-fifths of participants had ever experienced a depressant overdose. Among those who had overdosed within the past year, alcohol was the drug to which the last overdose was most commonly attributed.

It would appear that the number of suspected drug-related deaths where ecstasy was detected post-mortem has remained low and stable and likewise for ketamine and GHB. Conversely, they appear to have been in decline for illicit amphetamines.

Over one-quarter of REU interviewed accessed health services in relation to their drug use. This figure has remained relatively stable across time. GPs were the service most commonly accessed, followed by first aid services and drug and alcohol workers. The drugs most commonly noted as the problem drug were cannabis, alcohol, ecstasy and tobacco. The issues most frequently addressed were psychological issues (such as depression, anxiety and panic) and issues surrounding dependence or addiction.

Almost one-in-three reported recurring problems with family, friends or people at work or school as a result of their use of drugs. Approximately half the sample repeatedly found themselves in at-risk situations when they were under the influence of a drug. More than half the sample reported that their drug use had recurrently interfered with their responsibilities at home, work or school. Few participants reported recurring legal problems due to their drug use. The drugs most commonly attributed as causing these problems were ecstasy, alcohol and cannabis.

Almost one-third of the REU interviewed reported experiencing a mental health problem over the six months prior to the interview; however, only two-fifths of these participants sought help from a health professional. Depression and anxiety were those most commonly reported, followed by panic and paranoia.

The physical health problems most commonly reported included skin problems, vision problems, hay fever, back/neck pain/problems and sinus or sinus allergies.

Overall, REU experience a greater level of psychological distress than the general Australian population. Further, it appears that from 2006 onward, there have been fewer REU assessed to be experiencing 'low/no distress' according to the 10-item Kessler Psychological Distress Scale. This implies that across time there has been a greater number of participants experiencing some degree of psychological distress.

REU levels of personal wellbeing appear to fall slightly below the national average. This is consistent across almost all seven measures of subjective wellbeing (standard of living, health, achieving, personal relationships, community connectedness and future security but not safety).

Several KE mentioned concern regarding the use of energy drinks at festivals. One KE also noted that, at some festivals, energy drinks were easier to access than water. This could be problematic and may be, in part, contributing to the higher number of anxiety-related presentations at these events.

Risk behaviour

Approximately one-in-ten participants in 2009 had ever injected a drug and six participants had done so recently. The median numbers of drug types ever and recently injected were both 2. The median age of initiation to injecting was 19 years. The drugs last injected were base, crystal and heroin. No recent injectors had used a needle after someone else over the preceding six months; however, two had shared equipment (including spoons and filters) with others.

Eight in ten REU reported having had a regular sexual partner during the six months preceding the interview and two-thirds reported having had at least one casual sexual partner during this time. The use of protective barriers was reduced in both cases when the participant was under the influence of alcohol or other drugs.

Three-quarters of REU interviewed had driven a car in the last six months; 40% had done so over the legal blood alcohol limit and 68% had done so after consuming an illicit drug (most commonly cannabis or ecstasy).

Four in five participants had consumed energy drinks mixed with alcohol over the six months preceding the interview. Approximately half the sample had consumed energy drinks within the same episode as using ecstasy, most commonly either before or while using the drug.

Men consumed alcohol at high risk levels approximately once weekly and women approximately once a fortnight. Men consumed significantly more alcohol per drinking session than women.

Verbal aggression was the form of aggression most common among REU as measured by the Buss-Perry Aggression Questionnaire-Short Form (BPAQ-SF). Women reported significantly higher levels of anger than men.

Two-fifths of the sample had gambled in the month prior to the interview on a median of 2 occasions. They had spent a median of \$10 on the last occasion. Only 1% of the sample was identified as a problem gambler using the PGSI.

Criminal activity

Approximately one-third of REU interviewed in 2009 reported having recently committed a crime. The types of crime most commonly committed were drug dealing and property crime.

Two-fifths of participants in 2009 reported noticing an increase in police activity toward drug users over the six months prior to the interview. While the majority of participants reported that changes in police activity had not made it more difficult for them to score, this proportion was significantly lower than that reported in 2008.

Over time, there appears to have been an increase in the number of arrests for the possession/use of ecstasy, cocaine and cannabis and a decrease for amphetamines. The number of clandestine methamphetamine and MDMA laboratories detected in NSW appears to have remained stable, with minor fluctuations, since 2002/03.

Four-fifths of participants reported that at least half of their friends had used ecstasy over the six month prior to the interview. Several participants reported recent experimentation with hallucinogens (such as LSD, mushrooms and 2CB/2CI), ketamine, and GHB among their social group.

More than nine in ten participants had seen drug detection dogs in the preceding six months. Three-quarters of these had seen the dogs when they were in the possession of

drugs; however, only five participants reported being searched by police as a result of a positive notification from a drug detection dog.

Implications

The aims of the EDRS each year are to identify emerging trends in the demographic characteristics and drug use of REU, as well as to monitor ERD markets and to investigate the incidence of ecstasy-related harms. The implications arising from investigations in each of these areas are discussed below.

Demographics

In 2009 the largest changes in demographics were the decrease in median age from 25 in 2008 to 21 in 2009 and the increase in the proportion that identified as heterosexual from 63% in 2008 to 91% in 2009. Over the past few years, there have been several user comments and KE reports that ecstasy is being used among younger people each year. This change in median age may be partly reflecting this trend. However, it is also possible that slight changes in participant recruitment (including not directly advertising in GLBTQ-specific media; and attracting a different social network through snowballing) may have affected both of these variables. Thus, although they may reflect some changes in the demographics of REU as a group, these changes more likely reflect minor variations in participant recruitment methods.

Drug use and market trends

This year there has been a very consistent conclusion, supported by multiple data sources, that the price and purity of ecstasy have declined recently and that regular users of ecstasy have begun to experiment with new drugs. In particular, both KE and user reports note an increasing use of hallucinogens among REU in NSW, with LSD and mushrooms being most commonly reported. In addition, 2CB/2CI (a mild hallucinogen) was among the more commonly reported 'other drugs'. There are multiple implications which flow from this including a) questions surrounding the purity of ecstasy; b) risks associated with increasing experimentation; and c) market reactions to falling purity and price of Ecstasy.

a) The changing purity of Ecstasy: An important question to ask is whether ecstasy pills now simply contain less MDMA than in the past, or whether they now contain other substances *instead of* MDMA. Toxicological data indicates that most tablets sold as ecstasy contain MDMA, albeit in low doses. However, there has been an increasing number of tablets which contain active ingredients other than MDMA such as BZP and other piperazines. KE and user reports indicate that REU infrequently attempt to gather information about the content or purity of ecstasy before taking it. Even if they do so, this mainly involves asking friends or dealers rather than using testing kits or websites. Furthermore, health-related key experts have noted that those who present with acute ecstasy-related problems have generally taken pills of a different strength or content than expected. These data together lead to the first implication: that ecstasy of increasingly varying content is being supplied to users who are relatively uninformed regarding the content of the drugs they use. This can lead to health risks, with REU occasionally becoming unwell and requiring acute medical attention. It will be imperative to continue toxicological analyses of ecstasy seizures and to disseminate information about the more

commonly found active constituents. It will also be important to encourage REU to seek further information about the drugs they intend to use and to facilitate the use of multiple knowledge sources. The aim with both of these strategies is to reduce the health risks associated with using unexpected substances.

b) Increasing experimentation: Unfortunately, it is not only unwitting polydrug users who require assistance. Health KE have noted an increasing number of presentations by people who are experimenting with new drugs. It has been noted, by several KE and users alike, that the fall in ecstasy purity has encouraged users to seek out other drugs since they are becoming less willing to spend money on a product they view as ineffective or faulty. Correspondingly, there have been increases noted in the recent use of other drugs, particularly hallucinogens, ketamine and cannabis. Some KE have also suggested that LSD and GHB are seen as good alternatives to ecstasy since they cannot be detected by drug detection dogs and people feel more secure carrying them into festivals.

In light of the increasing experimentation noted in 2009, the second implication is that: there may be an increasing incidence of harm associated with ERD use as novice/inexperienced users try new, poorly understood drugs. It may therefore be useful for education campaigns to focus on the risks associated with polydrug use and, again, about the importance of gathering accurate information about different drugs and about drugs which participants may be intending to try, before using them. There are also legal implications since there appears to be a growing market for ‘designer drugs’ (such as ‘mephedrone’). Policy makers and law enforcement personnel will need to be able to make appropriate and timely decisions regarding the legal status of various chemicals and plants.

c) Market reactions to changing price and purity of Ecstasy: The fall in the purity of ecstasy appears to have been associated with a fall in price over the last 6-12 months. It is important to consider the possible effect this may have on the availability of other drugs. Several KE and users noted that the use of drugs such as LSD, mescaline, ketamine and other less common drugs (e.g. 2CB or DMT) by REU in Sydney was very much associated with their availability. It is possible that increasing market interest in these drugs may encourage dealers to put more resources into making them available for users to buy. It is commonly understood that when new drugs arrive ‘onto the scene’ it takes some time for users and health workers to identify the risks associated with their use and to disseminate messages regarding harm reduction practices. The implications of new drugs becoming available and more commonly used among REU are great - both for health care providers and law enforcement personnel. Thus, it will be particularly pertinent to maintain the focus on monitoring market trends to identify emerging risky behaviours quickly and to aid in reducing harms and the associated burden on the health care system.

Of course, this is highly speculative. It is important to remember that there are many factors which impact on drug availability (including whether they are locally produced or imported, changes in both national and international legislation, ease of production etc.) and future market directions are difficult to predict. Nonetheless, there are increasing

signs that new drugs and drug use patterns may emerge and it will be important to stay abreast of these changes.

Harms

In 2009, participants were asked the main reasons they used ecstasy. Participants' responses generally focused on the high, the energy and the positive drug effects such as enhanced music appreciation, and empathy with others commonly experienced by ecstasy users. It is also interesting to note, however, the large proportions of participants who reported experiencing repeated problems with regard to their social life (29%), their exposure to risky situations (47%) and meeting their daily responsibilities (54%). From this alone, it is safe to say that at least 1 in 2 REU experiences repeated problems in at least one area of their life which they attribute to their use of drugs. Furthermore, 28% of participants reported a recent mental health problem, slightly higher than the age matched general population estimate of approximately 25-26%. Thus, while the decision to use ecstasy among REU may be driven by the desire to achieve a pleasurable emotional and physical state (i.e. rather than avoidance of a negative emotional or physical state), it is common for REU to experience ongoing mental health and lifestyle consequences associated with it.

Many REU may not consider the link, if any, between ongoing lifestyle or emotional problems and their use of drugs. Furthermore, it may be that these negative consequences of drug use are not commonly discussed in social circles, hampering the dissemination of experience and knowledge regarding which problems may arise and how best one can deal with them. The dissemination of research, such as that contained herein, which attempts to quantitatively and/or qualitatively measure ecstasy-related problems, may be the first step in educating users about the prevalence and types of problems encountered by REU. Follow-up information regarding where and how to access help either for themselves or their friends will also be useful. Reinforcing the associations between drug use and harms and highlighting the prevalence of harms among their peers may assist in reducing drug use and/or encouraging REU to take harm reduction messages on board and effect behavioural change for themselves and their friends.

Furthermore, this information may encourage REU to seek help for problems they experience. In 2009, only 27% of REU had accessed a health service in the preceding six months, despite the relatively large numbers reporting at least one ongoing problem associated with their drug use. In most cases, the onus fell on a GP to provide information and advice regarding drug-related problems. Considering that REU are generally a well socially-integrated group, there appears to be wide scope to direct them toward alternative, specialised services. These services may include telephone or internet counseling, mental health professionals and drug and alcohol services. This would reduce the burden of care currently falling on GPs and expose this group to more directed assistance. It may also encourage other REU to recognise drug-related problems and seek help for these issues.

Risk behaviours

A new area of investigation in 2009 was that surrounding the use of energy drinks among REU. Several KE reported some concern at the use of energy drinks in conjunction with illicit drugs, especially CNS stimulants such as ecstasy. The vast majority (80%) of REU had consumed energy drinks with alcohol over the preceding six months and approximately half had consumed energy drinks either before or with ecstasy. Furthermore, approximately one-quarter of the whole sample had consumed energy drinks mixed with alcohol and taken ecstasy within the same episode.

Little is known about the physiological and neurological impacts associated with mixing energy drinks, alcohol and illicit drugs. While there did not appear to be a higher incidence of heart or circulatory problems among REU than the general population, there may be more long-term health problems associated with the combined use of CNS stimulants. These problems may affect many systems in the body including the circulatory system, the musculo-skeletal system and the nervous system. There may also be mental health problems associated with the combined use of these drugs and energy drinks. There did not appear to be elevated levels of physical health problems among the REU interviewed; however, systematically higher rates of health problems in these areas may not become evident until REU reach their fifth or sixth decades. More research into the combined effects of energy drinks, alcohol and ecstasy is needed; along with further research into REU attitudes towards and practices surrounding the use of energy drinks. In addition, it may be necessary to consider policy changes regarding the legal quantity of caffeine permissible in these beverages and/or whether they should be permitted to be sold in certain venues or at certain events.

Another new area of investigation in 2009 was that of trait aggression among REU. It was found that verbal aggression was the most common form of aggression among REU and that women exhibited higher levels of anger than men. A key expert working in public health research also noted that it was common for young polydrug users they had contact with to have recently 'had a fight with their mum' or 'yelled at their girlfriend' etc. It is important to highlight to REU the different elements of aggression (i.e. physical, verbal, anger and hostility), the ways that each are expressed and the possible impacts of each form of aggression on their lifestyles and relationships. For example, increased verbal aggression could lead to relationships breaking down and a reduction in social support, a crucial element of wellbeing. It is also important to educate health care providers and law enforcement personnel about the types of aggression which are most likely to be present among REU. This information could be used to inform training and behaviour management programs.

Alcohol use among REU has been recorded since the EDRS first began; however, in 2009, a new questionnaire was used, from which information about alcohol consumption at low risk, risky and high risk levels could be derived. It was found that men consumed alcohol at high risk levels on an approximately weekly basis and women more than fortnightly. It was also found that men consume an average of 9 and women 5 standard drinks per drinking session. These data, together, support key expert comments in 2008 and 2009 that REU consume very large amounts of alcohol. Throughout this report, alcohol has been associated (both in data from user interviews and also from key experts) with several areas of harm including depressant overdose, aggression, drug-related

lifestyle problems (particularly exposure to risky situations) and risky driving practices (such as driving over the legal blood alcohol limit).

There has been much government, law enforcement and media interest of late associated with alcohol consumption and its effects on health and behaviour. In particular, there have been multiple policies put into place to attempt to reduce the availability of and increase the cost of alcohol. It will be important to continue to monitor the use of alcohol among this group to ascertain the effectiveness of these interventions in reducing alcohol consumption and its related harms. This data further supports the notion that alcohol use within this group is problematic and that efforts to reduce risky alcohol consumption are warranted.

In 2009, the EDRS has continued to fulfill its role as a monitoring system capable of identifying trends and isolating implications which are relevant to multiple fields including health care provision, law enforcement and policy. It is evident that there is a continuing need to gather and disseminate information to REU, and to those who work with REU, to continue to reduce harms and increase knowledge about trends in and consequences of using ecstasy and related drugs.

1 INTRODUCTION

The Ecstasy and Related Drugs Reporting System (EDRS) is an ongoing monitoring system funded in 2009 by the Australian Government Department of Health and Ageing. It is run in a similar manner to the Illicit Drug Reporting System (IDRS), another ongoing data collection system funded by the Australian Government Department of Health and Ageing. The IDRS provides a coordinated approach to the monitoring of the markets of heroin, methamphetamine, cannabis and cocaine. It was identified that the IDRS did not capture the use of ecstasy and related drugs, as these were used infrequently among the target population of the IDRS – injecting drug users (IDU).

In June 2000, the National Drug Law Enforcement Research Fund (NDLERF), administered by the Australasian Centre for Policing Research (ACPR), funded a two-year, two state trial in New South Wales (NSW) and Queensland (QLD) of the feasibility of monitoring emerging trends in the markets for ecstasy and other related drugs using the extant IDRS methodology. In addition, Drug and Alcohol Services South Australia (DASSA) (formerly known as the Drug and Alcohol Services Council) agreed to provide funding for two years to allow the trial to proceed in this state. The results of this trial are presented elsewhere (See Topp, Breen et al. 2004). Regular ecstasy users (REU) were identified as an appropriate sentinel population to investigate ecstasy and related drug markets.

The term ‘ecstasy and related drugs’ includes any drug routinely used in the context of entertainment venues such as nightclubs or dance parties. ‘Ecstasy and related drugs’ refers to drugs such as ecstasy (3,4-methylenedioxymethamphetamine; MDMA), methamphetamine, LSD, ketamine, MDA (3,4-methylenedioxyamphetamine) and GHB (gamma-hydroxybutyrate).

As with the IDRS, the EDRS involves the collection and analysis of three data components: a) a survey of current regular ‘ecstasy’ users (REU), who represent a sentinel population of regular ecstasy users likely to be aware of trends in illicit drug markets; b) interviews with key experts (KE) – professionals and volunteers who work with, or have regular contact with, regular ecstasy users; and c) the analysis of secondary indicator data sources, such as existing databases of customs seizures, police drug-related arrests, and drug information telephone services. The three data sources are triangulated against each other in order to minimise the biases and weaknesses inherent in each one, ensuring that only valid emerging trends are documented.

The 2009 NSW Trends in Ecstasy and Related Drug Markets report provides information regarding ecstasy and related drug trends in Sydney.

1.1 Aims

The aims of the 2009 NSW EDRS were:

1. to describe the demographic characteristics of a sample of current ecstasy users interviewed in Sydney in 2009;
2. to examine the patterns of ecstasy and related drug use of this sample, including lifetime and recent use of over 20 licit and illicit drugs;
3. to document the current price, purity and availability of ecstasy and related drugs in Sydney, including locations and persons scored from and location of usual and also most recent use;
4. to examine participants' perceptions of the incidence and nature of ecstasy and other drug-related harms, including acute health-related harms, as well as financial, occupational, social and legal harms;
5. to identify emerging trends in the ecstasy and related drug market that may require further investigation; and
6. to compare key findings of this study with those reported in previous years (2000-2008).

2 METHODS

The 2009 EDRS used the methodology trialled in the feasibility study (Topp, Breen et al. 2004) to monitor trends in the markets for ecstasy and related drugs. The three main sources of information used to document trends were:

1. face-to-face interviews with current REU recruited in Sydney;
2. telephone interviews with KE who, through the nature of their work, have regular contact with users of ecstasy and/or other related drugs, or knowledge of the markets for these drugs in Sydney; and
3. indicator data sources such as the purity of seizures of ecstasy analysed in NSW, calls to drug support and information lines, and treatment services data.

These three data sources were triangulated to provide an indication of emerging trends in drug use and ecstasy and related drug markets.

2.1 Survey of regular ecstasy users (REU)

The sentinel population chosen to monitor trends in ecstasy and related drug markets consisted of people who engaged in the regular use of tablets sold as ‘ecstasy’. Although a range of drugs fall into the category ‘ecstasy and related drugs’, ecstasy is a drug that can be 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 2007 National Drug Strategy Household Survey (Australian Institute of Health and Welfare 2008).

A growing market for ecstasy (tablets sold purporting to contain 3,4-methylenedioxymethamphetamine; MDMA) has existed here for almost two decades. In contrast, other drugs that fall into the class of ‘ecstasy and related drugs’ have either declined in popularity since the appearance of ecstasy in this country (e.g. *d*-lysergic acid (LSD)); have fluctuated 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 has been suggested 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 (Topp and Darke 2001). Ecstasy may be the first illicit drug 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, LSD 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 – namely, ecstasy and related drug users/markets (Topp

and Darke 2001). In addition, as there has been an indication of increases in use and controversy regarding the neurotoxicity of ecstasy, more information on ecstasy users was considered beneficial. A sample of this population was successfully recruited and interviewed in the two-year feasibility trial (Topp, Breen et al. 2004), and was able to provide the data that were sought. Therefore, REU have been used again in 2009 to provide information on ecstasy and related drug markets.

2.1.1 Recruitment

A total of 100 REU residing in the Sydney metropolitan region were interviewed for the 2009 NSW EDRS. Participants were recruited through a purposive sampling strategy (Kerlinger 1986), which included advertisements in entertainment street press, gay and lesbian newspapers, interviewer contacts, and 'snowball' procedures (Biernacki and Waldorf 1981). '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 (Solowij, Hall et al. 1992; Ovendon and Loxley 1996; Boys, Lenton et al. 1997) and international studies (Dalgarno and Shewan 1996; Forsyth 1996; Peters, Davies et al. 1997). Initial contact was established through newspaper advertisements or interviewers' personal contacts. On completion of the interview, participants were requested to mention the study to friends who might be willing and able to participate.

2.1.2 Procedure

Participants contacted the researchers by telephone and were screened for eligibility. To meet entry criteria, they had to be at least 18 years of age (due to ethical constraints), have used ecstasy at least six times during the preceding six months, and have been a resident of the Sydney metropolitan region for the past 12 months. As in the IDRS, the focus was on the capital city, as new trends in illicit drug markets are more likely to emerge in urban rather than in remote or regional areas.

Participants were informed that all information provided was strictly confidential and anonymous, and that the study would involve a face-to-face interview that would take approximately 45 minutes. All respondents were volunteers who were reimbursed \$40 for their participation. Interviews took place in a location negotiated with participants, predominantly in coffee shops or at the National Drug and Alcohol Research Centre (NDARC), and were conducted by casual interviewers. 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, Hando et al. 1998; Topp, Hando et al. 2000), which incorporated items from a number of previous NDARC studies of users of ecstasy (Solowij, Hall et al. 1992) and powder amphetamine/methamphetamine (Hando and Hall 1993; Darke, Cohen et al. 1994; Hando, Topp et al. 1997). The interview schedule focused primarily on the preceding six months, and assessed demographic characteristics; patterns of ecstasy use and related drug use, including frequency and quantity of use and routes of administration; the price, purity and availability of a range of related drugs; perceived benefits and risks of ecstasy and related drug use; perceived acute health-related harms of ecstasy and related drugs; other drug-

related problems; self-reported criminal activity; and general trends in ecstasy and related drug markets, such as new drug types, new drug users and perceptions of police activity.

2.1.4 Data analysis

For continuous, normally distributed variables, *t*-tests were employed and means reported. Where continuous variables were skewed, medians⁴ are reported and the Mann-Whitney *U*-test, a non-parametric equivalent of the *t*-test (Siegel and Castellan 1988), was employed. Categorical variables were analysed using chi-square analysis. The Fisher's exact test statistic was reported for analyses where there was an expected value less than 5. Analyses were conducted using SPSS for Windows, Version 17.0 (SPSS 2008) and PASW Statistics Version 18 (PASW 2009).

The data collected in 2009 was compared with data collected from comparable samples of ecstasy users from 2003 onward, recruited as part of the PDI (2003-2005), and then the EDRS (2006-2008). As each of these samples was recruited using the same methods, meaningful comparisons can be made.

Differences between proportions were analysed using a spreadsheet which calculates Newcombe-Wilson hybrid score confidence intervals without a continuity correction, based on the chi-square distribution (Tandberg Version 1.49, available at: <http://www.cebm.net/index.aspx?o=1023>, see Newcombe 1998).

Differences between sexual behaviour when under the influence of drugs and when not were analysed using Friedman's test, a non-parametric analogue of the repeated measures ANOVA.

2.2 Survey of key experts (KE)

The eligibility criterion for KE participation in the EDRS is regular contact with a range of REU in the preceding six months. Regular contact was defined as average weekly contact and/or contact with 10 or more REU throughout the past six months. KE were recruited either through professional networks of project staff or recommendations, and in some instances through 'cold calls'.⁵

A total of 19 KE were interviewed in 2009, 8 were male and 11 were female. KE were administered a qualitative interview schedule derived from a previous study of cocaine use (Hando, Flaherty et al. 1997), with the focus dependent on the KEs area of expertise. In general, KE were interviewed on topics relating to patterns of illicit drug use among the REU they had had contact with in the past six months.

⁴ The median value lies in the middle of a series of data points arranged in order of size, i.e. it provides a more representative view of skewed data than the mean value.

⁵ People who were thought suitable to act as KE were contacted and invited to participate in a key expert (semi-structured) interview.

The KE interviewed for the 2009 EDRS came from a wide range of occupations which fell into three major categories: law enforcement, health care provision and industry workers (e.g. bar managers).

2.3 Other indicators

To complement and validate data collected from REU surveys and KE interviews, a range of secondary data sources were examined. These included health and law enforcement data. The pilot study for the IDRS recommended that such data should be available at least annually; include 50 or more cases; be brief; and be collected in the main study site (i.e. Sydney or NSW) (Hando, O'Brien et al. 1997).

Data sources that have been included in this report are:

- National Drug Strategy Household Survey;
- Australian Crime Commission – purity data from police seizures;
- Australian Institute of Health and Welfare – inpatient hospital admissions, Australian Psychological Distress (Kessler Psychological Distress Scale - K10);
- NSW Department of Health – drug-related visits to emergency departments, number of treatment episodes by drug type and gender, overdoses and toxicology data from suspected drug users in which drugs were detected;
- NSW Bureau of Crime Statistics and Research – drug possession/use and deal/traffic incidents;
- Alcohol and Drug Information Service – calls regarding problematic drug use;
- Family Drug Support – telephone support service for family members affected by problematic drug use and for users themselves;
- Sydney Gay Community Periodic Survey;
- Australian Unity Wellbeing Index – Australian Personal Wellbeing (PWI); and
- NSW Police Service – clandestine methamphetamine and MDMA laboratories.

3 OVERVIEW OF REGULAR ECSTASY USERS

3.1 Demographic characteristics of the REU sample

There were 100 REU sampled in the 2009 NSW EDRS. Table 1 presents the demographics of the sample across time. The mean age of the group was 22 years (median 21, range 18-45). The median age was significantly lower than that of the 2008 sample (25 in 2008 vs. 21 in 2009; $U=7,596$, $p<0.001$). Men were significantly older than women (medians 21 vs. 20, $U=871$, $p<0.05$). Almost two-thirds (64%) of the group were male. Four in five (82%) were born in Australia and 94% spoke English as their first language. No participants identified as being of Aboriginal and/or Torres Strait Islander (A&TSI) descent.

All participants reported having some long-term, stable accommodation with almost half (49%) living in a rented house/flat and 48% living either with their parents or in their family house. Three participants reported that they owned their house/flat.

The large majority of participants (82%) had completed high school and the mean number of years of school education was 12 years ($SD=0.7$; range 10-12). Some had gone on to complete either a trade or technical qualification (17%) or a university or college degree (16%) and many were currently studying, either full time (13%), or while also working (38%). One-fifth (21%) of the sample reported being currently employed on a full-time basis and 15% part-time while 13% were currently neither employed nor studying. Three participants had ever been in prison and four participants reported being currently in drug treatment.

The majority of the sample identified as heterosexual (91%), 5% as a gay male and small proportions as lesbian, bisexual or queer. There was a significantly larger proportion of participants identifying as heterosexual in 2009 compared with 2008 (63%) (95% CI -0.39, -0.17). Most (56%) were currently single, 38% had a partner and 5% were either married or in a de facto relationship.

In past years the demographic characteristics of regular ecstasy users recruited for the EDRS have varied little. However, in 2009 there were two important differences to note. Firstly, the mean age of participants fell significantly from 28 in 2008 to 22 in 2009, below 25 for the first time since 2000, when the study was first undertaken in NSW. Second, the proportion of participants who identify as heterosexual increased from 63% in 2008 to 91% in 2009. These changes may be due to a greater reliance on advertising within university settings and not advertising in mediums targeted specifically for the GLBTQ (Gay, Lesbian, Bisexual, Transsexual and Queer) community.

It is important to keep this in mind when interpreting some other changes in the data this year. For example, in 2009 there appeared to be a decline in the proportions of participants reporting that they were employed full-time or that they had obtained a tertiary qualification. However, this is likely due to the fact that this sample is younger than past samples and would not yet have had enough time to have completed tertiary study and gone into full-time work. In fact, half of participants reported that they were currently either full-time students or that they were both

studying and employed (13% and 38% respectively). This interpretation is supported by the fact that there has not been a large increase in the proportion reporting that they are currently unemployed.

Table 1: Demographic characteristics of REU sample, NSW 2003-2009

Variable	2003 (N=102)	2004 (N =104)	2005 (N =101)	2006 (N =100)	2007 (N =100)	2008 (N =100)	2009 (N=100)
Mean age (years)	26	26	26	28	27	28	22
Male (%)	63	60	67	68	64	68	64
English-speaking background (%)	96	95	95	97	95	98	94
A&TSI (%)	7	7	3	2	2	3	0
Heterosexual (%)	69	69	61	57	60	63	91
Mean number school years*	12	12*	12	11	12	12	12
Tertiary qualifications (%)	49	60	54	58	66	72	33
Employed full-time (%)	35	44	35	36	33	54	21
Full-time students (%)**	26	23	29	21	11	10	13
Unemployed (%)	22	8	15	16	17	11	13
Previous conviction(%)	3	3	6	6	4	2	3
Current drug treatment (%)	-	2	5	5	10	3	4

Source: EDRS regular ecstasy user interviews 2003-2009

*Question changed from “How many years of school did you complete?” to “What grade of school did you complete?”

** Question changed in 2007; number reported in 2007 refers to those in full-time education only

3.1.1 Key expert comments

Key experts described REU as a group which was, overall, young, employed and culturally diverse. REU were believed to be aged between 18⁶ and 35 on average, with the majority in their early-to-mid-20s. Most KE reported that ecstasy was used equally by men and women; however, several reported that slightly more men used ecstasy than women. There was also a higher reported tendency for young women to seek help for acute medical problems associated with the use of ecstasy than men. However, one KE noted that men were more commonly noted among the more severe drug and alcohol related medical presentations than women.

KE generally agreed that demographic characteristics of REU varied according to several other factors including (but not limited to) type of venue/event, music preference, sexual preference and other drug use. For example, it was reported that REU who regularly attend raves were more likely to be male and to use methamphetamines.

Several KE reported that while most REU they came into contact with were Caucasian, many REU came from other culturally and linguistically diverse (CALD) backgrounds. They were also noted to come from varying socio-economic backgrounds; however, it was generally agreed that most REU were either employed or studying.

3.2 Drug use history and current drug use

Participants were asked about their lifetime and recent usage of over 20 different drug types.⁷ Experience with a broad range of drugs was very common with an average of 11 drug types (range 4-20) ever being used and 7 (range 3-15) used within the preceding six months (Table 4).

Approximately one in ten (9%) REU reported having ever injected a drug, significantly fewer than in 2008 (19%; 95% CI: 0.003-0.197). This figure has been declining since 2007 (32%) and is at the lowest recorded value since 2003. A more thorough analysis of injecting drug use behaviours amongst this sample can be found in section 14.1 'Injecting risk behaviour'.

Table 4 presents the proportion of REU reporting lifetime and recent drug use across time. The proportions of the sample reporting the lifetime use of alcohol, cannabis and tobacco has remained relatively constant.

Significant changes from 2008 to 2009 include:

- higher recent use of tobacco (84% in 2009 vs. 63% in 2008; 95% CI: -0.32- -0.09);
- higher recent use of cannabis (83% in 2009 vs. 71% in 2008; 95% CI: -0.003- -0.233);

⁶ It is important to note that many KEs may not have had contact with REU younger than 18 since many venues and events are licensed for adults only. Thus, these figures may not take into account younger users.

⁷ 'Lifetime' usage refers to drugs that have ever been used. 'Recent' usage refers to drugs that had been used in the six months prior to the interview.

- lower lifetime (29% in 2009 vs. 52% in 2008; 95% CI: 0.09-0.35) and recent (9% in 2009 vs. 33% in 2008; 95% CI: 0.13-0.35) use of crystal methamphetamine ('crystal');
- higher recent use of LSD (37% in 2009 vs. 18% in 2008; 95% CI: -0.31 - -0.07);
- lower lifetime use of MDA (13% in 2009 vs. 30% in 2008; 95% CI: 0.06-0.28);
- lower recent use of GHB (6% in 2009 vs. 24% in 2008; 95% CI: 0.08-0.28);
- higher recent use of mushrooms (21% in 2009 vs. 9% in 2008; 95% CI: -0.22 - -0.02).

Approximately one-third (34%) of the sample reported the use of drugs other than those listed in Table 4. These included - 2CB/2CI (n=11), DMT (n=10), salvia (n=6), datura (n=4), 'tripstasy' (n=3), Viagra (n=3), mescaline (n=2), NoDoze (n=1) and robittussin (n=1).

Table 2: Lifetime and recent polydrug use of REU, NSW 2003-2009

Variable	2003 (N=102)	2004 (N =104)	2005 (N =101)	2006 (N =100)	2007 (N =100)	2008 (N =100)	2009 (N=100)
Mean no. drug types ever used	10	10	11	10	11	11	11
Mean no. drug types used recently	7	7	7	7	7	6	7
Ever inject any drug (%)	22	23	27	25	32	19	9
Alcohol ever used (%)	100	100	99	98	98	99	100
used last 6 mths (%)	96	99	96	94	92	95	100
Cannabis ever used (%)	96	99	92	95	97	93	98
used last 6 mths (%)	82	85	82	73	74	71	83
Tobacco ever used (%)	92	92	82	86	92	95	95
used last 6 mths (%)	72	73	72	68	72	63	84
Methamphetamine powder (speed) ever used (%)	97	98	94	88	86	92	83
used last 6 mths (%)	79	81	76	55	45	48	37
Methamphetamine base (base) ever used (%)	63	64	63	50	54	53	51
used last 6 mths (%)	42	39	43	24	23	17	23
Crystal methamphetamine (crystal) ever used (%)	56	68	62	68	60	52	29
used last 6 mths (%)	48	46	40	56	42	33	9
Cocaine ever used (%)	78	79	76	80	88	90	85
used last 6 mths (%)	46	46	55	45	62	51	64
LSD ever used (%)	66	61	71	65	68	57	62
used last 6 mths (%)	24	20	33	17	22	18	37
MDA ever used (%)	56	54	32	42	27	30	13

Variable	2003 (N=102)	2004 (N =104)	2005 (N =101)	2006 (N =100)	2007 (N =100)	2008 (N =100)	2009 (N=100)
used last 6 mths (%)	35	30	19	14	8	5	2
Ketamine ever used %	59	58	65	57	62	65	53
used last 6 mths (%)	49	39	39	27	36	30	19
GHB ever used (%)	33	28	32	40	37	37	24
used last 6 mths (%)	21	18	13	21	23	24	6
Amyl nitrite ever used (%)	66	66	65	66	65	72	74
used last 6 mths (%)	28	27	37	37	31	37	38
Nitrous oxide ever used (%)	44	40	44	38	36	34	27
used last 6 mths (%)	8	14	13	6	14	8	5
Benzodiazepines* ever used (%)	48	53	51	47	59*	52*	47
used last 6 mths (%)	32	30	39	25	36*	29*	24
Antidepressants* ever used (%)	27	21	19	40	30*	26*	20
used last 6 mths (%)	11	3	6	20	17*	10*	10
Pharmaceutical Stimulants* ever used (%)	-	47	43	39	42	38	52
used last 6 mths (%)		14	20	7	13	10	14
Mushrooms ever used (%)	11	7	43	44	45	35	48
used last 6 mths (%)	6	4	6	7	9	9	21
Heroin ever used (%)	24	17	22	19	28	11	11
used last 6 mths (%)	9	4	4	7	6	3	3
Methadone ever used (%)	6	4	6	10	13	7	1
used last 6 mths (%)	4	1	4	5	10	3	0
Buprenorphine ever used (%)	7	1	1	2	8	5	2
used last 6 mths (%)	5	0	1	1	2	1	1
Other opiates ever used (%)	12	20	30	17	27	23	27
used last 6 mths (%)	3	5	20	6	11	8	2

Source: EDRS regular ecstasy user interviews 2003-2009

*Includes licitly and illicitly obtained

In 2009, 45% of participants reported that Ecstasy was their main drug of choice. Other commonly reported drugs were cannabis (18%), cocaine (11%) and alcohol (9%). Smaller proportions of the sample nominated other drugs such as base (4%), ketamine (3%), LSD (2%), crystal (2%), speed (2%), GHB (1%), tobacco (1%), benzodiazepines (1%) and mushrooms (1%).

Less than one-fifth (16%) of participants reported bingeing on ecstasy and/or other related drugs over the past six months. Bingeing is defined as using the drug on a continuous basis for more than 48 hours without sleep (Ovendon and Loxley 1996). This proportion has almost halved since 2008 (30%; 95% CI: 0.25-0.02). Participants who had binged had done so on a median of 2 occasions over the preceding six months. The median length of the longest binge was 72 hours (range 50-120 hrs). Almost all participants (94%) who had binged had used ecstasy during a binge episode. Similarly, the majority (81%) had used alcohol with 75% consuming more than five standard drinks and 6% consuming fewer than five standard drinks. Other drugs used during binge episodes included cannabis (56%), cocaine (38%), speed (25%), base (25%), LSD (19%), crystal (13%), GHB (6%), amyl nitrate (6%) and pharmaceutical stimulants (6%).

3.2.1 Key expert comments

It is well known that REU are a group within which polydrug usage is quite common. This was supported by most KEs in 2009. Additionally, a few KEs noted that, especially among the more experienced REU, there had lately been widespread disappointment at the low purity of ecstasy tablets and many were seeking new drugs to “get into” including ketamine, crystal and mephedrone (a methcathinone). Several KEs also mentioned that there appeared to have been a slight resurgence of interest in hallucinogenic drugs such as LSD and mushrooms. One KE suggested that some REU were starting to use GHB and LSD at festivals rather than ecstasy, since these are purportedly undetectable by ‘sniffer’ dogs and pose less of a personal risk to the carrier.

Mixing illicit drugs with alcohol continued to be an issue in 2009. A few KEs commented on the increasing numbers of REU consuming large amounts of alcohol prior to using ecstasy, especially among “the younger crowd”. One KE, working in a frontline health provision role, noted that almost every patient who had to be transferred to hospital (i.e. was unable to be managed on site) had consumed alcohol⁸, which was not the case 5 years ago. A few other KE also noted that they continued to see problems associated with consuming alcohol while using GHB. One KE explained that while most people “in the scene” knew not to mix the two, there were a few people who believed it was more fun to do so and that if they were careful they could do so safely. They also noted that people who were not as experienced with GHB, or who were new to the scene, were another group who experienced problems due to mixing alcohol and GHB.

Several KEs in health care provision noted that polydrug use had increased over the preceding 6-12 months. It is particularly problematic in acute settings where management of symptoms or overdose is complicated by the fact that neither the patient, nor the treating health professional necessarily, knows which drugs the patient has consumed. Detailed comments regarding each drug type, as well as behaviours associated with drug use, are documented throughout the relevant sections of this report.

⁸ Along with other illicit drugs.

3.3 Summary of demographics and polydrug use trends in REU

- Ecstasy users were typically aged in their early to mid 20s. The median age in 2009 was 21 years, significantly lower than 2008 (25 years).
- Participants were predominantly male (64%), born in Australia (82%), relatively well educated (82% finished high school) and all had stable accommodation.
- Regular ecstasy users have little contact with the criminal justice system.
- The majority of REU interviewed identified as heterosexual (91%), a significant increase from 2008 (63%).
- The lower median age and higher proportion heterosexual are likely due to subtle changes in recruitment rather than reflecting changes in the demographics of the wider REU community. These changes should be kept in mind when interpreting some of the other changes noted from 2008 to 2009.
- Participants had experience with a broad range of drugs, having used a median of 11 different drugs in their lifetimes and 7 in the six months preceding the interview.
- From 2008 to 2009, fewer REU had recently used crystal, GHB and MDA; however, higher proportions had recently used tobacco, LSD and mushrooms.
- One-third of the sample had recently binged on ecstasy and/or related drugs. Those most commonly used were ecstasy, alcohol and cannabis.
- Key experts noted that many REU were beginning to look to other drugs in response to a widespread perception that the purity of ecstasy has declined recently.
- There was a decline in the proportion reporting that they had ever injected a drug compared with both 2008 and 2007.

4 ECSTASY

‘Ecstasy’ is a street term for a number of substances related to MDMA or 3,4-methylenedioxymethamphetamine. MDMA is classed as a hallucinogenic amphetamine. Tablets sold as ecstasy may contain a range of substances that do not include MDMA, and are more likely to contain methamphetamine, perhaps in combination with a hallucinogenic such as ketamine. They may also contain illegal chemicals like 3,4-methylenedioxyamphetamine (MDA), para-methoxyamphetamine (PMA) or 3,4-methylenedioxyethylamphetamine (MDEA) or substances such as caffeine or paracetamol or nothing at all. The results presented in this section relate to the participants’ use and knowledge of tablets sold as ‘ecstasy’.

On average, participants in the 2009 EDRS had used ecstasy for the first time at 17 years of age (median=17; range 12-35). Participants reported using ecstasy regularly (at least monthly) at a mean age of 19 years (median=18; range 14-35). No gender differences were found regarding the age of first ecstasy use between men and women ($U = 1052, p > 0.05$) nor for the age at which ecstasy began to be used regularly ($U = 1026, p > 0.05$).

4.1 Ecstasy use among REU

Table 3 presents an outline of patterns of usage of ecstasy among REU. In 2009, 45% of participants reported that ecstasy was their main drug of choice. Ecstasy was used on a median of 15 days (range 5-51) over the preceding six months. Two in five participants had used ecstasy between monthly and fortnightly (42%), just under two in five had used it between fortnightly and weekly (38%) and 19% had used ecstasy more than once a week over the preceding six months.

Respondents reported that they used a median of 2.5 tablets during a ‘typical’ occasion of use (range 1-6) over the preceding six months and the vast majority (91%) commonly used more than one tablet during a session. The median number of tablets consumed in the ‘heaviest’ session over the preceding six months was 5 (range 1-24).

Almost all REU reported that swallowing was their main route of administration (96%) for ecstasy however 3% reported mainly snorting it and 1% reported mainly injecting it. Participants were asked to identify each method of administration they had used over the preceding six months for ecstasy (in pill, powder and capsule form). Almost all participants had swallowed ecstasy (99%), 61% had snorted it, 12% had shelved or shafted⁹ it, 3% had smoked it and 1% had injected it. The proportion of participants who had ever injected ecstasy was lower in 2009 (5%) than 2008 (8%), continuing a generally declining trend since 2007.

⁹ Inserting a tablet into the anus is known as ‘shafting’; inserting a tablet into the vagina is known as ‘shelving’.

Table 3: Patterns of ecstasy use among REU, NSW 2003-2009

Variable	2003 (N=10 2)	2004 (N=10 4)	2005 (N=10 1)	2006 (N=10 0)	2007 (N=10 0)	2008 (N=10 0)	2009 (N=10 0)
Mean age first used ecstasy (years)	19	20	20	18	19	20	17
Ecstasy 'favourite' drug (%)	55	59	38	44	38	30	45
Median days used ecstasy last 6 mths	12	20	15	15	12.5	12	15
Use ecstasy weekly or more (%)	22	42	40	19	21	19	24
Median ecstasy tablets in 'typical' session	2	2	2	2	2	2	2.5
Typically use >1 tablet (%)	74	84	77	69	84	82	91
Recently binged on ecstasy (%)	35	28	41	41	36	30	33
Ever injected ecstasy (%)	13	10	13	11	15	8	5
Mainly swallowed ecstasy last 6 mths (%)	100	98	92	100	97	100	96
Mainly snorted ecstasy last 6 mths (%)	-	1	6	-	2	-	3
Mainly injected ecstasy last 6 mths (%)	-	1	2	-	1	-	1

Source: EDRS regular ecstasy user interviews 2003-2009

Participants were asked about their use of different forms of ecstasy (tablets, powder and capsules). Every participant reported having used ecstasy tablets ('pills') during the preceding six months. Approximately one-third (34%) reported having ever used ecstasy powder; however, only 14% reported having done so recently. Three-quarters (76%) reported having ever used ecstasy capsules ('caps') and 30% reported having used them over the preceding six months. Pills were first used at a median age of 17 years (range 12-22), powder at 19 years (range 16-40) and caps at 19 years (15-40).

The majority of REU (84%) reported using other drugs in combination with ecstasy the last time they used it. The drugs most commonly used with ecstasy were alcohol (87% of those who reported typically using other drugs with ecstasy; 15% less than 5 standard drinks and 72% more than five standard drinks), tobacco (69%), cannabis (24%) and cocaine (15%). Smaller proportions also reported using the following: speed (8%), base (5%), LSD (5%), amyl nitrate (4%), ketamine (3%) and crystal (3%).

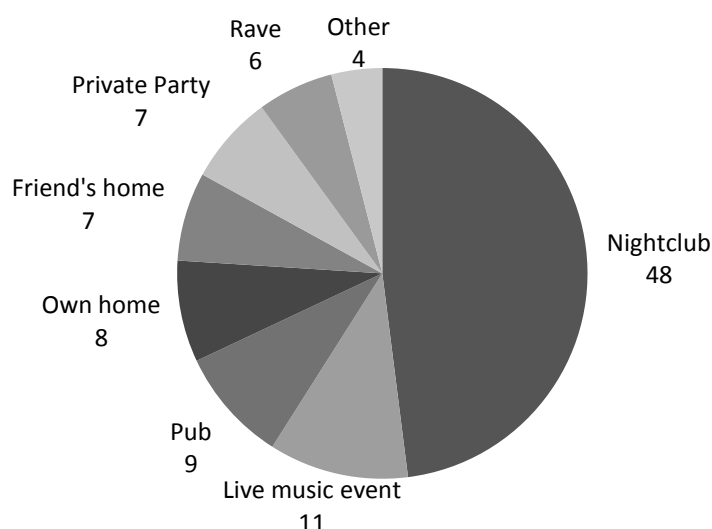
Seven in ten participants (70%) used other drugs to help them come down from ecstasy the last time they used it. The three most commonly reported drugs used to come down from ecstasy were tobacco (51%), alcohol (49% overall; 20% less than five standard drinks and 28% more than five standard drinks) and cannabis (47%). Smaller proportions also reported using the following: cocaine (4%), speed, crystal, mushrooms and amyl nitrate (1% respectively).

When asked what proportion of their friends had used ecstasy over the last six months, 6% of respondents reported that ‘all’ of their friends had, 44% reported that ‘most’ of their friends had used ecstasy, 31% reported that ‘about half’ of their friends had used ecstasy, 18% reported that ‘a few’ had and 1 respondent (1%) reported that none of their friends had used ecstasy.

4.2 Locations of ecstasy use

Participants were asked where they spent the most time while intoxicated, the last time they used ecstasy. Ecstasy was most commonly last used at a nightclub (48%). Smaller proportions reported last using it at a live music event, a pub, at their own home, at a friend’s home, at a private party, a rave and other locations (See Figure 1). While there were no significant changes in location of use from 2008 to 2009, there has been a significant increase in the number of participants reporting that their last location of use of ecstasy was at a nightclub from 2007(31%) to 2009 (48%) (95% CI: -0.30 - -0.03).

Figure 1: Location of last ecstasy use, NSW 2009.



Source: EDRS regular ecstasy user interviews 2009

Some recent studies have suggested that REU be viewed as a heterogeneous group with different patterns of and motivations for drug use (Bogt and Engels 2005; McCaughan, Carlson et al. 2005) and that groups could be identified according to what sort of party they attended. Comments by key experts in 2008 also supported the idea that different subcultures exist among ecstasy users in NSW. Those most commonly reported by KEs were ‘clubbers’, ‘ravers’, ‘festival goers’ and the GLBTQ community. The following definitions were taken from both key expert interviews and information collected by UniMed in Sydney (Reed 2009).

