

M. Dunn, L. Degenhardt and J. Stafford

**NSW TRENDS IN ECSTASY AND
RELATED DRUG MARKETS 2005
Findings from the Party Drugs Initiative (PDI)**

NDARC Technical Report No. 249

**NEW SOUTH WALES
TRENDS IN ECSTASY AND
RELATED DRUG MARKETS
2005**



**Findings from the
Party Drugs Initiative (PDI)**

**Matthew Dunn, Louisa Degenhardt and Jennifer
Stafford**

National Drug and Alcohol Research Centre
University of New South Wales

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ABBREVIATIONS

1,4-B	1,4-butanediol
2CB	4-bromo-2,5-dimethoxyphenethylamine
2CL	2,5-dimethoxy-4-iodophenethylamine
5-HTP	5-hydroxy-tryptophan
ABCI	Australian Bureau of Criminal Intelligence
ABS	Australian Bureau of Statistics
ACON	AIDS Council of NSW
ACC	Australian Crime Commission
ACPR	Australasian Centre for Policing Research
ADIS	Alcohol and Drug Information Service
AFP	Australian Federal Police
AGAL	Australian Government Analytical Laboratories
A&TSI	Aboriginal and/or Torres Strait Islander
BBVI	Blood-borne viral infections
BOCSAR	Bureau of Crime Statistics and Research
DASSA	Drug and Alcohol Services South Australia
DXM	Dextromethorphan
FDS	Family Drug Support
GHB	Gamma-hydroxy-butyrate
GBL	Gamma butyrolactone
GP	General Practitioner
HBV	Hepatitis B virus
HCV	Hepatitis C virus
HIV	Human immunodeficiency virus
IDRS	Illicit Drug Reporting System
IDU	Injecting drug user(s)
KE	Key expert(s)
LSD	<i>d</i> -lysergic acid
MDA	3,4-methylenedioxyamphetamine
MDMA	3,4-methylenedioxymethamphetamine
NDARC	National Drug and Alcohol Research Centre
NDSHS	National Drug Strategy Household Survey
NDLERF	National Drug Law Enforcement Research Fund
NSP	Needle and Syringe Program
NSW	New South Wales
NSW MDS DATS	New South Wales Minimum Data Set for Drug and Alcohol Treatment Services
PDI	Party Drugs Initiative
REU	Regular ecstasy user(s)

EXECUTIVE SUMMARY

This report presents the results of an ongoing study that monitors ecstasy and related drug markets in NSW. The 2005 sample provides data for the sixth year on trends in ecstasy and related drug markets. Data collected since 2000 are also included. Trends in the demographic characteristics and patterns of drug use among regular ecstasy users, their criminal behaviour, and harms perceived to be related to their ecstasy use are presented. The implications of the results and the nature and characteristics of ecstasy and related drug markets are discussed.

Demographic characteristics of regular ecstasy users

The 2005 results indicate that regular ecstasy users, a population defined in this study by at least monthly use of tablets sold as ‘ecstasy’, tend to be young, relatively well-educated, and likely to be employed or engaged in full-time study. Five participants were currently in treatment for a drug-related problem, and six participants had previously been incarcerated. Demographic characteristics of regular ecstasy users interviewed have changed little since 2000.

Patterns of drug use among REU

Participants could be characterised as extensive polydrug users, over one-third of whom nominated ecstasy as their favourite or preferred drug. On average, participants had used eleven drugs in their lifetime and had used seven in the preceding six months. Almost all reported lifetime use of alcohol, cannabis, methamphetamine powder (speed) and tobacco.

The prevalence and frequency of use of ecstasy and related drugs such as ketamine, GHB, MDA, and base, changed in 2005 which may suggest that while substantial minorities continue to report recent and lifetime use of these drugs, these may be influenced by such factors as price and availability. They may not be as widely or consistently available as ecstasy and therefore the use of these drugs may be opportunistic in nature. This is reflected in the relatively low frequency of use of these drugs, with most recent users reporting using less than monthly.

Ecstasy

Participants in the 2005 sample first used ecstasy at a mean age of 20 years. Forty percent of participants had used ecstasy weekly or more, 48% reported using ecstasy between monthly and fortnightly, 33% between fortnightly and weekly, and 20% reported using ecstasy more than weekly. Two-fifths (41%) of participants reported they had binged (used continuously for more than 48 hours without sleep) on ecstasy in the preceding six months. Most (77%) reported typically using more than one tablet per occasion of use. Consistent with previous years, participants primarily took ecstasy orally.