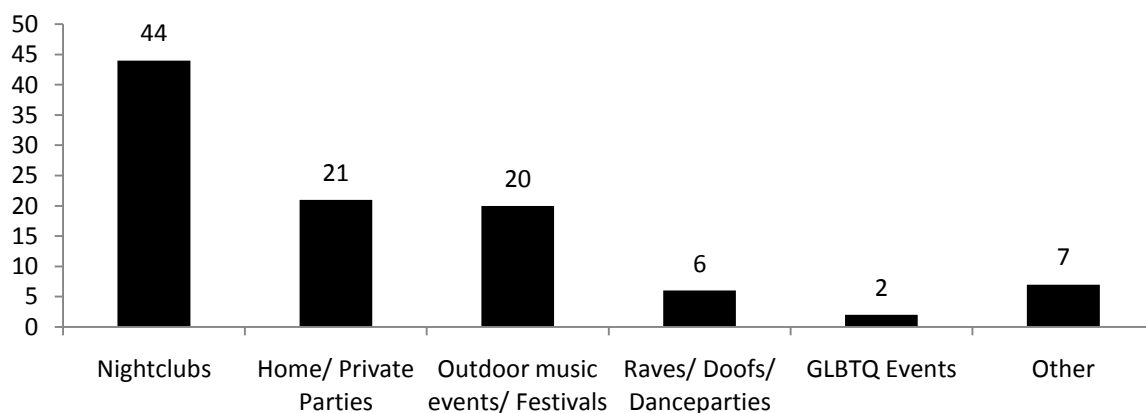
- ‘Clubbers’ are people who primarily socialise in fixed venues (e.g. nightclubs) in party precincts, which are open on a regular basis.

- ‘Ravers’ are people who regularly attend raves (i.e. predominantly indoor events of up to 6000 attendees, which typically occur overnight).
- ‘Festival goers’ are people who predominantly attend festivals (i.e. large, outdoor events with greater than 5000 attendees, occurring over the course of one or multiple days)

Thus, in 2009, participants were asked which type of location/event they had most frequently spent their time at while using ecstasy, over the preceding six months and what sort of party goer they identified as.

More than two-fifths of REU reported that they most frequently used ecstasy at nightclubs and one-in-five reported doing so at ‘home or private parties’ and at ‘outdoor music events or festivals’. Only 6% reported having most frequently used ecstasy at ‘raves/doofs or dance parties’ and 2% respectively at ‘GLBTQ events’, ‘pubs’ and ‘concerts or gigs’ (Figure 2).

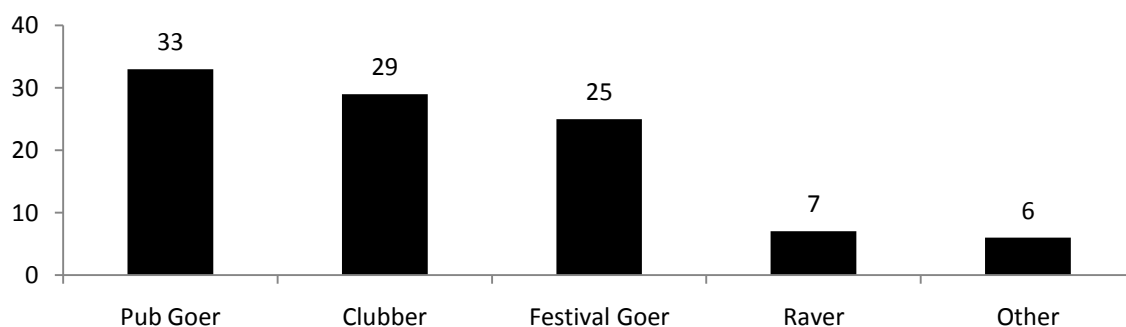
Figure 2: Usual location of ecstasy use among REU, NSW 2009.



Source: EDRS regular ecstasy user interviews 2009

Figure 3 shows the proportions of REU who identified themselves as a ‘pub goer’, ‘clubber’, ‘festival goer’ or ‘raver’. Participants were asked to identify what they most identified as. REU most commonly identified as a ‘person who frequents pubs’, clubbers or festival goers. This is in contrast with the usual location of use data where ‘pubs’ were only mentioned by two participants in the ‘other’ category. One interpretation of this disparity may be that while participants may most commonly use ecstasy at nightclubs, private parties and festivals, there may be a significant proportion who usually socialise in pubs and bars and do not commonly use ecstasy in this setting.

Figure 3: Self-identified type of party goer, NSW 2009.



Source: EDRS regular ecstasy user interviews 2009

In 2009, participants were asked what their main reasons were for deciding to use ecstasy at an event, these are presented in Table 4. 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>).

The most common reasons for deciding to use ecstasy at an event (reported by half the sample) were ‘to feel great’ and ‘the high, rush or buzz’ associated with the drug. Approximately one-third reported using ecstasy ‘to be able to dance all night’, for the ‘enhanced appreciation of music’ and for ‘specific drug effects’ such as hallucinations, creativity, insight etc. One-quarter of the sample had used it for the ‘enhanced closeness, bonding and empathy with others’ it creates. More than half the sample reported using ecstasy for other reasons so these were scored verbatim and then grouped according to common themes. Those most commonly reported included: for fun, to liven up the night (18%); it is cheaper than alcohol (18%); to be able to stay awake, for energy (15%); because it is ‘easier’ than alcohol (e.g. “don’t like lining up for drinks”) (7%); escapism (7%); more in control than drinking alcohol (6%); and out of habit, because it’s common (6%).

It is interesting to note that the majority of reasons for use centre around trying to enhance an evening/experience rather than trying to avoid a negative one.

Table 4: Reasons for deciding to use ecstasy at an event, NSW 2009

Variable	2009 (N=100)
To feel great	51
The high/rush/buzz	50
To be able to dance all night	37
Enhanced appreciation of music	36
Drug effects (e.g. hallucinations/insight/creativity)	30
Enhanced closeness/bonding/empathy with others	25
Because it’s not fun being sober when your friends are all high	21
To forget hassles/problems or have fewer worries	17
To make it easier to talk/flirt with people	17
To increase my self-insight	11
To enhance sexual experiences	9
Other	53

Source: EDRS regular ecstasy user interviews 2009

4.2.1 Key expert comments

KEs in 2009 generally agreed that ecstasy continues to be widely used among party goers, that it is generally consumed in tablet format, and that it is mostly swallowed. A small number of KE mentioned that they had recently heard of ecstasy in liquid form or ‘liquid E’; however, they doubted it was very widely used. KEs noted that ecstasy was not normally snorted unless there was only a small amount available or there were time pressures to get high (e.g. catch up with others who had taken ecstasy earlier). No KEs spontaneously commented on changes in the quantity, frequency or location of ecstasy use. However, several KEs again referred to the different groups of REU (including ravers, doofers, festival goers and the “gay community”), mainly when describing them demographically. Comments relating to the use of specific drugs other than ecstasy by these groups will be addressed in the relevant sections. It was generally agreed that ecstasy continues to be widely used within all these groups; however, some KEs noted that many members of the GLBTQ community had become “bored” with ecstasy, and while they would continue to use it, they were in the process of trying new drugs (such as ketamine, crystal and mephedrone) to find another alternative “to get into”.

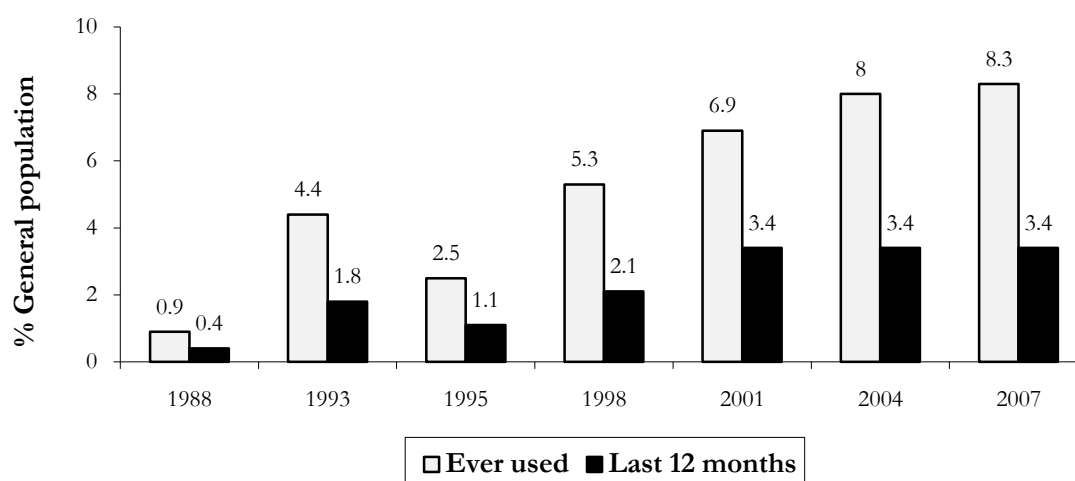
4.3 Use of ecstasy in other populations

4.3.1 General population

Figure 4 presents data collected for the National Drug Strategy Household Survey (NDSHS) from 1988 (the year in which ecstasy was first included in the survey) to 2007. Over this time, the reported lifetime prevalence of ecstasy use among the general Australian population (aged 14 years and over) increased from 1% in 1988 to 8.9% in 2007. Similarly, the proportion of the general population who reported using ecstasy in the preceding 12 months increased slightly from 1% in 1988 to 3.4% in 2007 (Australian Institute of Health and Welfare 2008).

Comparable to national prevalence, lifetime ecstasy use was reported by 8.3% of the NSW population aged 14 years and over in 2007, a rise from 0.9% in 1988. There has been a corresponding rise in the proportion of the NSW population who reported using ecstasy within the last twelve months from 0.4% in 1988 to 3.4% in 2007 (Australian Institute of Health and Welfare 2008).

Figure 4: Lifetime and recent ecstasy use in the NSW general population, 1988-2007.



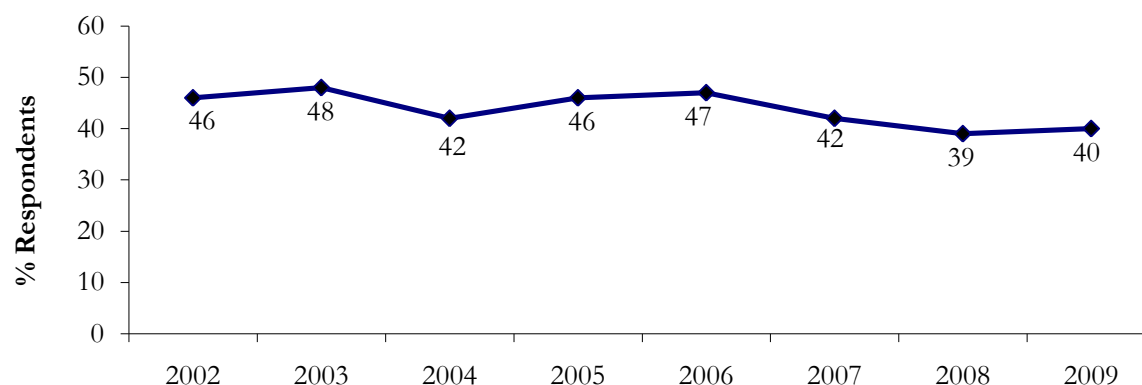
Source: National Drug Strategy Household Survey (Australian Institute of Health and Welfare 1999; 2002; 2002; 2002; 2005; 2005; 2005; 2008; 2008)

4.3.2 Sydney Gay Community Periodic Survey

The Sydney Gay Community Periodic Survey is a biannual cross-sectional survey of gay and homosexually active men. The first survey was conducted in February 1996 and the most recently published survey was completed in February 2009 with 2346 men participating. The major aim of the survey is to provide data on levels of sexual-, STI- and HIV-related practices, though the survey also asks about drug use in the past six months.

Figure 5 shows the proportion of men surveyed that had used ecstasy in the past six months. In 2009, two-fifths of the sample reported having recently used ecstasy. The authors report that, since the previous survey, there has been no significant change in the reported use of ecstasy; however, there has been a significant decrease from 2002 (46%) to 2009 (40%) (Frankland, Lee et al. 2009).

Figure 5: Proportion of gay men in Sydney reporting recent ecstasy use, 2002-2009.



Source: Sydney Gay Community Periodic Survey, 2009.

4.4 Summary of patterns of ecstasy use

- Ecstasy was the drug of choice for just under half the sample.
- Participants had used ecstasy on an approximately fortnightly basis over the preceding six months; however, this was quite variable.
- Participants used a median of 2.5 tablets in typical episodes of use and 5 tablets during the 'heaviest' occasion of use.
- Regular ecstasy users start using ecstasy in their late teens. There appears to be a swift transition to regular (monthly) use.
- All participants typically administer ecstasy orally; however, more than half the sample reported recently snorting the drug.
- It is common for REU to use other drugs both with ecstasy and to come down from it. Those most commonly used in both cases are alcohol, tobacco and cannabis. Several participants also reported having last used cocaine with ecstasy.
- Ecstasy continues to be most commonly used in nightclubs; however, it is also frequently used in private settings and at festivals and other live music events.
- The prevalence of lifetime use of ecstasy has increased in the general Australian population since 2001; however, the proportion of the population reporting recent usage has remained relatively stable. The reported recent use of ecstasy among the gay men interviewed for the gay community periodic survey has remained stable from 2008 to 2009.

4.5 Price

Almost all (98%) participants were able to comment on the price of ecstasy tablets in Sydney. Almost one-third (29%) were also able to comment on the price of capsules (commonly referred to as caps) and 2% on the price of powder. Due to the small number reporting on the latter, this data will not be presented here.

The median price of ecstasy was reported by users to be \$20 per tablet (range \$11-40) and \$30 per capsule (range \$18-50) (Table 5). From 2008 to 2009, the price of ecstasy in NSW fell by \$10, changing for the first time in five years. While the majority of participants (58%) reported that the price had remained stable over the preceding six months, almost three in ten participants (27%) reported a decrease in the price of ecstasy.

Table 5: Price of ecstasy purchased by REU, NSW 2003-2009

	2003	2004	2005	2006	2007	2008	2009
Median price per tablet \$	35	35	30	30	30	30	20
(range) \$	(20-55)	(13-50)	(15-50)	(20-50)	(15-40)	(15-50)	(11-40)
Price change:							
Increased (%)	12	3	11	3	4	5	6
Stable (%)	59	58	54	69	71	68	58
Decreased (%)	25	30	26	16	12	17	27
Fluctuated (%)	3	6	7	7	8	3	4
Don't know (%)	2	4	3	5	5	7	5

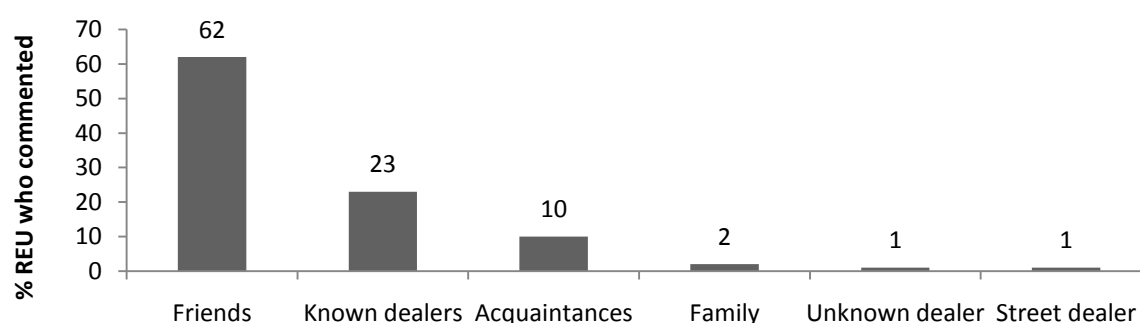
Source: EDRS regular ecstasy user interviews 2003-2009

Participants were asked questions regarding their purchasing of ecstasy over the last six months. Participants reported that they had purchased ecstasy from a median of 4 people (range 1-20). Two-thirds of the sample (67%) had purchased ecstasy for themselves and others and 29% had purchased it solely for themselves. When asked about how frequently they purchased ecstasy, 33% reported that they had bought it monthly or less, 45% fortnightly or less and 22% weekly or less. The median number of tablets purchased was 5 (range 1-1000).

4.5.1 Source person and source location of last purchase

Participants were asked to describe the types of person they had last purchased ecstasy from (Figure 6). Almost two-thirds reported having purchased ecstasy from a friend (62%), almost one-quarter (23%) from a known dealer and 10% from an acquaintance. Small proportions reported purchasing ecstasy from a family member, a street dealer and an unknown dealer.

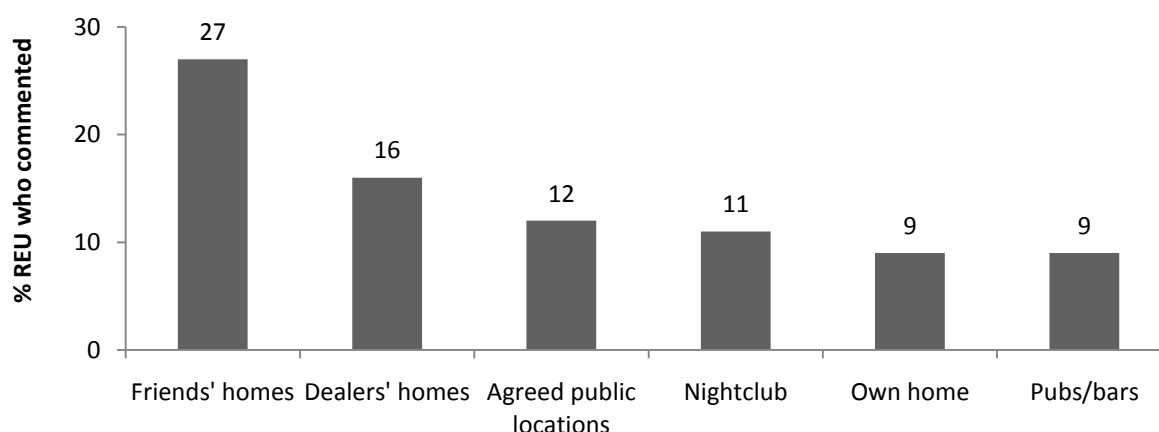
Figure 6: People from whom ecstasy was last purchased, NSW 2009.



Source: EDRS regular ecstasy user interviews 2009

Ecstasy was most often obtained, on the last occasion, at a friend's house (27%), at a dealer's house (16%), at an agreed public location (12%), at a nightclub (11%) at the participant's own home (9%) or at a pub (9%). Smaller proportions reported having last obtained ecstasy at a private party, at an educational institution, at a rave/doof or dance party, at a festival, on the street and at an acquaintance's house (Figure 7).

Figure 7: Locations at which methamphetamine was last purchased, NSW 2009.



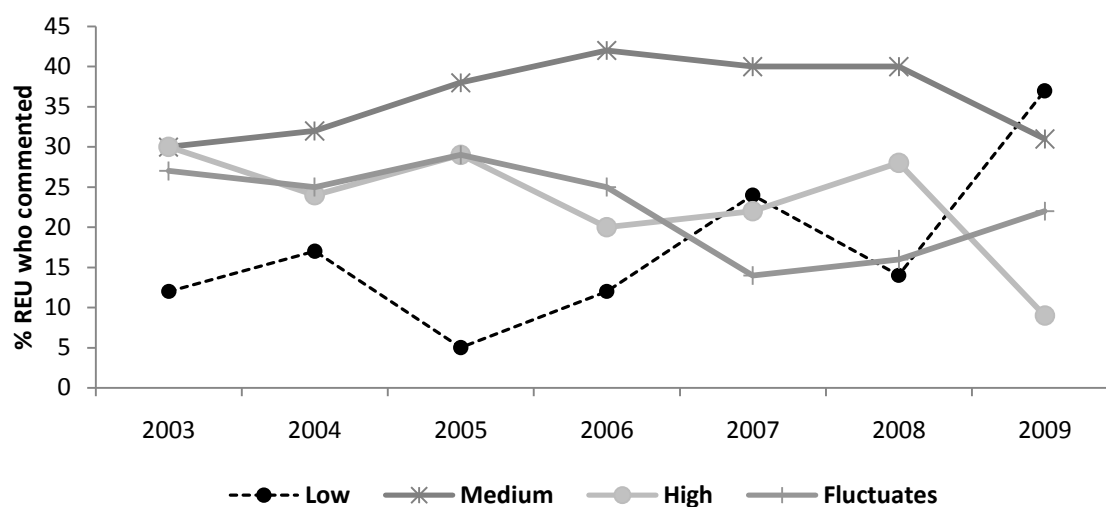
Source: EDRS regular ecstasy user interviews 2009

4.6 Purity

4.6.1 Current purity

Figure 8 presents REU reports of ecstasy purity across time. In 2009, 37% of REU reported that the current purity of ecstasy was 'low', 31% that it was 'medium', 9% that it was 'high' and one in five reported that it 'fluctuates'. From 2008 to 2009 there has been an increase in the proportion of participants reporting that the purity of ecstasy is low, and a decrease in the proportion reporting that it is high.

Figure 8: REU reports of current ecstasy purity, NSW 2003-2009.

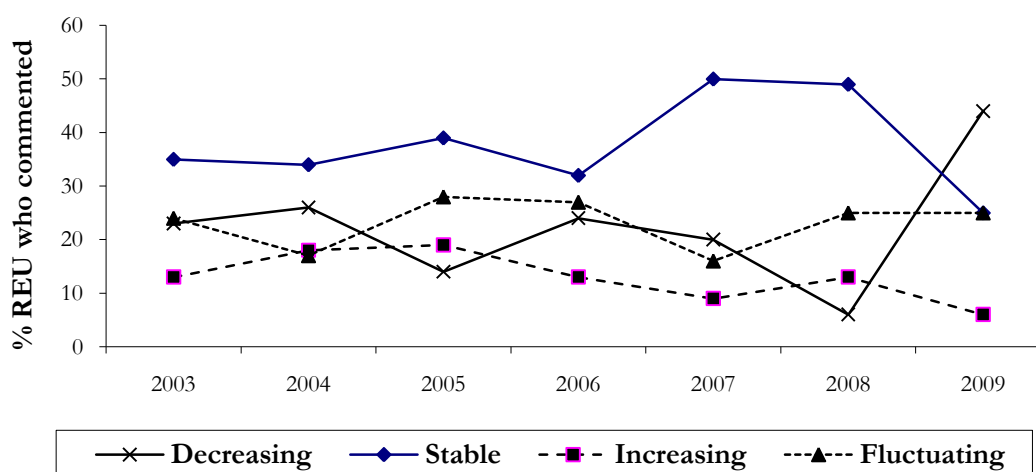


Source: EDRS regular ecstasy user interviews 2003-2009

4.6.2 Purity change

Figure 9 presents REU reports of changes in the purity of ecstasy over the six months prior to the interview. One-quarter of the sample (25%) reported that the purity of ecstasy had remained 'stable' over this period, two-fifths (44%) reported that it had decreased, 6% reported that it had increased and one-quarter (25%) that it had 'fluctuated'. These data also show an increase in the proportion of respondents who believe that the purity of ecstasy declined over the six months preceding the interview.

Figure 9: REU reports of change in ecstasy purity in the preceding six months, NSW 2003-2009.



Source: EDRS regular ecstasy user interviews 2003-2009

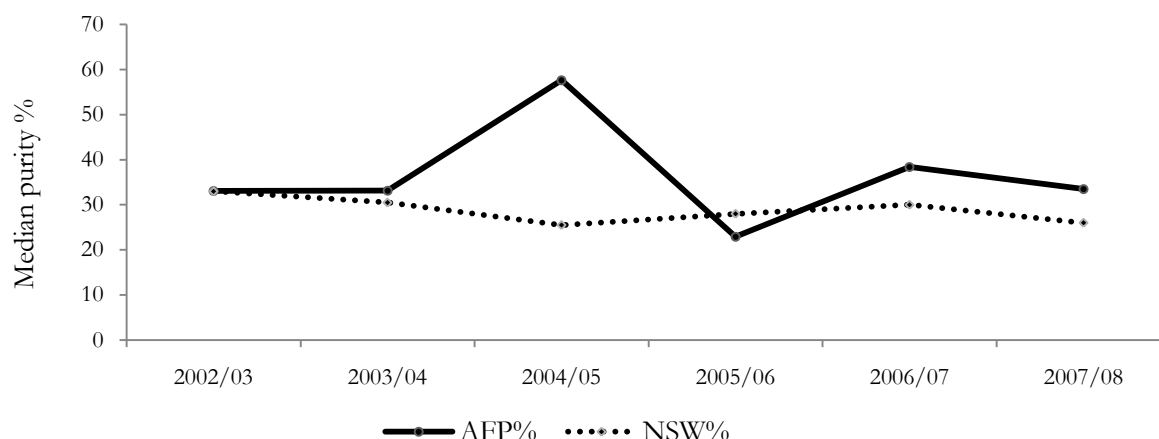
Estimates of purity are necessarily subjective and depend, among other factors, on users' tolerance levels. Laboratory analyses of the purity of seizures of ecstasy provide objective evidence regarding purity changes, and should therefore be more highly regarded than the reports of users. However, it is also important to note the limitation of the purity figures calculated by forensic agencies. 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, it remains the case that the purity figures provided by forensic agencies remain the most objective measure of changes in purity levels available in Australia.

The purity data presented in this report were provided by the Australian Crime Commission (ACC), formerly the Australian Bureau of Criminal Intelligence (ABCI). The ACC reports both federal and state police seizure data, including 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 DOB, DOM, MDA, MDEA, mescaline, PMA, and TMA also belong to the phenethylamine family (Australian Crime Commission 2003) and seizures of these drugs are included in the seizure data from 2000/01.

Figure 10 presents the median purity of phenethylamines seizures analysed by the NSW Police and Australian Federal Police (AFP) from 2002-03 to 2007/08. The median purity of all seizures analysed appears to have declined; both for those detected by the AFP (from 38.4% in 2006/07 to 33.5% in 2007/08) and by NSW Police (from 30% in 2006/07 to 26% in 2007/08).

It should be noted that figures do not represent the purity levels of all seizures – only those that have been analysed at a forensic laboratory. In addition, the period between the date of seizure by police and the date of receipt at the laboratory can vary greatly, and no adjustment has been made to account for double-counting joint operations between the AFP and NSW Police. Further, patterns of arrest and police operations change over time; for example, targeting of higher-level suppliers versus street dealers, and this, in turn, can influence the purity of the drug seized.

Figure 10: Median purity of phenethylamines seizures 2002/03-2007/08*.

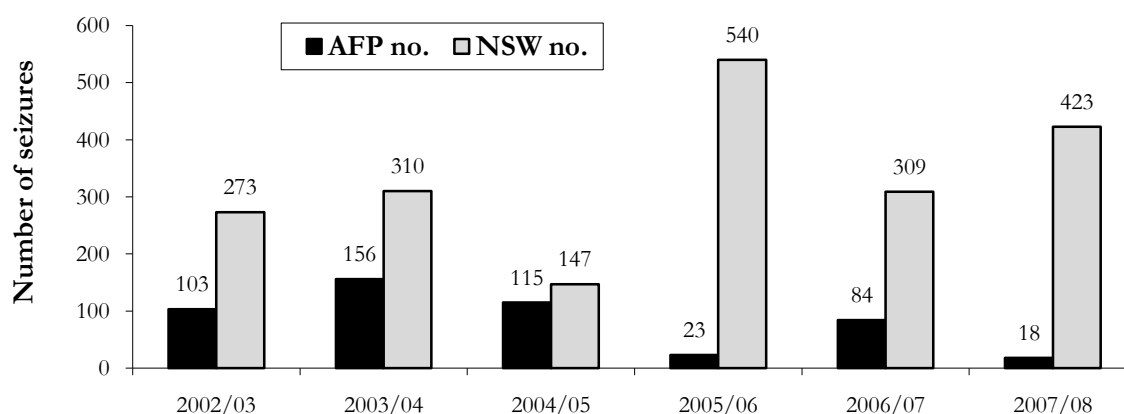


Source: Australian Crime Commission (2004; 2005; 2006; 2007; 2008; 2009)

*Data for 2008/09 were unavailable at time of publication

The number of phenethylamine seizures made by the AFP has decreased from 84 in 2006/07 to 18 in 2007/08 and, conversely, those made by the NSW Police have increased from 309 to 423 across the same time period (Figure 11). Caution should be used when interpreting the increase in the number of seizures analysed from 2005/06 when compared with previous years as this may reflect an increased police attention toward phenethylamines rather than an increased availability of these drugs.

Figure 11: Number of phenethylamines seizures 2002/03-2007/08*.



Source: Australian Crime Commission (2004; 2005; 2006; 2007; 2008; 2009)

* Data for 2008/09 were unavailable at time of publication

4.6.3 Key expert comments

Almost all KE who were able to comment on the purity of ecstasy, noted that it was currently low and that it had declined somewhat over the preceding 6-12 months.

A few KE were able to report the purity of 'ecstasy' tablets confirmed by toxicological analyses. They noted that the purity of tested ecstasy tablets was generally quite low and that there had been a sharp decline in the maximum purity figures since early 2008. They also noted that over the preceding six months there had been an increase in the number of ecstasy tablets found to have active constituents other than MDMA in them. In particular, there has been a notable increase in the numbers of ecstasy pills containing piperazines, most commonly benzylpiperazine (BZP). This drug was the active constituent of the 'party pills' which have recently been made illegal in New Zealand. KE also noted that there had been a decline recently in the numbers of ecstasy tablets containing PMA and other related derivatives.

A few KE also mentioned that there appears to have been: a) fewer MDMA manufacturing laboratories/sites over the preceding 6-12 months than in previous years; and b) no evidence of a corresponding increase in MDMA being imported from overseas. Thus, several KE proposed that the decreasing purity of MDMA pills 'on the street' was probably due to a reduced supply yet constant demand, requiring that the same numbers of ecstasy pills be manufactured with a smaller MDMA content per pill. Furthermore, KE noted that pill presses were continuing to be imported, and that there appeared to have been a shift toward importing MDMA in powder form rather than pill form since traffickers believed it would be more difficult to detect. It was also suggested that pills which were pressed here would be more likely to have been 'cut' and may again contribute to an overall declining purity of ecstasy pills.

4.7 Availability

Approximately half (52%) of participants interviewed in 2009 believed it was currently ‘very easy’ to obtain ecstasy. Two-fifths (44%) reported it was ‘easy’ to obtain and 4% reported it was difficult to obtain (

Table 6). Compared with 2008, there was a significant decline in the proportion indicating that ecstasy was ‘very easy’ to obtain (74% in 2008 vs. 52% in 2009; 95% CI: 0.090-0.34) and a significant increase in the proportion reporting it was ‘easy’ to obtain (22% in 2008 vs. 44% in 2009; 95% CI: -0.34 - -0.09). This may indicate that ecstasy has become less widely accessible. However, there was some disagreement among participants regarding changes in the availability of ecstasy over the preceding six months. The majority (61%) of REU reported that it had remained ‘stable’, one-fifth (22%) that it had become ‘easier’ to obtain, 16% that it had become ‘more difficult’ to obtain and 1 person reported that it fluctuated.

Table 6: REU reports of availability of ecstasy in the preceding six months, NSW 2003-2009

Ecstasy variable	2003 (N=102)	2004 (N=104)	2005 (N=100)	2006 (N=100)	2007 (N=100)	2008 (N=100)	2009 (N=100)
Current availability:							
Very easy (%)	63	67	73	60	72	74	52
Easy (%)	23	28	25	34	25	22	44
Availability:							
Stable (%)	73	72	75	80	81	73	61
Easier (%)	11	14	13	5	7	16	22

Source: EDRS regular ecstasy user interviews 2003-2009

4.5.2 Key expert comments

Key Experts reported that ecstasy continued to be widely available and that it generally costs \$18-35 per tablet, \$20 on average. A few KE also mentioned that the price was lower per tablet (e.g. \$14-17) if they were bought in bulk quantities (e.g. 10, 20, 100 etc.) or if the dealer selling the drugs was “high up”. Several KE mentioned that the price of ecstasy had decreased over the preceding 6-12 months.

4.8 Summary of ecstasy trends

- The median price of ecstasy was reported to be \$20, down from \$30 in 2008. This is the first time the price has changed since 2005.
- It is common for REU to purchase ecstasy for others, at the same time that they purchase it for themselves and it is commonly purchased from a friend.
- Both participant and key expert reports of ecstasy purity indicate that it is currently low and has decreased over the last 6-12 months.
- The median purity of ecstasy seizures analysed by the AFP and by NSW Police appears to have declined from 2006/07 to 2007/08; however, data for 2008/09 were unavailable at the time of printing.
- Ecstasy continues to be easily accessible to REU with the majority of respondents indicating that it is currently 'easy' or 'very easy' to obtain. This was supported by KE comments.

5 METHAMPHETAMINE

Throughout the 1990s, the proportion of amphetamine-type substance seizures that were methamphetamine (rather than amphetamine sulphate, the form most commonly available throughout the 1980s) steadily increased, until methamphetamine dominated the market (Australian Bureau of Criminal Intelligence 2001). In the financial year 2000/01, the vast majority (91%) of all seizures of amphetamine were methamphetamine hydrochloride (Australian Bureau of Criminal Intelligence 2002). In the 2007/08 financial year, no amphetamine seizures were analysed by NSW Police, only methamphetamine seizures (Australian Crime Commission 2009).

Chemically, amphetamine and methamphetamine differ in molecular structure but are closely related. They exert their effects indirectly by stimulating the release of peripheral nervous system (PNS) and central nervous system (CNS) monoamines (principally dopamine, noradrenaline, adrenaline and serotonin), and both have psychomotor, cardiovascular, anorexogenic and hyperthermic properties (Seiden, Sobol et al. 1993). Compared to amphetamine, methamphetamine has proportionally greater CNS than PNS stimulatory effects (Chesher 1993), and is a more potent form with stronger subjective effects.

In Australia today, the powder traditionally known as ‘speed’ is almost exclusively methamphetamine. The more potent forms of this family of drugs, known by terms such as ice, shabu, crystal meth, base and paste are also methamphetamine.

The distinction between methamphetamine powder (‘speed’), methamphetamine base (‘base’) and crystalline methamphetamine (‘crystal’) has been made in an attempt to collect more comprehensive information on the use, price, purity and availability of each of these different forms. ‘Speed’ is typically manufactured in Australia and ranges in colour from white to yellow, orange, brown or pink, due to differences in the chemicals used to produce it. It is usually of relatively low purity (approximately 10%; McKetin, McLaren et al. 2005). ‘Base’ (also called paste, wax, point or pure) is thought to be an oily or gluggy, damp, sticky, powder that often has a brownish tinge. Base is also thought to be manufactured in Australia; its purity has been found to be approximately twice that of speed (21%) (McKetin, McLaren et al. 2005). The crystal form (also called ice, shabu, or crystal meth) is large crystals that range from translucent to white but may also have a green, blue or pink tinge due to either impurities or the addition of food dye. Crystal is predominantly manufactured in Asia and imported into Australia (Topp and Churchill 2002), although the first crystalline methamphetamine laboratory was detected in Queensland in February 2002 (Australian Crime Commission 2003). Pure crystal has an estimated purity of 80%. A form of methamphetamine with a crystalline appearance has been detected which has a lower purity (19%); this lower purity crystalline methamphetamine may reflect either methamphetamine base with a crystalline appearance or crystal methamphetamine cut with crystalline adulterants (McKetin, McLaren et al. 2005).

5.1 Methamphetamine use among REU

5.1.1 Methamphetamine powder (speed)

Approximately eight out of ten participants (83%) had ever used speed and just over one-third (37%) of the sample had used it during the preceding six months. Speed was first used at a median age of 18 years (range 15-25). There was no significant difference between men and women in the age of first use of speed (men 17 years vs. women 18 years; $U = 156.5, p > 0.05$).

A small proportion (2%) of the sample reported that speed was their drug of choice. Of those who commented, a greater proportion typically used speed *with* ecstasy (8%) than *to come down from* ecstasy (2%). One in five (21%) of those who had binged on ecstasy and related drugs in the preceding six months had used speed during a binge episode. This figure is comparable to that reported in 2008 (23%).

Speed was used on a median of 3 days (range 1-30) over the preceding six months. The vast majority (94%) of those who had recently used speed had done so less than monthly. Small proportions reported having used speed between monthly and fortnightly (2%), between fortnightly and weekly (2%) or weekly or more (1%). No participant reported daily use of speed.

Most recent users quantified their use in terms of 'grams' (n=19) or 'lines' (n=16). The median amount used in a 'typical' or 'average' use episode in the preceding six months was either 1 gram (range 0.2-2) or 2 lines (range 0.5-4). The median amount used in the 'heaviest' use episode was either 1 gram (range 0.2-3.5) or 2.5 lines (range 1-8).

The most common route of administration for speed users in the preceding six months was snorting (97%); however, other routes of administration included swallowing (38%) and smoking (8%). No participants had injected or shelved/shafted speed in the six months prior to the interview.

From 2008 to 2009 fewer REU reported the lifetime or recent use of speed. The median number of days of use of speed over the preceding six months fell from 4 to 3 and it is interesting to note that the maximum number of days of use was lower in 2009 (30 days) than in any sampling year from 2003 onward. While the numbers of participants using speed and the number of days they did so appears to be in decline, the amounts used appear to have remained relatively stable across time (Table 7).

Table 7: Patterns of speed use among REU, NSW 2003-2009

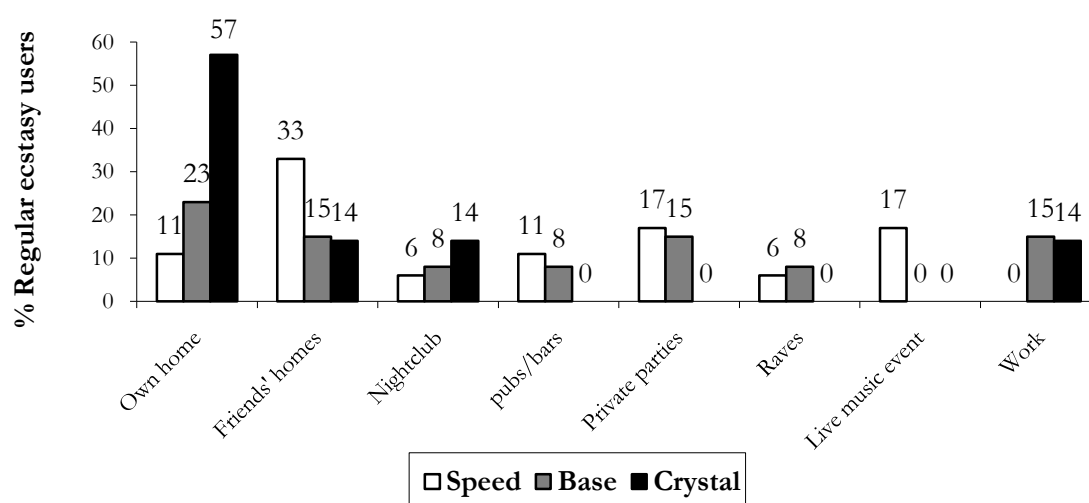
Speed variable	2003 (N=102)	2004 (N =104)	2005 (N =101)	2006 (N =100)	2007 (N =100)	2008 (N =100)	2009 (N=100)
Ever used (%)	97	98	94	88	86	92	83
Used preceding 6 mths (%)	79	81	76	55	45	48	37
Median days used* last 6 mths (range)	5 (1-60)	6 (1-96)	6 (1-96)	5 (1-180)	6 (1-90)	4 (1-120)	3 (1-30)
Median quantities used* (grams)							
Typical (range)	0.5 (0.05-7)	0.75 (0.1-3.5)	1 (0.2-6)	1 (0.5-3)	0.50 (0.25-2)	1 (0.2-2)	1 (0.2-2)
Heavy (range)	1 (0.1-12)	1.5 (0.15-7)	2 (0.3-12)	1.75 (0.50-6)	1 (0.5-3.5)	1 (0.2-4)	1 (0.25-3.5)

Source: EDRS regular ecstasy user interviews 2003-2009

* of those who had used in the preceding six months

Participants who had recently used speed reported that they had last used it at a friend's home (33%), at a private party (17%), at a live music event (17%), at their own home (11%), at a pub (11%), at a nightclub (6%) or at a rave (6%) (Figure 12).

Figure 12: Last location methamphetamine use by form, NSW 2009. #



Source: EDRS regular ecstasy user interviews 2009

Speed n=37, Base n=13, Crystal n=7

5.1.2 Methamphetamine base

Approximately half the sample (51%) had ever used base and just under one-quarter (23%) had used it over the preceding six months. The median age at which base was first used was 19 years (range 14-28). There was no significant difference between men and women regarding the median age of first use of base (men 19 years vs. women 18 years, $U=41.5$, $p>0.05$).

Four participants (4%) reported that base was their drug of choice. Of those who commented, 4% reported typically using base *with* ecstasy. No participants reported typically using base *to come down from* ecstasy. Of those who reported having binged in the preceding six months, 21% reported having used base in a binge episode.

Base had been used on a median of 2 days (range 1-96) over the preceding six months. The majority (78%) of those who had recently used base had done so less than monthly. Smaller proportions had used it between monthly and fortnightly (9%), between fortnightly and weekly (4%) or greater than weekly (8%). There were no daily users of base.

Most recent users of base quantified their use in terms of 'points'; however, small proportions also referred to grams, lines and bumps. Although it is likely that the actual weight of 'points' varies slightly, it is commonly understood that one 'point' is equal to approximately 0.1 grams. Those referring to points used a median of 2 points (range 0.3-4) in a 'typical' session and a median of 2 points (range 0.5-6) during the heaviest occasion of use over the preceding six months.

Base was most commonly swallowed (61%); however, 35% of those who had used base over the preceding six months reported having snorted it, 22% having injected it and 9% having smoked it. No participants reported shelving/shafting base in the preceding six months. Table 8 presents trends across time in certain indicators of base usage. The proportions reporting the lifetime and recent use of base have remained relatively stable across time as has the number of days of use and the quantities of use.

Table 8: Pattern of base use among REU, NSW 2003-2009

Base variable	2003 (N=102)	2004 (N=104)	2005 (N=101)	2006 (N=100)	2007 (N 100)	2008 (N=100)	2009 (N=100)
Ever used (%)	63	64	63	50	54	53	51
Used last six months (%)	42	39	43	24	23	17	23
Of those who had used:							
Median days used last 6 mths (range)	4 (1-96)	5 (1-36)	3 (1-96)	3.5 (1-180)	5 (1-90)	2 (1-120)	2 (1-96)
Median quantities used (points):							
Typical (range)	1 (0.1-5)	2 (0.5-4)	1.5 (0.25-9)	1 (0.50-3)	2 (0.50-5)	2 (1-5)	2 (0.3-4)
Heavy (range)	2.5 (0.1-10)	2 (0.5-10)	2.25 (0.25-25)	1 (0.50-7)	2 (0.50-5)	2 (1-5)	2 (0.5-6)

Source: EDRS regular ecstasy user interviews 2003-2009

Thirteen participants reported on the location of their last use of base. Three participants had last used it at their own home, two at a friend's house, two at a private party and two at work. One person each reported having last used base at a nightclub, a pub, a rave and outdoors (Figure 12).

5.1.3 Crystal methamphetamine

Approximately three in ten (29%) participants had ever used crystal and approximately one in ten (9%) had used it over the six months prior to the interview. There was a significant decline in both lifetime (52% in 2008 vs. 29% in 2009; 95% CI: 0.09-0.35) and recent crystal use (33% in 2008 vs. 9% in 2009; 95% CI: 0.13-0.35). The median age of first use of crystal was 20 years (range 15-39). There was no significant difference in age of first use of crystal between men and women (men 23 years vs. women 19 years; $U=6.0$, $p>0.05$).

Only two REU reported that crystal was their preferred drug. Of those who commented, 3% reported typically using crystal *with* ecstasy and 2% reported typically using crystal *to come down from* ecstasy. Among participants who had binged on ecstasy and/or related drugs over the preceding six months, 12% reported having used crystal during a binge episode. This figure is lower than that reported in 2008 (53%); however, it should be noted that it has fluctuated across sampling years (15% in 2007, 60% in 2006, 44% in 2005).

Crystal was used on a median of 12 days (range 1-48) over the preceding six months. One-third of those who had recently used crystal (33%) reported having used it less than monthly, one-third (33%) between monthly and fortnightly, 22% between fortnightly and weekly and 11% on a greater than weekly basis. There were no daily users of crystal.

Eight of the nine participants who had used crystal during the preceding six months quantified their use in terms of 'points' (generally believed to be 0.1 g). These participants reported using a median of 1 point (range 1-5) during 'typical' sessions of use and a median of 3.5 points (range 1-5) on the heaviest episode of crystal use over the preceding six months.

As in previous years, smoking was the most common route of administration for crystal (100%) followed by injecting (33%) and swallowing (11%). No participants reported snorting or shelving/shafting crystal over the preceding six months. It is interesting to note the reduction in the proportion of the whole REU sample reporting having ever injected crystal from 22% in 2007 to 13% in 2008 and to 4% in 2009.

Table 9 presents trends over time in some indicators of crystal use among REU. From 2008 to 2009 there has been a lower proportion reporting either lifetime or recent use of crystal. However, among those who reported recent use of crystal, the median number of days of use over the preceding six months has doubled from 2008 to 2009 to twice monthly. Further, while the amount used in a 'typical' session has remained relatively stable, the amount used in the heaviest session has increased by 1.5 points from 2008 to 2009.

Table 9: Patterns of crystal use among REU, NSW 2003-2009

Crystal variable	2003 (N=102)	2004 (N=104)	2005 (N=101)	2006 (N=100)	2007 (N=100)	2008 (N=100)	2009 (N=100)
Ever used (%)	56	68	62	68	60	52	29
Used 6 months (%)	48	46	40	56	42	33	9
Of those who had used:	3	6	4	6	9	6	12
Median days used last 6 mths (range)	(1-96)	(1-120)	(1-72)	(1-180)	(1-180)	(1-170)	(1-48)
Median quantities used (points):							
Typical (range)	1 (0.1-10)	1 (0.25-8)	1 (0.3-6)	1 (0.5-4)	1 (0.25-3)	1.75 (0.5-3)	1 (1-5)
Heavy (range)	1 (0.1-10)	2 (0.5-12)	2 (0.3-10)	2 (0.5-0.7)	3 (.25-15)	2 (1-6)	3.5 (1-5)

Source: EDRS regular ecstasy user interviews 2003-2009

Seven participants commented on the location where they last used crystal. That most commonly reported was at the participant's own home (n=4); however, one person respectively reported having last used crystal at a friend's home, at a nightclub and at work (See).

5.1.4 Summary of locations of methamphetamine use

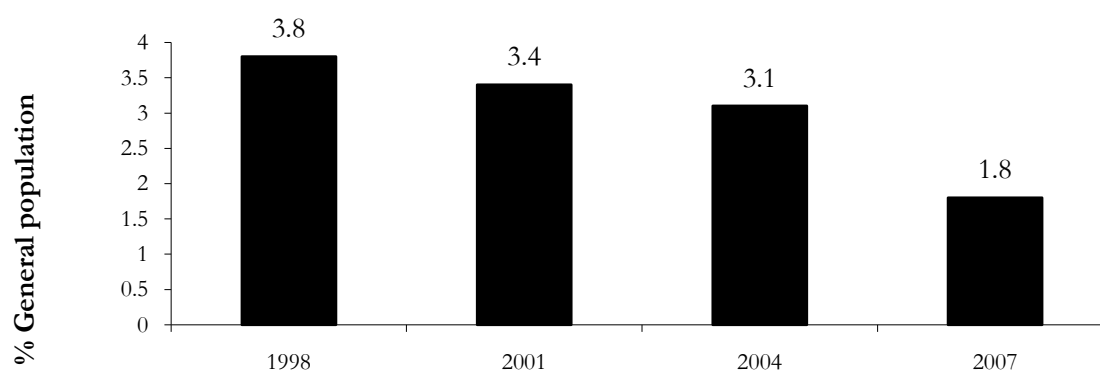
Methamphetamines (i.e. speed, base and ice) were most commonly used in private settings such as in the participant's own home, at a friend's house or at a private party. However, there were some reports of methamphetamine use in public venues such as nightclubs, pubs and at work (See Figure 12).