The use of other drugs in conjunction with ecstasy was commonly reported, including alcohol, tobacco, cannabis, speed and crystal methamphetamine or ‘ice’. Most participants also used a similar range of drugs to ease the ‘come down’ or recovery period following acute ecstasy intoxication, including alcohol, tobacco and cannabis.

Price, purity and availability of ecstasy

The median price paid for a single ecstasy tablet was \$30 in 2005 and most participants reported that this price has remained 'stable'. Most participants paid for ecstasy or were given ecstasy as a gift. The majority reported obtaining from friends and known dealers and the most frequently reported purchase location was from friends' homes or dealers' homes.

There was variation regarding users' subjective reports of the purity of ecstasy and KE reports reflect this inconsistency. The median purity of seizures of tablets containing MDMA/phenethylamines analysed by both AFP and NSW police have remained stable since 2002/03. Many tablets sold as 'ecstasy' will not contain any MDMA. Users' reports of 'purity' are consistent with this.

Tablets sold as ecstasy have remained readily available in Sydney since 2000; the great majority of users have consistently described the drug as 'very easy' to obtain across time.

Imported tablets are more likely to contain MDMA than locally manufactured imitation tablets that contain methamphetamine. The number and weight of customs seizures of ecstasy seized at the border has increased in recent years, suggesting either changes in customs activity, improvements in detection, or more ecstasy being imported into the country, or a combination of these factors. The supply of imported MDMA tablets is also supplemented by domestic production: NSW police reported that the ratio of methamphetamine tablets sold as 'ecstasy' to 'ecstasy' tablets containing MDMA decreased in 2001/02. This may indicate an increase in imported MDMA, some manufacture of local MDMA, or that tablets containing methamphetamine are being sold as such. Consistent with the possibility that local manufacture is occurring, there have been seizures of the precursors required to manufacture MDMA, and in 2002/03 NSW Police reported seven clandestine MDMA laboratories detected in NSW (Australian Crime Commission 2003). This suggests that there are local manufactures of ecstasy attempting to compete with importers of the drug.

Factors influencing the price and use of ecstasy

For the first time, in 2005, respondents were asked to comment on the factors they believed would influence the price of ecstasy as well and their use of ecstasy. While reports varied, the majority of the sample reported that knowing their ecstasy supplier (79%) and buying ecstasy in larger quantities (88%) would result in a 'decrease' in the price of ecstasy. Factors which the majority of the sample believed would result in 'no change' to their ecstasy use included a greater availability of ecstasy and other drugs; changes in the risk of being caught by police; or changes in the penalties relating to the use of ecstasy. The majority of respondents also indicated that a negative impact on physical health, mental health, occupation and relationships would result in a 'decrease' in their use of ecstasy.

Methamphetamine

Virtually all (94%) participants in 2005 reported having used methamphetamine powder (speed) at some time and three-quarters (76%) reported using speed in the six months preceding interview. Recent users reported using speed at a median frequency of once a month, with snorting and swallowing being the most common routes of administration.

Approximately two-thirds (63%) of the 2005 sample reported lifetime base use and 43% had used base in the preceding six months. The majority of recent users reported using

less than once a month and the most common route of administration was swallowing. Prevalence of base use has increased over time, although it has remained stable since 2002. The frequency and quantity of base use has fluctuated in recent years.

Two-thirds of the sample (62%) reported having used crystal methamphetamine at some time and two-fifths (40%) reported using in the preceding six months. Crystal use appears to have stabilised or decreased in 2005 relative to the 2004 sample. Quantity of crystal use seems to have remained relatively stable. Most crystal users used less than monthly while one-quarter used between monthly and fortnightly. In contrast to the other forms of methamphetamine, the most common route of crystal administration was smoking. Of those who reported using other drugs whilst using ecstasy, 21% reported using crystal with ecstasy, while 44% of those who binged reported doing so with crystal in 2005 (compared to 53% of those who had recently binged using crystal in 2004 and 37% in 2003).