5.2 Meth/amphetamine use in other populations

5.2.1 General population

Figure 13 shows the proportion of the general population in NSW (aged 14 years and over) who reported having recently used any form of meth/amphetamine. This figure decreased from 3.1% in 2004 to 1.8% in 2007. There appears to have been an overall decline in the use of meth/amphetamine from 1998 (3.8%) to 2007 (1.8%).

Figure 13: Recent* meth/amphetamine use in the NSW general population, 1998-2007.

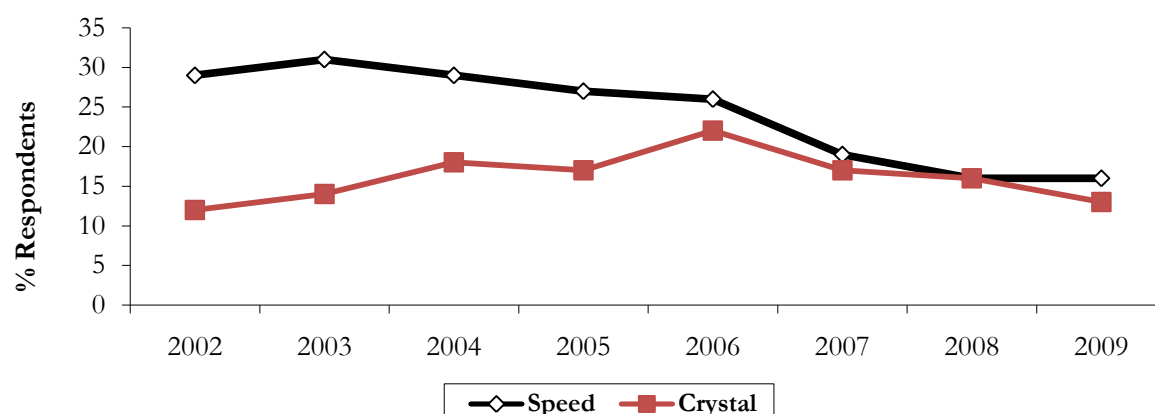


Source: Fitzsimmons & Cooper-Stanbury (2000); Australian Institute of Health and Welfare (2002; 2005; 2008).

* Used in the last 12 months.

Sydney Gay Community Periodic Survey Figure 14 shows the proportion of gay men surveyed that had used speed and crystal in the past six months. In 2009, 16% of the men interviewed had used speed and 13% had used crystal. The authors reported a significant decrease in the proportion reporting the recent use of crystal from 16% in 2008 to 13% in 2009 (Frankland, Lee et al. 2009). The authors note that since 2002 the use of both speed and crystal has decreased significantly.

Figure 14: Proportion of gay men in Sydney reporting recent speed and crystal use, 2002-2009.



Source: Sydney Gay Community Periodic Survey, 2009

5.2.2 Illicit Drug Reporting System

A separate monitoring system investigating trends in the use of methamphetamine in injecting drug users has been conducted in NSW since 1996, in Victoria (VIC) and South Australia (SA) since 1997 and nationally since 2000. This is called the Illicit Drug Reporting System, or IDRS, and reports and bulletins are available from the NDARC website (<http://notes.med.unsw.edu.au/NDARCWeb.nsf/page/IDRSa>).

5.3 Price

5.3.1 Speed

Twelve participants reported on the price of speed over the six months prior to the interview (Table 10). The median price reported the last time speed was purchased was \$47.5 a gram (range \$10-100). Four participants reported purchasing 'eightballs' of speed. It is widely accepted that an 'eightball' represents one-eighth of an ounce (i.e. approx. 3.5 grams). The median price for one eightball was \$145 (range \$120-175). Over half of those who commented (56%) believed the price of speed had remained stable over the preceding six months, 17% believed it had decreased, 6% that it had increased and one-fifth (22%) were unsure (Figure 15).

5.3.2 Base

Thirteen participants reported on the price of base. The median price of the last point of base purchased was \$30 (range \$20-60). Three participants quantified their use of base according to grams. The median price of the last gram of base purchased was \$150 (range \$100-200) (Table 10). Approximately half (54%) of those who commented reported that the price of base had remained stable over the preceding six months; however, almost one-quarter (23%) reported that it had increased. One participant respectively reported that the price of base had decreased, fluctuated and that they were not sure (Figure 15).

5.3.3 Crystal

Nine participants reported on the price of crystal. Eight of these reported that the price paid for the last point of crystal purchased was \$50 and one participant reported \$80 (Table 10). Six participants believed the price of crystal had remained stable over the preceding six months, two that it had increased and one participant was unsure whether the price had changed over this time.

Table 10 presents data collected on the price of methamphetamines from 2003 onward. The reported price of speed has remained relatively stable from 2008 to 2009. The reported price of base fell from \$42.50/point in 2008 to \$30/point in 2009 while the price of a gram of base remained stable. With only one exception, the price of crystal has also remained stable at \$50/point from 2008 to 2009. Changes in the prices of base and crystal have been interpreted with caution due to the small numbers reporting on these measures.

Table 10: Price of various methamphetamine forms purchased by REU, NSW 2003-2009

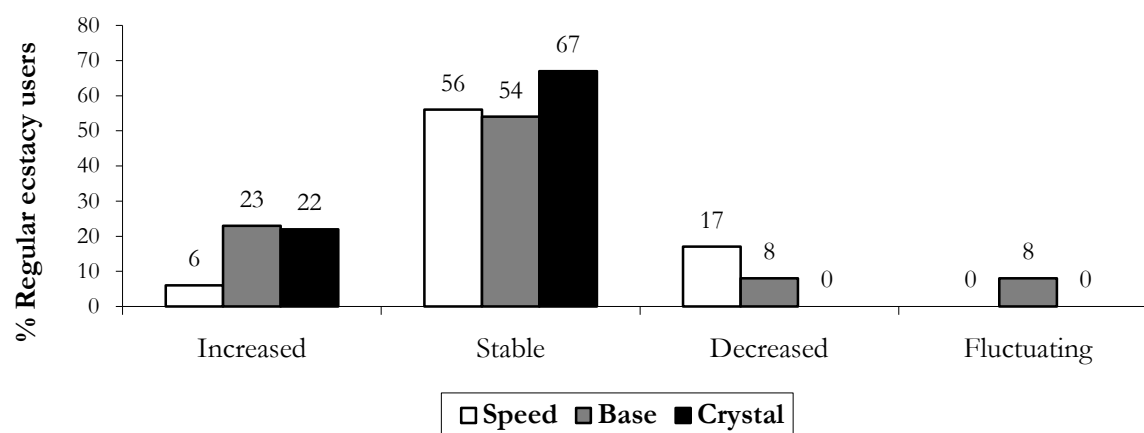
Median price (\$) (range)	2003	2004	2005	2006	2007	2008	2009
Speed	n=46	n=60	n=78	n=50	n=23	n=27	n=18
Point	30	30 (20-40)	40	40 (30-50)	47.5 (40-50)	-	-
Gram	55 (40-190)	60 (60-90)	60 (30-200)	60 (30-350)	50 (30-200)	50 (20-100)	47.5 (10-100)
Half gram	35 (25-50)	30 (20-50)	37.5 (15-50)	50 (45-70)	-	40* (30-50)	45* (40-50)
Base	n=24	n=30	n=51	n=24	n=9	n=13	n=13
Point	40 (20-50)	37.50 (20-70)	30 (10-200)	37.5 (20-50)	40 (15-50)	42.5 (20-70)	30* (20-60)
Gram	175 (150-300)	150 (100-200)	150 (100-260)	100 (12-120)	100 (50-200)	150* (120-300)	150* (100-200)
Half gram	50	100	50	-	-	-	90* (65-100)
Crystal	n= 21	n=34	n=51	n=54	n=37	n=27	n=9
Point	50 (30-70)	40 (25-100)	50 (20-80)	50 (30-80)	50 (30-60)	50 (40-60)	50* (50-80)
Gram	250 (250-350)	200 (150-400)	400 (100-500)	350 (50-400)	315 (280-350)	300*	-
Half gram	70 (40-150)	150	-	-	-	-	-

Source: EDRS regular ecstasy user interviews 2003-2009

*Small numbers reporting n<10.

Figure 15 shows REU impressions of the price of methamphetamines over the preceding six months. Across all three groups, more than half believe the price of methamphetamines has remained stable.

Figure 15: Recent changes in price of various methamphetamine forms purchased by REU*, NSW 2009.



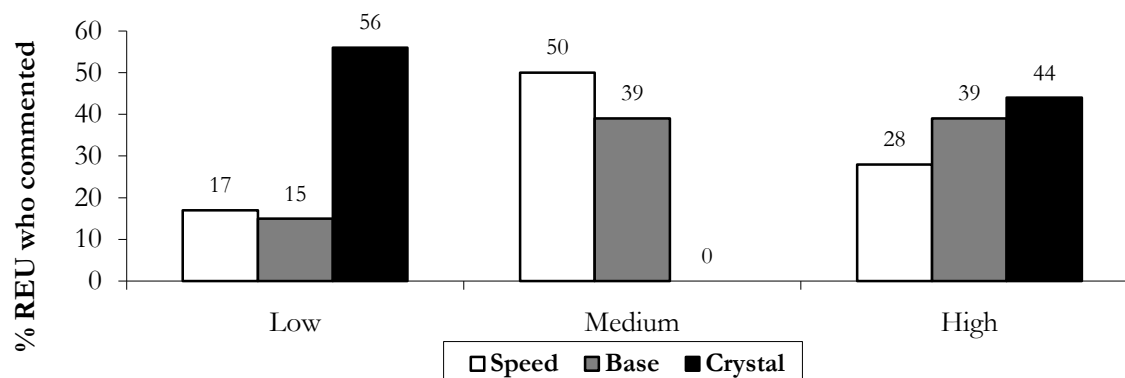
Source: EDRS regular ecstasy user interviews 2009

* of those who commented (speed n=18; base n=13; crystal n=9)

5.4 Purity

The majority of participants reporting on the purity of speed believed it was currently of 'medium' purity. Base was reported to be currently of either 'medium' or 'high' purity. There was little consensus about the current purity of crystal as similar proportions of those responding reported that crystal was currently of 'low' purity as of 'high' purity (Figure 16).

Figure 16: REU reports* of current methamphetamine purity, NSW 2009.

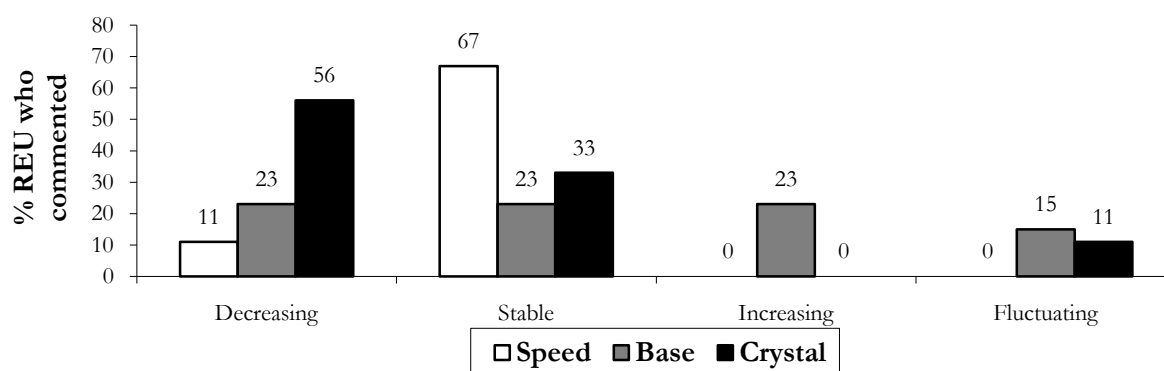


Source: EDRS regular ecstasy user interviews 2009

* of those who commented (speed n=18; base n=13; crystal n=9)

Figure 17 presents data on the perceived change in purity of speed, base and crystal over the six months preceding the interview. The purity of speed was largely reported to have remained stable while that of crystal was largely reported to have decreased. There was some variation of the reported change in purity of base with equal proportions of those who commented reporting that it had recently decreased, remained stable and increased.

Figure 17: REU reports* of changes in methamphetamine purity in the past six months, NSW 2009.



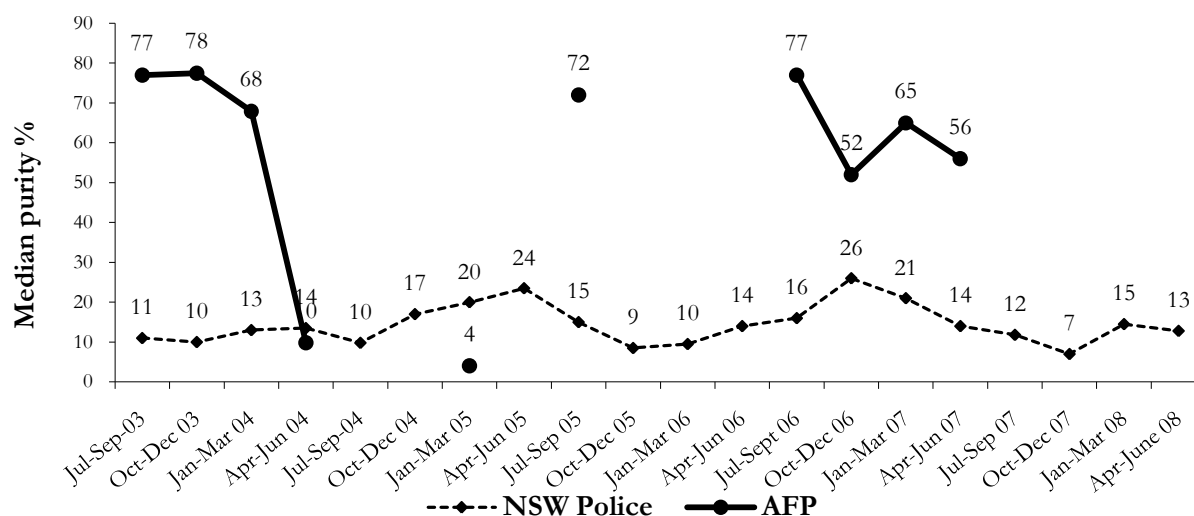
Source: EDRS regular ecstasy user interviews 2009

* of those who commented (speed n=18; base n=13; crystal n=9)

Figure 18 shows the median purity of methylamphetamine seizures analysed in NSW for the period July 2003 to June 2008. From April 2007 to June 2008 the median purity of methylamphetamine seizures analysed in NSW was below 15%, falling to 7% in Oct-Dec 2007. Over time, there has been much greater variation in the seizures analysed by the AFP and they have generally been of a higher median purity. Note that the majority of these seizures are likely to be from targeted, higher level operations than those made by state police. Thus it may be expected that these seizures would generally be of higher purity and that there would be fewer AFP seizures compared with those made by NSW Police. No methylamphetamine seizure purity data was available from the AFP for the period July 2007 to June 2008.

It should be noted that figures do not represent the purity levels of all methylamphetamine seizures – only those that have been analysed at a forensic laboratory. In addition, the period between the date of seizure by police and the date of receipt at the laboratory can vary greatly, and no adjustment has been made to account for double-counting joint operations between the AFP and NSW Police.

Figure 18: Purity of methylamphetamine seizures analysed in NSW, by quarter, July 2003-June 2008.

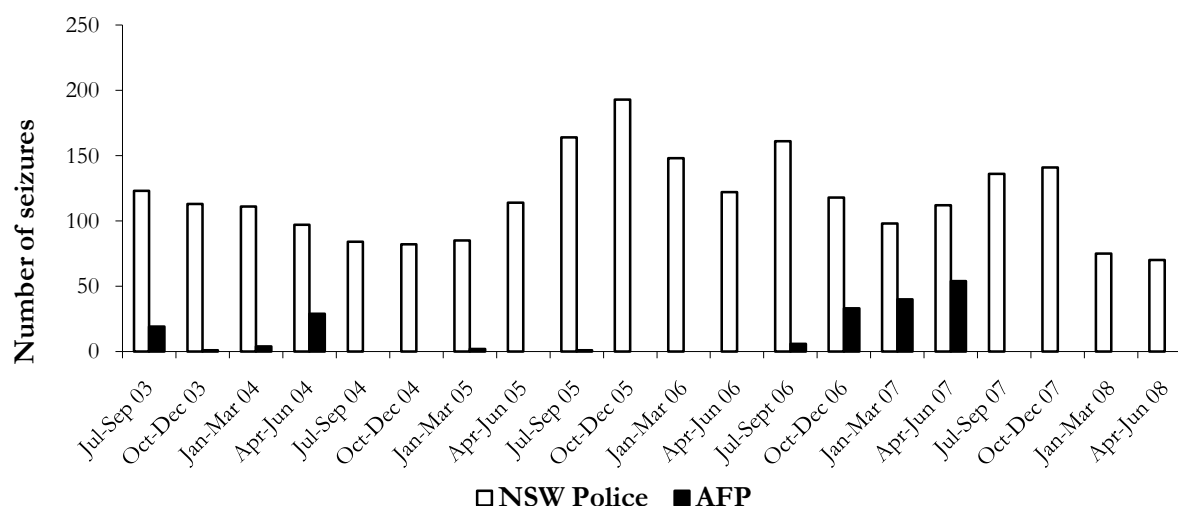


Source: Australian Crime Commission (2004-2009)

NB: Data for 2008/09 were unavailable at time of publication.

Figure 19 shows the number of methylamphetamine seizures upon which the above purity figures are based. The number of seizures analysed in NSW in the first half of 2008 was relatively low (compared with the preceding year) and stable. The number of methylamphetamine seizures has appeared to peak toward the last quarter of every year from 2005-2007.

Figure 19: Number of methylamphetamine seizures analysed in NSW, by quarter, July 2003-June 2008.



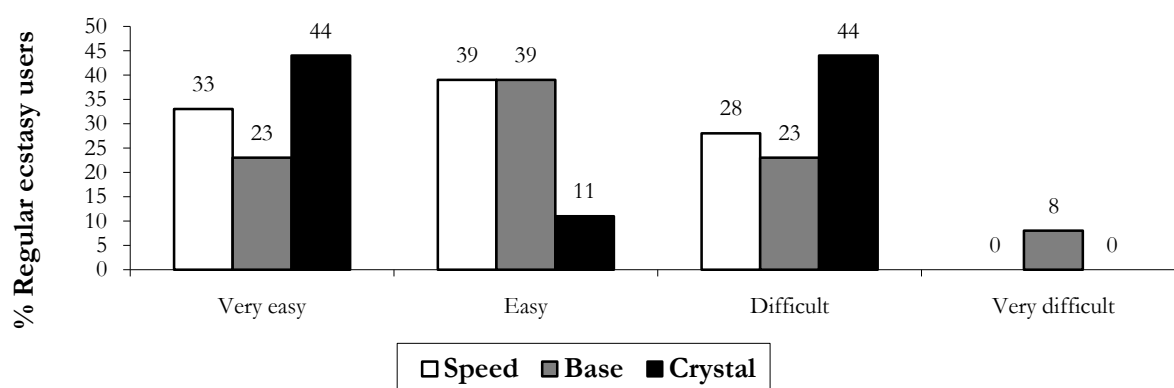
Source: Australian Crime Commission (2004-2009)

NB: Data for 2008/09 were unavailable at time of publication.

5.5 Availability

The majority of those who commented on the availability of speed (72%) and base (62%) reported that they were currently 'easy' or 'very easy' to obtain. As with reports on the current price of crystal, reports of current availability were also polarised with equal proportions reporting it was currently 'very easy' and 'difficult' to obtain (Figure 20).

Figure 20: REU reports* of current availability of methamphetamine forms, NSW 2009.

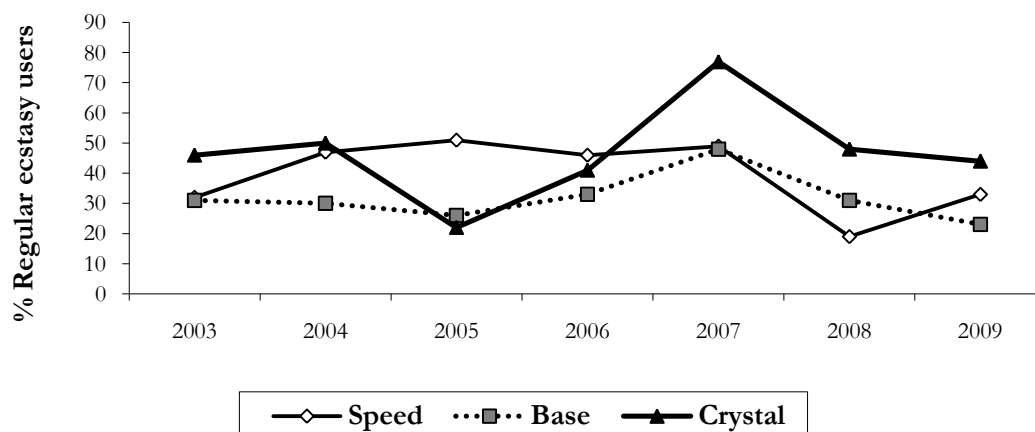


Source: EDRS regular ecstasy user interviews 2009

* of those who commented (speed n=18; base n=13; crystal n=9)

Figure 21 shows the proportion of REU reporting the availability of the three forms of methamphetamine as 'very easy' to obtain, over time. While there has been a 14% increase in those reporting that speed was 'very easy' to obtain from 2008 to 2009, this proportion has not exceeded that reported in 2007 of 49%. The proportions reporting that base and crystal are currently 'very easy' to obtain have both been decreasing since 2007.

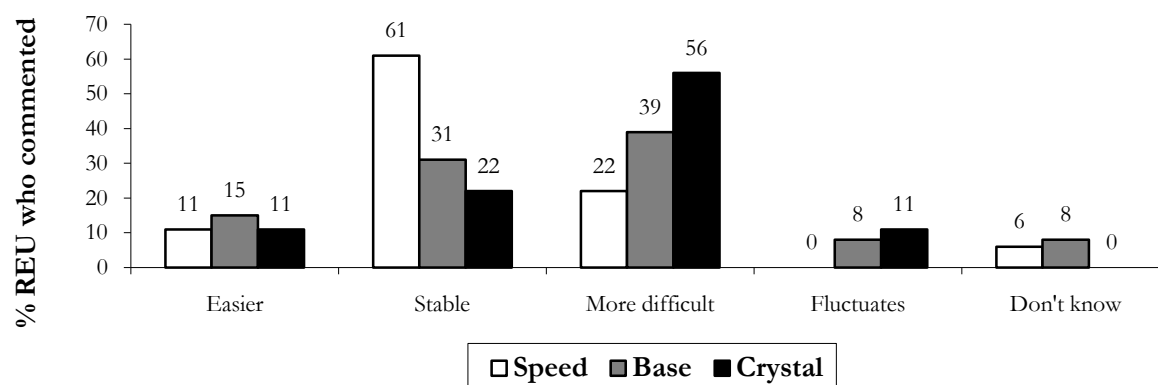
Figure 21: Proportion of REU reporting methamphetamine as 'very easy' to obtain across time, NSW 2003-2009.



Source: EDRS regular ecstasy user interviews 2003-2009

Figure 22 presents the perceived change in availability of speed, base and crystal over the six months prior to interviewing. Most participants who commented believed that the availability of speed had remained stable and that crystal had become more difficult to access. There was some uncertainty about changes in the availability of base with 39% reporting it had become 'more difficult' to obtain, 31% that it had remained 'stable' and 15% that it had become 'easier' to obtain.

Figure 22: Change in the availability of various forms of methamphetamine in the preceding six months*, NSW 2009.



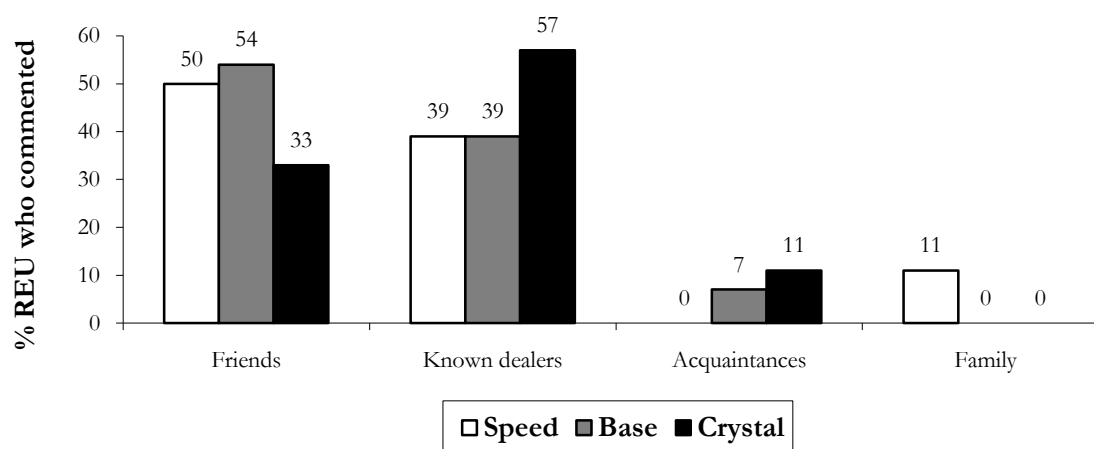
Source: EDRS regular ecstasy user interviews 2009

* of those who commented (speed n=18; base n=13; crystal n=9)

5.5.1 Source person and source location

Overall, methamphetamines were most commonly purchased from friends or known dealers. Speed and base were most commonly last purchased from friends, while crystal was most commonly last purchased from a known dealer. Small numbers reported having purchased methamphetamines from acquaintances and family members (Figure 23).

Figure 23: People from whom methamphetamine was last purchased, NSW 2009[#].

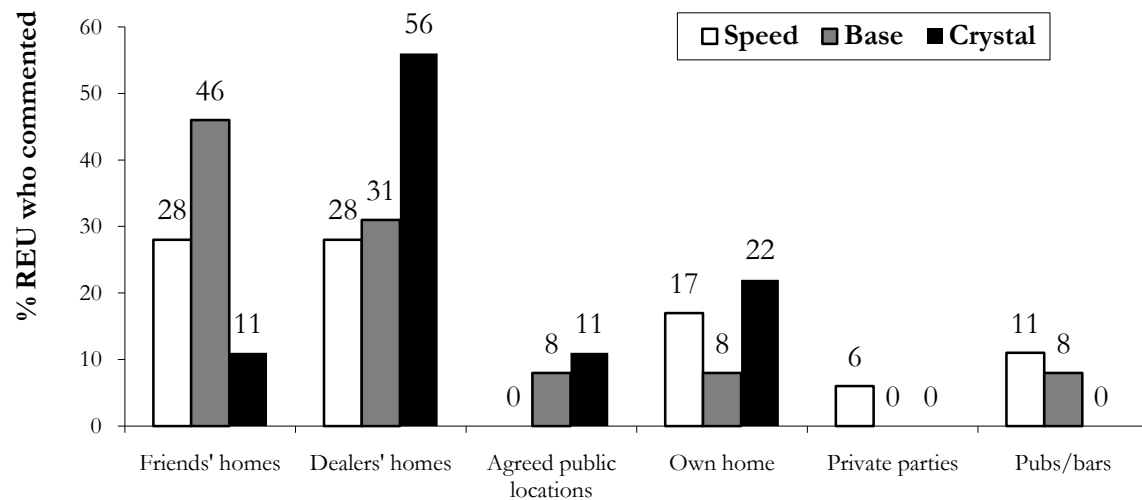


Source: EDRS regular ecstasy user interviews 2009

[#] speed n=18, base n=13, crystal n=9

Figure 24 compares locations of last purchase across the three forms of methamphetamine. REU interviewed had most commonly last purchased methamphetamine in private locations. Crystal was most commonly last purchased at a known dealer's house or in the participant's own home. Base was most commonly last purchased at a known dealer's house or in the participant's own home. Speed was most commonly purchased at a friend's house or at a dealer's house. Speed was last purchased in a greater variety of settings than base or crystal; however, a friend's house or a dealer's house were again those most commonly reported.

Figure 24: Locations at which methamphetamine was last purchased, NSW 2009[#].



Source: EDRS regular ecstasy user interviews 2009

[#] speed n=18, base n=13, crystal n=9

5.5.2 Key expert comments

REU who used methamphetamines, in general, were noted by KE to display signs of anxiety, impulsivity, paranoia and aggression more often, compared with REU who did not. This was noted to be the case even when methamphetamine use was quite irregular (i.e. on a monthly basis). As in previous years, KE reported that while aggression and violence was not common among REU, it was more likely to occur when REU had used alcohol and methamphetamines in combination. A few KE further noted that REU who used methamphetamines tended to frequent raves and live bands or ‘gigs’ and to be less affluent. Methamphetamines tended not to be seen as frequently at festivals and large-scale events.

Several KE were able to comment on speed. They noted that speed continued to be snorted and appeared to be used more commonly than base and crystal, among REU. However, a few KE noted that speed had been used less frequently by REU over the 6-12 months preceding the interview and that “people are moving away from speed”.

Few KE commented on base; however, among those that did, there was a general consensus that base was declining in popularity and seen less often over the preceding 6-12 months. They also noted that when base was used, it was generally swallowed or snorted.

Several KE commented on crystal use among REU. It was generally agreed that crystal tended to be smoked rather than injected by REU and that its use was more accepted among the GLBTQ community than in other groups. However, it was also agreed that crystal was still “viewed very negatively by most groups” (including the GLBTQ community) and commonly seen as “the last frontier along with GHB and smack [heroin]”. KE noted that the main issues associated with crystal were those of aggression and addiction among otherwise ‘recreational’ drug users and that these issues were ongoing in the REU community. Regarding the purity of crystal, KE with access to data from toxicological analyses of methamphetamine samples noted that, while in the past crystal methamphetamine could generally be assumed to be of high purity, there had been a recent increase in dealers’ abilities to find other chemicals to ‘cut’ it with. This has resulted in decreasing purity of crystal methamphetamine and greater uncertainty about its purity for the end user.

5.6 Summary of methamphetamine trends

- Speed was the form of methamphetamine most commonly used among REU, although recent use of speed has been gradually declining across time.
- Recent base use remained relatively stable from last year at approximately one-fifth of respondents.
- The proportions reporting lifetime and recent use of crystal were both significantly lower in 2009 than 2008.
- Speed and base were both used infrequently by REU (i.e. less than monthly); however, crystal had been used on a median of 12 days (by recent users) over the preceding six months (i.e. fortnightly).
- Recent users reported using a median of 1 gram of speed, 2 points of base or 1 point of crystal in a typical episode of use of any of these drugs.
- Speed was purchased at approximately \$47.50 a gram; base at \$30 a point or \$150 a gram; and crystal at \$65 a point. These prices have remained relatively stable from 2008 to 2009.
- Speed was reportedly currently of medium purity and had remained stable over the preceding six months. While base was reported to be of medium to high purity, there was uncertainty regarding changes in purity over the preceding six months. There were mixed reports regarding the current purity of crystal; however, most who commented, both among users and key experts, agreed that it had recently declined.
- In the first half of 2008, the median purity of methamphetamine seizures analysed by NSW Police was low (i.e. <15%) and the number of seizures was low compared with the end of 2007. Seizures analysed by the AFP were generally of higher and fluctuating purity; however, none were recorded for the first half of 2008.
- While speed and base were generally reported to be easy or very easy to obtain, reports on the current availability of crystal were mixed. Similarly, while users noted that the availability of speed had remained stable and that crystal had become more difficult to access, reports on changes in base availability were mixed.
- All forms of methamphetamine were commonly used in private settings such as the participants' own homes, friends' homes or private parties. However, consistent with KE reports, speed was also often used in public venues such as live music events and pubs/bars.
- Speed and base were most commonly purchased from friends, while crystal was most commonly purchased from dealers.
- Methamphetamine use appears to have declined in the general Australian population. Similarly, while speed use has remained stable, crystal use has declined among gay men interviewed for the Sydney Gay Community Periodic Survey.
- Key experts generally agreed that there was a negative stigma associated with the use of crystal. It was also noted that mental health and behavioural problems tended to occur among REU who used methamphetamines, even if they did so infrequently.

6 COCAINE

Cocaine is a stimulant, like methamphetamine. Cocaine is a colourless or white crystalline alkaloid. Cocaine hydrochloride, a salt derived from the cocoa plant, is the most common form of cocaine available in Australia ('crack' cocaine is most prevalent in North America and infrequently encountered in this country) (Australian Crime Commission 2008). 'Crack' is a form of freebase cocaine (hydrochloride removed) which is particularly pure.

Street cocaine is usually 'cut' or diluted with other substances, some which mimic the taste or appearance of cocaine. There is not a great deal of information on the adulterants found in street cocaine, but glucose, lactose, baking soda and even talcum powder have been found.

Almost nine out of ten (85%) regular ecstasy users in 2009 had ever used cocaine and almost two-thirds of the sample (64%) had used it during the six months prior to the interview. The median age at which cocaine was first used was 19 years (range 15-32). Women first used cocaine at a significantly younger age than men (19 vs. 20 years; $U=583$, $p<0.05$).

Cocaine was the drug of choice for 11 participants and, amongst those who reported having binged on ecstasy and other stimulants over the preceding six months, one-third (32%) reported having used cocaine in a binge session. Of those who had used other drugs *with* ecstasy on their last occasion of use, 15% reported having used cocaine. Of those who had used other drugs *to come down from* ecstasy on their last occasion of use, 5% reported having used cocaine.

6.1 Cocaine use among REU

Participants who had used cocaine over the preceding six months had done so on a median of 3 days (range 1-30). The majority of recent users (71%) had used cocaine on a less than monthly basis, 16% had used it between monthly and fortnightly, 11% between fortnightly and weekly and 2% had used cocaine on a greater than weekly basis. There were no daily users of cocaine.

The majority of recent cocaine users quantified their use in terms of grams. The median amount used during a 'typical' occasion of use was 0.5 grams (range 0.1-2.5) and that used on the heaviest occasion was 1 gram (range 0.25-5). A large proportion of users (21 of 64) reported their use of cocaine in terms of 'lines'. These participants reported using a median of 2 lines (range 1-8) during a 'typical' occasion of use and a median of 3 lines (range 1-10) on the heaviest occasion of use.

All recent users of cocaine reported having snorted it over the preceding six months. A significant proportion of recent users of cocaine (22%) reported having swallowed it during this time and 5% reported having smoked it. No participants reported having injected or shelved/shafted cocaine over the six months preceding the interview.

Table 11 presents data across time on the prevalence, frequency and quantity of cocaine use among REU interviewed in NSW. The number of participants reporting the lifetime use of cocaine has remained relatively stable from 2008-2009 while the proportion reporting recent cocaine use has increased by 13% over this period. Similarly, from 2008 to 2009 cocaine continued to be used relatively infrequently (i.e. less than monthly) and in similar quantities.

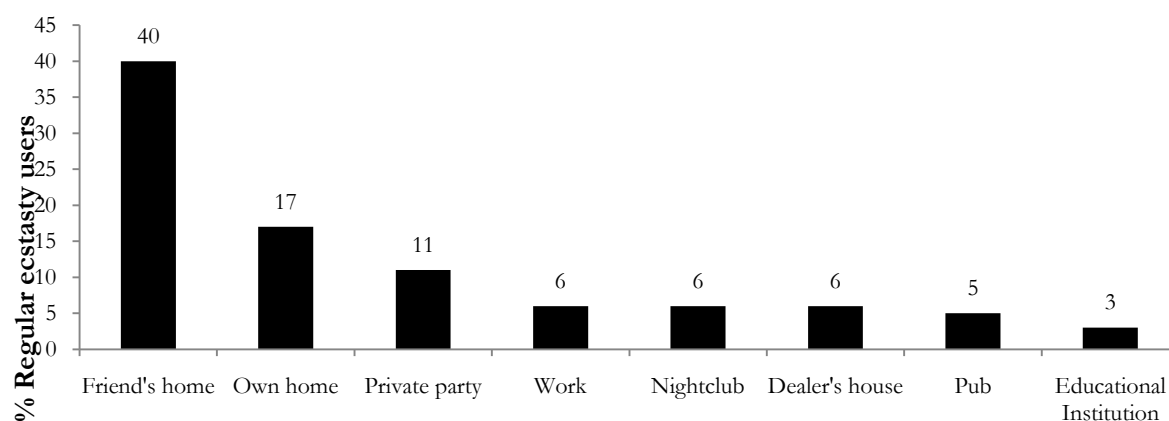
Table 11: Patterns of cocaine use of REU, NSW 2003-2009

Cocaine variable	2003 (N=102)	2004 (N=104)	2005 (N=101)	2006 (N=100)	2007 (N=100)	2008 (N=100)	2009 (N=100)
Ever used %	78	79	76	80	88	90	85
Used last 6 mths %	46	46	55	45	62	51	64
Of those who had used:							
	2	3	2.5	2	4	5	3
Median days used last 6 mths (range)	(1-24)	(1-48)	(1-84)	(1-14)	(1-48)	(1-90)	(1-30)
Median quantities used (grams):							
Typical (range)	0.5 (0.25-2)	0.5 (0.13-2.5)	1 (0.25-10)	1 (0.25-2)	0.5 (0.25-3)	0.5 (0.25-2)	0.5 (0.1-2.5)
Heavy (range)	1 (0.3-5)	1 (0.13-4)	1 (0.25-12)	1 (0.25-3)	1 (0.25-7)	1 (0.5-5)	1 (0.25-5)

Source: EDRS regular ecstasy user interviews 2003-2009

Among those who commented (n=35), 40% reported last having used cocaine at a friend's home, 17% at their own home and 11% at a private party (Figure 25). Smaller proportions reported having used cocaine at a pub (9%), a dealer's home (6%), a nightclub (6%), at work (6%) and at an educational institution (3%). Overall, cocaine had most commonly been used in private settings.

Figure 25: Last location of cocaine use, NSW 2009.



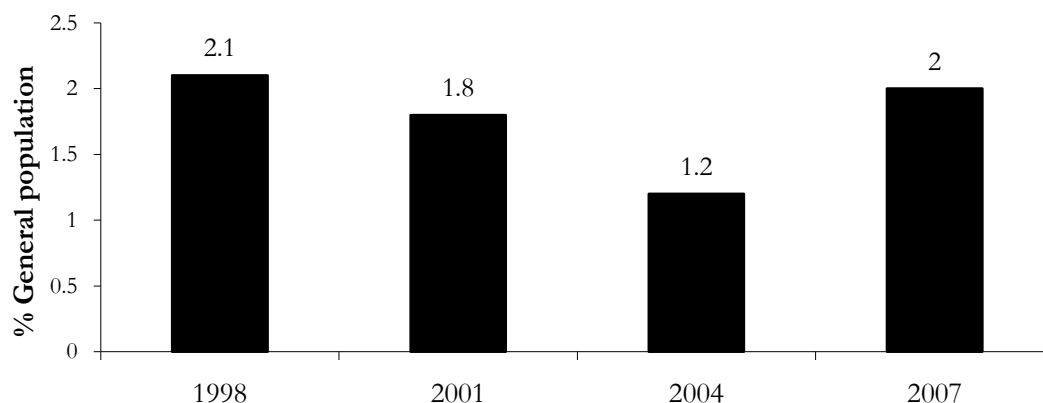
Source: EDRS regular ecstasy user interviews 2009

6.2 Cocaine use in other populations

6.2.1 General population

Recent cocaine use appears to have increased slightly in the general population from 1.2% in 2004 to 2% in 2007; however, it remains relatively low (Figure 26).

Figure 26: Recent* cocaine use in the NSW general population, 1998-2007.



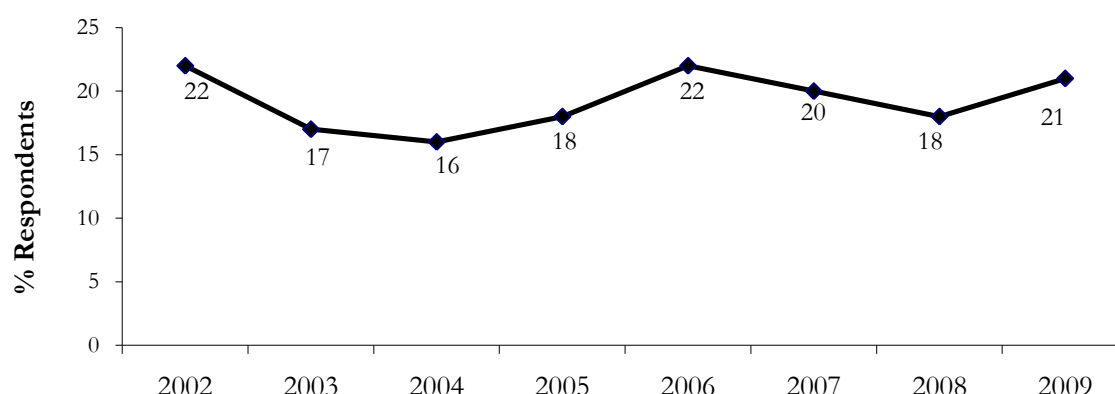
Source: Fitzsimmons & Cooper-Stanbury (2000); AIHW (2002; 2005; 2008)

* Used in the last 12 months.

6.2.2 Sydney Gay Community Periodic Survey

Figure 27 shows the proportion of men surveyed that had used cocaine in the past six months. The authors report a significant increase in the proportions reporting the recent use of cocaine from 2008 (18%) to 2009 (21%). They also report that there has been a significant increase in the use of cocaine across time from 2002 to 2009 (Frankland, Lee et al. 2009).

Figure 27: Proportion of gay men in Sydney reporting recent cocaine use, 2002-2009.



Source: Sydney Gay Community Periodic Survey, 2009

6.2.3 Illicit Drug Reporting System

A separate monitoring system investigating trends in the use of cocaine in injecting drug users has been conducted in NSW since 1996, VIC and SA since 1997 and nationally since 2000. This is called the Illicit Drug Reporting System, or IDRS, and reports and bulletins are available from the NDARC website (<http://notes.med.unsw.edu.au/NDARCWeb.nsf/page/IDRSa>).

6.3 Price

Thirty-six participants were able to comment on the price of cocaine. The median price per gram was \$300 (range \$120-400). This figure has remained stable for the past four years (Table 12).

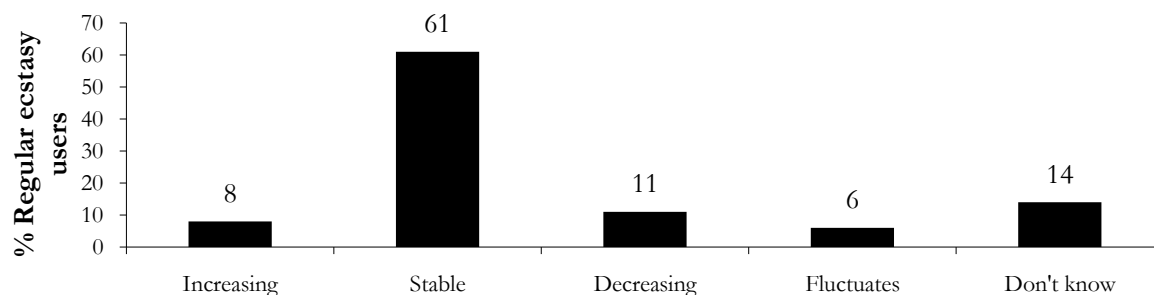
Table 12: Price of cocaine purchased by REU, NSW 2003-2009

	2003	2004	2005	2006	2007	2008	2009
Median price per gram (range) \$	200 (150-400)	200 (200-450)	270 (70-500)	300 (100-300)	300 (180-350)	300 (250-400)	300 (120-400)

Source: EDRS regular ecstasy user interviews 2003-2009

The majority (61%) of those who commented on the price of cocaine believed it had remained stable over the preceding six months (Figure 28).

Figure 28: Recent changes in price of cocaine purchased by REU, NSW 2009.

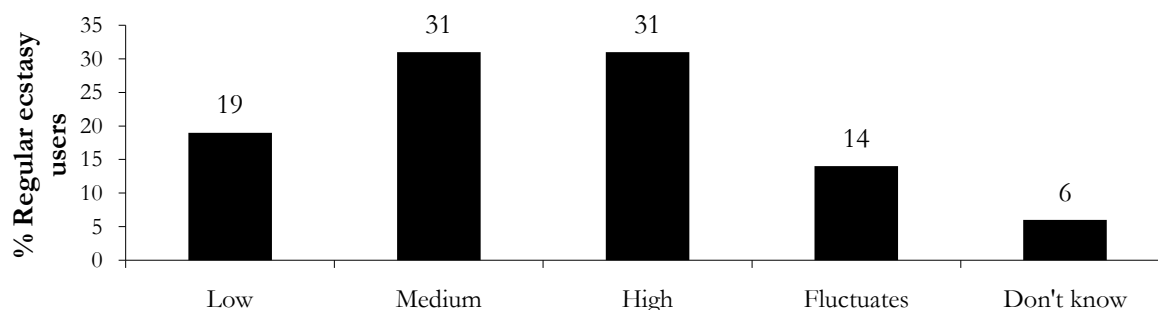


Source: EDRS regular ecstasy user interviews 2009

6.4 Purity

Thirty-six REU were able to comment on the purity of cocaine. The majority (62%) reported that it was currently of 'medium' or 'high' purity; however, approximately one in five reported that it was currently of 'low' purity (Figure 29).

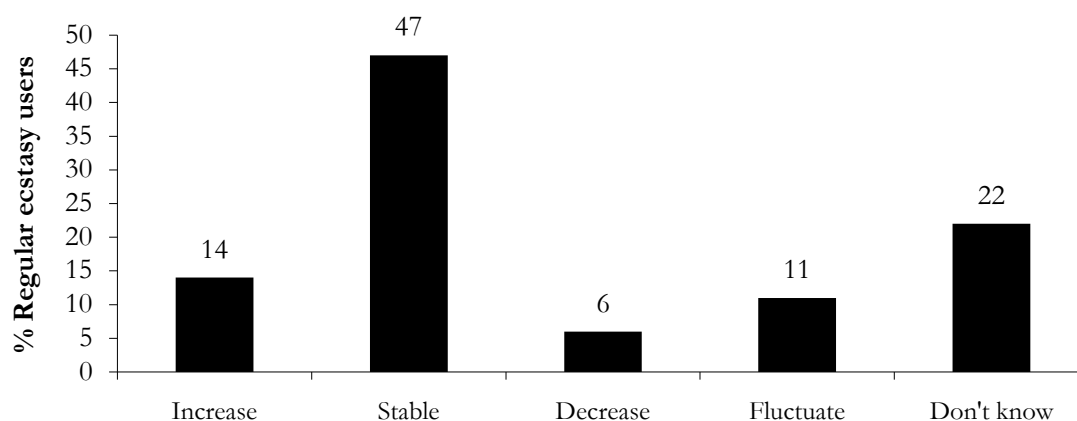
Figure 29: User reports of current purity of cocaine, NSW 2009.



Source: EDRS regular ecstasy user interviews 2009

Approximately half of those who commented reported that the purity of cocaine had remained stable over the preceding six months; however, 14% believed it had recently increased and 22% were unable to comment (Figure 30).

Figure 30: User reports of changes in cocaine purity in the past six months, NSW 2009.

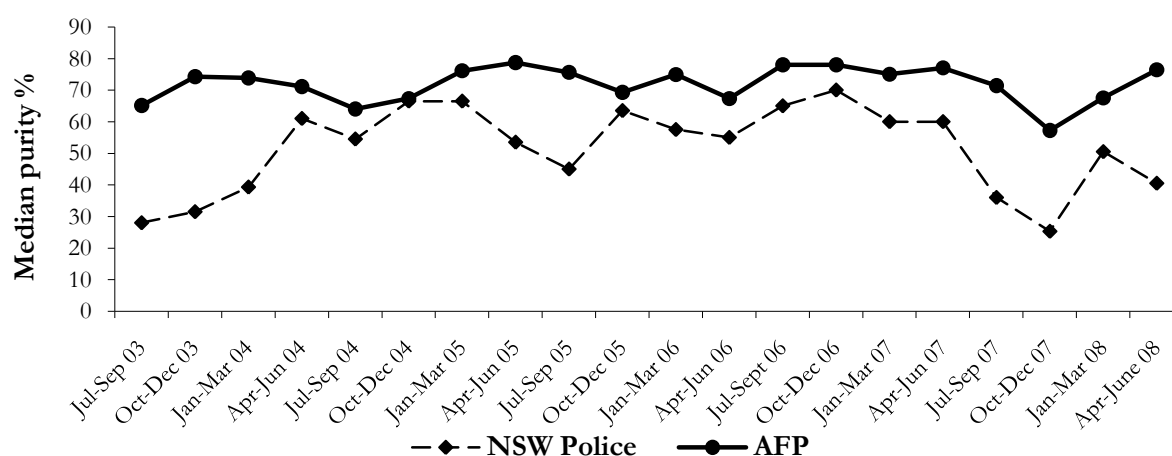


Source: EDRS regular ecstasy user interviews 2009

Figure 31 presents data on the purity of cocaine seizures analysed in NSW by the AFP and NSW Police between July 2003 and June 2008. There was a slight drop in the purity of cocaine seizures analysed between October and December 2007. Since this time, the purity of seizures analysed by the AFP appear to have been increasing and to have returned to levels seen in early 2007. The purity of seizures analysed by NSW Police, however, have remained variable. As of mid-2008, the median purity of seizures analysed by NSW Police was approximately 41%.

It should also be noted that figures do not represent the purity levels of all cocaine seizures – only those that have been analysed at a forensic laboratory. 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.

Figure 31: Purity of cocaine seizures analysed in NSW, by quarter, July 2003-June 2008.

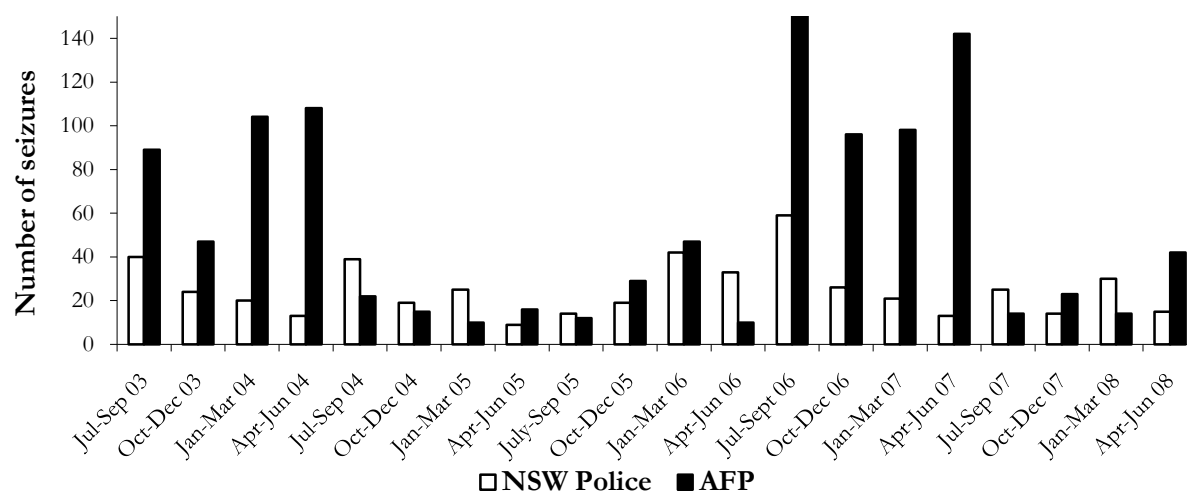


Source: Australian Crime Commission (2004-2009)

NB: Data for 2008/09 were unavailable at time of publication.

Figure 32 shows the number of seizures analysed in NSW between July 2003 and June 2008. The number of seizures analysed by the AFP in 2007/08 returned to levels comparable to those seen prior to July 2006.

Figure 32: Number of cocaine seizures analysed in NSW, by quarter, 2003-2008.



Source: Australian Crime Commission (2004-2009)

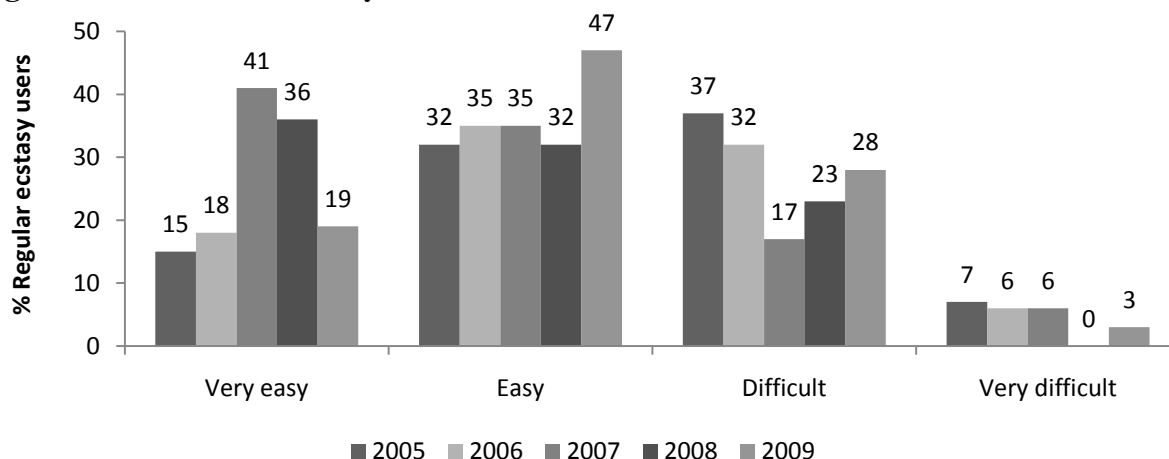
NB: Data for 2008/09 were unavailable at time of publication.

6.5 Availability

Thirty-six participants were able to comment on the availability of cocaine. Of these, the majority (67%) believed cocaine was currently either 'easy' or 'very easy' to obtain; however, a large proportion (28%) reported that it was currently 'difficult' to obtain.

Figure 33 presents changes across time in the reported current availability of cocaine. The proportion reporting that cocaine was 'very easy' to obtain appears to have decreased from 36% in 2008 to 19% in 2009, continuing a generally declining trend from 2007. Over this time there also appears to have been an increase in the proportions reporting that cocaine was currently 'difficult' to obtain from 17% in 2007 to 28% in 2009.

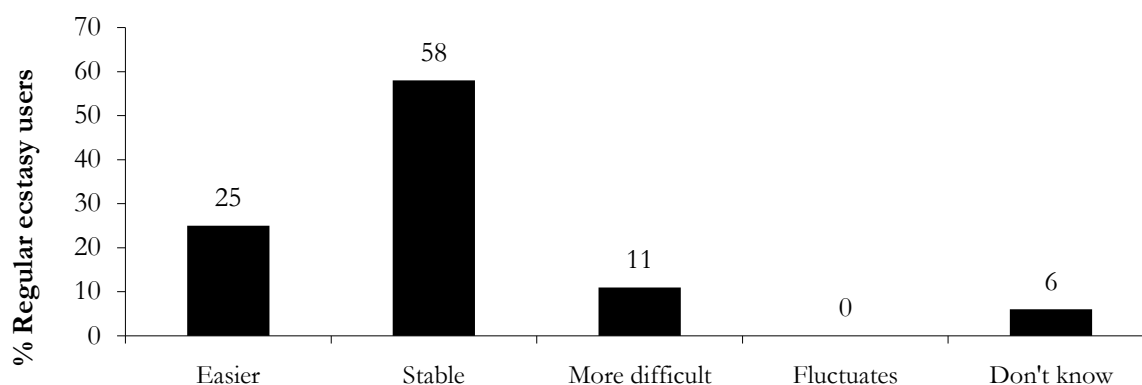
Figure 33: Current availability of cocaine, NSW 2005-2009.



Source: EDRS regular ecstasy user interviews 2005-2009

Contrasting somewhat with the trends noted in the reported current availability of cocaine, when participants were asked to comment on changes to the availability of cocaine over the preceding six months, more than half reported that it had remained 'stable' and one-quarter reported that it had become 'easier' to obtain (Figure 34).

Figure 34: Changes to the availability of cocaine in the preceding six months, NSW 2009.

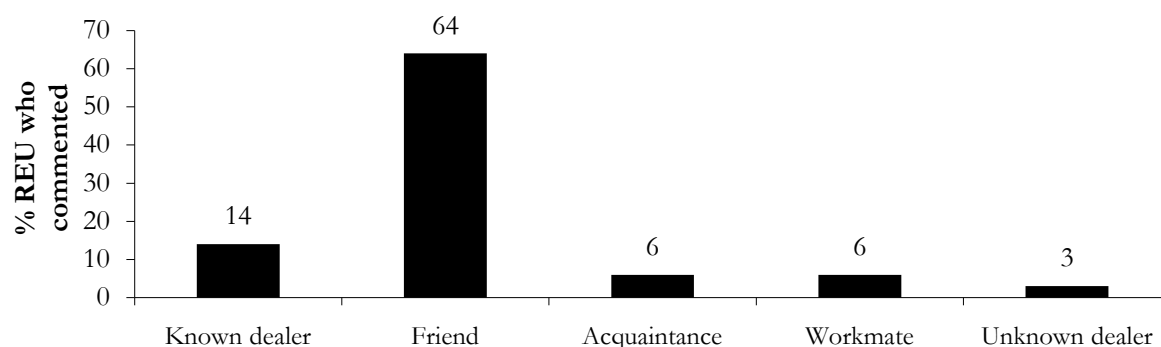


Source: EDRS regular ecstasy user interviews 2009

6.5.1 Source person and source location

Of those who commented on purchasing cocaine over the preceding six months (n=36), the majority had purchased it from a friend and smaller proportions reported having purchased it from a known dealer, an acquaintance, a workmate or an unknown dealer (Figure 35).

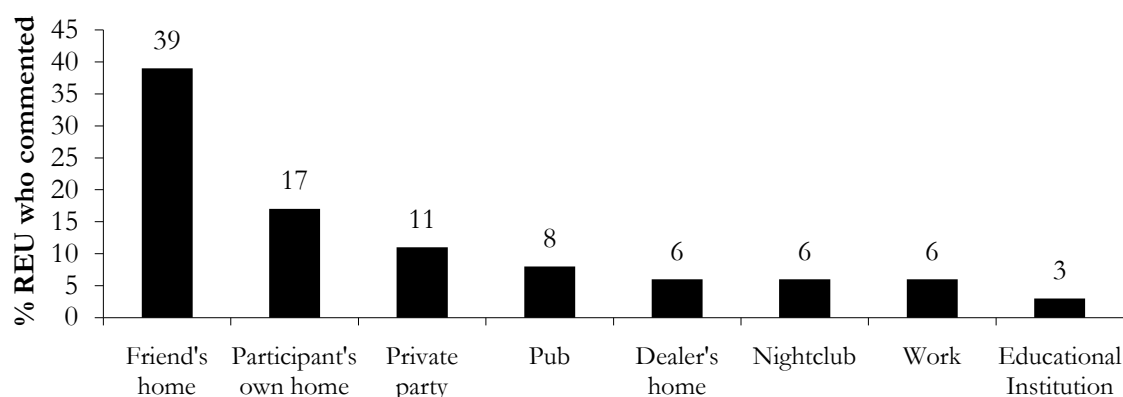
Figure 35: People from whom cocaine was last purchased, NSW 2009.



Source: EDRS regular ecstasy user interviews 2009

Participants were asked to specify the location they had last purchased cocaine (Figure 36). Two in five reported having last purchased cocaine at a friend's home, approximately one in five at their own home and approximately one in ten at a private party. Thus, cocaine had been most commonly purchased in private locations from friends.

Figure 36: Locations at which cocaine was last purchased, NSW 2009.



Source: EDRS regular ecstasy user interviews 2009

6.5.2 Key expert comments

Many KE commented on cocaine and it was generally agreed that there had been much more “talk” of cocaine among REU over the 6-12 months preceding the interview. KE differed regarding whether or not they had actually seen an increase in cocaine use; however, KE who worked with the GLBTQ community seemed to consistently report that there had been an increase in use among this group. In particular, it was noted that cocaine had become “more mainstream ... less hidden away” among GLBTQ REU who viewed it as a ‘cleaner’ drug which did not leave you looking “trashy”. KE stated that following recent GHB- and crystal-related overdoses in the party scene, GLBTQ REU were looked on less favourably if they appeared “really out of it” (since this frightens and disturbs others). Since many users consider themselves to be more in control when using cocaine, this may be a possible reason for the noted increase in cocaine use amongst this group.

Many KE reported that they rarely observed aggression or health-related problems among REU when using cocaine. However, one KE had noted an increase in young, fit people presenting with chest pain at festivals over the preceding six months, which the KE attributed to cocaine use. Another KE had noted a slight increase in the number of people presenting to their service experiencing a cocaine-induced psychosis over the preceding six months.

A few KE were able to comment on the price, purity and availability of cocaine. Most KE agreed that the price was currently high (approximately \$300 a gram), that the purity was medium to high and that these figures had remained relatively constant. There was low consensus among KE regarding the availability of cocaine. While some reported that it had increased, others reported that it had remained stable and it was the popularity and use patterns that had changed. Law KE reported that there had been a slight increase in the number of cocaine detections in Sydney. However, they were mostly of small quantities and may reflect better policing practices rather than an actual increase in use or availability.

It was generally agreed that cocaine was still primarily available in powder form, with users snorting it in social settings (commonly in lines or from ‘bumpers’¹⁰). KE also noted that cocaine was being used by younger REU and more often by women, compared with previous years. Overall, there had been a reported shift in perception of cocaine among REU from a glamorous, ‘special occasion’ drug to one which had become more mainstream and accessible.

A few KE referred to the use of cocaine among injecting drug users. Further investigation of cocaine use among IDU was undertaken in the Illicit Drug Reporting System (IDRS), a separate monitoring system conducted in NSW since 1996, VIC and SA since 1997 and nationally since 2000. Reports and bulletins are available from the NDARC website (<http://notes.med.unsw.edu.au/NDARCWeb.nsf/page/IDRSa>).

¹⁰ A ‘bumper’ is a small glass nasal inhaler, purchased from tobacconists, used to store and administer powdered substances such as ketamine and cocaine.

6.6 Summary of cocaine trends

- In 2009, most REU interviewed had used cocaine (85%) and approximately two-thirds had used it recently; however, cocaine continued to be used relatively infrequently by this group (i.e. on 3 days over the preceding six months).
- Recent users of cocaine had used a median of 0.5 grams in a typical occasion of use and a median of 1 gram in the heaviest occasion of use (over the preceding six months).
- Snorting continued to be the main route of administration for cocaine.
- Cocaine was most commonly used in private, social settings such as friends' homes, participants' own homes and private parties.
- Cocaine use among the general population in NSW appears to have remained relatively low and stable while among gay men in Sydney there has been an increase in use from 2008 to 2009, consistent with KE reports of increasing cocaine use among the wider GLBTQ community.
- The price of cocaine remained stable at \$300 for 1 gram, consistent with KE reports.
- User reports of cocaine purity indicate that it was of medium to high purity at the time of interviewing and had remained stable in the six months preceding this. Toxicological data from cocaine seizures for 2007/08 are relatively consistent with this, as are KE reports.
- Both user reports and KE reports of cocaine availability were inconsistent. There appears to be a generally declining trend in the proportions of REU reporting that cocaine was currently very easy to obtain and an increase in those reporting it was difficult to obtain. However, most REU who commented indicated the availability of cocaine had remained stable and one-quarter reported it had become 'easier' to obtain. Similarly, KE comments indicate that while there seems to be more interest in cocaine among REU, many were unsure whether there was indeed a greater availability of the drug.
- Cocaine was primarily purchased from friends in private locations such as a friend's house, the participant's own house or a private party.

7 KETAMINE

Ketamine is a rapid acting, dissociative anaesthetic that is used in veterinary surgery and less commonly in human surgery. Ketamine is a liquid that can be injected for legitimate use. It is typically converted into a fine powder through evaporation, which is typically snorted. Ketamine can also be made into tablets, capsules and tabs which are usually swallowed. Common names for ketamine include K, special K or vitamin K.

Ketamine produces a dissociative state in the user, commonly eliciting an out-of-body experience. It has a combination of stimulant, depressant, hallucinogenic and analgesic properties. Too much ketamine can result in the user having a ‘near death experience’ or falling into a ‘K hole’.

As ketamine is complicated to manufacture, and precursor chemicals are difficult to obtain, it is unlikely that it is produced in clandestine laboratories. The majority of ketamine used by REU is probably diverted from veterinary sources or imported from overseas, making supply irregular compared with other illicit substances (Australian Crime Commission 2008; 2009)

Approximately half (53%) of the 2008 sample of regular ecstasy users reported having ever used ketamine and approximately one-fifth (19%) reported having done so recently. Ketamine was first used at a median age of 19 years (range 15-37) across the entire sample (i.e. there was no difference between men and women).

Ketamine was the drug of choice for 3% of the sample. Among those who reported bingeing on ecstasy and other drugs, 9% reported having used ketamine in a binge episode. Of those who had last used ecstasy *with* other drugs, 3% reported having used ketamine; however, no participants reported having last used ketamine *to come down from* ecstasy.

7.1 Ketamine use among REU

Almost all the REU who had recently used ketamine had done so on a less than monthly basis with only one participant having used ketamine between monthly and fortnightly. No participants reported weekly or daily use of ketamine.

Thirteen of the nineteen recent users of ketamine reported their use in terms of ‘bumps’¹¹. They reported a median of 4 bumps (range 1-7) on a typical occasion of use and 4.5 bumps (range 1-8) on the heaviest occasion of use over the preceding six months. Some respondents reported their use in terms of lines, grams or points and will not be reported here due to small numbers reporting.

¹¹ A bump refers to a small amount of powder, typically measured and snorted from the end of a key, the corner of a plastic card or a ‘bumper’. A bumper is a small glass nasal inhaler, purchased from tobacconists, used to store and administer powdered substances such as ketamine.

Ketamine was most commonly snorted over the preceding six months (95%) and approximately one in five (21%) recent users reported having swallowed it. No recent ketamine users reported having injected, smoked or shelved/shafted it over this period.

Table 13 presents data across time regarding patterns of ketamine use among REU interviewed in the EDRS. While the proportion reporting the lifetime use of ketamine remained relatively stable from 2008 to 2009, the proportion reporting its recent use fell from approximately one in three to one in five. Similarly, while the median number of days of use remained relatively stable, the median amount used in an average session and in the heaviest session over the preceding six months both increased.

Table 13: Patterns of ketamine use among REU, NSW 2003-2009

Ketamine variable	2003 (N=102)	2004 (N=104)	2005 (N=101)	2006 (N=100)	2007 (N=100)	2008 (N=100)	2009 (N=100)
Ever used (%)	59	58	65	57	62	65	53
Used last 6 mths (%)	49	39	39	27	36	30	19
Of those who had used:							
Median days used last 6 mths (range)	3 (1-100)	4 (1-30)	2 (1-72)	2 (1-48)	2 (1-25)	3 (1-12)	2 (1-8)
Median quantities used (bumps):							
Typical (range)	3 (1-20)	3 (0.5-15)	3 (0.5-10)	2 (0.5-7)	1 (1-3)	2 (1-4)	4 (1-7)
Heavy (range)	3 (1-20)	4 (2-15)	4 (1-20)	2.5 (0.5-7)	2 (1-10)	2 (1-10)	4.5 (1-8)

Source: EDRS regular ecstasy user interviews 2003-2009

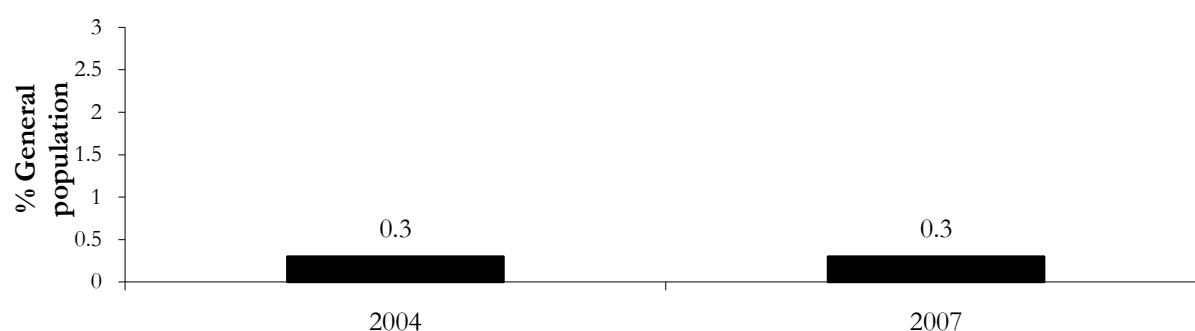
Six participants were able to comment on the locations of use of ketamine. Two REU reported having last used ketamine at a friend's home, two in a public place (e.g. street, park) and one person each reported having last used ketamine at a nightclub and a private party.

7.2 Ketamine use in other populations

7.2.1 General population

Ketamine was first included in the National Drug Strategy Household Survey in 2004 (Australian Institute of Health and Welfare 2005). The proportion of the general population in NSW aged 14 years or over reporting recent use of ketamine has remained stable at 0.3% (Figure 37).

Figure 37: Recent* ketamine use in the NSW general population, 2004 and 2007.



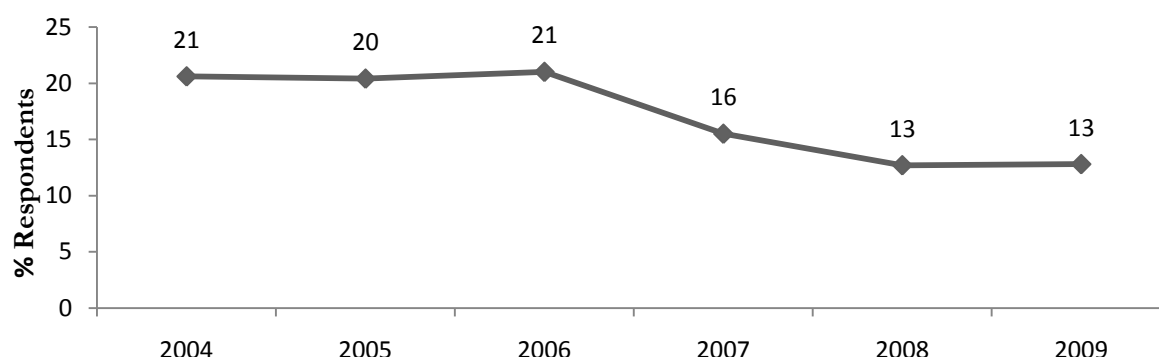
Source: AIHW 2005, 2008.

* Used in the last 12 months.

7.2.2 Sydney Gay Community Periodic Survey

Figure 38 shows the proportion of men surveyed that had used ketamine in the past six months. There was no significant change in the proportion reporting recent ketamine use from 12.7% in 2008 to 12.8% in 2009; however, the authors report a significant decline in the use of ketamine among their sample from 2004 (20.6%) to 2009 (12.8%) (Frankland, Lee et al. 2009).

Figure 38: Proportion of gay men in Sydney reporting recent ketamine* use, 2004-2009.



Source: Sydney Gay Community Periodic Survey, 2009

*Not asked in all surveys

7.3 Price

As only seven participants reported on the price, purity and availability of ketamine, the following data should be interpreted with caution.

The median price of ketamine per gram was \$150 (range \$140-170). Three of those who commented reported that the price of ketamine had increased over the six months preceding the interview. One person respectively reported that it had remained stable, decreased or fluctuated.

The reported price of ketamine has remained stable for the past three years at \$150 per gram (Table 14). Over this time, the price range has been quite large, indicating that the street price was quite variable. In 2009 the price range was relatively small (only \$30) and may indicate a growing stability in the market value of ketamine; however, the possibility that the small range is due to people reporting from within the same social network cannot be excluded.

Table 14: Price of ketamine purchased by REU, NSW 2003-2009

Median Price (range)	2003 (n=24)	2004 (n=24)	2005 (n=44)	2006 (n=7)	2007 (n=15)	2008 (n=13)	2009 (n=6)
Gram (range)	150 (80-200)	200 (100-200)	100 (20-300)	175 (80-200)	150 (50-280)	150 (40-250)	150 (140-170)

Source: EDRS regular ecstasy user interviews 2003-2009

7.4 Purity

Four participants reported that ketamine was currently of ‘medium’ purity, two that the purity was currently ‘high’ and one person reported that it was currently of ‘low’ purity. When asked about changes in purity over the preceding six months, four participants reported that it had decreased and two that it had remained stable.

7.5 Availability

Ketamine was generally reported to be either ‘difficult’ (n=4) or ‘very difficult’ (n=1) to obtain and only two participants reported that it was currently ‘easy’ to obtain. When asked about changes in the availability of ketamine over the preceding six months, three participants reported that it had remained ‘stable’, two that it had become ‘easier’ to obtain and one that it had become ‘more difficult’.

7.5.1 Source person and source location

Four of the six participants who commented on purchasing ketamine reported having last purchased it from a ‘friend’. One person each reported having purchased it from a known dealer or an acquaintance. Accordingly, when asked where they had last purchased ketamine, four participants reported having done so at a friend’s home, one at their own home and one at an agreed public location.

7.5.2 Key expert comments

Several KE commented on ketamine. Some KE reported that it had become “more well known” over the 6-12 months preceding the interview. Several KE noted that while it had been less available in the preceding six months, at the time of the interviews, it was becoming slightly more

available. Law KE reported that more ketamine related detections were being made outside the city metropolitan area and that there had been a general increase in the number and overall weight of detections. Furthermore, they reported that there were low numbers of border detections of ketamine compared with other drugs. However, there had been no reported thefts of ketamine from veterinary or ambulance stocks over the six months preceding the interview.

KE reported that ketamine was generally used in powder form and commonly snorted from bumpers or in lines. It was thought to cost approximately \$150 a gram. Some KE were able to comment on demographic characteristics of REU who used ketamine. They reported that they were generally aged between 20 and 34 years, mostly male and probably polydrug users. It was noted by some that ketamine was commonly used by REU who had become “bored” or disheartened with ecstasy and were experimenting with new drugs. A few KE reported seeing REU who had used ketamine in venues. However, those present at festivals stated they rarely saw ketamine-related presentations, excepting situations where the patient had unexpectedly consumed ecstasy with ketamine in it or was a novice user.

7.6 Summary of ketamine trends

- In 2009, approximately half the sample had ever used ketamine and one-in-five had used it recently. These figures have been fluctuating over time.
- Ketamine had been used on a less than monthly basis by most recent users.
- Recent users of ketamine reported using a median of 4 bumps on a typical occasion of use and 4.5 on the heaviest occasion in the preceding six months. These figures were both higher than those reported in 2008.
- Ketamine continues to be most commonly snorted by REU.
- Ketamine use has been low and stable in the general population of NSW and has declined among gay men in Sydney.
- The price of ketamine appears to have remained relatively constant at \$150 a gram.
- The purity of ketamine was reportedly medium to high and several REU indicated that this had decreased over the preceding six months¹².
- Ketamine is generally difficult to obtain and both user reports and KE reports indicate that its availability is variable.
- Key experts indicated that many experienced users of ecstasy were beginning to use ketamine as an alternative as they had become disillusioned with ecstasy.

¹² Small numbers reporting – interpret with caution.

8 GHB

Gamma-hydroxybutyrate (GHB) has been researched and used for a number of clinical purposes including as an anaesthetic (Kam and Yoong 1998; Nicholson and Balster 2001). In 1964, GHB was introduced in Europe as an anaesthetic agent particularly for children (Laborit 1964; Vickers 1968), but was not widely used due to the incidence of vomiting and seizures (Hunter, Long et al. 1971). Research has also examined the effectiveness of GHB as a treatment for narcolepsy (Mamelak 1989; Chin, Kreutzer et al. 1992; Mack 1993) and for alcohol dependence and opioid withdrawal (Kam and Yoong 1998; Nicholson and Balster 2001).

In recent years, there has been documentation of the use of GHB as a recreational drug, in a range of countries around the world. Common street names for GHB in Australia include 'liquid ecstasy', 'fantasy', 'GBH', 'grievous bodily harm' and 'blue nitro'. Following restrictions on the availability of GHB, there have been reports of the production of GHB from its precursor, GBL (gamma-butyrolactone). The use of GBL, and a similar chemical, 1,4-B (1,4-butanediol), has also been documented (Ingels, Rangan et al. 2000). GBL and 1,4-B are metabolised into GHB in the body. They may be used as substitutes for GHB, but are known to be pharmacologically different.

Approximately one-quarter (24%) of the sample had ever used GHB; however, only six participants reported having used it over the past six months. GHB was first used at a median of 19 years (range 16-37). There was no significant difference in the median age of initiation to GHB between men and women (19 years respectively; $U=43.5, p>0.05$).

Only one participant reported that GHB was their preferred drug and, among those who had recently binged, only one participant reported having used GHB during a binge episode. No participants reported having used GHB either *with* ecstasy or *to come down from* it on their last occasion of use.

8.1 GHB use among REU

Three of the six respondents who had recently used GHB had done so less than monthly, two had done so between monthly and fortnightly and one had done so on a greater than weekly basis. There were no daily users of GHB.

Table 15 presents patterns of GHB use across time. Both the proportion reporting the lifetime use and also the recent use of GHB has fallen from 2008 to 2009. Data relating to the frequency and quantity of use has been included for completeness of reporting; however, it should be interpreted with caution as there were very small numbers reporting.

Table 15: Patterns of GHB use among REU, NSW 2003-2009

GHB variable	2003 (N=102)	2004 (N=104)	2005 (N=101)	2006 (N=100)	2007 (N=100)	2008 (N=100)	2009 (N=100)
Ever used (%)	33	28	32	40	37	37	24
Used last 6 mths (%)	21	18	13	21	23	24	6
Of those who had used:							
Median days used last 6 mths (range)	2 (1-30)	2 (1-26)	2 (1-72)	3 (1-40)	6 (1-180)	2.5 (1-48)	4^ (1-72)
Median quantities used (mL):							
Typical (range)	8.25 (5-30)	5 (2-30)	4 (1.8-20)	3.5 (.25-20)	2 (1-15)	3 (1-20)	7^ (5.5-10)
Heavy (range)	8.75 (5-40)	12 (3-36)	15 (3-43.20)	6 (.25-40)	6 (2-40)	6 (1-20)	8^ (5.5-15)

Source: EDRS regular ecstasy user interviews 2003-2009

^ Small numbers reporting

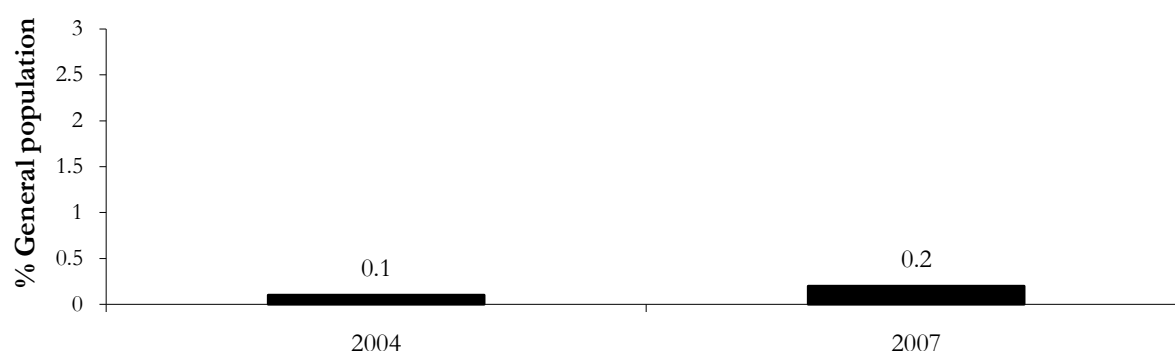
Five REU who were recent users of GHB were able to specify where they had last used it. Three reported having last used GHB in a private setting such as their own home or a friend's home and two reported having last used GHB at either a nightclub or a rave/doof/danceparty.

8.2 GHB use in other populations

8.2.1 General population

The 2004 National Drug Strategy Household Survey was the first to include GHB as a separate drug class (Australian Institute of Health and Welfare 2005). From 2004 to 2007 the recent use of GHB among the NSW general population aged 14 years and over remained relatively stable at 0.2% (Figure 39).

Figure 39: Recent* GHB use in the NSW general population, 2004 and 2007.



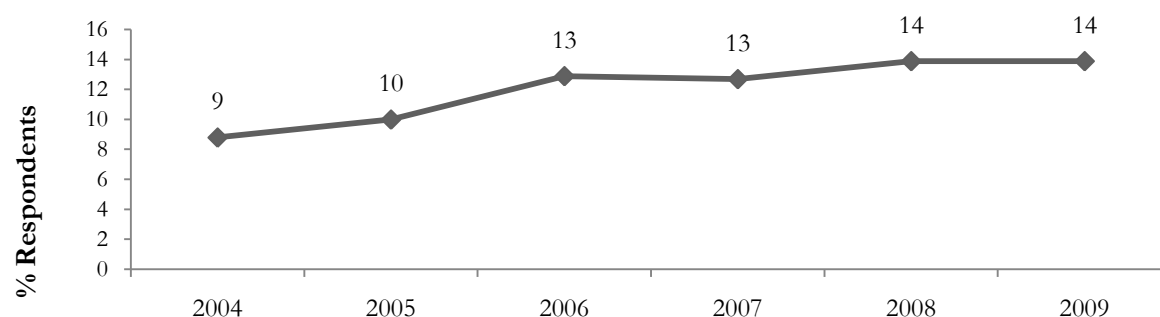
Source: AIHW, 2005, 2008.

* Used in the last 12 months.

8.2.2 Sydney Gay Community Periodic Survey

Figure 40 shows the proportion of gay men surveyed that had used GHB in the past six months. The proportion of participants reporting recent use of GHB has increased from 8.8% in 2004 to 13.9% in 2009 (Frankland, Lee et al. 2009).

Figure 40: Proportion of gay men in Sydney reporting recent GHB* use, 2004-2009.



Source: Sydney Gay Community Periodic Survey, 2009

*Not asked in all surveys

8.3 Price

Given the confusion regarding the size of vials in which GHB is typically purchased, and the uncertainty around what constitutes a typical dose, it is not surprising that there is wide variation and seemingly inconsistent reports of the price of GHB between years. Again, the small proportion of respondents who commented on the price of GHB makes it difficult to draw any strong conclusions from these data.

In 2008, seven participants reported that the median price of GHB was \$4 for 1 mL (range \$1-9). Three participants reported a median price of \$20 for 2 mL (range \$15-25) and three participants

reported a median price of \$25 for 1 vial (range \$10-35). Again, caution should be used when interpreting these data.

In 2009, three participants reported that the median price for a vial/‘fish’ of GHB was \$12 (range \$10-22.50) and three participants reported a median price of \$7 (range \$5-15) for 1 mL.

When asked about changes in the price of GHB over the preceding six months, three participants reported that it had ‘increased’ and two that it had remained ‘stable’.

8.4 Purity

Three participants reported that GHB was currently of ‘medium’ purity and one participant respectively reported that it was currently of ‘low’ and ‘high’ purity. There was not much consensus regarding changes to the purity of GHB over the preceding six months with one participant reporting that it had ‘increased’, one that it had remained ‘stable’, two that it had ‘decreased’ and one that it had ‘fluctuated’.

8.5 Availability

Four of the five participants who commented on the availability of GHB reported that it was currently ‘difficult’ to access while one participant reported that it was currently ‘very easy’ to access. Similarly, four participants reported that it had become ‘more difficult’ to access while one participant reported that it had become ‘easier’ to access. Again, readers are cautioned when interpreting these data due to the small numbers reporting.

8.5.1 Source person and source location

GHB had been purchased from known dealers (n=3) or acquaintances (n=2) in private venues such as at the participants’ own homes, dealers’ homes or friends’ homes.

8.6 Key expert comments

Several key experts were able to comment on the use of GHB among REU. It was noted that GHB and its precursor GBL were still relatively available, of moderate to strong purity and priced at approximately \$15-25 for 4-5 mL (a fish) or \$3-6 for 1-1.5 mL. Both GHB and GBL were generally seen in liquid form and were often taken mixed in a drink. One KE reported that there had been a move away from using fish containers toward using clear sachets (similar to ketchup sachets) which were purportedly less likely to be heard or felt in a police ‘pat down’. GHB/GBL was reportedly used by REU who were slightly older, i.e. 30 years old and over. KE had also noted a slight increase in the number of women using GHB.

KE noted that there had been a decline in the use of GHB in clubs and an increase in private locations such as house parties. Some KE had also noticed a slight increase in the number of festival goers using GHB. One KE believed this may be the case because GHB is reportedly undetectable by current drug detection dogs. Another KE had noticed that some REU have begun to consume GHB along with energy drinks and was concerned about this trend because of the possible health risks associated with consuming a central nervous system depressant and stimulant at the same time. KE working in health care settings noted that many REU continue to consume GHB/GBL along with alcohol. They noted that when patients presented with GHB-related problems, they tended to be of higher severity and to require more intensive treatment.

8.6 Summary of GHB trends

- Approximately one-quarter of participants in 2009 had ever used GHB; however, only six participants reported recent use of the drug.
- GHB was relatively infrequently used (i.e. a median of 4 days over the preceding six months).
- Recent users reported using a median of 7 mL on a typical occasion of use and 8 mL in the heaviest occasion of use over the preceding six months.
- While the use of GHB has remained relatively low and stable among the general population of NSW, its use increased among gay men in Sydney from 2008 to 2009.
- The median price of a 'fish' or vial of GHB was \$12 and for 1 mL was \$7. These figures are inconsistent with those reported in 2008 and also with KE estimates and should be interpreted with caution given the small numbers reporting.
- User reports of the purity of GHB were consistent with KE reports indicating that it was currently of medium to high purity. However, reports of changes in the purity of GHB over the preceding six months were inconsistent.
- REU reports indicate that GHB was currently difficult to access and had become more difficult over the preceding six months. However, KE reports indicated that GHB was still relatively available.
- GHB was most commonly purchased from either known dealers or acquaintances in private locations.
- Key experts indicated that GHB tended to be used more commonly among REU in their late 20s and early 30s. This may partly account for the apparent reduction in the proportion of REU reporting recent use of GHB in 2009 given the significant reduction in median age from 2008.

9 LSD

Lysergic acid diethylamide is commonly known as LSD, ‘trips’ or ‘acid’. It is a powerful hallucinogen which can produce significant changes in perception, mood and thought. Only a small amount is needed to cause visual hallucinations and distortions. These experiences are known as ‘trips’.

LSD is usually adhered to perforated sheets. Small paper squares (‘tabs’) are detached from these sheets and usually decorated with designs which can often be culturally specific to the user groups. LSD is potent, so trips are often cut into halves or quarters and shared with others.

Unpleasant reactions to LSD include fear, anxiety and depression. LSD is manufactured in illicit laboratories and the majority of LSD is believed to be imported from overseas.

Almost two-thirds (62%) of REU had ever used LSD and more than one-third (37%) had done so over the six months preceding the interview. LSD was first used at a median age of 18.5 years (range 14-28) and there was no significant difference between men and women regarding the age of initiation to LSD (18 and 19 respectively, $U=384.5$, $p>0.05$).

Two participants reported that LSD was their drug of choice. Of those who had recently binged, six REU had done so while using LSD. Four participants had used LSD *with* ecstasy on their last occasion of ecstasy use; however, no participants reported having used LSD *to come down from* ecstasy.

9.1 LSD use among REU

LSD was used on a median of 2 days (range 1-25) over the preceding six months. Of those who had used LSD, the vast majority (86%) had done so less than monthly. Four participants had used LSD between monthly and fortnightly and one participant had used LSD on a greater than weekly basis (Table 16).

The majority of recent users of LSD quantified their use in terms of tabs. They reported having used a median of 1 tab (range 0.5-3) during a ‘typical’ episode of use and 1 tab (range 0.5-3.5) during the heaviest episode of use in the preceding six months (Table 16). While the majority of recent users of LSD (95%) reported having swallowed it over the preceding six months, one participant each reported having snorted and shelved it.

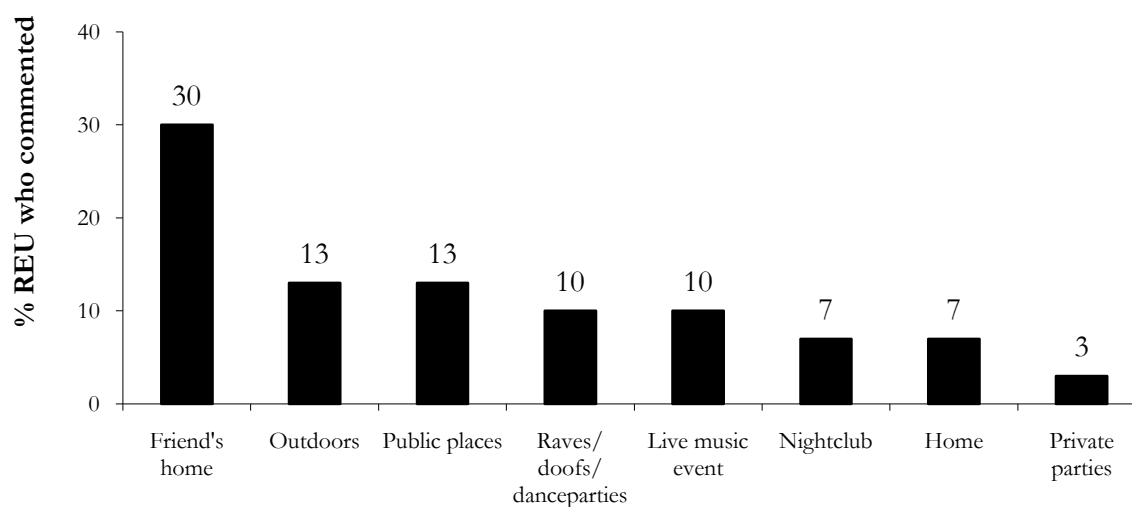
Table 16 presents data across time on patterns of LSD use among REU. While the proportion reporting the lifetime use of LSD appears to have remained relatively stable, the proportion reporting the recent use of LSD was higher in 2009 than 2008. The frequency with which participants reported having used LSD and the quantities used appear to have remained stable.

Table 16: Patterns of LSD use of REU, NSW 2003-2009

LSD variable	2003 (N=102)	2004 (N=104)	2005 (N=101)	2006 (N=100)	2007 (N=100)	2008 (N=100)	2009 (N=100)
Ever used (%)	66	61	71	65	68	57	62
Used last 6 mths (%)	27	20	33	17	22	18	37
Of those who had used:							
Median days used last 6 mths (range)	1 (1-20)	1 (1-20)	2 (1-72)	2 (1-25)	2.5 (1-20)	2 (1-20)	2 (1-25)
Median quantities used (tabs):							
Typical (range)	1 (0.5-3)	1 (0.25-4)	1 (0.50-3)	1 (0.50-2)	1 (0.25-4)	1 (0.25-2.5)	1 (0.5-3)
Heavy (range)	1 (0.5-12)	1 (0.5-4)	1 (0.5-15)	2 (0.50-6)	1 (0.25-10)	1.75 (0.5-3)	1 (0.5-3.5)

Source: EDRS regular ecstasy user interviews 2003-2009

Figure 41 presents the location of last LSD use. In contrast to many of the other drugs reported herein, LSD was least likely to be used in private parties or at nightclubs and most likely to be used in public, open spaces or at raves/doofs/danceparties or live music events.

Figure 41: Last location of LSD use, NSW 2009.

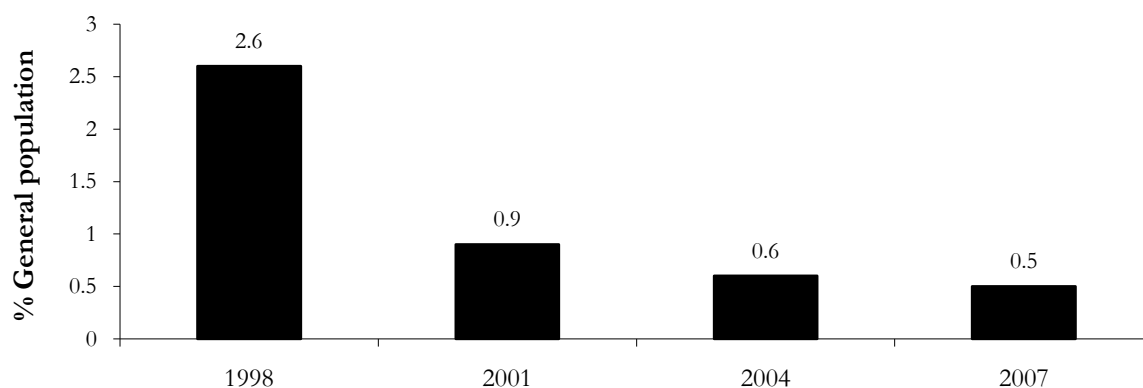
Source: EDRS regular ecstasy user interviews 2009

9.2 Hallucinogen use in other populations

9.2.1 General population

Figure 42 presents data across time on the recent use of hallucinogens in the NSW general population among participants aged 14 years or over. This proportion decreased from 2.6% in 1998 to 0.9% in 2001 and has decreased slightly since with 0.5% of the NSW general population reporting recent usage of hallucinogens in 2007.

Figure 42: Recent* hallucinogen use in the NSW general population, 1998-2007.



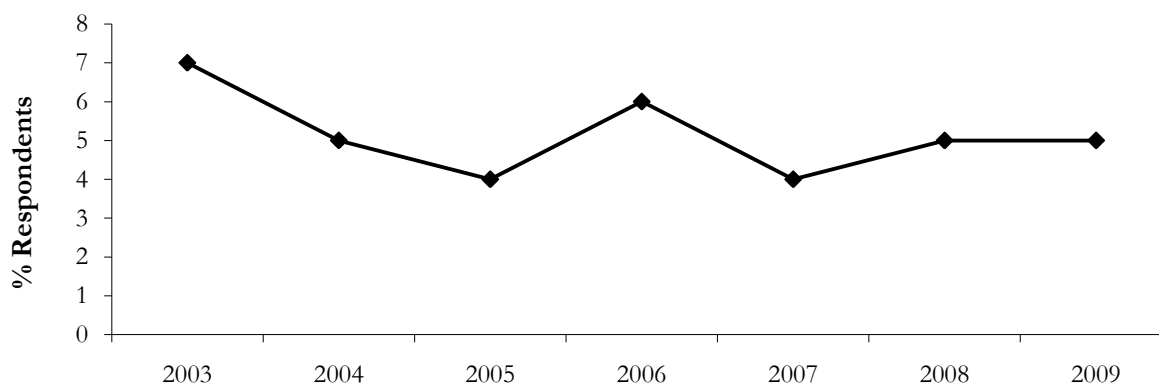
Source: Fitzsimmons & Cooper-Stanbury 2000; Australian Institute of Health and Welfare 2002, 2005, 2008.

* Used in the last 12 months.

9.2.2 Sydney Gay Community Periodic Survey

Figure 43 shows the proportion of men surveyed that had used LSD/trips in the past six months. In 2009, 5% of the sample had recently used LSD. The authors reported that there has been no significant change in the use of LSD over time (Frankland, Lee et al. 2009).

Figure 43: Proportion of gay men in Sydney reporting the recent use of LSD/trips*, 2003-2009.



Source: Sydney Gay Community Periodic Survey, 2009

*Not asked in all surveys

9.3 Price

Thirty participants reported on the price of LSD (Table 17). The median price last paid for a tab of LSD was \$20 (range \$10-40). The majority of those who commented (47%) reported that the price had remained stable over the preceding six months; however 17% reported that it had increased, 13% reported that it had decreased and 7% reported that it had fluctuated. Five participants were unable to comment on changes to the price of LSD. Data on the price per tab of LSD is presented in Table 17. The price of LSD rose by \$5 from 2008 to 2009.