The price of speed was commented on by over three-quarters (77%) of the sample, with \$60 for one gram the most common purchase. Forty-six percent (35% of the entire sample) agreed the price of speed had remained 'stable'. Nearly half (46%) of the sample reported on the current price of base. A 'point' (0.1 of a gram) was the most commonly purchased amount, for which a median of \$30 was paid. Forty-four percent (20% of the entire sample) reported the price of base had remained 'stable'. Fifty-one respondents were able to comment on the current price of crystal, with a 'point' of crystal the most frequently purchased amount for \$50. Of those who commented, 28% (14% of the entire sample) reported that the price had remained 'stable' while 24% (12% of the entire sample) reported that the price had increased in the preceding six months. Amongst those who commented, the current purity of speed was considered 'medium' (36%) and the current purity of both base (52%) and crystal (43%) were considered to be 'high'.

The majority of those who commented reported the availability of speed was 'easy' to 'very easy' to obtain. Conflicting reports were provided in regards to the availability of base, with responses ranging from 'easy' to 'difficult'. Conflicting reports in regards to the availability of crystal were also reported, with reports ranging from 'easy' to 'difficult'.

Cocaine

The prevalence of lifetime cocaine use has remained stable across sampling years, with the majority (76%) of participants reporting having used cocaine at some time in 2005. However, proportions of REU that reported recent cocaine use rose in 2005, with more than half (55%) of the respondents reporting having used cocaine in the previous six months. The median number of days used has fluctuated across the six year period; in 2005 the majority of recent cocaine users had used cocaine once a month or less. Snorting was the most common route of administration.

Thirty respondents commented on the price of cocaine, which was commonly purchased in grams for a median of \$270. One-third of respondents reported that the price of cocaine had remained 'stable' in the last six months. Conflicting reports were reported regarding the availability of cocaine. Reports of purity also varied. The majority did not know if the purity had changed in the past six months.

Ketamine

In 2005, 65% of the sample reported lifetime use of ketamine, while recent ketamine use remained stable at 39%. Frequency of ketamine use by the majority of recent users was less than once a month, which is comparable to previous years.

A gram of ketamine was purchased for a median of \$100 (n=44). The majority (30%; 13% of the entire sample) reported the price as 'stable'. Over half (55%) of those who commented reported that the purity was 'high'. Conflicting reports were provided regarding the availability of ketamine, with reports ranging from 'easy' to 'difficult'. Of those who commented, most believed that the level of availability had remained 'stable' in the preceding six months.

GHB

One-third of the 2005 sample (32%) reported lifetime use of GHB while 13% reported using GHB in the preceding six months. While the prevalence of GHB use has increased over time, with substantial increases in reports of both lifetime and recent use since 2000, there was a decrease in recent use of GHB in 2005. Three-fifths of those who had recently used GHB had done so less than monthly.

Only a small proportion of participants in 2005 were able to comment on price and availability so these data must be interpreted with caution. GHB was commonly purchased in a 'vial' for a median of \$25. Thirty-one percent (5% of the entire sample) reported the price was 'stable'. Conflicting reports were obtained regarding the availability of GHB, with responses ranging from 'very easy' to 'difficult'.

LSD

Lifetime and recent use of LSD has increased in 2005, with 71% reporting lifetime use of LSD and 33% reporting recent use. Frequency of LSD use was a median of two days in 2005. Users typically used one tab per occasion of use and this has remained stable across sampling years.

Thirty-eight respondents were able to comment on the price of LSD, which was reported at a median price of \$20 in 2005; this price was reported to have remained 'stable' by over half of those who commented (22% of the entire sample). The price of LSD has increased steadily since 2000. Reports on the current availability of LSD were inconsistent. Fifty-seven percent (24% of the entire sample) reported that the availability of LSD had remained 'stable' in the preceding six months.

MDA

Approximately one-third (32%) of participants in 2005 reported a lifetime prevalence of MDA use and one-fifth (19%) reported recent MDA use. Prevalence of lifetime and recent MDA use decreased in 2005. The median number of days for which MDA was used remained stable.

Eight participants were able to comment on the price of MDA, which was reported as a median of \$37.50 per capsule. Three-fifths (59%; 10% of the entire sample) believed that MDA was currently 'easy' to obtain. Of those who commented, 65% (11% of the entire sample) reported that the availability of MDA had remained 'stable' in the preceding six months.