Table 17: Prices of LSD purchased by REU, NSW 2003-2009

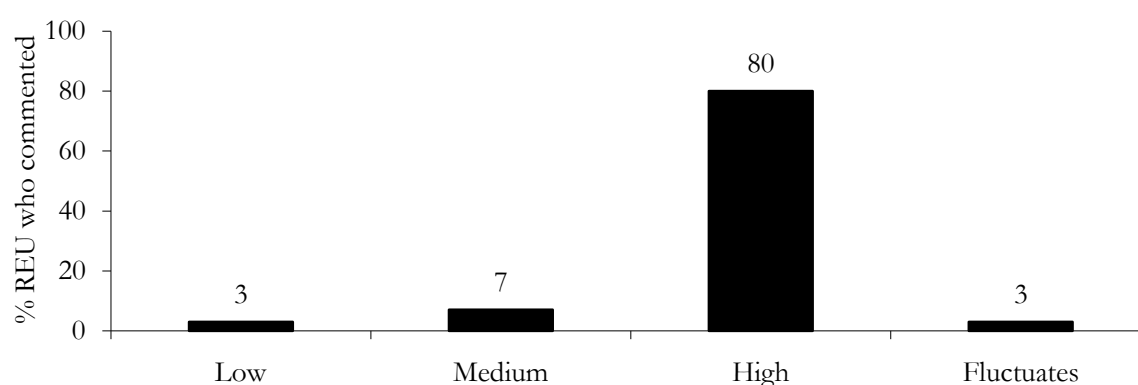
Median price (\$) LSD	2003 (n=23)	2004 (n=18)	2005 (n=38)	2006 (n=27)	2007 (n=34)	2008 (n=12)	2009 (n=30)
Tab (range)	15 (4-30)	20 (10-35)	20 (5-40)	20 (10-70)	15 (10-25)	15 (10-50)	20 (10-40)

Source: EDRS regular ecstasy user interviews 2003-2009

9.4 Purity

Thirty participants commented on the purity of LSD. Of these, the majority (80%) reported that LSD was currently of 'high' purity and smaller proportions reported differently (Figure 44). Half of those who commented reported that the purity of LSD had remained 'stable' over the preceding six months, 17% reported that it had been 'increasing' and one participant reported that it had 'fluctuated'. Almost one-third were unable to comment on changes in the purity of LSD.

Figure 44: Current purity of LSD, NSW 2009.



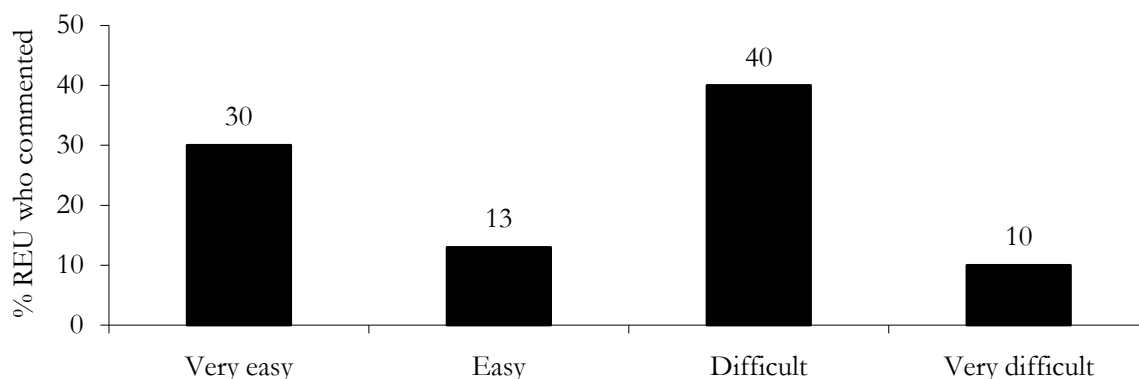
Source: EDRS regular ecstasy user interviews 2009

9.5 Availability

There was little agreement regarding the current availability of LSD with 50% reporting that it was either 'difficult' or 'very difficult' to obtain and 43% reporting that it was either 'easy' or

‘very easy’ to obtain (Figure 45). There was similar uncertainty about whether LSD had become ‘more difficult’ (17%) or ‘easier’ (33%) to obtain with 30% reporting that it had remained ‘stable’. One participant reported that the availability of LSD had fluctuated over the preceding six months and five participants were unable to comment on this.

Figure 45: Current availability of LSD, NSW 2009.



Source: EDRS regular ecstasy user interviews 2009

9.5.1 Source person and source location

LSD was most commonly purchased from friends (67%) or known dealers (23%). Smaller proportions reported having purchased LSD from unknown dealers (7%) or acquaintances (3%). LSD was most commonly purchased at a friend’s house (33%), at the participant’s own home (10%) or at a dealer’s home (10%). Smaller proportions reported having purchased LSD at a nightclub (7%), a private party (7%), a pub (3%) and at a rave/doof/danceparty (3%).

9.5.2 Key expert comments

KE who commented generally agreed that there had been more interest in and more widespread use of LSD among REU over the preceding six months. Several KE reported that LSD was mainly sold and consumed in ‘tabs’ which were purchased for approximately \$15. A few KE reported that LSD was generally of high purity and appeared to have remained so over the preceding 6-12 months. It was noted that there was an inconstant supply of LSD in Sydney; however, one KE suggested that an increasing demand was likely to lead to an increasing supply. A law KE noted that there had been an increase in the number of detections of LSD and mushrooms in the latter half of 2008 with almost half of these being made at festivals. Another KE noted that, similar to GHB, LSD was not thought to be detectable by drug detection ‘sniffer’ dogs, and thus more REU were using LSD at festivals to reduce the risk of being caught. It was also noted that LSD was becoming trendier and was relatively cheap, making it even more attractive to REU.

KE working in health service provision noted an increase in the number of people hallucinating at festivals; however, they had not noted any increase in health or safety issues among hallucinogen users in this setting. When help was sought, it was generally associated with issues such as fear or emotional upset.

9.6 Summary of LSD trends

- Approximately six-in-ten REU had ever used LSD and almost two-fifths had used it recently, a significant increase from 2008 when only one-fifth had done so.
- Recent users had used it on a median of 2 days over the preceding six months and used a median of 1 tab on both typical and heavy occasions of use. The frequency and quantity of use of LSD remained stable from 2008 to 2009.
- LSD was most commonly swallowed.
- LSD was most frequently used either outdoors or in public places.
- The proportions reporting recent LSD use among the general population in NSW and also among gay men in Sydney has remained low and stable in 2009.
- The price per tab of LSD increased by \$5 to \$20 in 2009.
- Recent users indicated that LSD was currently of 'high' purity and had remained stable over the preceding six months.
- LSD was mainly purchased from friends in private settings.
- There was little agreement regarding the current availability of LSD.
- Key experts reported that there had been more interest in and increased use of LSD among REU over the preceding 6-12 months. One KE suggested that this was partly due to it being cheap and partly that it was not detectable by drug detection dogs.

10 CANNABIS

Cannabis is derived from the cannabis plant (*cannabis sativa*). While cannabis can be grown in almost any climate, it is being increasingly cultivated by means of indoor hydroponic technology. The main active ingredient in cannabis is delta-9-tetrahydro-cannabinol (THC). Cannabis is used recreationally in three main forms: marijuana ('bush' or 'hydro' – see below for a description of these forms of marijuana), hashish ('hash') and hash oil (National Drug and Alcohol Research Center 2008).

From 2006, the EDRS included a more detailed section about cannabis and made a distinction between indoor-cultivated 'hydroponic' cannabis (hydro) and outdoor-cultivated 'bush' cannabis for price, potency and availability. In 2009, only participants who were able to distinguish between hydro and bush provided information about the price, purity and availability of cannabis.

Almost every participant in the 2009 EDRS (98%) reported having ever used cannabis and 83% reported having done so over the six months preceding the interview (Table 18). Cannabis was first used at a median age of 15 years (range 9-21) and there was no significant difference between men and women.

Cannabis was the drug of choice for 18% of the sample and, of those who reported having binged on ecstasy and related drugs, 59% reported having used cannabis during a binge episode. Among those who had last used other drugs *with* ecstasy, 24% reported having used cannabis and 62% reported having used cannabis *to come down from* ecstasy.

10.1 Cannabis use among REU

Recent cannabis users reported having used it on a median of 25.5 days (range 1-180). Almost one-third (31%) reported having used cannabis on a less than monthly basis, 9% between monthly and fortnightly, 18% between fortnightly and weekly and 35% greater than weekly. Seven participants reported daily cannabis use. All recent users reported having smoked cannabis and one-third reported having swallowed it over the preceding six months.

Recent users of cannabis were asked how much they had smoked on their last occasion of use. Forty-five participants quantified their last use in terms of cones and reported having smoked a median of 4 cones (range 0.5-40) on their last occasion of use. Thirty-five quantified their use in terms of joints and reported having smoked a median of 1 joint (range 0.2-6) on their last occasion of use.

Trends in the use of cannabis are presented in Table 18. There was a higher proportion of recent cannabis users in the REU sample in 2009 (71% in 2008 vs. 83% in 2009; 95% CI: -0.00 - -0.23); however, the number of days of use appears to have remained relatively stable.

Table 18: Patterns of cannabis use of REU, NSW 2003-2009

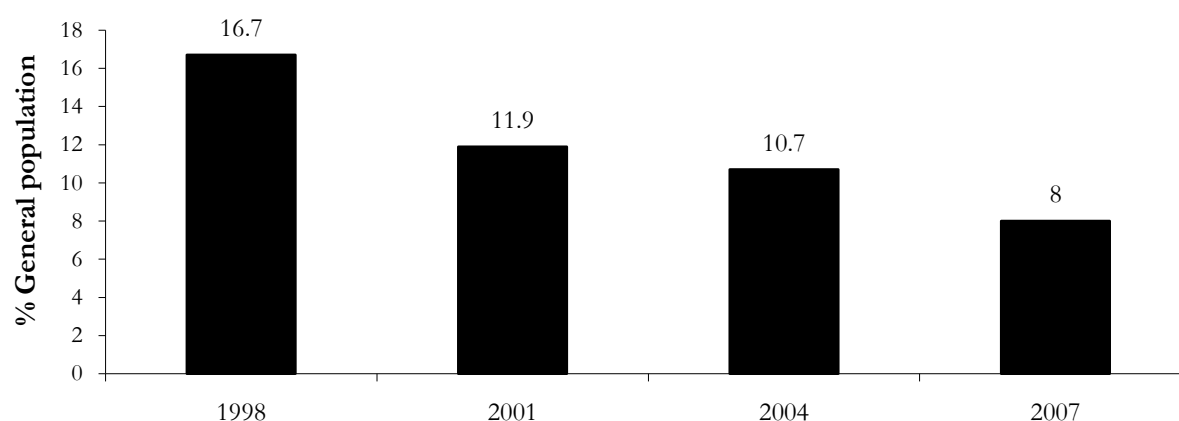
Cannabis variable	2003 (N=102)	2004 (N=104)	2005 (N=101)	2006 (N=100)	2007 (N=100)	2008 (N=100)	2009 (N=100)
Ever used (%)	96	99	92	95	97	93	98
Used last 6 mths (%)	82	85	82	73	74	71	83
Of those who had used:							
Median days used last 6 mths (range)	49 (1-180)	48 (1-180)	48 (1-180)	24 (1-180)	48 (1-180)	24 (1-180)	25.5 (1-180)

Source: EDRS regular ecstasy user interviews 2003-2009

10.2 Cannabis use in other populations

10.2.1 General population

The proportion of the NSW general population aged 14 years or over reporting the recent use of cannabis has continued to decline from 10.7% in 2004 to 8% in 2007. The current proportion of recent users in the general population of NSW is less than half that reported in 1998 (16.7%) (Figure 46).

Figure 46: Recent* cannabis use in the NSW general population, 1998-2007.

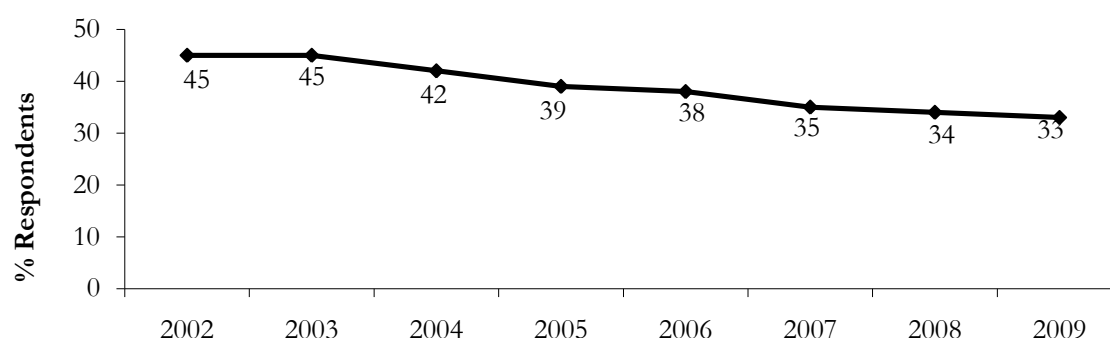
Source: Fitzsimmons & Cooper-Stanbury 2000; Australian Institute of Health and Welfare 2002, 2005, 2008.

* Used in the last 12 months.

10.2.2 Sydney Gay Community Periodic Survey

Figure 47 shows the proportion of gay men surveyed that had used cannabis in the past six months. One-third of the men who participated had recently used cannabis. The authors reported a significant decrease in the use of cannabis from 45% in 2002 to 33% in 2009 (Frankland, Lee et al. 2009).

Figure 47: Proportion of gay men in Sydney reporting recent cannabis use, 2002-2009.



Source: Sydney Gay Community Periodic Survey, 2009

11.2.3 Illicit Drug Reporting System (IDRS)

A separate monitoring system investigating trends in the use of cannabis in IDU has been conducted in NSW since 1996, VIC and SA since 1997 and nationally since 2000. This is called the Illicit Drug Reporting System, or IDRS, and reports and bulletins are available from the NDARC website (<http://notes.med.unsw.edu.au/NDARCWeb.nsf/page/IDRSa>).

10.3 Price

Table 19 presents the reported price for one ounce and one gram of hydro and bush cannabis.¹³ These data should be interpreted with caution since in 2008 participants were asked to report the 'median' price paid for these quantities whereas in 2009 participants were asked to report what they paid the last time they purchased this amount. Nonetheless, the prices have remained relatively stable from 2008 to 2009 at \$20 a gram for hydro and bush and rising to \$200 an ounce for bush and \$295 an ounce for hydro.

¹³ Data regarding the price of hash or hash oil in 2009 is not presented here due to small numbers reporting.

Table 19: Median price per ounce and gram of bush and hydroponic cannabis, NSW 2009

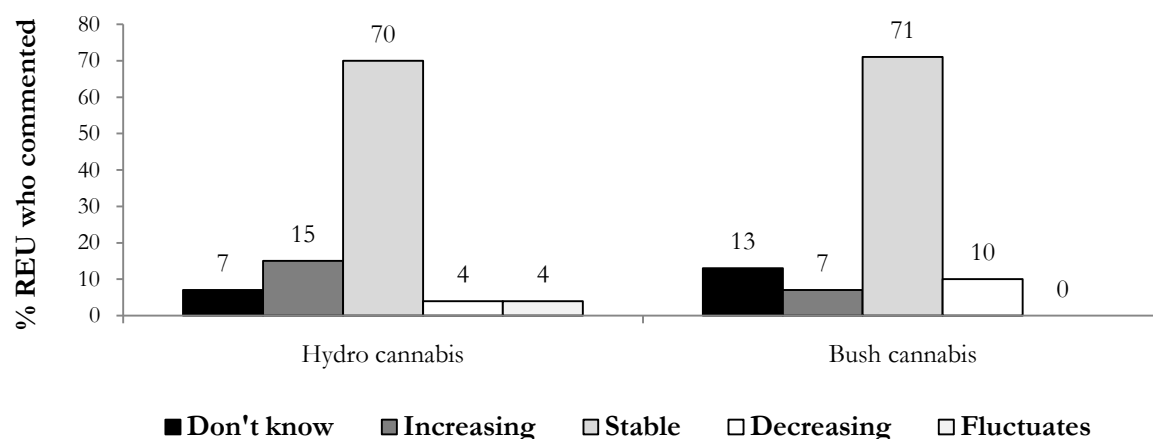
Median price cannabis (\$)	2008	2009
Price (\$) hydro (range)		
per ounce	300 (90-350) ¹	295 (100-350)
per gram	20 (20-110) ¹	20 (10-25)
Price (\$) bush (range)		
per ounce	-	200 (150-300) ¹
per gram	20 (20-110) ¹	20 (7.5-20)

Source: EDRS interviews 2008-2009

¹ Small numbers reporting (n<10)

Participants were asked about changes to the price of hydro and bush over the preceding six months. The majority reported that it had been stable both for hydro (70%) and bush (71%) (Figure 48).

Figure 48: Price change of bush and hydroponic cannabis*, NSW 2009.



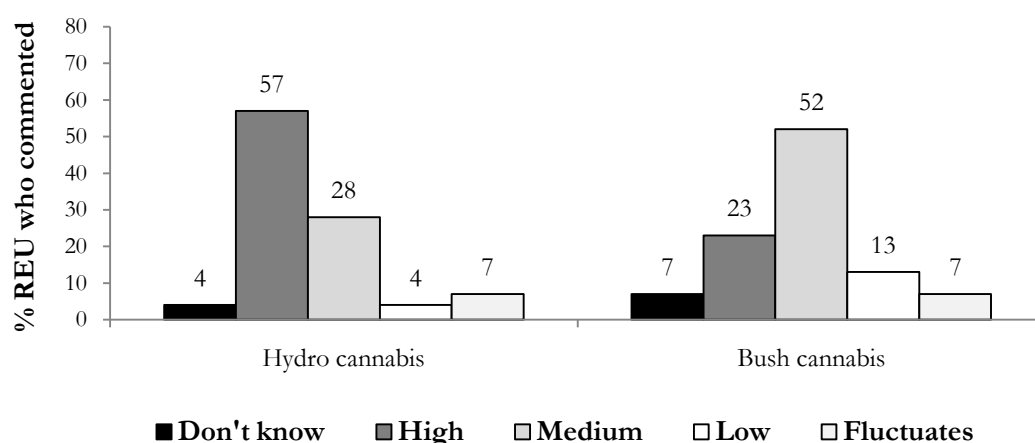
Source: EDRS regular ecstasy user interviews 2009

*Of those who commented (n=31 for bush, n=54 for hydro)

10.4 Potency

Figure 49 presents participants' perceptions of the current potency of hydro and bush cannabis. The majority of those who commented reported that hydro was currently of 'high' potency and that bush was currently of 'medium' potency.

Figure 49: Current potency of bush and hydroponic cannabis*, NSW 2009.

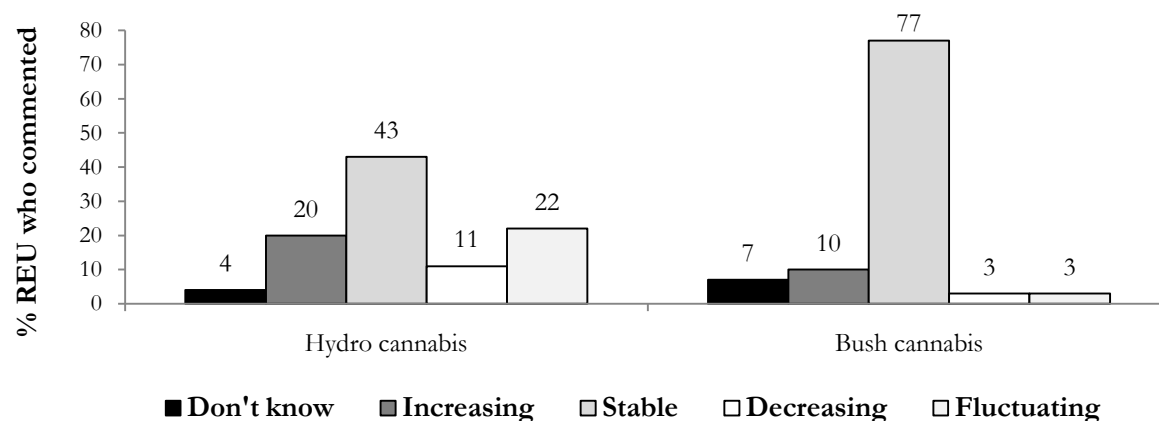


Source: EDRS regular ecstasy user interviews 2009

*of those who commented (n=31 for bush, n=54 for hydro)

Participants were asked to comment on changes in the potency of cannabis over the preceding six months. Among those who commented on the potency of bush over this period, the majority reported that it had remained 'stable'. There was much less consensus among those who commented on hydro, with two-fifths reporting that it had remained 'stable' while one-fifth reported that the potency of hydro had 'increased' and one-fifth that it had 'fluctuated' (Figure 50).

Figure 50: Change in potency of bush and hydroponic cannabis over the last six months*, NSW 2009.



Source: EDRS regular ecstasy user interviews 2009

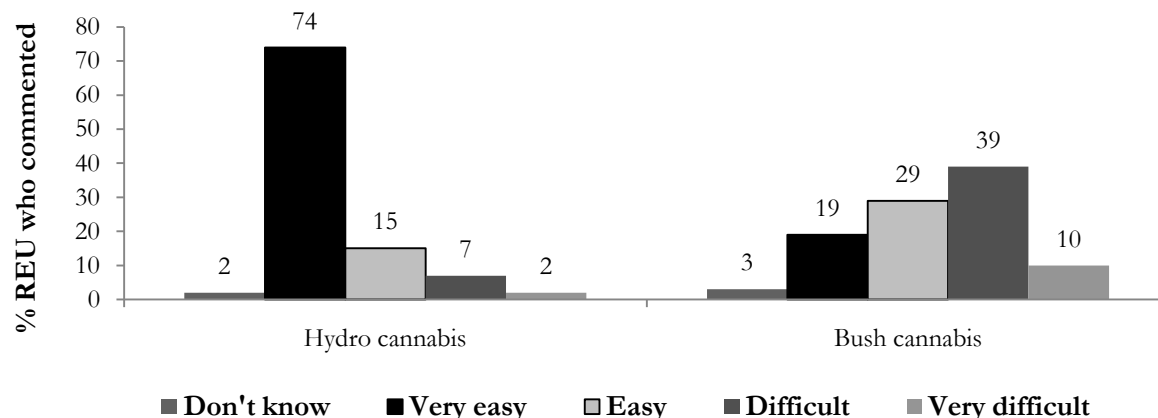
*of those who commented (n=31 for bush, n=54 for hydro)

10.5 Availability

Figure 51 presents data on the REU-reported current availability of bush and hydro. The majority of respondents believed that hydro was currently 'very easy' to obtain. There was less agreement about the current availability of bush with 48% reporting it was currently either 'easy'

or 'very easy' to obtain and 49% reporting it was currently either 'difficult' or 'very difficult' to obtain.

Figure 51: Current availability of bush and hydroponic cannabis*, NSW 2009.

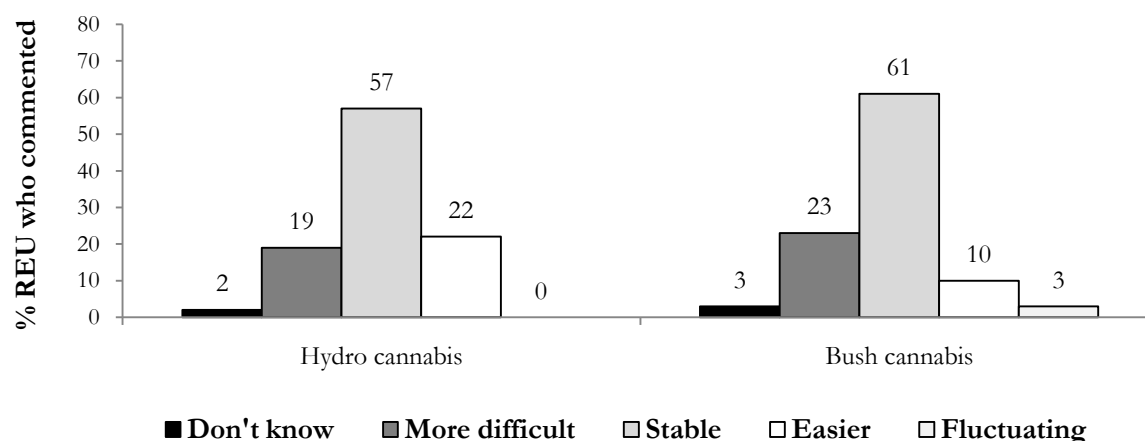


Source: EDRS regular ecstasy user interviews 2009

*of those who commented (n=31 for bush, n=54 for hydro)

The majority of those who commented reported that both hydro and bush had remained equally available over the preceding six months (Figure 52). However, approximately one-fifth reported that hydro had become more difficult to access and almost one-quarter reported the same for bush.

Figure 52: Change in availability of bush and hydroponic cannabis over the last six months*, NSW 2009.



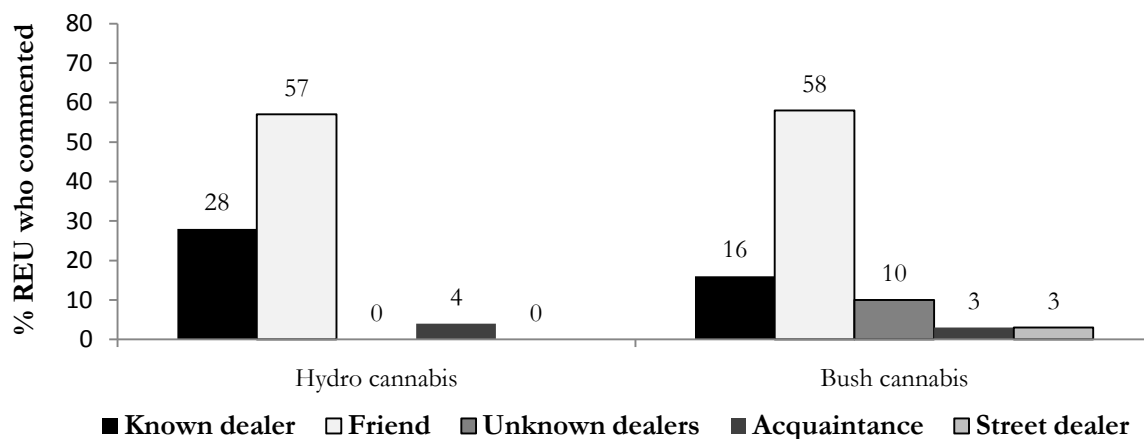
Source: EDRS regular ecstasy user interviews 2009

*of those who commented (n=31 for bush, n=54 for hydro)

10.5.1 Source person and source location

REU were asked to comment on purchasing cannabis over the six months prior to the interview. Both hydro and bush were most commonly purchased from friends or known dealers (Figure 53).

Figure 53: Source person last time purchased bush or hydroponic cannabis *, NSW 2009.

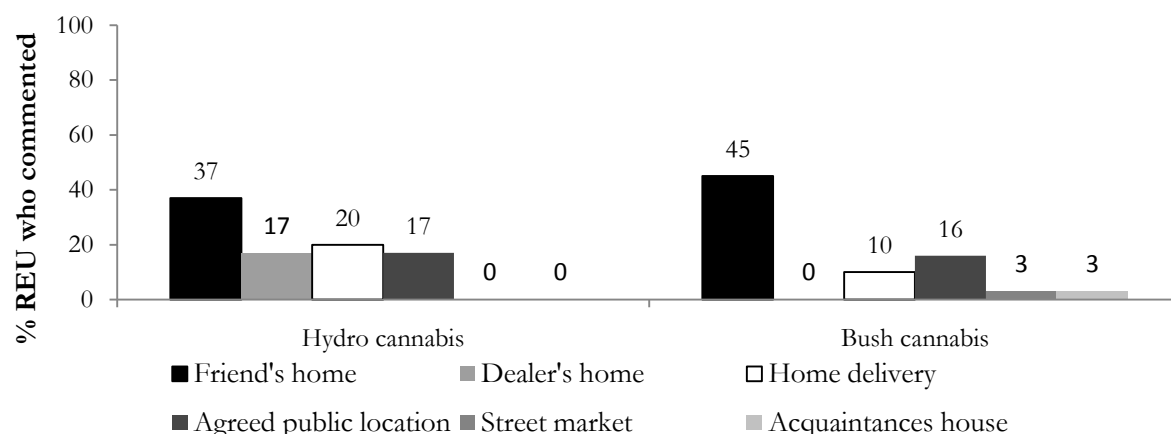


Source: EDRS regular ecstasy user interviews 2009

*of those who commented (n=31 for bush, n=54 for hydro)

Both forms of cannabis were most commonly purchased at a friend's home. Other common locations of purchase included a dealer's home and an agreed public location. There were also one-fifth of those who commented on hydro and one-tenth of those who commented on bush who reported having had it home delivered last time (Figure 54).

Figure 54: Source location last time purchased bush or hydroponic cannabis*, NSW 2009.



Source: EDRS regular ecstasy user interviews 2009

*of those who commented (n=31 for bush, n=54 for hydro)

10.5.2 Key expert comments

Few KE commented specifically on cannabis use among REU in 2009. It is well known that cannabis use is widespread among REU and commonly used when coming down from ecstasy. One KE mentioned that among the REU with whom they had contact, cannabis was one of the most commonly used drugs.

KE in law enforcement were able to comment specifically on cannabis. KE commented that the age of suppliers had recently increased to early 30s, and that they were predominantly male and Caucasian. Reports of and data pertaining to outdoor cannabis cultivation indicate that this had remained stable. Further, while the number of detections of hydroponic cultivations appears to have remained stable, there was a noted increase in the number of plants found per seizure. KE also reported that there was a sizeable increase in the amount of cannabis being imported from Europe (mainly in seed form). They had also heard that new strains of seeds were being imported; however, they had no evidence that this was occurring.

KE noted that detections of cannabis cultivation continued to be centred in northern NSW while those for possession were more centrally localised. They also noted that the number of cannabis detections had increased in 2009; however, they suspected this was likely due to an increased use of drug detection dogs rather than increased supply. KE noted, in keeping with user reports on the price of cannabis, that hydro and bush were both sold for similar prices per gram (\$20-25), but that the price per ounce was different (approximately \$250 for bush and \$300 for hydro).

10.6 Summary of cannabis trends

- Almost all REU interviewed in 2009 had ever used cannabis and four-fifths had done so recently. While the proportion of REU reporting lifetime use of cannabis has been high and relatively stable across time, there was an increase in the proportion reporting recent use from 71% in 2008 to 83% in 2009.
- Cannabis had been used on a median of 25.5 days over the preceding six months.
- All recent users had smoked cannabis.
- Respondents reported having smoked a median of 4 cones or 1 joint on their last occasion of use.
- The use of cannabis in the general population of NSW and also among the gay male community in Sydney has been in decline.
- The median price per gram of hydro was equal to that of bush, \$20; however, the price differed in larger quantities where hydro was reported to cost \$295 per ounce and bush \$200 per ounce.
- Hydro was reported to be of high potency while bush was of medium potency. While the potency of bush was reported to be currently stable, there were inconsistent reports regarding changes in the potency of hydro over the preceding six months.
- Hydro was reported to be very easy to access and to have remained so over the preceding six months. There were mixed reports about the availability of bush; however, the largest proportion reported that it was difficult to access in Sydney. The availability of hydro was reportedly stable.
- Both hydro and bush cannabis were primarily purchased from either friends or known dealers in private locations.
- Few KE commented on cannabis; however, one noted that cannabis use is very widespread among REU. Law KE indicated that the number of plants per seizure had increased for hydroponic cultivations and that there had been an increase in the importation of cannabis seeds from overseas.

11 OTHER DRUGS

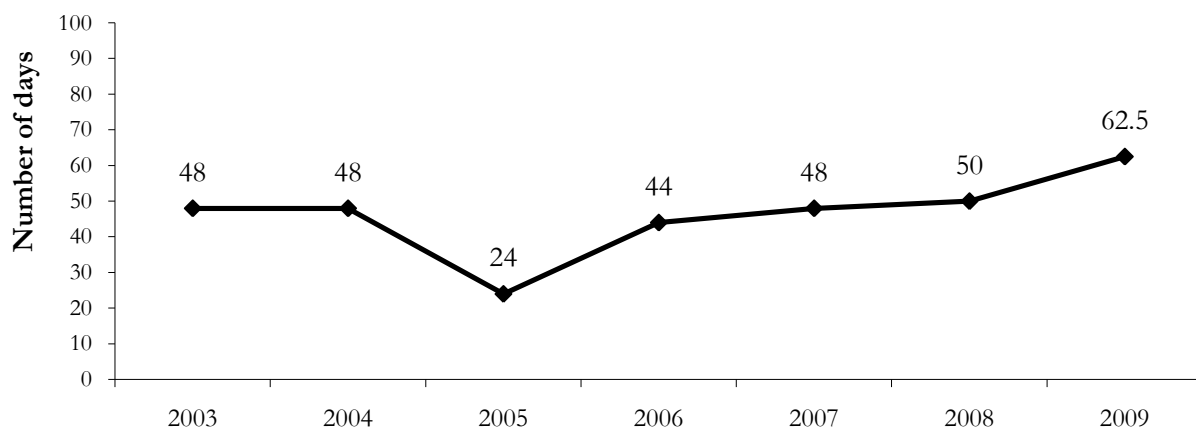
Substantial proportions of REU have reported the use of other licit and illicit drugs across sampling years.

11.1 Alcohol

The entire 2009 sample of REU reported the lifetime and recent use of alcohol. Alcohol was first used at a median age of 14 years (range 5-19) and there was no difference between men and women.

Participants reported having consumed alcohol on a median of 62.5 days (range 1-180) over the preceding six months. Figure 55 presents this figure across time. In 2009 there was a higher frequency of alcohol use among participants than in 2008.

Figure 55: Days of alcohol use in the last six months, NSW 2003-2009.



Source: EDRS regular ecstasy user interviews 2003-2009

The majority of REU (74%) had used alcohol on a greater than weekly basis. One in ten (11%) had used it between fortnightly and weekly, 5% between monthly and fortnightly and 7% less than monthly. There were three daily consumers of alcohol.

Alcohol was the preferred drug for 9% of the sample. Of those who had recently binged, 27% reported having used alcohol during a binge episode (25% more than 5 standard drinks; 2% less than five standard drinks). The majority (64%) of those who had last used other drugs *with* ecstasy reported having used alcohol in this way (53% more than 5 standard drinks; 11% less than 5 standard drinks). More than one-third (36%) of those who had last used other drugs *to come down from* ecstasy reported having used alcohol in this way (21% more than five standard drinks; 15% less than five standard drinks).

Please see section 14.4 for a more detailed discussion of the use of alcohol, ecstasy and energy drinks among REU in 2009.

11.1.1 Key expert comments

Several KE spontaneously commented on the use of alcohol among REU in 2009. The majority of those who commented nominated alcohol as a major drug of concern primarily because of health- and aggression-related issues.

KE noted that alcohol use among REU is very high. Furthermore, KE noted that there has been an increase in the use of alcohol in conjunction with ecstasy over the past five years or so. KE noted that, currently, REU will take ecstasy on a day/night out and then continue to drink as they usually would, not considering the impact of one drug on the other. Furthermore, KE noted that there had been an increase lately in the proportions of people arriving at festivals in the morning already quite heavily intoxicated, then continuing to drink and take drugs throughout the day. KE working in health services noted that both at festivals and dance events, and also in and around the city, alcohol use among REU is problematic. They noted that the majority of patients requiring transfer to hospital “have alcohol on board” and that there is a higher incidence of trauma among festival attendees who have been drinking.

There is general consensus among KE that different types of venue/music/festival attract different crowds and that alcohol use varies between them. In particular, it was noted by a few KE, that the more “dancy” venues/events tended to have a higher use of ecstasy, higher sales of energy drinks and water and less alcohol consumption compared with “rock gigs” and larger festivals. Several KE went further to note that there was less aggression at raves, compared with festivals, and suggested this may be related to the reduced alcohol consumption at raves. One KE in particular reported that there had been a move to reduce or limit the sales of RTDs¹⁴ at certain festivals and noted that there was significantly reduced violence and aggression at these events. KE working in nightclubs also reported that aggression in their venues was almost always alcohol related.

There were several KE who commented on the use of alcohol and GHB. There seemed to be general consensus that while there is good information available regarding the dangers of mixing GHB and alcohol, some party goers continue to do so, reporting that “if you know what you’re doing, you’ll have a way better time...”. Health KE noted that collapse from GHB-related overdose continued to be a concern since patients presenting in this condition required a higher level of care over a longer period than many other drug- or alcohol-related cases.

11.2 Tobacco

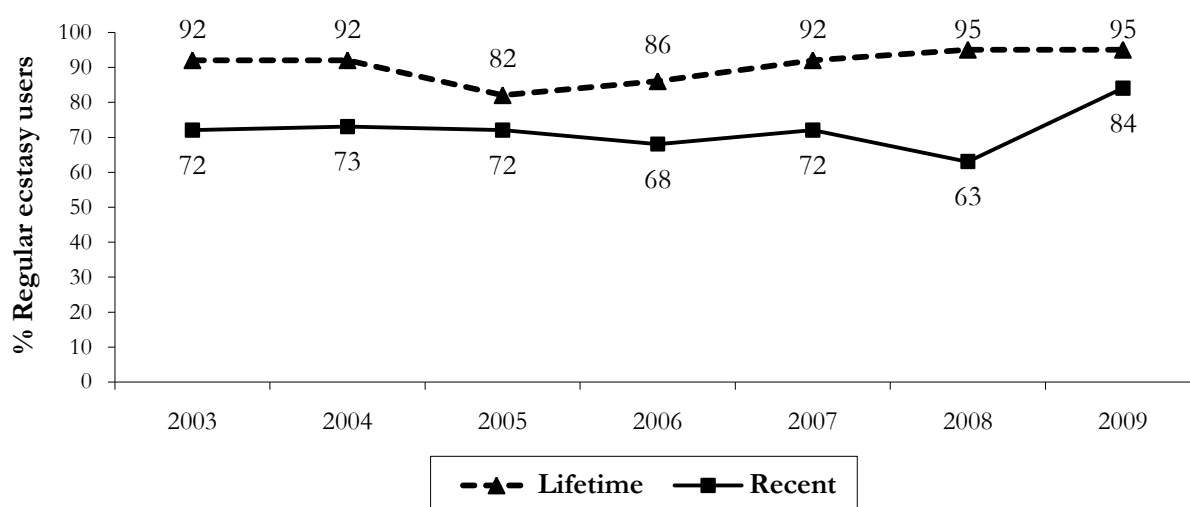
The vast majority (95%) of REU interviewed in 2009 had used tobacco at some point and 84% reported having done so over the preceding six months. There was a higher reported recent use of tobacco in 2009 than in 2008 (63% in 2008; 95% CI: -0.32- -0.09). Tobacco was first used at a median age of 14 years (range 6-21) and there was no significant difference of age at initiation between men and women (15 years vs. 14 years; $U=938.5$, $p>0.05$).

¹⁴ Ready To Drink alcoholic beverages (i.e. premixed cans/bottles of vodka and lemonade, bourbon and coke etc.)

Tobacco had been used on a median of 148 days (range 1-180) over the preceding six months. Almost half (45%) of recent users of tobacco were daily users and almost one-third had used it on a greater than weekly basis. Smaller proportions reported having used it between fortnightly and weekly (8%), between monthly and fortnightly (8%) and less than monthly (6%).

While the proportion of the samples reporting lifetime usage of tobacco has remained relatively stable, the proportion reporting recent tobacco use was significantly higher in 2009 (84%) than 2008 (63%) (95%CI: -0.32 - -0.09) (Figure 56).

Figure 56: Proportion of regular ecstasy users reporting lifetime and recent tobacco use, NSW 2003-2009.



Source: EDRS regular ecstasy user interviews 2003-2009

The majority of those who had recently binged (68%) reported having used tobacco during a binge episode. Similarly, 69% of those who had used other drugs *with* ecstasy on their last occasion of use reported having used tobacco in this way and 67% reported having used tobacco *to come down from* ecstasy.

11.3 Benzodiazepines

Almost half (47%) of the sample reported having ever used any benzodiazepines and one-quarter (24%) reported having done so recently. Among those who had recently used them, benzodiazepines had been used on a median of 3 days (range 1-114). Only one participant respectively reported i) that benzodiazepines were their drug of choice; ii) having used benzodiazepines during a binge episode; or iii) having last used them *to come down from* ecstasy.

11.3.1 Licit benzodiazepines

Seven participants reported having ever used licitly obtained benzodiazepines and six participants reported having used them over the preceding six months. Licit benzodiazepines were first used at a median age of 20 years (range 16-23). They had been used on a median of 18 days (range 2-90) over the six months prior to the interview. All six participants reported swallowing as the

main route of administration of licitly obtained benzodiazepines over this period; however, one participant had also snorted them.

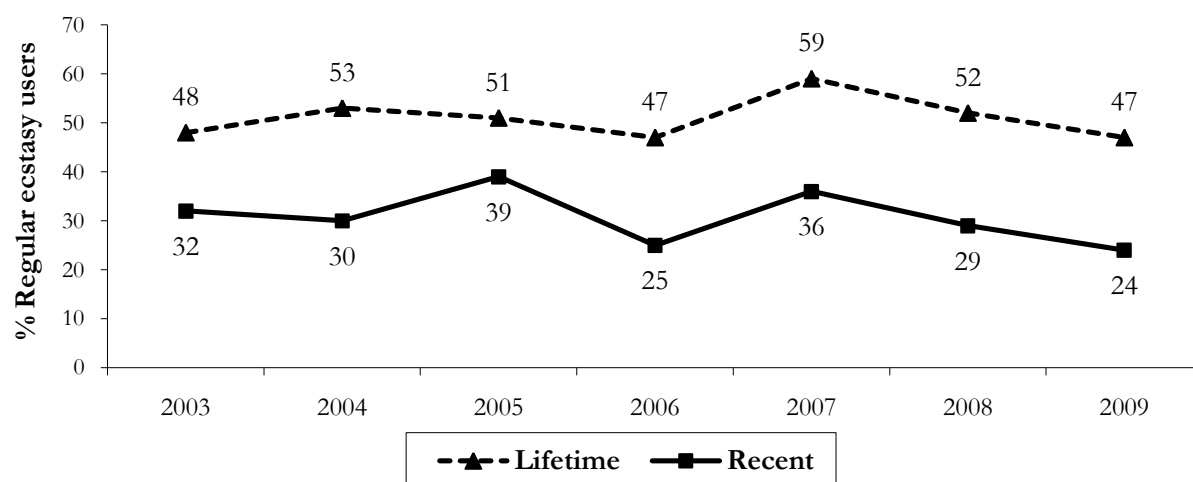
11.3.2 Illicit benzodiazepines

More than two-fifths (46%) of REU had ever used illicitly obtained benzodiazepines and one-fifth (21%) had done so over the preceding six months. They were first used at a median age of 19.5 years (range 9-30). Almost all recent users reported having swallowed them over the preceding six months.

Illicit benzodiazepines had been used on a median of 3 days (range 1-72) by recent users. Of these, the majority (76%) had used illicit benzodiazepines on a less than monthly basis. Fifteen percent had used them between monthly and fortnightly, 5% between fortnightly and weekly and 5% greater than weekly. There were no daily users of illicit benzodiazepines.

Trends across time in the prevalence of both lifetime and recent use of any benzodiazepines among REU are presented in Figure 57. Both lifetime and recent use has fluctuated slightly over time; however, both figures were lower in 2009 than in 2008.

Figure 57: Proportion of regular ecstasy users reporting lifetime and recent benzodiazepine use, NSW 2003-2009*.



Source: EDRS regular ecstasy user interviews 2003-2009

11.4 Antidepressants

One-fifth (20%) of participants reported having ever used antidepressants and one in ten (10%) had done so over the preceding six months. No participant reported that antidepressant were their drug of choice, or having used them during a binge episode. One participant reported using antidepressants *with* ecstasy on their last occasion of use; however, no participant reported having used them *to come down from* ecstasy.

11.4.1 Licit antidepressants

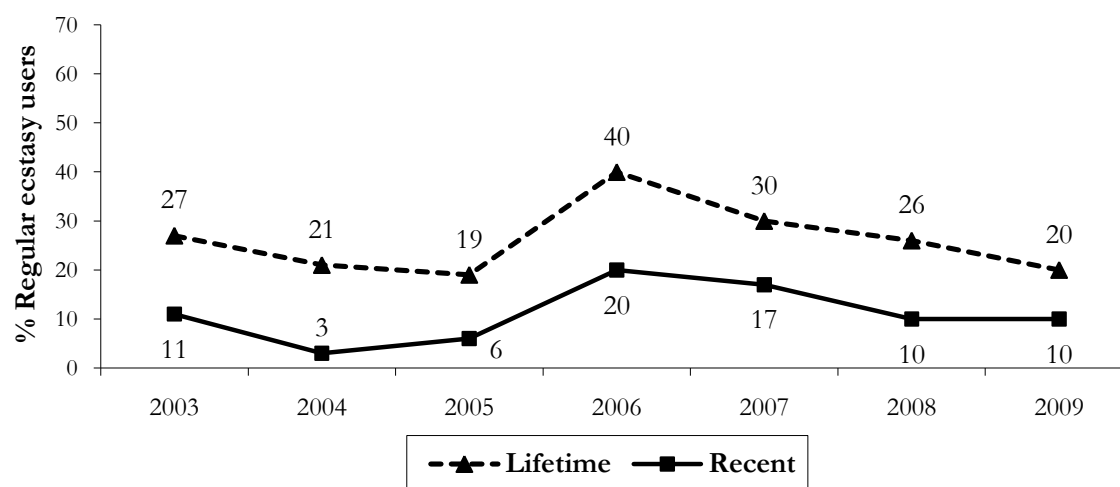
Seventeen participants reported having ever used licitly obtained antidepressants and nine reported having done so over the preceding six months. Licit antidepressants were first used at a median age of 19 years (range 13-32). They had been used on a median of 120 days (range 1-180) and swallowing was the only route of administration reported.

11.4.2 Illicit antidepressants

Five participants reported having ever used illicit antidepressants and one participant reported having used them over the past six months. The median age at which they were first used was 19 years (range 15-25). Given the small sample who had recently used illicitly obtained antidepressants (n=1), data on routes of administration and the median days of use is not presented here.

Figure 58 presents data from 2003 onwards on the reported lifetime and recent use of any antidepressants. While the proportion reporting the recent use of antidepressants has remained stable, the proportion reporting the lifetime use of antidepressants is lower in 2009 (20%) than 2008 (26%).

Figure 58: Proportion of regular ecstasy users reporting lifetime and recent antidepressant use, NSW 2003-2009*.



Source: EDRS regular ecstasy user interviews 2003-2009

11.5 Inhalants

11.5.1 Amyl nitrite

Three quarters (74%) of REU had ever used amyl nitrite and two-fifths (38%) had used it over the preceding six months. Amyl nitrite was first used at a median age of 18 years (range 13-24). Those who had recently used it had done so on a median of 2.5 days (range 1-180) over the preceding six months. The majority of recent users of amyl nitrite (74%) used it on a less than monthly basis, 11% used it between monthly and fortnightly and 11% between fortnightly and

weekly. One participant each reported having used amyl nitrite on a greater than weekly basis or having used it daily.

No participants reported that amyl nitrite was their drug of choice and only one participant reported having used amyl nitrite during a binge episode over the six months prior to the interview. Three participants reported having used amyl nitrite *with* ecstasy, on their last occasion of use. One participant reported having used it *to come down from* ecstasy on their last occasion of use.

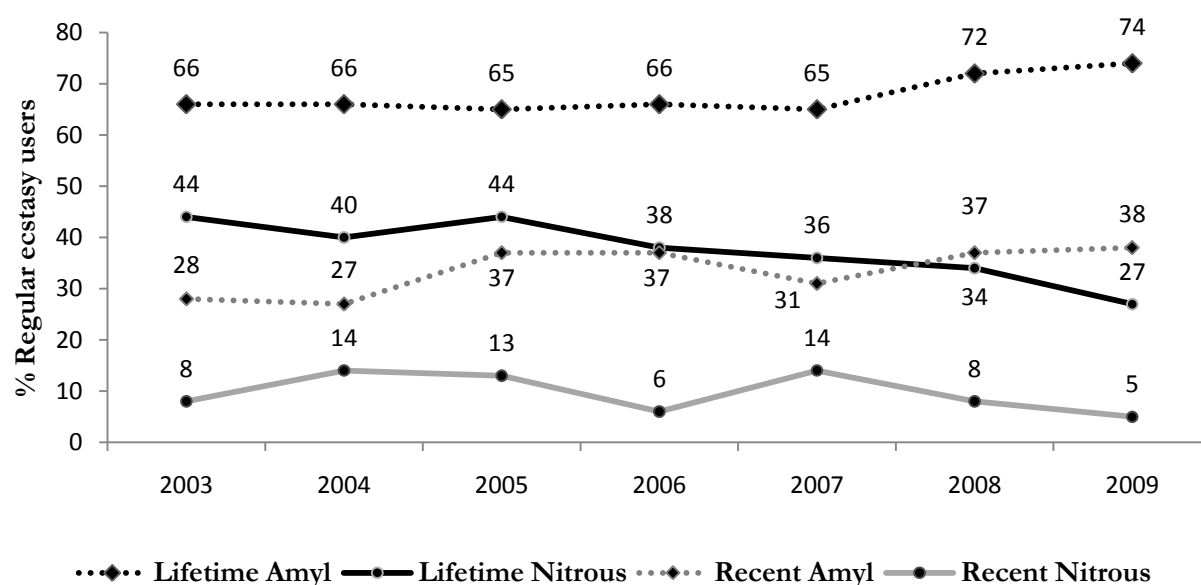
11.5.2 Nitrous oxide

Just over one-quarter (27%) of REU interviewed in 2009 reported having ever used nitrous oxide and five participants reported having used it over the preceding six months. Nitrous oxide was first used at a median age of 17 years (range 12-30).

Due to the small number of participants who had recently used nitrous oxide, data on the frequency of use will not be presented. No participant had last used nitrous oxide either *with* ecstasy or *to come down from* it. Similarly, no participant reported having used nitrous oxide during a binge episode or that it was their preferred drug.

Figure 59 presents trends across time of the proportions of the EDRS samples that had ever used and had recently used both amyl nitrite and nitrous oxide. While there were some minor fluctuations in these figures from 2008 to 2009, there were no significant changes noted.

Figure 59: Proportion of regular ecstasy users reporting lifetime and recent amyl nitrite and nitrous oxide use, NSW 2003-2009.

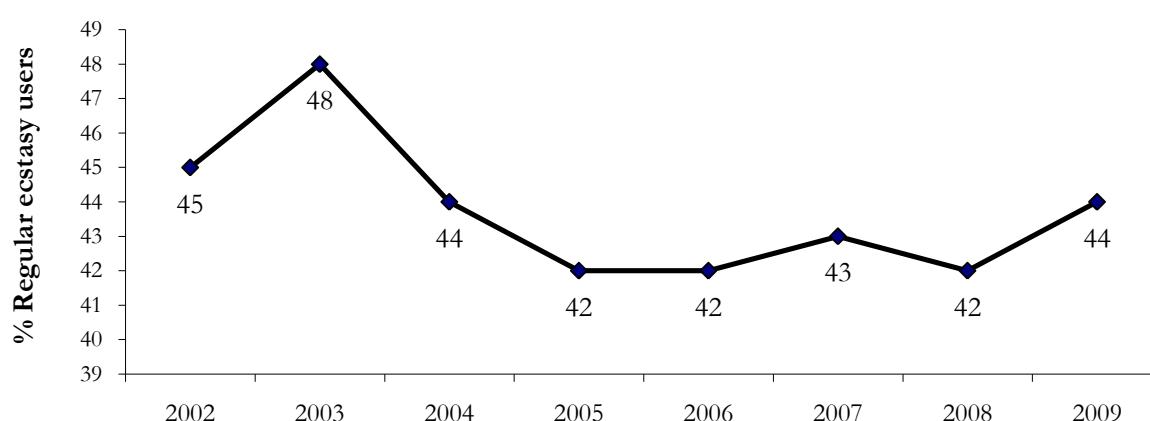


Source: EDRS regular ecstasy user interviews 2003-2009

11.5.3 Inhalant use in other populations

The recent use of inhalants in the NSW general population aged 14 years and above has remained low and stable in the past three surveys (0.5% in 2001, 0.4% in 2004 and 0.4% in 2007) (Australian Institute of Health and Welfare 2008). Data collected across time from the Sydney Gay Community Periodic Survey has shown that large proportions of men reported the use of amyl nitrite in the past six months (Figure 60). Just over two-fifths (44%) of participants in 2009 reported recently using amyl nitrite. However, the authors reported a significant decrease across time in the recent usage of amyl nitrite from 2002 to 2008 (Frankland, Lee et al. 2009).

Figure 60: Proportion of gay men in Sydney reporting recent amyl nitrite use, 2002-2009.



Source: Sydney Gay Community Periodic Survey, 2009

11.6 MDA

Thirteen participants in the 2009 EDRS reported having ever used MDA and only 2 participants reported having done so over the preceding six months. MDA was first used at a median age of 20 years (range 15-25). No participants reported that MDA was their preferred drug. Furthermore, no participants reported having used MDA in a binge episode, having used MDA *with* ecstasy or *to come down from* it. Across time, the EDRS has shown a decline in the use of MDA among REU in NSW with 35% reporting recent MDA use in 2003 compared with 2% in 2009.

11.7 Heroin and other opiates

11.7.1 Heroin

Just over one in ten (11%) participants had ever used heroin in the 2009 sample and three participants had used it within the preceding six months. Heroin was first used at a median age of 21 years (range 16-26). No participants reported that heroin was their preferred drug. Furthermore, no participants reported having used heroin in a binge episode, having used heroin *with* ecstasy or *to come down from* it.

11.7.2 Methadone and buprenorphine

Only one participant reported having ever used methadone and no participant had used it over the six months prior to the interview. Two participants reported lifetime use of buprenorphine; however, only one participant reported having used it recently.

11.7.3 Other opiates

While over one-quarter (27%) of respondents had ever used a licitly obtained opiate (other than methadone or buprenorphine), only one participant had used a licitly obtained opiate recently. Licitly obtained opiates were first used at a median age of 17 years (range 10-30). Nine participants reported having ever used illicitly obtained opiates; however, only one participant had used them over the six months prior to the interview.

11.7.4 Opiate use in other populations

A separate monitoring system investigating trends in the use of opioids in injecting drug users has been conducted in NSW since 1996, VIC and SA since 1997 and nationally since 2000. This is called the Illicit Drug Reporting System, or IDRS, and reports and bulletins are available from the NDARC website (<http://notes.med.unsw.edu.au/NDARCWeb.nsf/page/IDRSa>).

11.8 Mushrooms

Almost half (48%) of the REU interviewed in 2009 reported having ever used mushrooms with one-fifth (21%) having done so recently. The proportion reporting the recent use of mushrooms was significantly higher in 2009 (21%) than 2008 (9%) (95% CI: -0.22 - -0.02). Mushrooms were first used at a median age of 19 years (range 14-29). Those who had recently used mushrooms reported having done so on a median of 1 day (range 1-15) over the preceding six months. Among those who commented, all participants reported having used mushrooms on a less than monthly basis. The only route of administration described by users of mushrooms (both lifetime and recent users) was swallowing.

11.9 Pharmaceutical stimulants

More than half (52%) of participants in 2009 reported having ever used pharmaceutical stimulants and fourteen reported having done so recently. Pharmaceutical stimulants were used on a median of 3 days (range 1-180) over the preceding six months. One participant reported having used pharmaceutical stimulants during their last episode; however, no participant reported having last used pharmaceutical stimulants either *with* ecstasy or *to come down from it*.

11.9.1 Licit pharmaceutical stimulants

Seven participants reported having used licitly obtained pharmaceutical stimulants; however, only one participant reported using them recently. They were first used at a median age of 13 years (range 8-34).

11.9.2 Illicit pharmaceutical stimulants

Almost half of the sample (47%) had ever used illicitly obtained pharmaceuticals and 13% had done so over the preceding six months. Illicit pharmaceutical stimulants were first used at a median age of 17 years (range 14-37). Those who had recently used them had done so on a median of 3 days (range 1-15) over the preceding six months. The majority (n=11) reported having swallowed them; however, smaller proportions reported having recently snorted (n=3) and shelved/shafted (n=1) them.

11.10 Other drugs

Two-fifths (40%) of participants reported having ever used drugs other than those already discussed. These included 2CB (a synthetic psychedelic of moderate duration; n=11), DMT (n=8), salvia (n=3), Viagra (n=3), mescaline (n=2) and datura (n=2).

11.10.1 Key expert comments

Key expert comments regarding drugs other than alcohol were relatively infrequent and often represent the opinion of small numbers of KE. However they are presented below for completeness. KE noted:

- Tobacco continues to be widely used among REU.
- People at doofs (outdoor dance parties, often held in remote areas) appear to use nitrous oxide 'bulbs' relatively more commonly than other REU.
- There appears to have been a slight increase in the number of police seizures of MDA in early 2009.
- There seems to have been an increase in the use of prescription drugs such as Valium by REU to help them get to sleep after partying. A few KE noted that these were likely to have been purchased from dealers since it was reportedly difficult to get a prescription for these types of drugs from a GP.

11.11 Summary of other drug use

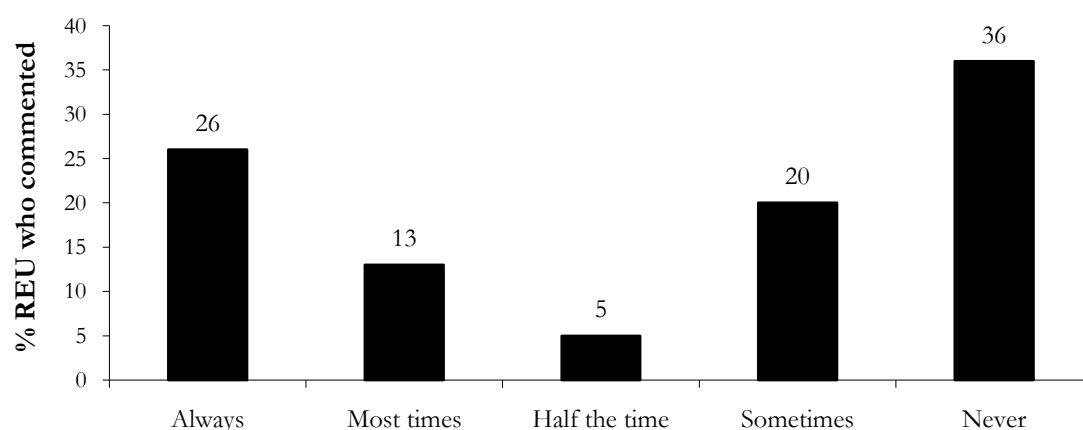
- Every REU interviewed reported the lifetime and recent use of alcohol. Two-thirds of the sample had consumed alcohol on their last occasion of use of ecstasy.
- Several KE commented on alcohol, indicating that it is a major drug of concern. They noted, in particular, issues surrounding a) the concomitant use of alcohol and illicit drugs and b) alcohol-related aggression.
- The majority of REU reported both lifetime and recent use of tobacco.
- Approximately half of the sample had ever used benzodiazepines and one-quarter had used them recently. Participants more commonly reported using illicitly obtained benzodiazepines rather than licitly obtained ones.
- KE noted it was difficult for REU to gain prescriptions for benzodiazepines and so purchased them from dealers instead.
- One-fifth of REU had ever used antidepressants and one-tenth had done so recently. Those most frequently reported were licitly obtained antidepressants, commonly used on a daily basis.
- Three-quarters of the sample had ever used amyl nitrite and almost two-fifths had done so recently. Over one-quarter had ever used nitrous oxide and five participants had used it recently. Use of inhalants continued to be infrequent, with amyl nitrite used more commonly than nitrous oxide.
- While over one in ten had ever used MDA, only two participants had done so recently.
- Use of opiates continued to be low with one in ten having ever used heroin and three participants having used it recently. Small proportions reported the lifetime and recent use of methadone and buprenorphine.
- Half of REU interviewed had ever used mushrooms and one-fifth had done so recently. The recent use of mushrooms was significantly higher in 2009 than 2008.
- Half the sample had ever used pharmaceutical stimulants and over one in ten had done so recently. Illicitly obtained pharmaceutical stimulants were used by a greater proportion of REU than licitly obtained pharmaceutical stimulants.
- The other drugs most commonly reported were 2CB and DMT.

12 DRUG INFORMATION-SEEKING BEHAVIOUR

Participants were asked a series of questions relating to the content, purity and testing of ecstasy tablets and the use of ‘information resources’. This is the fifth year in which this data has been collected.

Figure 61 presents the proportions of the 2008 sample who attempted to find out the content and purity of tablets purchased as ‘ecstasy’ before taking them. Approximately one-third of the sample reported ‘never’ attempting to find out the content of ecstasy tablets prior to taking them while one-quarter reported ‘always’ doing so. It would appear that participants fall into two groups; those who mostly/always attempt to gain information regarding the purity of ecstasy and those who do only sometimes or never. This may depend more on individual characteristics rather than any specific market characteristics.

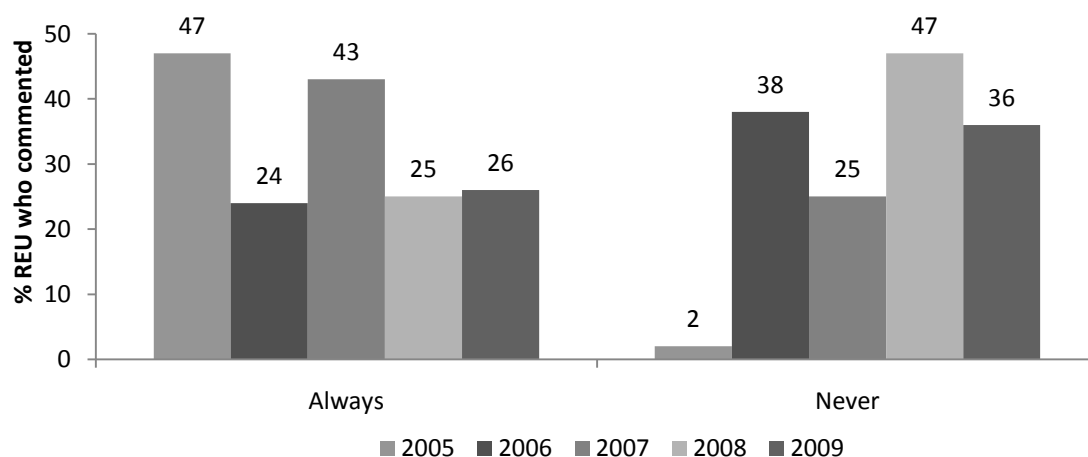
Figure 61: Frequency of finding out content and purity of ecstasy, NSW 2009.



Source: EDRS regular ecstasy user interviews 2009

Figure 62 presents data across time of the proportions of REU who reported ‘always’ vs. ‘never’ attempting to find out the content or purity of ecstasy they consumed. These figures have been quite variable across time. The change in proportion reporting they ‘never’ attempted to find out the content or purity of ecstasy prior to consuming it, between 2008 and 2009, was not significant. However, it implies that a greater number of participants in 2009 attempted, at least sometimes, to find out the content or purity of tablets sold as ‘ecstasy’ than in 2008. This may indicate a greater variability in ecstasy purity over the past 12 months and would be consistent with both user and KE reports of a recent decline in the purity or strength of ecstasy.

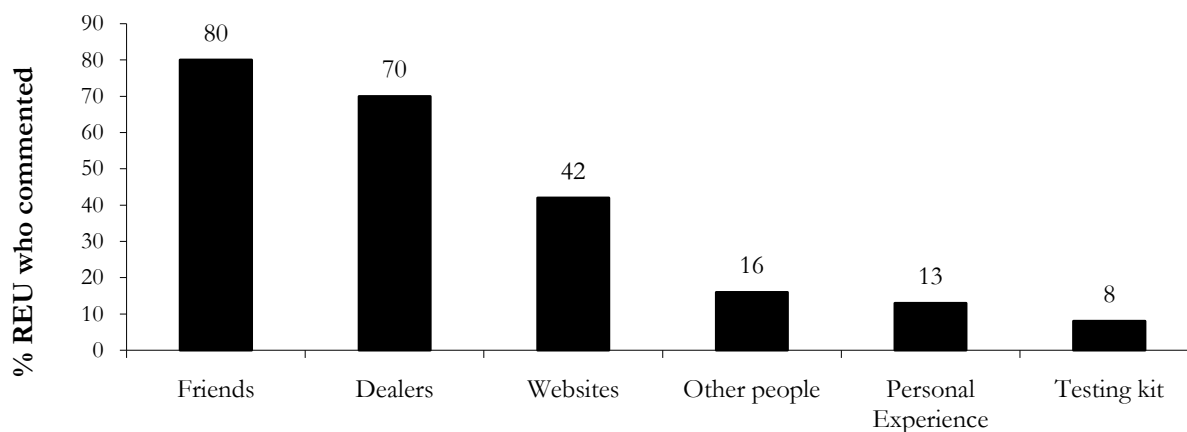
Figure 62: Changes in the proportions reporting 'always' and 'never' finding out the content and purity of ecstasy, NSW 2005-2009.



Source: EDRS regular ecstasy user interviews 2009

Among the 64 participants who reported trying to find out the content and purity of ecstasy tablets, the most commonly reported sources of information were friends who had already taken the drug and dealers. Websites were used by two in five and other less commonly reported sources of information included other people who had already taken the drug, personal experience with a given tablet and testing kits (Figure 63).

Figure 63: Sources of ecstasy content and purity, NSW 2009.



Source: EDRS regular ecstasy user interviews 2009

Participants were asked how often they had bought ecstasy and it turned out to have a different content or purity than expected. One-fifth (18%) reported that this 'never' happened, 55% reported that it happened 'sometimes', 18% that it happened 'about half the time', 6% 'most times' and 3% 'always'. The majority (85%) of participants suspected they had used ecstasy over the preceding six months which contained substances other than MDMA. Two-fifths (42%) suspected it had contained meth/amphetamines and one-fifth (20%) ketamine. Other suspected active ingredients included hallucinogens (16%), opiates (11%), 2CB/2CI (9%), caffeine (8%), MDA (7%), piperizones (6%) and PMA (6%). In addition, one-fifth (21%) believed that there was 'something unusual' about the ecstasy they had used, however were unable to identify which drug/s were in it.

12.1 Summary of drug-information seeking behaviour

- Approximately one-third of REU interviewed reported 'never' attempting to find out the content or purity of ecstasy tablets.
- The most common sources of information regarding the content and purity of ecstasy were friends who had already taken the drug, dealers and websites.
- More than 80% of participants reported having purchased ecstasy which turned out to have a different content or purity than expected.
- The majority of participants (85%) suspected they had consumed ecstasy which contained substances other than MDMA; those most commonly reported were methamphetamines, ketamine and hallucinogens.

13 HEALTH-RELATED TRENDS ASSOCIATED WITH ECSTASY AND RELATED DRUG USE

13.1 Overdose and drug-related fatalities

Participants were asked if they had ever overdosed on a stimulant drug or a depressant drug. In both instances, 'overdose' was defined as presenting with 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). As such, the following sections are based on participants' understanding of these definitions and their opinions as to whether they had overdosed.

13.1.1 Stimulant overdose

Approximately one-fifth (19%) of participants reported having overdosed on a stimulant drug throughout their lifetime. Participants reported having experienced a median of 1 overdose (range 1-5) and that their last overdose had occurred a median of 14 months ago (range 2-96).

Just under one-tenth (9%) of participants reported having overdosed on a stimulant drug within the preceding 12 months, 5% at nightclubs or public events (i.e. raves or live music events) and 4% in private settings (i.e. a home, private parties, outdoors).

Participants were asked to identify the main drug to which they attributed their last overdose and also to identify other drugs they had used. Ecstasy was the drug most commonly reported to have caused the overdose (n=8) and one person identified cocaine as having caused their overdose. Almost all of those who had overdosed in the past year reported having taken other drugs at the same time. Alcohol was that most commonly reported (n=6), followed by cannabis (n=3), base (n=1), cocaine (n=1) and ecstasy (n=1).

Amongst those who overdosed within the preceding year, the most common symptoms reported included vomiting (n=8), nausea (n=5), increased body temperature (n=5), rapid breathing (n=4), extreme anxiety (n=4), paranoia (n=4) and dizziness (n=4). Smaller numbers reported having experienced other symptoms such as shallow breathing, muscle twitches, increased heart rate, agitation (n=3 respectively); chest pain, tremors, headache, extreme agitation, visual hallucinations (n=2 respectively); auditory hallucinations, delirium and 'passing out' (n=1 respectively).

Among the eight participants who commented on the treatment they had received the last time they accidentally overdosed on a stimulant, seven reported not receiving any treatment. One participant reported that they were given oxygen by St John Ambulance staff.

Participants were asked how long they had been partying prior to overdosing on the last occasion. The median number of hours participants had been partying was 7.5 (range 3-30).

13.1.2 Depressant overdose

Two fifths (42%) of the current sample of REU reported having ever overdosed on a depressant drug. This figure, although higher, was not significantly different to that recorded in 2008 (35%). Those who had overdosed reported having done so on a median of 4 occasions (range 1-200) with the most recent having occurred a median of 12 months prior to the interview (range 1-108).

One-quarter of the sample (n=23) reported having overdosed on a depressant drug within the year preceding the interview. Among these, 30% reported having last overdosed at a private party, 22% at a friend's home, 13% at their own home, 13% at a live music event and 9% at a nightclub. Smaller proportions reported having overdosed in other settings including at work, at a farm and in a public place (such as a street or park) (n=1 respectively).

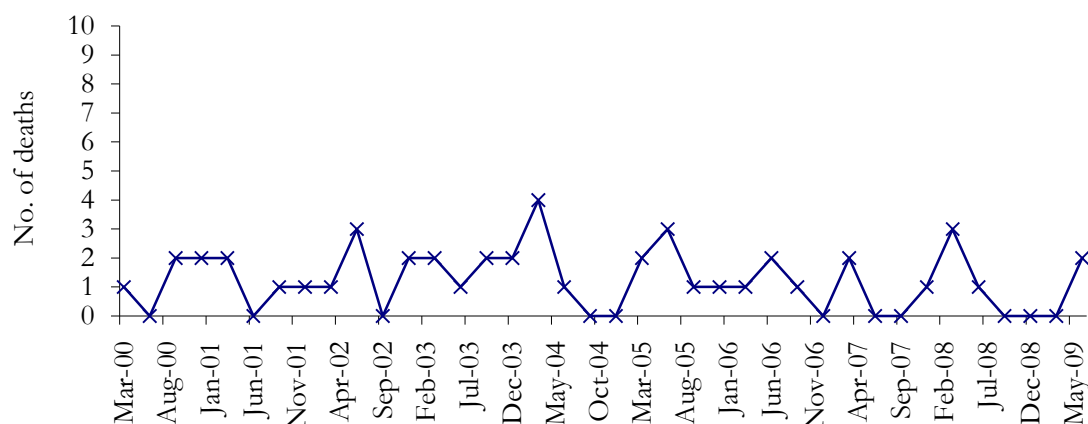
The vast majority of those who had overdosed on a depressant drug within the last year attributed their overdose to alcohol (91%) and one participant each reported their overdose to GHB and ketamine. Approximately two-fifths (39%) reported not having used any other drugs prior to their overdose. One-third (35%) reported having used cannabis, 13% ecstasy, and 4% respectively reported having used cocaine, LSD, alcohol and benzodiazepines.

The most commonly reported symptom of a depressant overdose among this group was vomiting (91%) followed by losing consciousness (48%), dizziness (30%), collapsing (26%) and suppressed breathing (4%). Despite experiencing these symptoms, the majority of respondents indicated that they had received no treatment during their last depressant overdose. One participant each reported that an ambulance was called and being admitted to a hospital emergency department.

13.1.3 Ecstasy

The number of suspected drug-related deaths where ecstasy was detected is low and appears to have remained relatively stable over time, generally fluctuating between one or two each quarter (Figure 64). The detection of MDMA, however, does not imply that MDMA was causally related to the death, as there may have been other drugs present post-mortem.

Figure 64: Number of deaths of individuals suspected of drug use, in which MDMA was detected post-mortem, 2000-2009.



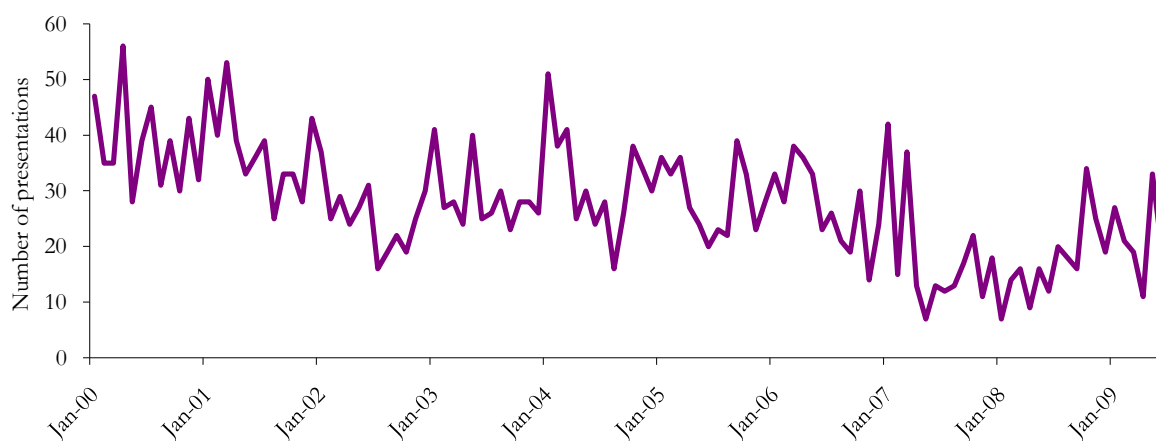
Source: Forensic Toxicology Laboratory database, Division of Analytical Laboratories

NB: These numbers relate to deaths in which ecstasy was detected; however, there may have also been other drugs present.

13.1.4 Methamphetamine

The total number of amphetamine overdose presentations to NSW emergency departments has fluctuated over time (Figure 65). There appears to be a slight increase in the numbers of presentations noted from January 2008 to June 2009; however, these data are highly variable and may have been affected by changes in the way presentations have been coded since 2008.

Figure 65: Amphetamine overdose presentations to NSW emergency departments, 2000-2009.

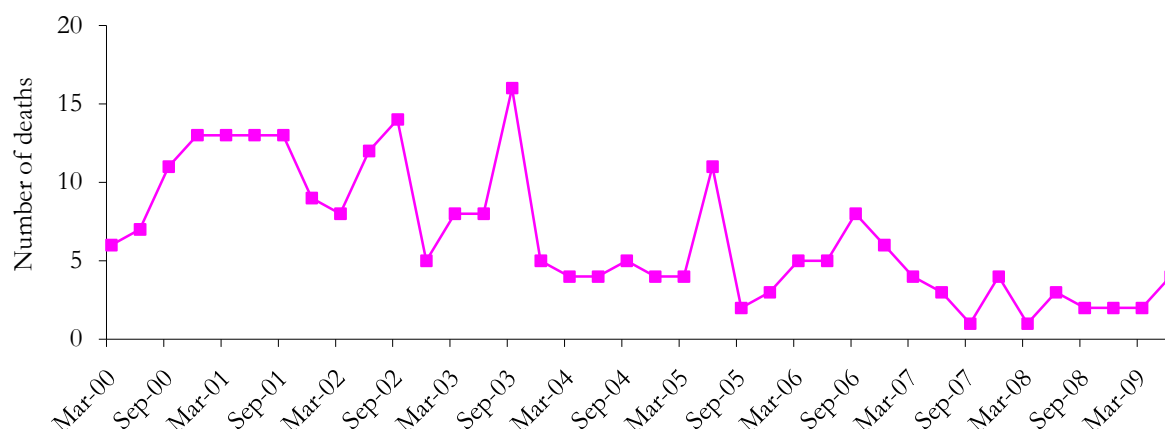


Source: Emergency Department Information System, NSW Department of Health.

NB: Figures refer to overdose only and do not include presentations for use disorders.

As with amphetamines overdose presentations to NSW emergency departments, the number of deaths of individuals suspected of drug use where amphetamines were detected post-mortem in NSW has fluctuated; however, it appears to be generally declining (Figure 66). From July 2008 to June 2009, 10 amphetamine-related deaths were recorded in total. These figures do not include methylenedioxymethamphetamine, methylenedioxyamphetamine, or p-methoxyamphetamine. Also excluded are pseudoephedrine and ephedrine as only deaths related to illicit amphetamines are presented.

Figure 66: Number of deaths of individuals suspected of drug use, in which illicit amphetamines were detected post-mortem, 2000-2009.



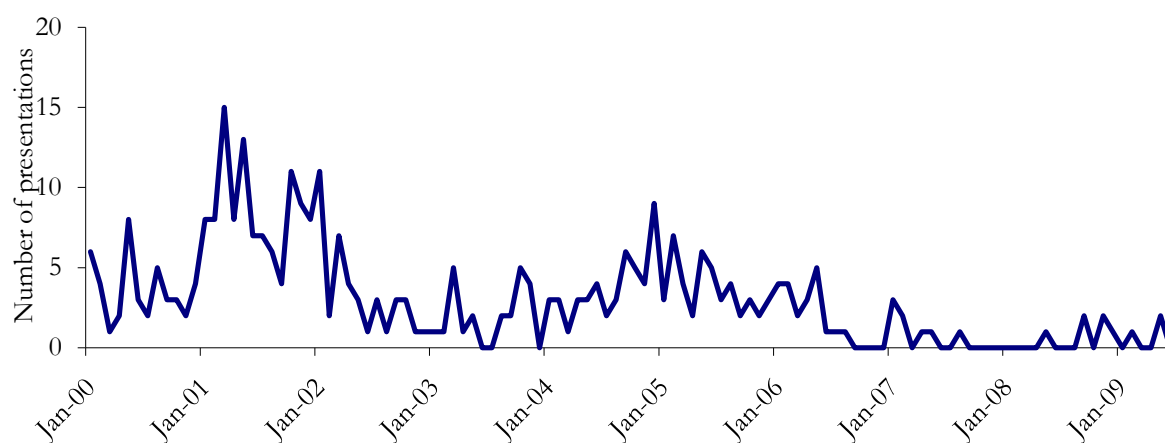
Source: Forensic Toxicology Laboratory database, Division of Analytical Laboratories

NB: These numbers relate to deaths in which amphetamines, including methamphetamine, were detected; however, there may have also been other drugs present.

13.1.5 Cocaine

The number of cocaine overdose presentations to NSW emergency departments appears to have declined from January 2005. The number of presentations per month has been at 2 or less since February 2007 with 8 presentations recorded in total between July 2008 and June 2009 (Figure 67).

Figure 67: Cocaine overdose presentations to NSW emergency departments, 2000-2009.

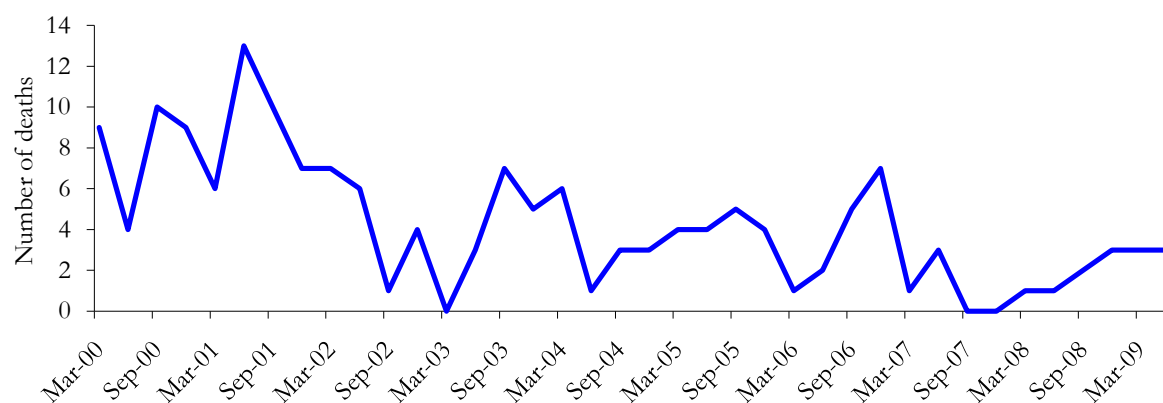


Source: Emergency Department Information System, NSW Department of Health

NB: Figures refer to overdose only and do not include presentations for use disorders.

The number of deaths of suspected drug users where cocaine was detected post-mortem has fluctuated over time; however, it appears to have remained low from July 2008 to June 2009 with a total of 11 deaths recorded over this time (Figure 68).

Figure 68: Number of deaths of individuals suspected of drug use, in which cocaine was detected post-mortem, 2000-2009.



Source: Forensic Toxicology Laboratory database, Division of Analytical Laboratories

NB: These numbers relate to deaths in which cocaine was detected; however, there may have also been other drugs present.

13.1.6 Ketamine

Deaths of suspected drug users where ketamine was detected post-mortem remain low. Data from the Forensic Toxicology Laboratory Database at the Division of Analytical Laboratories show that only 10 of these deaths have occurred between January 1999 and June 2009. There were no deaths during 2008-2009 where ketamine was detected.

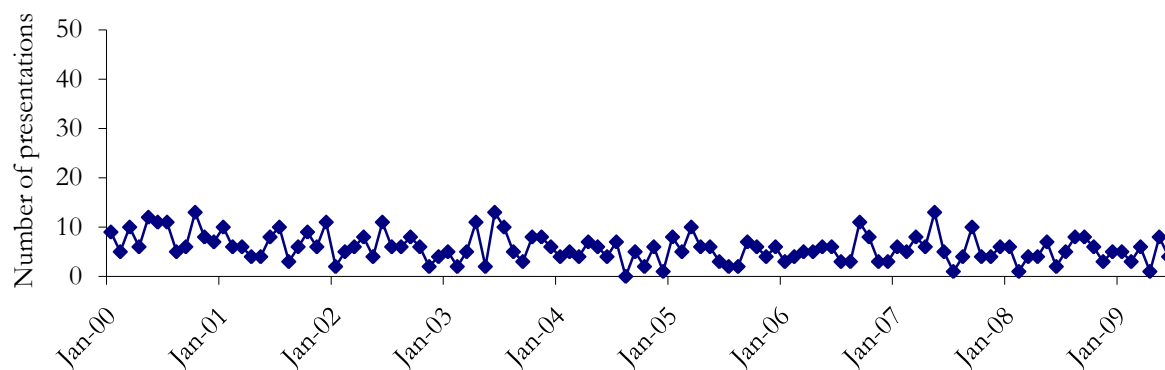
13.1.7 GHB

Data from the Forensic Toxicology Laboratory Database at the Division of Analytical Laboratories show that, since 2000, only four deaths have occurred where GHB was detected post-mortem. There were no deaths during 2008-2009 where GHB was detected.

13.1.8 Cannabis

The number of cannabis toxicity presentations to emergency departments has remained relatively low and stable, at less than 20 per month since 1997 (Figure 69).

Figure 69: Cannabis toxicity presentations to NSW emergency departments, 2000-2009.



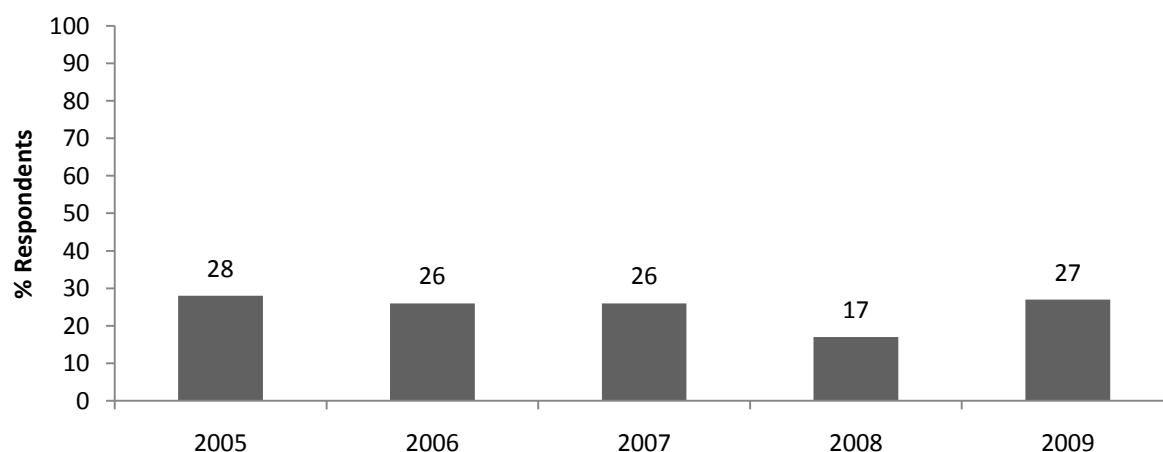
Source: Emergency Department Information System, NSW Department of Health

NB: Figures refer to overdose only and do not include presentations for use disorders.

13.2 Help-seeking behaviour

Participants were asked if they had accessed any medical or health services in relation to their drug use in the last six months. More than one-quarter (27%) of those interviewed in 2009 reported having done so. This figure has remained relatively stable across time (Figure 70).

Figure 70: Proportion of REU who recently accessed a medical/health service in relation to drug use, NSW 2005-2009.



Help was sought from varied services with general practitioners (GP) being those most accessed (42%) followed by first aid services (22%), drug and alcohol workers (19%) and counsellors (12%). Other services accessed included internet counselling (8%), ambulance services (8%), psychiatrists (8%), psychologists (8%), telephone counselling (4%), emergency departments (4%), hospitals (for admission) 4% and social workers (4%) (Table 20).

The drugs most commonly noted as the problem drug were cannabis, alcohol, ecstasy and tobacco. The issues most frequently addressed were psychological issues (such as depression, anxiety and panic) and issues surrounding dependence or addiction.

Table 20: Proportion of REU who accessed health help by main drug type and main reason, NSW 2009

Service (n=27)	Ecstasy (%)	Alcohol (%)	Cannabis (%)	Polydrug (%)	Other (%)	Main issue
GP (n=11)	27	18	18	-	Tobacco (27%) BZ (9%)	Dependence/psychological issues/sleep difficulties
First aid (n=6)	50	17	17	-	LSD (17%)	Psychological/Behavioural issues
Drug and Alcohol Worker (n=5)	40	-	-	20	Opiates (40%)	Depression/ Information/ Dependence or Addiction
Counsellor (n=3)	-	-	33	67	-	Dependence/Psychological issues
Ambulance (n=2)	-	100	-	-	-	Overdose/Aggression
Psychologist (n=2)	-	-	50	50	-	Anxiety/Depression
Psychiatrist (n=2)	-	-	50	-	-	Dependence/anxiety
Internet Counselling (n=2)	-	-	-	-	Heroin (50%) Tobacco (50%)	Information/advice
ED* (n=1)	-	100	-	-	-	Aggression
Hospital (n=1)	-	-	-	-	Cocaine (100%)	Pre-existing health condition
Social/Welfare worker (n=1)	100	-	-	-	-	Information/advice
Telephone Counselling (n=1)	-	-	-	-	Tobacco (100%)	Information/advice

Source: EDRS regular ecstasy user interviews 2009

* ED – emergency department, APP – acute physical problems, BZ – benzodiazepines,

13.2.1 Key expert comments

Several KE working in health service provision commented on trends in the types of medical presentations they'd seen recently and the mental and physical health of patients. KE noted that help was most commonly sought by young females. People seeking help for drug and alcohol related issues at festivals and events were generally in their early twenties and more commonly female. However, it was noted that males tended to present with the more serious cases.

Overall, there was a general consensus that, in acute settings, problems associated with ecstasy use were generally infrequent. People who presented with ecstasy-related anxiety or discomfort were generally noted to be either new or inexperienced users or people who had taken ecstasy with other active drugs besides MDMA (either accidentally or on purpose). Several KE had noted that there appeared to have been an increase in the numbers of people presenting with anxiety-related symptoms recently. One KE mentioned that over the past 6-12 months they had been required to focus more energy on providing mental health support (i.e. helping to calm people down; at times, needing to prescribe mild anxiolytics to avoid hyperventilation) as well as first aid.

Several KE noted that, acutely, polydrug use (including mixing drugs with alcohol) was one of the most common presenting problems and frequently associated with symptoms such as anxiety, sweating, nausea etc. It was noted that polydrug use was complicated to manage from a health perspective "because neither they nor you know what they've taken". KE also noted that it had become more common for REU to drink heavily both prior to and while using ecstasy and other drugs. Several KE noted that this was problematic because it could lead to aggression and high levels of disinhibited behaviour and because it further complicated treatment.

Regarding general health and safety knowledge among REU, one KE noted an increased willingness from festival goers and other REU to answer questions from medical staff openly and honestly as well as an increased ability among medical staff to ask drug and alcohol related questions. However, another KE noted that the level of general knowledge regarding the effects of drugs and current drug research had decreased over the years to the point where many people they treated did not even know the colour and logo of the ecstasy pills they had taken that day. This KE noted that the "current generation of REU" did not appear to be taking health messages on board since they continued to take drugs in combination with alcohol and with other illicit drugs, without paying close attention to the content/purity of the drugs they were taking.

Issues regarding mixing GHB/GBL with alcohol continued to cause concern among health workers. They noted that while many people knew not to combine the two, inexperienced or infrequent party goers who were not really "part of the scene" could occasionally overdose by mixing alcohol and GHB. One KE noted that there appeared to be more use of GBL among the GLBTQ community, which was worrying since GBL takes longer to metabolise than GHB. Thus, the KE noted that many people were taking increasing amounts of GBL after not feeling an immediate/initial high and then risking overdose because they had taken too much.

Finally, several KE mentioned concern regarding the use of energy drinks at festivals and events in combination with ecstasy and other drugs such as GHB. One KE also noted that, at some

festivals, energy drinks were easier to access than water. This could be problematic and may be, in part, contributing to the higher number of anxiety-related presentations at these events since energy drinks can produce anxious symptoms such as increased heart rate, respiration and sweating. This in itself, can make people anxious, further compounding the situation.

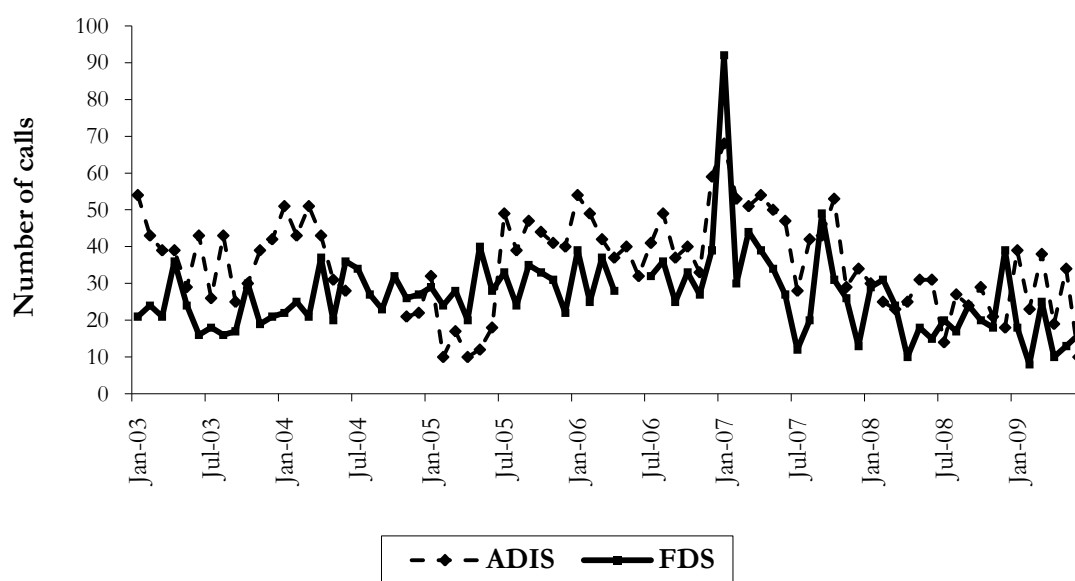
13.3 Drug treatment

13.3.1 Ecstasy

The NSW Alcohol and Drug Information Service (ADIS) provides a telephone information and referral service in NSW. ADIS data reflect calls in which ecstasy was the primary drug of concern. Similarly, the NSW Family Drug Support (FDS) provides over-the-phone support and referral. FDS data represent all calls in which ecstasy was mentioned.

Figure 71 shows that the number of calls received by ADIS regarding ecstasy has fluctuated across time; however, there appears to be a downward trend in the number of calls both to ADIS and FDS after a spike in January 2007.

Figure 71: Number of inquiries regarding ecstasy received by ADIS and FDS, January 2003-June 2009



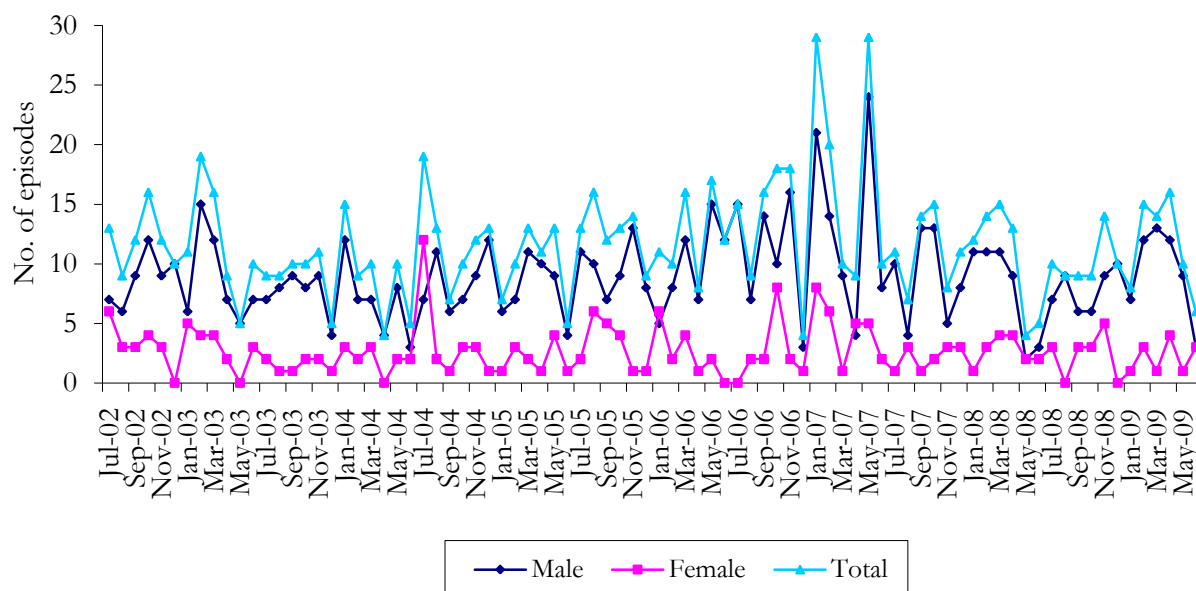
Source: NSW Alcohol and Drug Information Service, NSW Family Drug Support

NB: Family Drug Support data was only available from April 2000; data for May and June 2006 were not available. Data from ADIS for July-October 2004 are unavailable due to database changes.

The number of closed treatment episodes, based on the date of commencement, where the principal drug of concern was ecstasy, has fluctuated over the preceding seven years (Figure 72). After spiking in both January and May 2007, the number of ecstasy treatment episodes returned

to figures consistent with those prior to this period. In line with the gender distribution of the 2009 NSW REU sample, men accounted for most of the treatment episodes.