Patterns of other drug use

Comparable to previous years, almost all regular ecstasy users report consuming alcohol on a median of once per week. Similarly, most of the 2005 sample reported recent cannabis use, the majority of whom smoked on a median of two days per week. Tobacco use was common, with over half of those reporting recent use being daily cigarette smokers. Also comparable to previous years, half of the 2005 sample reported lifetime use of benzodiazepines. Those who reported recent benzodiazepine use did so at a median frequency of once a month. Nineteen participants reported lifetime use of antidepressants although only six participants reported recent use. The use of inhalants such as amyl nitrate and nitrous oxide appear to have remained stable across time. Small numbers reported the recent use of mushrooms and other drugs.

Drug information-seeking behaviour

Respondents in the 2005 PDI survey were asked for the first time to discuss their drug information-seeking behaviour. Nearly half (47%) of respondents always found out the content and purity of ecstasy, and nearly one-third (28%) indicated that they always found out the content and purity of other drugs (not including ecstasy). Friends were the most frequently cited source of information regarding content and purity of ecstasy. Nearly one-third (28%) indicated that they had used testing kits.

Risk behaviour

One in four (27%) respondents reported having injected a drug at some time in their lives and 17% reported injecting in the six months preceding interview. A median of 3.5 drugs (range 1-11) had ever been injected while those who reported injecting in the preceding six months had injected a median of two (range 1-7) drug types.

Two-fifths (42%) of lifetime injectors reported injecting for the first time while under the influence of drugs. Ecstasy, cannabis and alcohol were most often reported drugs used, followed by speed and MDA.

When lifetime injectors were asked to specify how they learned to inject, three-quarters (77%) reported that a friend or partner showed them how. Of those that reported having injected in the preceding six months, no respondents reported using a needle after someone else in the month preceding interview.

Twenty-four percent of the sample reported that they had never been vaccinated for hepatitis B. A further 59% reported that they had completed the vaccination schedule, 6% did not finish the vaccination schedule and 6% did not know if they had been vaccinated. Of the sample, 42% reported that they had never been tested for HCV, while 34% had been tested in the last year, 18% were tested more than a year ago and 4% either did not know or didn't get their result. Forty-one percent of the sample had been tested for HIV in the last year and a further 21% had been tested more than a year ago.

The majority (91%) of participants reported penetrative sex in the six months preceding interview. A large proportion (44%) reported one sex partner during the preceding six months although one-fifth (22%) of participants reported having penetrative sex with two partners and 17% reported having six or more partners. More than one-third (37%) of those who reported penetrative sex in the preceding six months had had anal sex. The majority (80%) of those reporting recent penetrative sex reported using drugs during sex in the previous six months. The drugs mainly reported were ecstasy, alcohol and methamphetamine.

Of the sample, 48% had driven within one hour of taking a drug. The drug most commonly taken was ecstasy (69%) followed by cannabis (55%) and speed (36%).

Health-related issues

Of the PDI sample 15% of the participants had overdosed on either ecstasy or other related drugs. Of those that had overdosed, the main drug used was GHB (33%) followed by alcohol (27%).

For the second time, in 2005, the severity of dependence scale (SDS) was used for ecstasy and methamphetamine. The median SDS score for ecstasy was 0.5 (range 0-8). Half (50%) of the respondents had obtained an SDS score of zero, 16% a score of one and 4% obtained a score of two. Seventeen percent of respondents who had used ecstasy in the last six months obtained an SDS score of four or more. Of those that had used methamphetamines the median SDS score was zero (range 0-11), with 15% scoring four or above, the level of dependence.

Participants in 2005 reported a range of other problems associated with their drug use. Participants were asked if they had experienced any occupational, social, financial or legal problems in the six months preceding interview that they would attribute to their drug use. Proportions reporting these harms predominantly attributed them to their use of ecstasy rather than other drugs.

Approximately two-fifths of the sample had experienced financial problems (39%), occupational/study problems (39%) and relationship/social problems (35%) in the preceding six months attributable to the use of ecstasy and related drugs; 7% reported legal problems.

Criminal activity, policing and market changes

Relatively few of the ecstasy users interviewed were involved in criminal activity apart from dealing drugs. Twenty-three percent reported dealing drugs in the month preceding interview and most of them reported dealing once a week or less.