Figure 72: Number of ecstasy treatment episodes by gender, NSW July 2002-June 2009



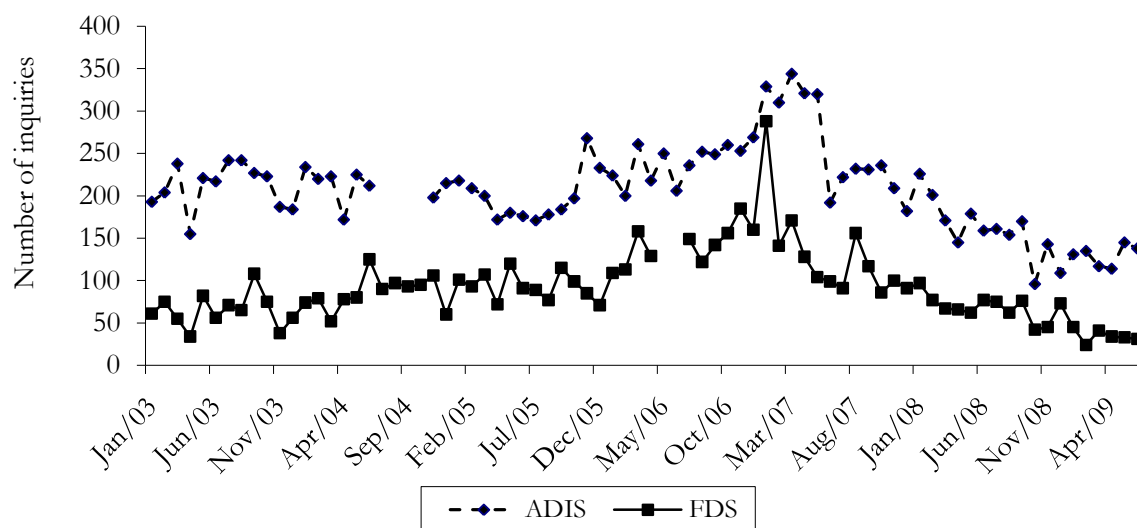
Source: NSW MDS AODTS, NSW Department of Health.

NB: The NSW MDS AODTS is based on closed treatment episodes and so some episodes may be excluded if they did not finish in the given period. Figures are presented by the commencement date for treatment.

13.3.2 Methamphetamine

Figure 73 shows the number of calls to the ADIS and FDS lines regarding amphetamines. The number of enquiries regarding amphetamines has continued a declining trend from 2007-08 to 2008-09. The number of calls have returned to levels comparable to 2003, prior to the rise and subsequent peak noted in 2007.

Figure 73: Number of inquiries to ADIS and FDS regarding amphetamines, including ‘crystal’/‘ice’, January 2003-June 2009

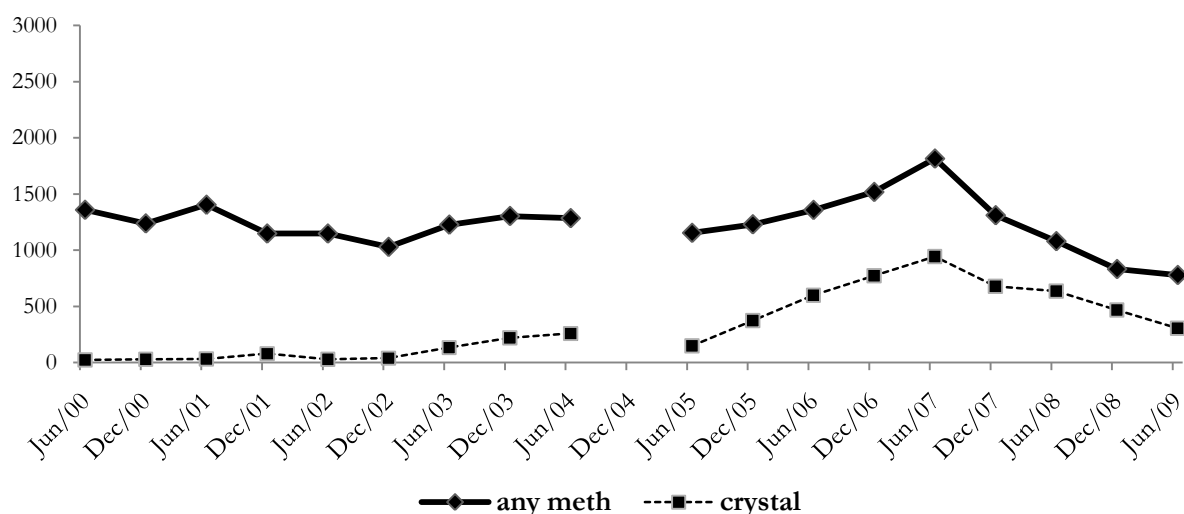


Source: NSW Alcohol and Drug Information Service and Family Drug Support

NB: Family Drug Support data were only available from April 2000 and refer to calls where any mention of amphetamines was made. ADIS data refer to the number of calls where amphetamines were mentioned as any drug of concern. ADIS data were unavailable for the period July-October 2004 and FDS data were unavailable for the period May-June 2006.

Figure 74 presents calls to ADIS coded as being related to any meth/amphetamine and also those where ice/crystal specifically had been mentioned. From 2002 to June 2007, there was an increase in calls coded as related to meth/amphetamines generally and a similar increase in calls where crystal was mentioned. It is worth noting that this trend may reflect an increase in public awareness and concern following a large number of controversial media reports on crystal methamphetamine at that time. Many of these calls may have been initiated by a concerned family member or friend rather than by users. As with the other methamphetamine data, calls regarding methamphetamines generally and ice/crystal specifically have both continued to decline into 2009.

Figure 74: Number of enquiries to ADIS regarding amphetamines, including ice/crystal, June 2000-June 2009.

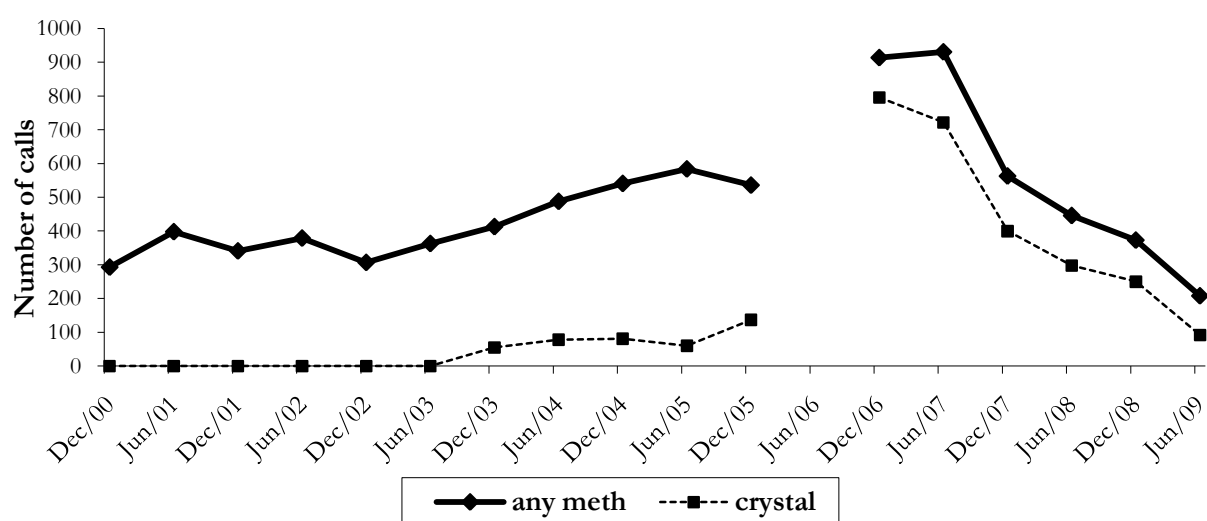


Source: ADIS

NB: Data is presented on calls coded as relating to meth/amphetamines and calls relating to crystal. Calls may not fall exclusively into either category and it is possible that there is some overlap. Data were unavailable for the period July-October 2004.

Figure 75 presents data from December 2000 to June 2009 comparing the number of calls coded as specifically mentioning crystal and those where meth/amphetamines generally were measured. The number of calls has continued to fall steadily over the past 12 months and in early 2009, the number of calls relating to ice/crystal represented approximately half of the total number of amphetamine related calls, a proportion which has been falling since the latter half of 2006.

Figure 75: Number of enquiries to FDS regarding amphetamines, including ice/crystal, June 2000-June 2009.

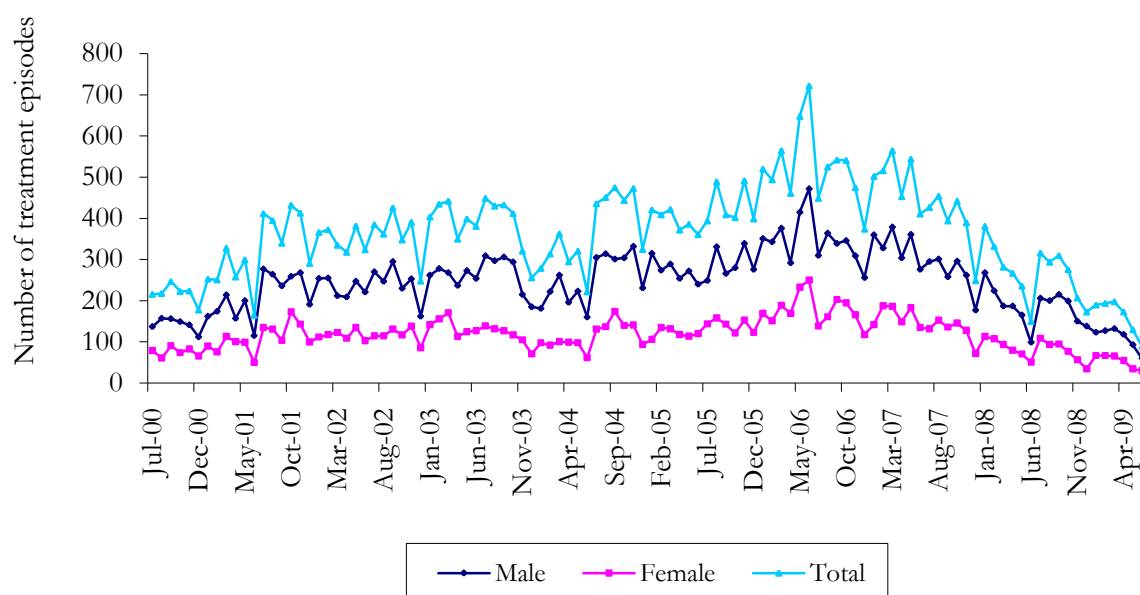


Source: FDS.

NB: Data is presented on calls coded as relating to meth/amphetamines and calls relating to crystal. Calls may not fall exclusively into either category and it is possible that there is some overlap. Data were unavailable for the period May-June 2006.

The number of closed treatment episodes based on date of commencement where amphetamine was the principal drug of concern has continued to decline from 2008 to 2009 (Figure 76). Men continue to account for a greater proportion of this total compared to women.

Figure 76: Number of ATS treatment episodes by gender, NSW July 2000-June 2009



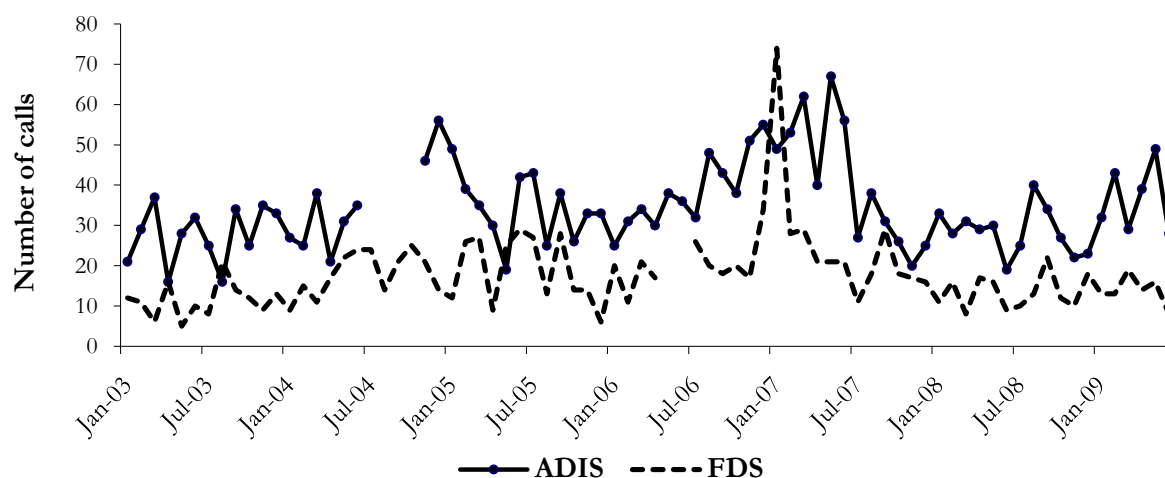
Source: NSW MDS AODTS, NSW Department of Health

NB: The NSW MDS AODTS is based on closed treatment episodes and so some episodes may be excluded if they did not finish in the given period. Figures are presented by the commencement date for treatment.

13.3.3 Cocaine

Figure 77 shows the number of calls to the ADIS and FDS lines regarding cocaine. While calls to FDS appear to have remained relatively stable, calls to ADIS appear to have increased from early-2008 to mid-2009.

Figure 77: Number of inquiries to ADIS and FDS regarding cocaine, January 2003-June 2009.



Source: ADIS and FDS

NB: FDS data were only available on a monthly basis from April 2000 and refer to calls where any mention of cocaine was made. FDS is based in NSW but data may include some calls from interstate. ADIS data include calls made in NSW and the Australian Capital Territory (ACT) and refer to the number of calls where cocaine was mentioned as any drug of concern. ADIS data were unavailable for the period July to October 2004 and FDS data were unavailable for the period May to June 2006.

13.3.4 Ketamine

Treatment-seeking for problems with ketamine use is low compared to other drugs. Data from the NSW Minimum Dataset show during the period 2002-2009 there were ten closed treatment episodes based on the date of commencement where the principal drug of concern was ketamine (NSW MDS AODTS, NSW Department of Health). The NSW MDS is based on closed treatment episodes and so some episodes may be excluded if they did not finish in the given period.

Calls to telephone helplines

From July 2008 to June 2009 there were 7 calls to ADIS where ketamine was mentioned as a drug of concern. This continues a declining trend from 15 calls in the period July 2007-June 2008 and 23 calls from July 2006-June 2007.

13.3.5 GHB

Data from the NSW Minimum Dataset show that during the period 2002-2009 there have been 22 treatment episodes where GHB was the principal drug of concern (NSW MDS DATS, NSW Department of Health). Five of these were recorded in the 2008/09 period. The NSW MDS is based on closed treatment episodes and so some episodes may be excluded if they did not finish in the given period.

Calls to telephone helplines

From July 2008 to June 2009 there were 20 calls to ADIS where GHB was mentioned as a drug of concern. This appears to have fallen slightly from 33 calls from July 2007-June 2008 and 40 calls from July 2006-June 2007.

13.3.6 LSD

Calls to telephone helplines

Calls to ADIS where hallucinogens were mentioned as a drug of concern appear to be increasing with 59 calls recorded for the period July 2008-June 2009, higher than the 44 calls noted from July 2007-June 2008 and the 31 calls from July 2006-June 2007.

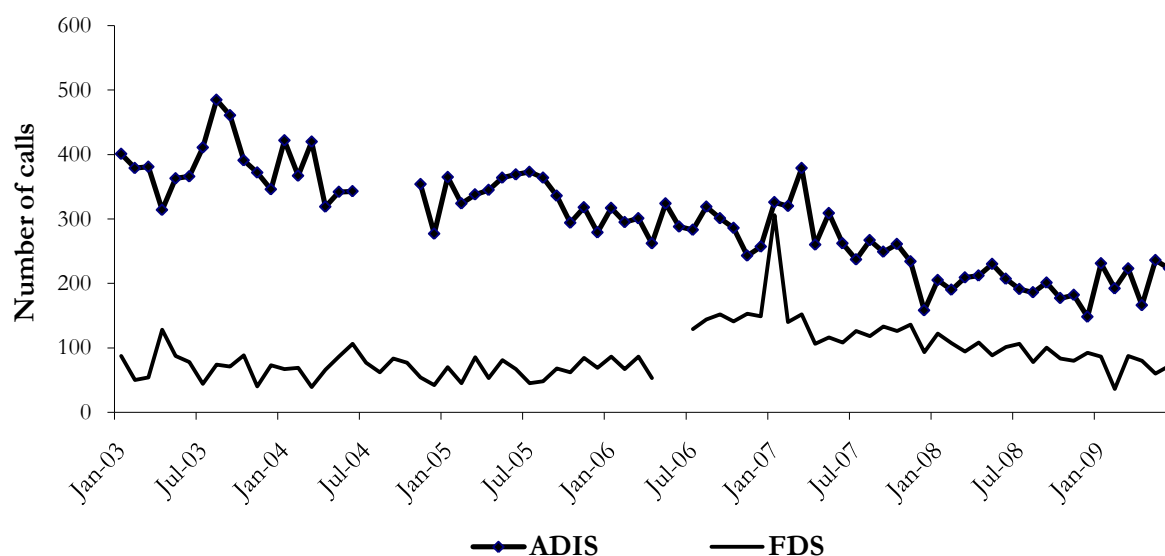
13.3.7 MDA

From July 2007 to June 2009 there have been no calls recorded by ADIS where MDA was mentioned as a drug of concern.

13.3.8 Cannabis

Figure 78 presents data on calls to the ADIS and FDS services where cannabis was mentioned as a drug of concern. The numbers of calls to ADIS have been in decline since mid-2003; however, the number of calls increased slightly in early 2009. Calls to FDS regarding cannabis also appear to have been declining slowly since late-2006.

Figure 78: Number of enquiries to ADIS and FDS regarding cannabis, January 2003-June 2009.

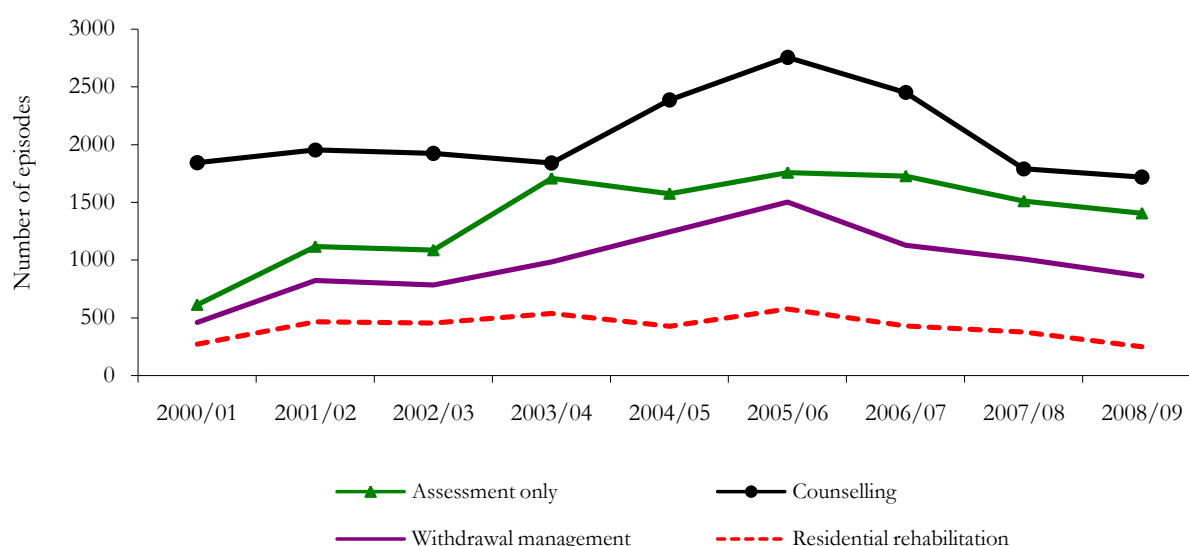


Source: ADIS and FDS

NB: FDS data were only available on a monthly basis from April 2000 and refer to calls where any mention of cannabis was made. FDS is based in NSW but data may include some calls from interstate. ADIS data include calls made in NSW and the ACT and refer to the number of calls where cannabis was mentioned as any drug of concern. ADIS data were unavailable for the period July to October 2004 and FDS data were unavailable for the period May-June 2006.

Figure 79 shows the number of closed treatment episodes based on the date of commencement where the principal drug of concern was cannabis, by treatment type. Counselling continues to be the most commonly accessed form of treatment. From 2007/08 to 2008/09 the number of treatment episodes appears to have remained stable both overall and within each treatment type.

Figure 79: Number of cannabis treatment episodes by treatment type, NSW 2000/01-2008/09



Source: NSW MDS AODTS, NSW Department of Health

NB: The NSW MDS is based on closed treatment episodes and so some episodes may be excluded if they did not finish in the given period. Figures are presented by the commencement date for treatment.

13.4 Self-reported problems associated with ecstasy and related drug use

Participants 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 could have gotten themselves or others hurt, or put themselves or others at risk; or if their drug use had recurrently interfered with their responsibilities at home, work or school. Table 21 presents the proportion experiencing these problems and the drug attributed by them as the main cause of these problems.

Three-in-ten REU (29%) reported that their use of drugs had caused repeated problems with family, friends or people at work or school in the six months prior to the interview. Ecstasy was the drug most commonly identified as causing these problems, followed by cannabis, alcohol and crystal.

Almost half (47%) of the sample reported recurrently finding themselves in situations where they were under the influence of a drug and could have caused injury either to themselves or others

or put themselves or others at risk. This figure was significantly higher than that recorded in 2008 (24%; 95% CI: -0.35 - -0.10). Respondents most commonly identified alcohol as the main drug causing these problems followed by ecstasy and cannabis.

More than half of the sample (54%) in 2009 reported that their drug use had recurrently interfered with their responsibilities at home, at work or at school. This proportion was significantly higher than that recorded in 2008 (33%; 95% CI: -0.34 - -0.07). Similar proportions (just under one-third of respondents each) identified cannabis, ecstasy and alcohol as the main drug causing these problems.

Only two participants reported experiencing recurring legal problems due to drug use. These were attributed to alcohol and cannabis; however, this data should be interpreted with caution given the small proportion of the sample reporting.

Overall, it is evident that a sizeable proportion of REU experience problems associated with their drug use across multiple domains and that these are most commonly associated with the use of alcohol, cannabis and ecstasy. From 2008 to 2009 there were significantly greater numbers reporting problems associated with risk and responsibility. This may be accounted for by the fact that the participants of the NSW EDRS were significantly younger in 2009 than in previous years.

Table 21: Self-reported drug-related problems, NSW 2009

Problems in the following areas (last 6 months):	Any drug (N=100)	Alcohol (%)	Cannabis (%)	Ecstasy (%)	Crystal (%)	LSD (%)	Cocaine (%)	GHB (%)
Social (%)	n=29	14	31	35	10	3	3	-
Legal (%)	n=2	50*	50*	-	-	-	-	-
Risk (%)	n=47	53	13	21	2	6	-	2
Responsibility (%)	n=54	28	32	30	4	-	2	2

Source: EDRS regular ecstasy user interviews 2009

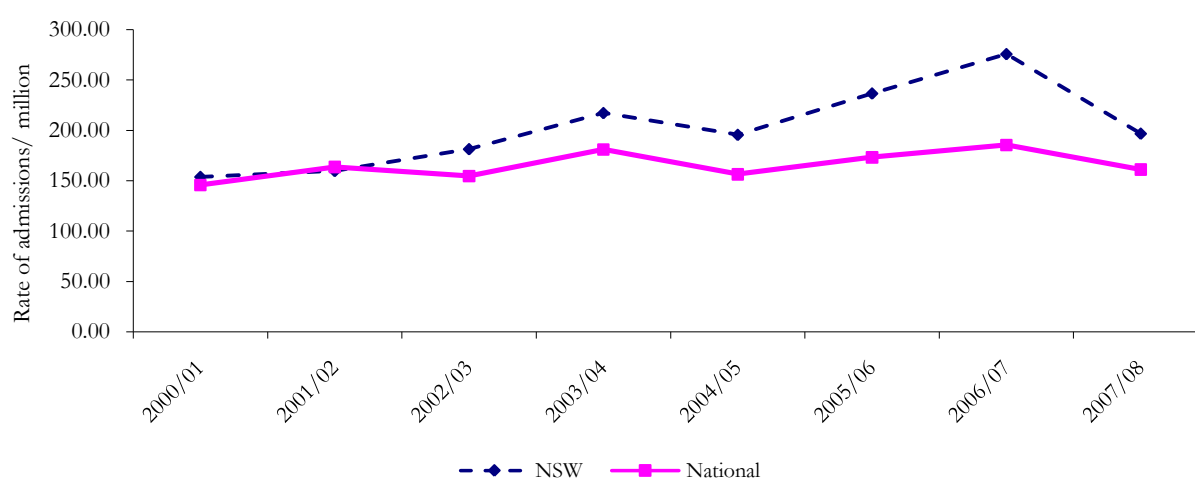
* Small numbers reporting

13.5 Hospital admissions

13.5.1 Methamphetamine

The rate per million of inpatient hospital admissions among persons aged 15-54 years in which amphetamines were the principal diagnosis is shown in Figure 80 below. Diagnoses for the period 1998 to 2004 were recorded using ICD-10-AM codes. A principal diagnosis is defined as having been chiefly responsible for occasioning the patient's episode of care in hospital. While national rates appear to have remained relatively stable, those recorded in NSW appear to have been increasing from 2000/01 to 2006/07 and then to have declined in 2007/08.

Figure 80: Number per million persons of principal amphetamine-related hospital admissions among persons aged 15-54, NSW and nationally, 2000/01-2007/08.

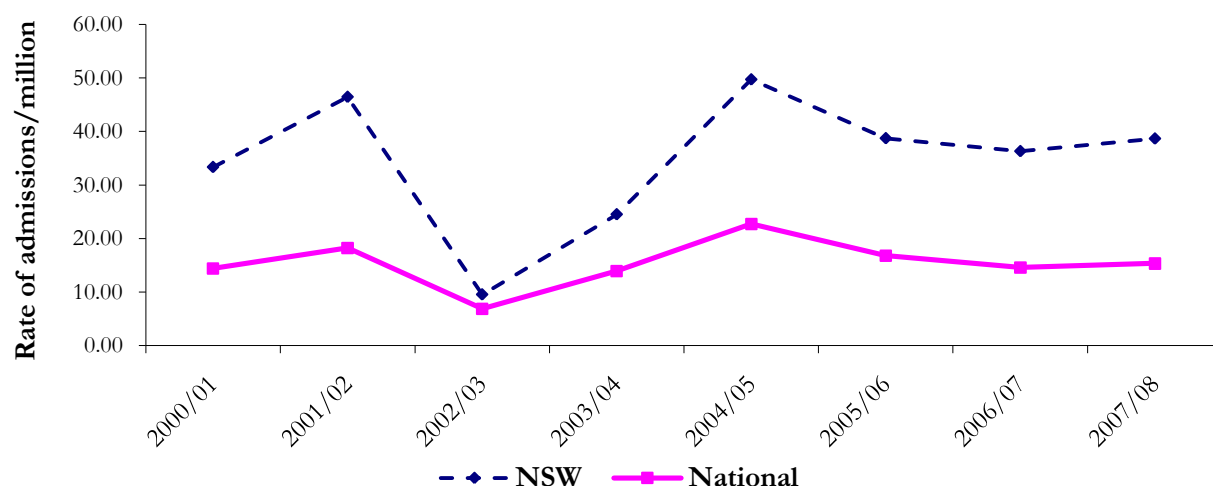


Source: National Hospital Morbidity Database, AIHW; (Roxburgh and Burns in press)

13.5.2 Cocaine

The rates of inpatient hospital admissions where cocaine was the principal diagnosis per million people aged 15-54 years are shown in Figure 81. Both the national rate and that for NSW appear to have remained relatively stable from 2006/07 to 2007/08.

Figure 81: Number per million persons of principal cocaine-related hospital admissions among persons aged 15-54, NSW and nationally, 2000/01-2007/08.

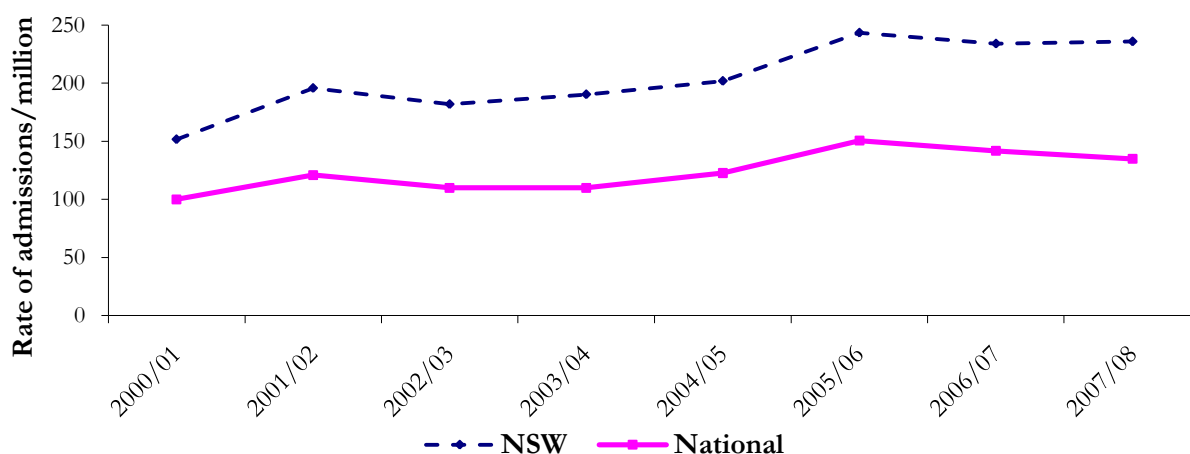


Source: National Hospital Morbidity Database, AIHW; Roxburgh and Burns (in press)

13.5.3 Cannabis

Figure 82 shows the rates of hospital admissions where cannabis was the principal diagnosis per million people aged 15-54 years. Rates in NSW remain higher than nationally, and have been so for the duration of the study. Since 2000/01, NSW has accounted for between 50-60% of Australian inpatient hospital admissions where cannabis was the principal diagnosis.

Figure 82: Number per million persons of inpatient hospital admissions where cannabis was the principal diagnosis aged 15-54 years, 2000/01 to 2007/08.



Source: National Hospital Morbidity Database; Roxburgh and Burns (in press)

13.6 Mental and physical health and wellbeing

13.6.1 Self-reported mental health

Participants were asked whether they had experienced any mental health problems over the previous six months (Table 22). Almost three-in-ten (28%) had recently experienced a mental health problem, similar to the proportion observed in 2008 (31%). This is slightly higher than that recorded among the general population of a similar age range (16-24 years (26%) and 25-34 years (25%) (Australian Bureau of Statistics 2007)). Depression was the most commonly reported mental health problem followed by anxiety, panic and paranoia. One-fifth of those who experienced a mental health problem sought assistance from a health professional. One-in-three of those who experienced a mental health problem had been prescribed medication for this with the majority (n=4) receiving antidepressants. Although there was no significant change in the proportions seeking help from a health professional from 2008 to 2009 (39% to 43%) or being prescribed medication (19% to 29%), increases in both these indicators were noted.

Table 22: Mental health problems among REU, NSW 2008-2009

	2008 (N=100)	2009 (N=100)
Any mental health problem recently (%)	31	28
<i>Of these (%):</i>		
Depression	71	57
Anxiety	48	43
Panic	16	18
Paranoia	13	11
Bipolar Disorder	7	4
Schizophrenia	3	-
Drug-Induced Psychosis	3	-
Obsessive Compulsive Disorder	3	-
Personality Disorder	3	-
Sought help from health professional (%)	39	43
Prescribed medication^ (%)	19	29

Source: EDRS regular ecstasy user interviews 2008-2009

^% of the whole sample

13.6.2 Self-reported physical health

Table 23 and Table 24 present self-reported data regarding the physical health of participants in 2009. Asthma was the most commonly reported chronic condition with 27% of the sample having ever been diagnosed with the condition. While most of these were diagnosed in early childhood, almost two-fifths of those who had ever been diagnosed had received treatment within the last year (Table 23).

Table 23: Chronic physical health problems among REU, NSW 2009

Condition	% ever diagnosed in general population [#]	% REU ever diagnosed	Median age (years) first diagnosed*	% receiving treatment in past 12 months*
Chronic Conditions:				
Asthma	26	27	5	37
Gout, rheumatism, or arthritis	1	6	21	33
Cancer	2	1	- [^]	- [^]
Stroke	[9] [†]	-	-	-
Other heart or circulatory condition		5	18	0

Among the other conditions, those most commonly reported included skin problems, vision problems, hay fever, back/neck pain/problems and sinus or sinus allergies. Relatively large proportions of participants reporting a diagnosis for these conditions, also reported receiving treatment in the preceding 12 months (Table 24).

Table 24: Other physical health problems among REU, NSW 2009

Other Conditions:	n=90		
Skin problems	31	15	45
Vision problems	28	14	79
Hay fever	27	13	59
Back or neck pain or back or neck problems	22	22	50
Sinus or sinus allergy	20	13	40
Bronchitis	15	15	40
Joint/muscular/skeletal	12	15	42
Migraine	11	14	27
Anaemia	10	17	50
Hearing problems	5	10	20
Respiratory disease	4	^	^
Fluid problems/fluid retention /oedema	3	^	^
High blood pressure	2	^	^
Cellulitis	2	^	^
Hernias	2	^	^
Stomach ulcer or other gastrointestinal ulcer	2	^	^
Human papilloma virus	1	^	^
Emphysema	1	^	^
Psoriasis	1	^	^
Thyroid trouble/goiter	1	^	^

Source: EDRS regular ecstasy user interviews 2009

* Of those diagnosed with that particular condition

^Information omitted to preserve privacy

Among Australians aged 15-24¹⁵ ABS (2009)

†The figure provided encompasses stroke AND other circulatory problems.

¹⁵ This age range was thought to provide the most accurate comparison since more than 75% of the 2009 NSW sample fall within it.

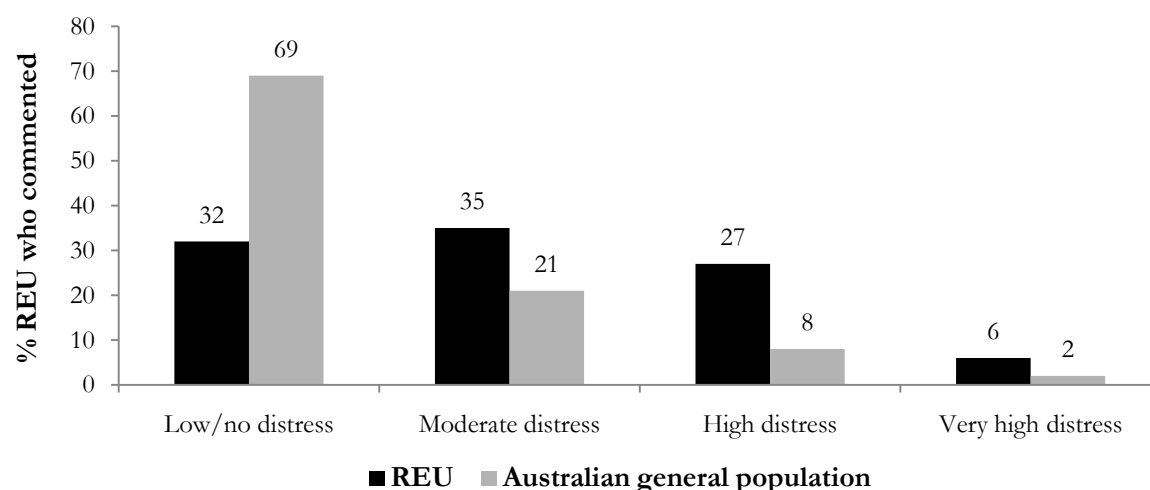
13.6.3 Kessler Psychological Distress Scale (K10)

From 2006, the EDRS has included the 10-item Kessler Psychological Distress Scale (K10) (Kessler, Andrews et al. 2002) which is a questionnaire designed to measure the level of distress and severity associated with psychological symptoms in population surveys. The minimum score is 10 and the maximum 50. Scores ranging from 10-15 were classified as 'low/no distress', 16-21 'moderate distress', 21-29 'high distress' and 30-50 'very high distress' (Australian Institute of Health and Welfare 2008).

The median score for participants was 19 (range 10-38). Approximately one-third of participants' scores fell into the 'low/no distress' category, one-third fell into the 'moderate distress' one, over one-quarter fell into the 'high distress' category and six participants' scores fell into the 'very high' distress category (Figure 83).

Figure 83 compares the spread of REU scores across these four categories with those of the general Australian population. While more than two-thirds of the general population fell into the low/no distress category, only one-third of REU in the current sample fell into this category. This places a much higher proportion of REU into the categories indicative of at least some level of psychological distress. Overall, REU appear to experience a higher level of psychological distress than the wider Australian public.

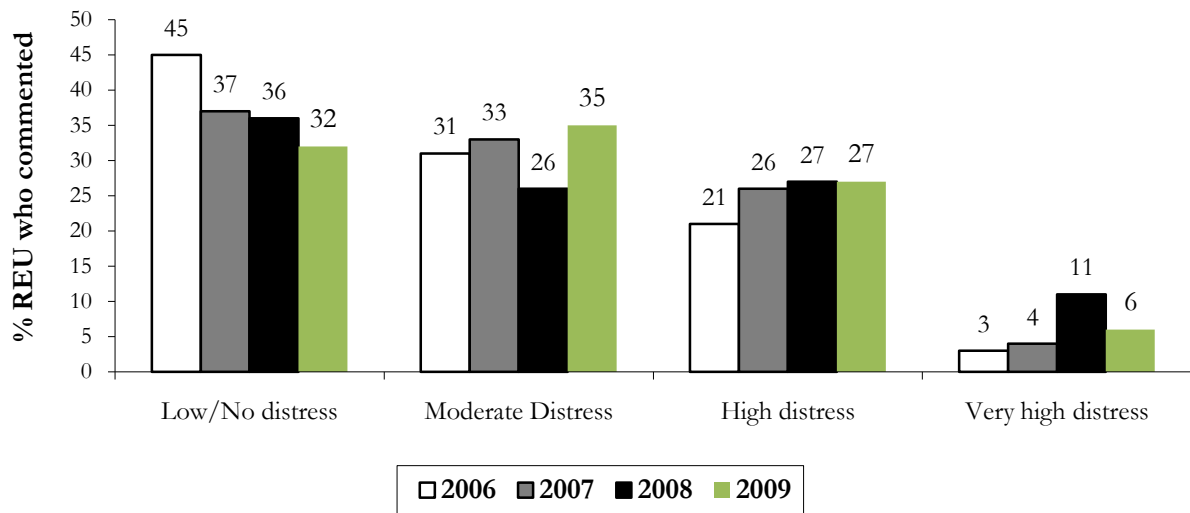
Figure 83: K10 scores for REU compared with the general Australian population, NSW 2009.



Source: EDRS regular ecstasy user interviews 2009; AIHW (2008)

Figure 84 presents data across time on the proportions of each sample from 2006 to 2009 that fell into each distress category. There appears to be a general decline in the proportion falling into the low/no distress category; indicating that across time there has been a greater number of participants experiencing some degree of psychological distress as measured by the K10. This would appear particularly true of the moderate and high distress categories. The proportions falling into the very high distress category have remained variable.

Figure 84: K10 scores across time for REU, NSW 2006-2009.

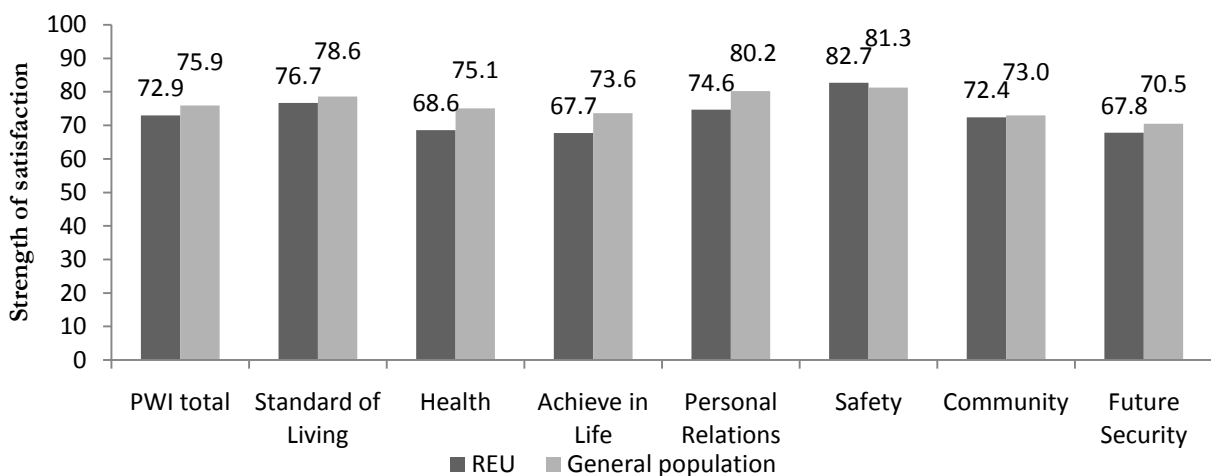


Source: EDRS regular Ecstasy Interviews (2006-2009)

13.6.4 Personal Wellbeing Index (PWI)

In 2009, the EDRS included the Personal Wellbeing Index (PWI) a measure of subjective wellbeing. This is a seven-item questionnaire which asks respondents to rate how satisfied they are with seven aspects of their personal lives – standard of living, health, achieving, personal relationships, safety, community connectedness and future security. Participants were also asked to rate their satisfaction with their life as a whole. Responses were made on a scale ranging from 0 to 10. Scores were then averaged and standardised on a scale from 0 (completely dissatisfied) to 100 (completely satisfied) according to the questionnaire manual (International Wellbeing Group 2006). The overall score for satisfaction with life in general among REU was 72.9%. REU scores of personal wellbeing fell almost consistently below those of the general population in the domains measured, excluding safety (Figure 85).

Figure 85: PWI scores for REU compared with the general Australian population, NSW 2009.



Source: EDRS regular ecstasy user interviews 2009; Cummins, Woerner et al. (2009)

13.7 Summary of health-related trends

- Approximately one-fifth of participants had ever experienced a stimulant overdose. Among those who had overdosed within the past year, ecstasy was the drug to which the last overdose was most commonly attributed.
- Approximately two-fifths of participants had ever experienced a depressant overdose. Among those who had overdosed within the past year, alcohol was the drug to which the last overdose was most commonly attributed.
- Suspected drug-related deaths where ecstasy was detected post-mortem appear to have remained low and stable and likewise for ketamine and GHB. Conversely, they appear to have been in decline for illicit amphetamines.
- Over one-quarter of REU interviewed accessed health services in relation to their drug use. GPs were most commonly accessed.
- Several KE mentioned concern regarding the use of energy drinks at festivals. One KE also noted that, at some festivals, energy drinks were easier to access than water. This could be problematic and may be, in part, contributing to the higher number of anxiety-related presentations at these events.
- Almost one-in-three reported recurring problems with family, friends or people at work or school and approximately half the sample repeatedly found themselves in at-risk situations when they were under the influence of a drug. More than half the sample reported that their drug use had recurrently interfered with their responsibilities at home, work or school. Few participants reported recurring legal problems due to their drug use.
- The drugs most commonly attributed as causing these problems were ecstasy, alcohol and cannabis.
- Almost one-third of the REU interviewed reported experiencing a mental health problem over the six months prior to the interview; however, only two-fifths of these participants sought help from a health professional.
- The physical health problems most commonly reported included skin problems, vision problems, hay fever, back/neck pain/problems and sinus or sinus allergies.
- Overall, REU experience a greater level of psychological distress than the general Australian population.
- REU levels of personal wellbeing appear to fall slightly below the national average. This is consistent across almost all seven measures of subjective wellbeing (standard of living, health, achieving, personal relationships, community connectedness and future security but not safety).

14 RISK BEHAVIOUR

14.1 Injecting risk behaviour

Approximately one-in-ten participants had ever injected a drug and only six participants had done so recently. Among those who had ever injected, the median number of drug types injected¹⁶ was 2 (range 1-9) and, among recent injectors, the median number of drug types injected was 2 (range 1-4) (Table 25).

Table 25: Injecting risk behaviour among REU, NSW 2009

Variable	2009 (N=100)
Ever injected (%)	9
Median number of drugs ever injected* (range)	2 (1-9)
Injected last 6 mths (%)	6
Median number of drugs injected last 6 mths** (range)	2 (1-4)

Source: EDRS regular ecstasy user interviews 2009

* of those who had ever injected

** of those who had injected in the last 6 mths

14.1.1 Lifetime injectors

Patterns of lifetime injecting drug use

The median age of initiation for respondents who had ever injected was 19 years (range 15-21). A wide range of drug types had ever been injected; however, those most frequently reported were heroin, speed, ecstasy pills and base (Table 26). The most common drug first injected was speed (33%) followed by heroin and base (22% respectively), crystal (1%) and 'other opiates' (1%).

¹⁶ This figure was calculated without combining licit and illicit benzodiazepines, pharmaceutical stimulants or antidepressants and may be higher than previous years where these drug types had been combined.

Table 26: Injecting drug use history among REU injectors, NSW 2009

Drug	Ever injected (%)	Ever injected (n)
Heroin	67	6
Speed	56	5
Ecstasy pills	56	5
Base	56	5
Crystal	44	4
Cocaine	33	3
Ketamine	33	3
Other opiates	11	1
Methadone	11	1
Ecstasy powder	11	1
Buprenorphine	11	1
Benzodiazepines (illicit)	11	1
Ecstasy Capsules	11	1
LSD	11	1

Source: EDRS regular ecstasy user interviews 2009

14.1.2 Recent injectors

Patterns of recent injecting drug use

The six participants who had injected a drug in the six months prior to the interview reported having injected any drug a median of 10 times (range 3-120) over this period.

Participants were asked about the last time they had injected a drug. Base was the drug most commonly last injected (n=3) followed by crystal (n=2) and heroin (n=1). Half of those who had recently injected a drug did so in their own home on the last occasion (n=3). One participant each reported having last injected in a friend's home, in a car or on a street/park/bench.

Injecting risk behaviour

No REU interviewed had used a needle after someone else in the past six months. Only two participants had used other injecting equipment including spoons and filters after someone else during this period.

Context of injecting

Two participants reported usually injecting alone over the preceding six months and the remaining four with close friends. Three of six recent injectors had injected while 'coming down' from ecstasy and other drugs and one participant had done so both when under the influence of and also when coming down from these drugs. Two participants reported that they had not injected when under the influence or when coming down from ERDs over this period.

Obtaining needles

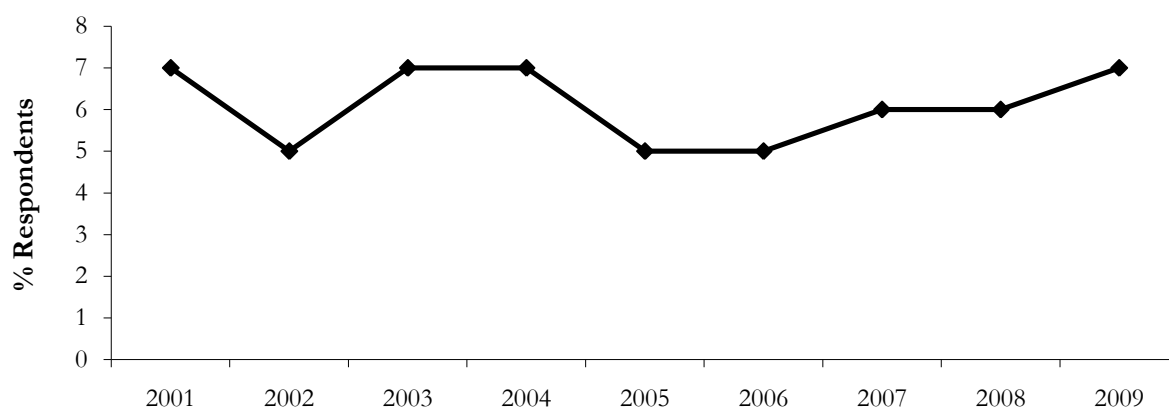
Respondents were asked to identify where they had obtained needles over the preceding six months. Three participants reported having obtained them at chemists, two at needle and syringe programs, two from friends and one each from a dealer and a hospital.

14.1.3 Injecting drug use in other populations

Data collected for the past four National Drug Strategy Household Surveys indicates that the proportion of the general population in NSW aged 14 years or over who had injected a drug in the past 12 months has remained relatively stable at 0.3% (1998, 2001, 2004) and 0.4% in 2007 (Fitzsimmons 2000).

Data collected from the Sydney Gay Community Periodic Survey shows that, across sampling years, less than one in ten had injected any drug in the six months prior to interview (Figure 86). This figure was not significantly different from that recorded in 2008 (Frankland, Lee et al. 2009).

Figure 86: Proportion of gay men in Sydney reporting injecting drug use, 2001-2009



Source: Sydney Gay Community Periodic Survey, 2002-2009

14.2 Sexual risk behaviour

Participants were asked questions about their recent sexual activity, particularly with regards to penetrative sex. This was defined as 'penetration of penis or fist 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.

The majority (80%) of the sample in 2009 reported having had a regular partner over the six months preceding the interview. Participants were asked how often they had used a sexual barrier (e.g. condoms/gloves) when having penetrative sex with a regular partner both when under the influence of alcohol/drugs and also when NOT under the influence (Table 27). Approximately one-quarter of participants reported using protection 'every time' with their

regular partner when not under the influence and approximately one-fifth reported doing so 'every time' when they were. Responses differed significantly depending on whether participants were/were not under the influence of alcohol or drugs ($\chi^2=8.0$, $p<0.01$). It appears that fewer participants reported using condoms 'every time' or 'often' when under the influence of alcohol or drugs and a higher proportion reported doing so 'sometimes'.

Table 27: Use of sexual barriers with regular partners, NSW 2009

Variable	2009 N=100
How often used barrier with <u>regular partner</u> when:	
a) Not under the influence of alcohol/drugs (%)	n=80
Every time	24
Often	21
Sometimes	8
Rarely	16
Never	31
b) Under the influence of alcohol/drugs (%)	n=78
Every time	21
Often	17
Sometimes	12
Rarely	13
Never	39

Source: EDRS regular ecstasy user interviews 2009

Approximately two-thirds of the sample reported having had penetrative sex with at least one casual partner (i.e. someone who was not a regular partner) over the preceding six months. Of these, approximately one-fifth reported one casual partner, one-quarter reported two casual partners and almost half reported three to five casual partners. Smaller numbers reported having sex with six or more people over the preceding six months (Table 28).

The majority (88%) of those who reported penetrative sex with a casual partner also reported having done so while under the influence of alcohol or drugs (Table 28). The drugs most commonly used were alcohol, ecstasy, cannabis and cocaine. Participants were also asked how often they had used a sexual barrier when having penetrative sex with a regular partner both when under the influence of alcohol/drugs and also when NOT under the influence. There was again a significant difference in participants' responses under these two conditions ($\chi^2=40.2$, $p<0.001$) with fewer participants appearing to do so 'always' and more participants using protection 'often' or 'sometimes' when under the influence of drugs.

Table 28: Trends in sexual activity with casual partners in the preceding six months, NSW 2009

Variable	2009 N=100
Casual penetrative sex (%)	65
No. of sexual partners (%):*	
One person	17
Two people	23
3-5 people	45
6-10 people	9
10+ people	6
Penetrative sex with casual partner while on drugs	n=57
Drugs used (%):	
Alcohol	83
Ecstasy	64
Cannabis	42
Cocaine	21
Amyl Nitrate	7
Crystal	5
LSD	5
Ketamine	4
Speed	4
Base	4
GHB	2
Benzodiazepines	2
How often used barrier with <u>casual partner</u> when:	
a) Not under the influence of alcohol/drugs (%)	n=64
Every time	47
Often	16
Sometimes	13
Rarely	11
Never	14
b) Under the influence of alcohol/drugs (%)	n=57
Every time	40
Often	19
Sometimes	19
Rarely	9
Never	12

Source: EDRS regular ecstasy user interviews 2009 * of those who had penetrative sex in the last 6 mths

14.3 Driving risk behaviour

Participants were asked a series of questions regarding driving and the use of alcohol and other drugs. Three-quarters of participants in 2009 had driven a car, motorcycle or other vehicle in the preceding six months. Approximately half of these (49%) had driven under the influence of alcohol during this time. Two-fifths (40%) of all those who had driven had done so over the legal blood alcohol limit¹⁷. Those who reported having driven over the legal limit reported having done this on a median of two occasions (range 1-12) in the preceding six months (Table 29). Approximately half (49%) of those who had driven during the last six months had been subject to a roadside breath test within that time. Four participants reported having tested over the legal blood alcohol limit at least once.

Over two-thirds of those who had recently driven had done so after using an illicit drug on a median of 19 occasions (range 1-180). The drugs most commonly used prior to driving included cannabis (64%) and ecstasy (60%) (Table 29).

Table 29: Drug driving in the last six months among REU, NSW 2008-2009

Variable	2008 (N=100)	2009 (N=100)
Driven a car in the past six months (%)	66	75
Driven under the influence of alcohol* (%)	65	49
Driven over the limit of alcohol* (%)	51	40
Driven after taking an illicit drug* (%)	53	68
<i>Of those who had driven after taking a drug:</i>		
Drug (%)	n=35	n=50
Cannabis	43	64
Ecstasy	63	60
Cocaine	20	8
Speed	17	8
Base	6	8
LSD	-	6
Crystal	23	4
Ketamine	3	4
Mushrooms	3	2
GHB	9	-
Amyl nitrite	6	-

Source: EDRS regular ecstasy user interviews 2008-2009

*Of those who had driven a car in the last 6 mths

¹⁷Participants reported according to their own perception of their blood alcohol content.

Participants were asked a series of questions focussing on the last occasion in which they drove after taking an illicit drug. The drugs most commonly reported as having been taken on the last occasion were cannabis (60% of respondents) and ecstasy (42%). Smaller numbers reported having consumed cocaine (6%), ketamine (2%) and speed (2%). Participants reported having driven a median of 1 hour (range 0-26) after taking an illicit drug.

When asked how they thought having recently taken a drug had impacted on their driving on the last occasion, more than half of respondents believed that it had been impaired (12% 'quite impaired' and 46% 'slightly impaired'). One-quarter (26%) believed that there had been no impact on their driving ability and 16% believed that it was 'slightly improved'. Three participants had been tested by a police roadside drug testing van, all receiving a 'negative' result.

14.4 Energy drinks, ecstasy and alcohol

In 2009, the EDRS included questions examining the use of energy drinks (e.g. 'V' and 'Red Bull') in the context of alcohol and/or ecstasy use. Four in five participants had consumed energy drinks mixed with alcohol over the preceding six months. On their last occasion, respondents had consumed a median of 3 (range 1-12) energy drinks mixed with alcohol. More than half the sample had consumed energy drinks within the same episode as ecstasy during the preceding six months (Table 30).

Participants were asked whether they had consumed the energy drinks before, with or after taking ecstasy on the last occasion they did this (Table 30). Just over half of those who had consumed energy drinks and ecstasy on the same occasion reported having done so 'before' taking ecstasy the last time. Participants reported doing so a median of 72 minutes (range 1-540) before taking ecstasy. Approximately half of respondents had taken energy drinks with ecstasy and almost one-in-three had done so after taking ecstasy. Among this latter group, participants reported having consumed energy drinks a median of 85 minutes (range 1-360) after taking ecstasy. Half of the REU who reported on their last occasion of using energy drinks with ecstasy reported that their energy drinks had been mixed with alcohol on this occasion.

There is no significant difference between men and women in this group regarding the use of energy drinks with ecstasy and alcohol.

Table 30: Use of energy drinks in the last six months among REU, NSW 2009

Variable	2009 (N=100)
Consumed energy drinks with (%):	
Alcohol	79
Ecstasy	54
<i>On the last occasion consumed with ecstasy:</i>	
Before taking ecstasy	53
With ecstasy	51
After taking ecstasy	28

Source: EDRS regular ecstasy user interviews 2009

14.5 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 Alcohol Quantity Frequency and Variability Assessment¹⁸ (AQFV) 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 '2-3 standard drinks, 3 days per week' or '5-6 standard drinks, 2 days per month' etc.

Using the information gleaned 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 6 drinks for men or 4 for women); b) risky (from 7 to 10 drinks for men or 5 to 6 for women); or c) high risk (11 drinks and above for men or 7 and above for women) (National Health and Medical Research Council 2001).

Table 31 presents the frequency and quantity of alcohol consumption for male and female REU in NSW in 2009. There was no difference between men and women in the number of days per year of high risk, risky or low risk drinking. However, men consumed a significantly greater number of drinks per drinking session overall than women did (9 vs. 6, $U=1,500$, $p<0.01$). Of note is that both men and women were drinking at high risk levels approximately once a week.

¹⁸ Many thanks to Dr James Lemon, previously of the National Drug and Alcohol Research Centre, for his kind permission to use the AQFV assessment in the 2009 EDRS.

Table 31: Frequency and quantity of alcohol consumption among REU, NSW 2009

	Men	Women
Median number of drinking days/year (range):		
Low Risk	52 (0-303)	52 (0-208)
Risky	15 (0-245)	4 (0-156)
High Risk	48 (0-246)	50 (0-197)
Average no. drinks per session	9	6

Source: EDRS regular ecstasy user interviews 2009

14.6 Aggression among REU

In 2009, the EDRS included a new module investigating the presence of trait aggression among REU. This was in response to the increased government and media attention surrounding antisocial behaviour in and around ‘party precincts’. Ecstasy has long been known to impact on the serotonergic system in the brain and there is a growing body of evidence that serotonin is implicated in the modulation of aggression in humans (Bond 2005; Hoshi, Cohen et al. 2007). In addition, there are multiple other factors which may contribute toward an increased involvement in aggressive situations by REU. These include currently experiencing symptoms of depression and/or anxiety, being young, being male, the use of other illicit substances such as cocaine and other stimulants, the high prevalence of cannabis use and the involvement in obtaining/using drugs and associated social contexts (Murray, Chermack et al. 2008).

Thus, the 2009 EDRS included the Buss-Perry Aggression Questionnaire (Short Form) (BPAQ-SF). This self-report measure addresses three major components of aggression: the motor components (physical and verbal aggression), the emotional component (anger) and the cognitive component (hostility). This questionnaire provides a valid and reliable measure of ‘dispositional aggression’ which correlates well with the original 29-item Buss-Perry Aggression Questionnaire (Bryant and Smith 2001).

The most commonly endorsed form of aggression among REU in the 2009 sample was verbal aggression, with one-fifth of the whole sample fully endorsing¹⁹ this domain (Table 32). Scores for each domain were compared between men and women. It is interesting to note that the only form of aggression which was significantly different between these two groups was anger, the emotional component of aggression. Women reported significantly higher levels of anger than men ($U=844.5, p<0.05$).

¹⁹ This refers to someone who answered ‘characteristic of me’ or ‘somewhat characteristic of me’ or ‘extremely characteristic of me’ to all three items which contributed to that domain (e.g. physical aggression).

Table 32: Aggression among REU, NSW 2009

	Men	Women	Total
Fully endorsed this form of aggression (%)	n=64	n=36	N=100
Physical	9	3	7
Verbal	19	20	20
Anger	6	3	4
Hostility	8	3	5
Median BPAQ Aggression scores (range)			
Physical	6 (3-17)	4.5 (3-13)	5 (3-17)
Verbal	9.5 (3-18)	8 (3-18)	9 (3-18)
Anger*	7 (3-14)	9 (3-15)	8 (3-15)
Hostility	6 (3-15)	6 (3-15)	6 (3-15)

Source: EDRS regular ecstasy user interviews 2009

* Significantly different between men and women $p < 0.05$.

14.7 Gambling among REU

In 2009, for the second year, participants were asked about their gambling practices in the month prior to interview. In 2009, an additional questionnaire, the Problem Gambling Severity Index (PGSI), was included to evaluate the proportion of participants gambling at problematic levels (Holtgraves 2009). Participants were also asked about drug and alcohol use on their last occasion of gambling.

Approximately two-fifths (43%) of REU interviewed reported they had gambled in the month prior to the interview on a median of 2 days (range 1-20). Approximately two-fifths of participants reported that this amount was 'usual' for them (37%). A similar proportion reported that this was 'more than usual' for them (42%) and approximately one-fifth (21%) reported that this was 'less than usual' for them. Recent gamblers reported having spent a median of \$10 (range \$0.10-\$100.00) on the last occasion of gambling.

Respondents most commonly reported usually gambling using poker machines (70%); however, other forms of gambling included horse/dog racing (21%), private poker games (19%), gambling at the casino (16%) and 'two-up' (5%). Participants were asked which form of gambling they engaged in on the last occasion. More than half (58%) had gambled using poker machines, 20% horse/dog racing, 5% at the casino and 20% reported other forms of gambling including poker, two-up and online betting.

More than half (58%) of those who had recently gambled had done so under the influence of alcohol on their last occasion of gambling and 92% of these participants continued to consume alcohol while gambling. Four recent gamblers were under the influence of illicit drugs on the last gambling occasion, three had used cannabis and one had used cocaine.

Eight participants qualified to complete the PGSI (i.e. had gambled on four days or more over the preceding month). Scores on the PGSI can be classed into four categories of severity of gambling risk – recreational, low risk, moderate risk and problem gambling. Four participants' scores placed them in the 'recreational gambling' category, three participants fell into the 'low risk' category and one participant fell into the 'problem gambling' category. Thus, only 1% of the sample of REU were problem gamblers (according to the questionnaires used in the 2009 EDRS).

14.8 Summary of risk behaviour

- Approximately one-in-ten participants in 2009 had ever injected a drug and six participants had done so recently.
- The median number of drug types *ever* and *recently* injected were both 2.
- The median age of initiation to injecting was 19 years.
- The drugs last injected were base, crystal and heroin.
- No recent injectors had used a needle after someone else over the preceding six months; however, two had shared equipment (including spoons and filters) with others.
- Eight in ten REU reported having had a regular sexual partner during the six months preceding the interview and two-thirds reported having had at least one casual sexual partner during this time. The use of protective barriers was reduced in both cases when the participant was under the influence of alcohol or other drugs.
- Three-quarters of REU interviewed had driven a car in the last six months; 40% had done so over the legal blood alcohol limit and 68% had done so after consuming an illicit drug (most commonly cannabis or ecstasy).
- Four in five participants had consumed energy drinks mixed with alcohol over the six months preceding the interview. Just under half the sample had consumed energy drinks within the same episode as using ecstasy, most commonly either before or while using the drug.
- Men and women both consumed alcohol at high risk levels approximately once weekly. Men consumed significantly more alcohol per session than women.
- Verbal aggression was the form of aggression most common among REU. Women reported significantly higher levels of anger than men.
- Two-fifths of the sample had gambled in the month prior to the interview on a median of 2 occasions. They had spent a median of \$10 on the last occasion.
- Only 1% of the sample was identified as a problem gambler using the PGSI.

15 CRIMINAL ACTIVITY, POLICING AND DRUG MARKET CHANGES

15.1 Reports of criminal activity among REU

Approximately one-in-ten participants reported having been arrested over the preceding 12 months. There had been four arrests made for the use/possession of illicit substances, four arrests for property crime, two arrests for violent crime, two arrests for driving under the influence of alcohol, one for resisting arrest and one for trespassing.

Over one-third of participants had committed a crime in the month leading up to the interview (Table 33). Approximately one-fifth (n=21) of participants had dealt drugs over this period. Of these, the majority (n=12) had done so less than once a week, four had done so once a week and five had done so more than once a week but less than daily. Approximately one-fifth (n=18) of REU had committed property crime over the last month. Again, the majority (n=12) had done so less than once a week; however, three REU had done so once a week, two more than once a week but less than daily, and one participant had done so on a daily basis. Eight participants had engaged in violent crime over this period (seven participants less than once a week and one participant once a week) and three participant had engaged in fraud.

Table 33 presents data across time on both self-reported criminal activity and arrests among samples of REU. In 2009, approximately one-third of participants reported having committed any crime in the month preceding the interview. This figure, although higher, was not significantly different from 2008. Drug dealing has been the most commonly reported crime across time and continued to be in the current sample. Proportions reporting dealing, property crime and fraud all remained stable from 2008 to 2009; however, there was a significant increase in the proportion reporting recent violent crime (1% in 2008 to 8% in 2009; 95% CI: -0.14 - -0.01). This difference may be due to some demographic changes from 2008 to 2009.

Table 33: Criminal activity reported by REU, NSW 2003-2009

Criminal activity in the last month	2003 (N=102)	2004 (N=104)	2005 (N=101)	2006 (N=100)	2007 (N=100)	2008 (N=100)	2009 (N=99)
Any crime	30	19	29	27	23	24	36
Drug dealing	28	12	23	21	15	15	21
Property crime	4	5	8	13	13	11	18
Fraud	1	4	2	4	1	2	3
Violent crime	5	4	1	2	2	1	8
Arrested last 12 months*	-	11	6	7	14	5	11

Source: EDRS regular ecstasy user interviews 2003-2009

*Not recorded prior to 2004

15.2 Perceptions of police activity towards REU

More than two-fifths of the sample in 2009 reported ‘more’ police activity toward drug users in the six months prior to the interview. An equal proportion reported that it had remained ‘stable’ while only 2% reported that there had been ‘less’ police activity during this period. Ten participants were unable to comment on recent changes in police activity toward drug users (Table 34). As in previous years, the majority of participants reported that police activity had not made it more difficult for them²⁰ to obtain drugs over the preceding six months. However, this figure was significantly lower in 2009 (77%) than in 2008 (92%) (95% CI: 0.04 – 0.25). Importantly, while many participants stated that police activity had not made it more difficult for them to score drugs, it is not possible to draw conclusions regarding the effect of police activity on other participant behaviours – for example, it may act as a deterrent to entering nightclubs in possession of drugs.

Participants were asked to specify changes in police activity which they had observed (Table 34). Participants specifically noted that drug-focused policing (including the use of drug detection dogs and a generally increased presence of both uniformed and plain clothed police), which had previously been more focussed on specific events and festivals, had become more common in party precincts in the city. Participants particularly noted an increase in police activity in nightclubs and in public locations such as train stations. A few participants believed there had been an increased focus on dealers and clandestine laboratories and reported that more raids of both venues and private premises had been conducted over the preceding six months.

Table 34: Perceptions of police activity by REU, NSW 2003-2009

Perception	2003 (N=102)	2004 (N=104)	2005 (N=101)	2006 (N=100)	2007 (N=100)	2008 (N=100)	2009 (N=100)
Recent police activity:							
Decreased	7	1	2	10	0	3	2
Stable	36	41	36	29	40	38	44
Increased	37	45	49	32	47	33	44
Don’t know	20	13	14	28	13	25	10
Did not make scoring more difficult	80	85	92	86	92	92	77

Source: EDRS regular ecstasy user interviews 2003-2009

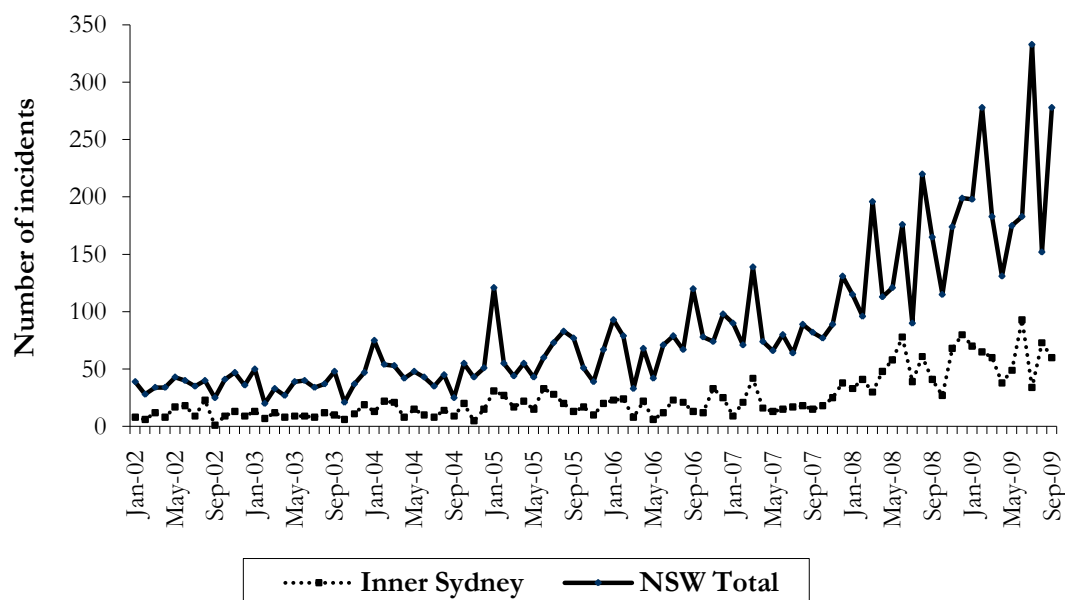
²⁰ Participants were asked “Has police activity made it more difficult *for you* to score drugs in the last six months?” (yes/no).

15.3 Arrests

15.3.1 Ecstasy

Figure 87 presents the number of police-recorded criminal incidents for ecstasy possession and use in inner Sydney and NSW. While number of incidents per month is highly variable, there has been an increasing trend from May 2007 to September 2009. This may be an outcome of increased police presence in and around party venues and the increased use of drug detection dogs at these sites. This is supported by the increase in cannabis use/possession incidents (Figure 93) noted over the same time period, as cannabis is detected fairly easily by drug detection dogs due to its strong odour.

Figure 87: Number of police incidents recorded for ecstasy possession/use, January 2002-September 2009



Source: NSW Bureau of Crime Statistics and Research (BOCSAR)

Figure 88 presents the number of police-recorded incidents for ecstasy dealing and trafficking for inner Sydney and NSW. The number of incidents involving dealing or trafficking of ecstasy has been fluctuating within NSW and Sydney over the past few years. Aside from a large peak in August 2009, the number of incidents appears to have remained relatively stable from 2008 to 2009.

Figure 88: Number of police incidents recorded for ecstasy deal/traffic, January 2002-September 2009

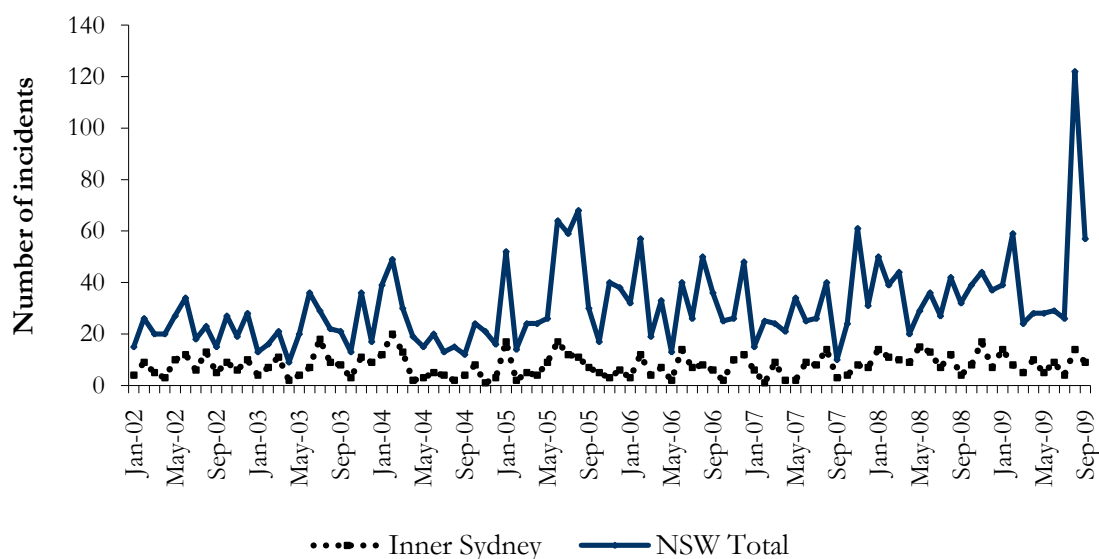
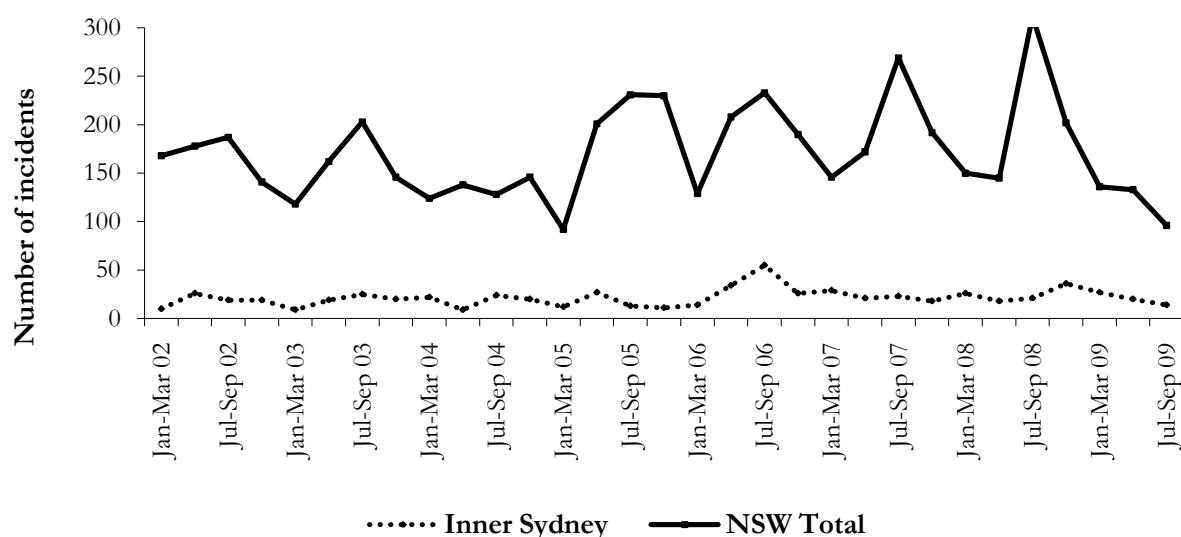


Figure 90 shows the number of police-recorded criminal incidents for amphetamine deal/trafficking in the inner Sydney area and NSW. Each year from 2005 to 2008 there has been a peak in recorded deal/traffic incidents in NSW during the July-September quarter. However, this was not the case in 2009, with the number of recorded incidents at their lowest since early 2005 during this quarter. This is mirrored in the data from Inner Sydney where there appears to have been a steady decline in incidents recorded from late 2008 through 2009.

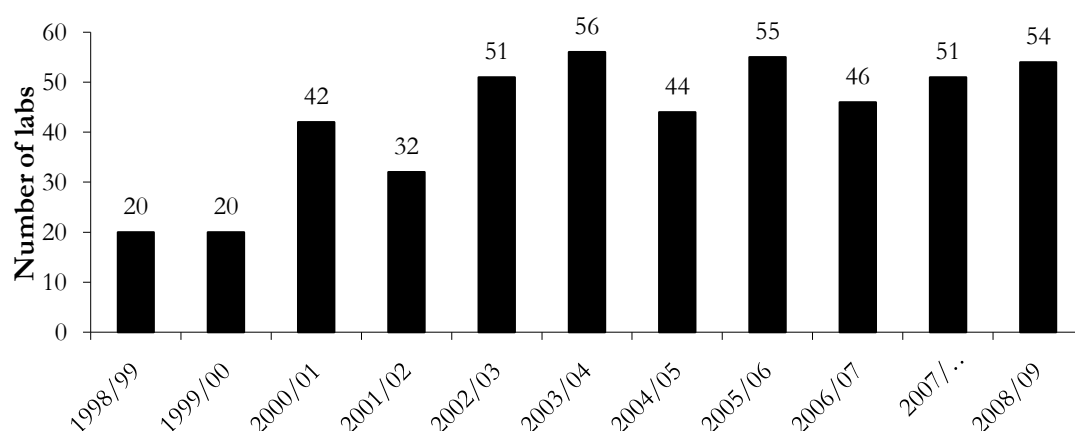
Figure 90: Recorded incidents of amphetamine deal/traffic per quarter, inner Sydney and NSW, January-March 2002 to July-September 2009.



Source: NSW Bureau of Crime Statistics and Research (BOCSAR)

The number of clandestine methamphetamine and MDMA laboratories detected in NSW appears to have remained relatively stable (despite minor fluctuations) since the 2002/03 financial year (Figure 91). In the 2008/09 financial year 54 sites were detected.

Figure 91: Number of clandestine methamphetamine and MDMA laboratories detected by NSW police 1998/99-2008/09.



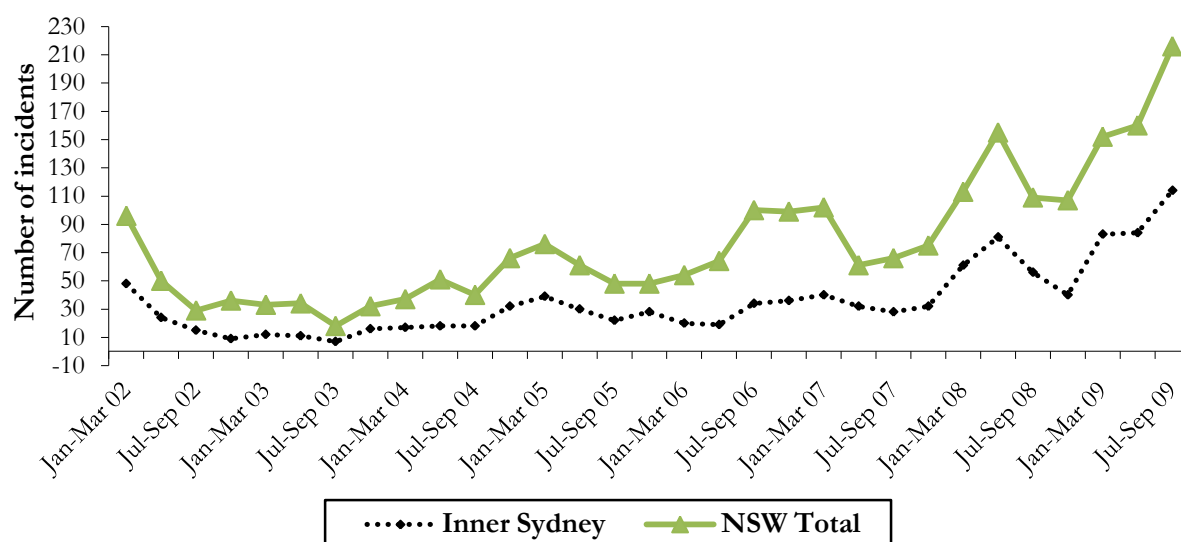
Source: NSW Police Service

* 2 of these were PMA laboratories

15.3.3 Cocaine

The number of police-recorded incidents for cocaine possession/use has fluctuated in NSW (Figure 92); however, these data appear to have been generally increasing from early 2006 to late 2009. While incidents reported in Inner Sydney continue to represent the majority of incidents for NSW, there appear to be an increasing number of incidents occurring outside the city centre.

Figure 92: Recorded incidents of cocaine possession/use per quarter, January-March 2002 to July-September 2009.



Source: NSW Bureau of Crime Statistics and Research (BOCSAR)

15.3.4 Ketamine

Although it is an offence in jurisdictions such as NSW 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.

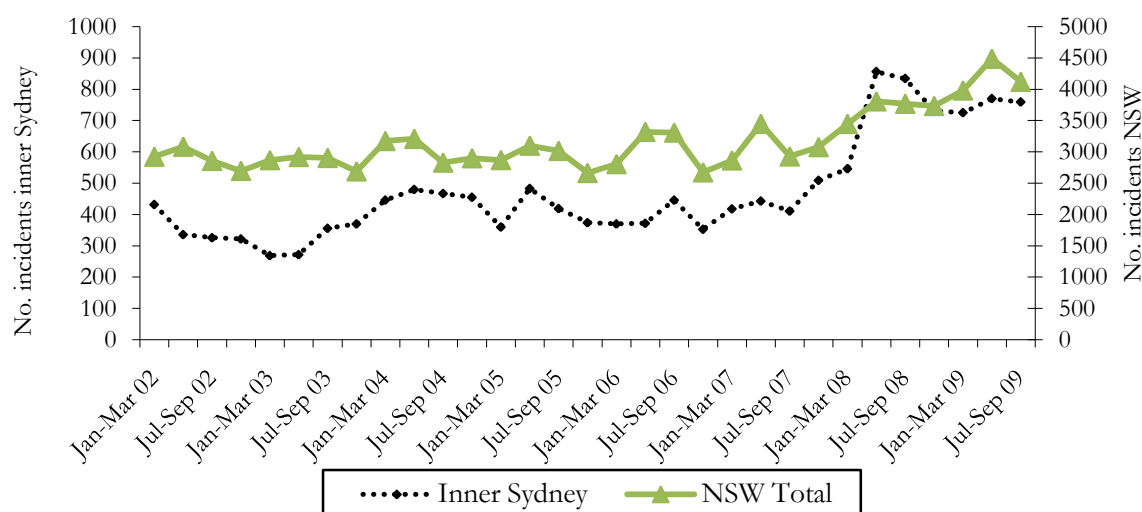
15.3.5 GHB

GHB, GBL and 1,4-B are controlled substances in Australia, and possession of them 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 these substances because they are not separately recorded in police databases.

15.3.6 Cannabis

Figure 93 shows the number of police-recorded incidents of cannabis possession/use per quarter in the inner Sydney area and NSW overall. The number of incidents reported in inner Sydney appears to have increased from mid-2007 to late-2009, reflecting a general increase noted across the same time frame in NSW as a whole. As with the noted increase in ecstasy possession/use incidents, it is possible that this reflects greater police attention to this issue.

Figure 93: Recorded incidents of cannabis possession/use per quarter, inner Sydney and NSW, January-March 2002 to July-September 2009.



Source: NSW Bureau of Crime Statistics and Research (BOCSAR)

15.4 Perceptions of changes in peer drug use

The majority of participants (81%) reported that half or more of their friends had used ecstasy during the previous six months (6% ‘all’; 44% ‘most’; 31% ‘about half’). One-fifth (18%) reported that ‘a few’ of their friends had used ecstasy and one person reported that ‘none’ of their friends had used ecstasy in the preceding six months.

Close to half (48%) of participants had perceived changes in drug use amongst their social group. It should be noted that in many instances participants’ comments related to their specific social group and may reflect cohort changes rather than necessarily reflecting changes in the sample overall.

Participants this year made several comments regarding experimentation with ‘new’ drugs such as hallucinogens (mainly LSD and mushrooms), ketamine, GHB, 2CB/2CI and mephedrone (a methcathinone). One participant noted that “many people [are] discontent with the quantity and quality of methamphetamines [including ecstasy] at the moment” and it was generally agreed that many ecstasy users were “looking for something different”. However, several participants made reference to the fluctuating availability of these drugs, i.e. “there was some mescaline around for a while but it has dried up now” indicating that drug availability is a relatively important factor in the process of deciding which drugs to use/try.

One participant noted that there had been a “general increase in the number of people taking ecstasy and decreasing age”. This sentiment was also shared by several others who agreed that

there had been an increase in the number of people using ecstasy and related drugs and that more ‘young’ people were using ecstasy. In addition, one participant noted “ecstasy is not as frowned upon”, and throughout the interviews several participants reported the belief that, both in their social circles and among the wider society, ecstasy use had become less stigmatised.

15.5 Experiences with drug detection ‘sniffer’ dogs

In 2009, participants were asked for the fourth year about their experiences with drug detection ‘sniffer’ dogs. The majority (93%) of participants had seen sniffer dogs in the six months preceding the interview on a median of four occasions (range 1-72). This proportion was significantly higher than that reported in 2008 where only 74% of participants had recently seen sniffer dogs (95% CI: -0.29 - -0.09). Almost three-quarters of REU who had seen sniffer dogs recently had been in the possession of drugs on at least one of these occasions; however, only 7% (n=5) reported having been searched by police as a result of a positive notification from a drug detection dog. Only one participant had been searched twice during this period and the remainder had been searched once. The outcome of the search for four of these participants was that no drugs were recovered and the participants were allowed to go. One participant reported that drugs were found on their person and they were arrested.

15.6 Summary of criminal and police activity

- Approximately one-third of REU interviewed in 2009 reported having recently committed a crime. The types of crime most commonly committed were drug dealing and property crime.
- Two-fifths of participants in 2009 reported noticing an increase in police activity toward drug users over the six months prior to the interview.
- While the majority of participants reported that changes in police activity had not made it more difficult for them to score, this proportion was significantly lower than that reported in 2008.
- Over time, there appears to have been an increase in the number of arrests for the possession/use of ecstasy, cocaine and cannabis and a decrease for amphetamines.
- The number of clandestine methamphetamine and MDMA laboratories detected in NSW appears to have remained stable, with minor fluctuations, since 2002/03.
- Four-fifths of participants reported that at least half of their friends had used ecstasy over the six months prior to the interview.
- Several participants reported recent experimentation with hallucinogens (such as LSD, mushrooms and 2CB/2CI), ketamine, and GHB among their social group.
- More than nine in ten participants had seen drug detection dogs in the preceding six months. Three-quarters of these had seen the dogs when they were in the possession of drugs; however, only five participants reported being searched by police as a result of a positive notification from a drug detection dog.

16 IMPLICATIONS

The aims of the EDRS each year are to identify emerging trends in the demographic characteristics and drug use of REU, as well as to monitor ERD markets and to investigate the incidence of ecstasy-related harms. The implications arising from investigations in each of these areas are discussed below.

Demographics

In 2009 the largest changes in demographics were the decrease in median age from 25 in 2008 to 21 in 2009 and the increase in the proportion that identified as heterosexual from 63% in 2008 to 91% in 2009. Over the past few years, there have been several user comments and KE reports that ecstasy is being used among younger people each year. This change in median age may be partly reflecting this trend. However, it is also possible that slight changes in participant recruitment (including not directly advertising in GLBTQ-specific media; and attracting a different social network through snowballing) may have affected both of these variables. Thus, although they may reflect some changes in the demographics of REU as a group, these changes more likely reflect minor variations in participant recruitment methods.

Drug Use and Market Trends

This year there has been a very consistent conclusion, supported by multiple data sources, that the price and purity of ecstasy have declined recently and that regular users of ecstasy have begun to experiment with new drugs. In particular, both KE and user reports note an increasing use of hallucinogens among REU in NSW, with LSD and mushrooms being most commonly reported. In addition, 2CB/2CI (a mild hallucinogen) was among the more commonly reported 'other drugs'. There are multiple implications which flow from this including a) questions surrounding the purity of ecstasy, b) risks associated with increasing experimentation and c) market reactions to falling purity and price of Ecstasy.

a) The changing purity of Ecstasy: An important question to ask, is whether ecstasy pills now simply contain less MDMA than in the past, or whether they now contain other substances *instead of* MDMA. Toxicological data indicates that most tablets sold as ecstasy contain MDMA, albeit in low doses. However, there has been an increasing number of tablets which contain active ingredients other than MDMA such as BZP and other piperazines. KE and user reports indicate that REU infrequently attempt to gather information about the content or purity of ecstasy before taking it. Even if they do so, this mainly involves asking friends or dealers rather than using testing kits or websites. Furthermore, health-related key experts have noted that those who present with acute ecstasy-related problems have generally taken pills of a different strength or content than expected. These data together lead to the first implication: that ecstasy of increasingly varying content is being supplied to users who are relatively uninformed regarding the content of the drugs they use. This can lead to health risks, with REU occasionally becoming unwell and requiring acute medical attention. It will be imperative to continue toxicological analyses of ecstasy seizures and to disseminate information about the more commonly found active constituents. It will also be important to encourage REU to seek further information about the drugs they intend to use and to facilitate the use of multiple knowledge sources. The aim with both of these strategies is to reduce the health risks associated with using unexpected substances.

b) Increasing experimentation: Unfortunately, it is not only unwitting polydrug users who require assistance. Health KE have noted an increasing number of presentations by people who are experimenting with new drugs. It has been noted, by several KE and users alike, that the fall in ecstasy purity has encouraged users to seek out others drugs since they are becoming less willing to spend money on a product they view as ineffective or faulty. Correspondingly, there have been increases noted in the recent use of other drugs, particularly hallucinogens, ketamine and cannabis. Some KE have also suggested that LSD and GHB are seen as good alternatives to ecstasy since they cannot be detected by drug detection dogs and people feel more secure carrying them into festivals.

In light of the increasing experimentation noted in 2009, the second implication is that: there may be an increasing incidence of harm associated with ERD use as novice/inexperienced users try new, poorly understood drugs. It may therefore be useful for education campaigns to focus on the risks associated with polydrug use and, again, about the importance of gathering accurate information about different drugs and about drugs which participants may be intending to try, before using them. There are also legal implications since there appears to be a growing market for 'designer drugs' (such as 'mephedrone'). Policy makers and law enforcement personnel will need to be able to make appropriate and timely decisions regarding the legal status of various chemicals and plants.

c) Market reactions to changing price and purity of Ecstasy: The fall in the purity of ecstasy appears to have been associated with a fall in price over the last 6-12 months. It is important to consider the possible effect this may have on the availability of other drugs. Several KE and users noted that the use of drugs such as LSD, mescaline, ketamine and other less common drugs (e.g. 2CB or DMT) by REU in Sydney was very much associated with their availability. It is possible that increasing market interest in these drugs may encourage dealers to put more resources into making them available for users to buy. It is commonly understood that when new drugs arrive 'onto the scene' it takes some time for users and health workers to identify the risks associated with their use and to disseminate messages regarding harm reduction practices. The implications of new drugs becoming available and more commonly used among REU are great, both for health care providers and law enforcement personnel. Thus, it will be particularly pertinent to maintain the focus on monitoring market trends to identify emerging risky behaviours quickly and to aid in reducing harms and the associated burden on the health care system.

Of course, this is highly speculative. It is important to remember that there are many factors which impact on drug availability (including whether they are locally produced or imported, changes in both national and international legislation, ease of production etc.) and future market directions are difficult to predict. Nonetheless, there are increasing signs that new drugs and drug use patterns may emerge and it will be important to stay abreast of these changes.

Harms

In 2009, participants were asked the main reasons they used ecstasy. Participants' responses generally focused on the high, the energy and the positive drug effects such as enhanced music appreciation and empathy with others commonly experienced by ecstasy users. It is also interesting to note, however, the large proportions of participants who reported experiencing

repeated problems with regard to their social life (29%), their exposure to risky situations (47%) and meeting their daily responsibilities (54%). From this alone, it is safe to say that at least 1 in 2 REU experiences repeated problems in at least one area of their life which they attribute to their use of drugs. Furthermore, 28% of participants reported a recent mental health problem, slightly higher than the age matched general population estimate of approximately 25-26%. Thus, while the decision to use ecstasy among REU may be driven by the desire to achieve a pleasurable emotional and physical state (i.e. rather than avoidance of a negative emotional or physical state), it is common for REU to experience ongoing mental health and lifestyle consequences associated with it.

Many REU may not consider the link, if any, between ongoing lifestyle or emotional problems and their use of drugs. Furthermore, it may be that these negative consequences of drug use are not commonly discussed in social circles, hampering the dissemination of experience and knowledge regarding which problems may arise and how best one can deal with them. The dissemination of research, such as that contained herein, which attempts to quantitatively and/or qualitatively measure ecstasy-related problems, may be the first step in educating users about the prevalence and types of problems encountered by REU. Follow-up information regarding where and how to access help either for themselves or their friends will also be useful. Reinforcing the associations between drug use and harms and highlighting the prevalence of harms among their peers may assist in either reducing drug use and/or encouraging REU to take harm reduction messages on board and effect behavioural change for themselves and their friends.

Furthermore, this information may encourage REU to seek help for problems they experience. In 2009, only 27% of REU had accessed a health service in the preceding six months, despite the relatively large numbers reporting at least one ongoing problem associated with their drug use. In most cases, the onus fell on a GP to provide information and advice regarding drug-related problems. Considering that REU are generally a well socially-integrated group, there appears to be wide scope to direct them toward alternative, specialised services. These services may include telephone or internet counseling, mental health professionals and drug and alcohol services. This would reduce the burden of care currently falling on GPs and expose this group to more directed assistance. It may also encourage other REU to recognise drug-related problems and seek help for these issues.

Risk Behaviours

A new area of investigation in 2009 was that surrounding the use of energy drinks among REU. Several KE reported some concern at the use of energy drinks in conjunction with illicit drugs, especially CNS stimulants such as ecstasy. The vast majority (80%) of REU had consumed energy drinks with alcohol over the preceding six months and approximately half had consumed energy drinks either before or with ecstasy. Furthermore, approximately one-quarter of the whole sample had consumed energy drinks mixed with alcohol and taken ecstasy within the same episode.

Little is known about the physiological and neurological impacts associated with mixing energy drinks, alcohol and illicit drugs. While there did not appear to be a higher incidence of heart or circulatory problems among REU than the general population, there may be more long-term health problems associated with the combined use of CNS stimulants. These problems may affect many systems in the body including the circulatory system, the musculo-skeletal system

and the nervous system. There may also be mental health problems associated with the combined use of these drugs and energy drinks. There did not appear to be elevated levels of physical health problems among the REU interviewed; however, systematically higher rates of health problems in these areas may not become evident until REU reach their fifth or sixth decades. More research into the combined effects of energy drinks, alcohol and ecstasy is needed; along with further research into REU attitudes towards and practices surrounding the use of energy drinks. In addition, it may be necessary to consider policy changes regarding the legal quantity of caffeine permissible in these beverages and/or whether they should be permitted to be sold in certain venues or at certain events.

Another new area of investigation in 2009 was that of trait aggression among REU. It was found that verbal aggression was the most common form of aggression among REU and that women exhibited higher levels of anger than men. A key expert working in public health research also noted that it was common for young polydrug users they had contact with to have recently 'had a fight with their mum' or 'yelled at their girlfriend' etc. It is important to highlight to REU the different elements of aggression (i.e. physical, verbal, anger and hostility), the ways that each are expressed and the possible impacts of each form of aggression on their lifestyles and relationships. For example, increased verbal aggression could lead to relationships breaking down and a reduction in social support, a crucial element of wellbeing. It is also important to educate health care providers and law enforcement personnel about the types of aggression which are most likely to be present among REU. This information could be used to enhance training and behaviour management programs.

Alcohol use among REU has been recorded since the EDRS first began; however, in 2009, a specific questionnaire was used, from which information about alcohol consumption at low risk, risky and high risk levels could be derived. From this, it was found that men consumed alcohol at high risk levels on approximately a weekly basis and women more than fortnightly. It was also found that men consume an average of 9 and women 5 standard drinks per drinking session. These data, together, support key expert comments in 2008 and 2009 that REU consume very large amounts of alcohol. Throughout this report, alcohol has been associated (both in data from user interviews and also from key experts) with several areas of harm including depressant overdose, aggression, drug-related lifestyle problems (particularly exposure to risky situations) and risky driving practices (such as driving over the legal blood alcohol limit).

There has been much government, law enforcement and media interest of late associated with alcohol consumption and its effects on health and behaviour. In particular, there have been multiple policies put into place to attempt to reduce the availability of and increase the cost of alcohol. It will be important to continue to monitor the use of alcohol among this group to ascertain the effectiveness of these interventions in reducing alcohol consumption and its related harms. This data further supports the notion that alcohol use within this group is problematic and that efforts to reduce risky alcohol consumption are warranted.

In 2009, the EDRS has continued to fulfill its role as a monitoring system capable of identifying trends and isolating implications which are relevant to multiple fields including health care provision, law enforcement and policy. It is evident that there is a continuing need to gather and disseminate information to REU, and to those who work with REU, to continue to reduce harms and increase knowledge about trends in and consequences of using ecstasy and related drugs.

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