There was a marked decrease in the proportion of ecstasy users sampled who perceived recent increases in police activity. However, of those who did report an increase, the majority reported an increase in police presence in nightclubs, dance parties and raves (including 'doofs' and dance parties) and increased use in drug detection dogs.

The majority of all of ecstasy users reported that police activity had not made it more difficult for them to obtain drugs.

Conclusions

There is increasing evidence that the use of ecstasy is widespread and that the market has increased or stabilised in recent years. The results of general population surveys (showing an increased prevalence of use over time), increases in arrests for possession or dealing ecstasy, increases in calls to telephone help lines about ecstasy, and reports from regular users, suggest that, over time, this group is increasing in size and that ecstasy is being used more heavily. The PDI survey data show that regular ecstasy users score from a range of people and use in a wide variety of locations. All this information suggests that, despite Australia's continued effort to reduce both the importation and local manufacture of ecstasy, it has remained readily available in Sydney since 2000. Continued monitoring

of the market for ecstasy will ensure policymakers are well placed to respond to changes in the market or to the nature and extent of ecstasy-related harms in a timely fashion.

Implications

There is evidence to suggest that ecstasy (MDMA) may be neurotoxic to serotonergic neurons in the brain, which are involved in mood regulation and memory function (Hegadoren, Baker et al. 1999; Boot, McGregor et al. 2000). The long-term consequences of ecstasy use are not well understood. Results from the PDI suggest that there is the potential to reduce the harm associated with ecstasy and related drug use in this population. The challenge of harm reduction strategies is to incorporate messages that are credible and acceptable to the population.

The majority of ecstasy users reported a range of psychological, neurological and physical harms related to their use of the drug, yet they continue to use in ways that may be considered harmful. Substantial proportions reported recently bingeing on ecstasy and using large amounts of alcohol in conjunction with ecstasy. Both these patterns of behaviour are likely to increase the risks associated with ecstasy use and should perhaps be considered by health educators as harmful behaviour worth targeting.

Although many users were able to identify harms related to the use of ecstasy and related drugs, there were users that did not know the risks associated with use. As regular ecstasy users are also polydrug users, it is important to provide accurate information to users regarding combinations of ecstasy and related drugs and their effects. The provision of evidence-based information to reduce the harm associated with the use (and poly-use) of these drugs may help to avoid some of these harms. Further research may be required to provide a better understanding of harms associated with specific drug combinations. In addition it is important to acknowledge that users may be using specific combinations of drugs to enhance effects or decrease the side effects of others. Some users of speed, ketamine, GHB and amyl nitrate reported that the benefit of these drugs was the ability to enhance effects or decrease the side effects of other drugs. It is a challenge to provide effective harm reduction strategies to this group, acknowledging their knowledge of these drugs while also attempting to limit harm.

The content of 'ecstasy' tablets is variable, and this is an issue of concern that could be potentially addressed by the consistent analysis of seizures by law enforcement agencies. Since 1997, the Victoria Police Forensic Services Department, Chemical Drugs Intelligence Team, has maintained a database on drug seizures. Over the last seven years this database has developed into a comprehensive record of drug seizures and trends within Victoria. This database will contain a greater number of seizures from other jurisdictions in the future, but at time of publication data for NSW was not available.

The use of other drugs appears to be more selective, possibly suggesting that these drugs are used for specific occasions by users. While there has been a change in the number of users reporting lifetime and recent use of ketamine, GHB, LSD and MDA in the 2005 sample, as with other years, only small proportions of respondents were confident about commenting on the price, purity and availability of these drugs. Thus, many of the people who report the recent use of these drugs may not seek them out, or have infrequent contact with them; hence, this may be why they are unfamiliar with market indicators for them. However, the use of these drugs is of interest as it may be that the most important concern related to REU use of these other drugs is the risks associated with the combinations of drugs used, i.e. the polydrug use itself. The fluctuation that was seen in

2005 regarding the use of these drugs – e.g. a decrease in the proportion reporting recent GHB use, the increase in the proportion reporting recent LSD use – highlights the usefulness that comes from investigating these drugs and warrants continued monitoring.

The 2005 NSW PDI results highlight that the use of crystal methamphetamine among regular ecstasy users has decreased slightly in 2005 compared to other years. However, anecdotal evidence from KE suggested an increase in use amongst this group of users and a move towards using crystal in more private locations. Reports from KE also suggest that there is a group of crystal users who have, to some extent, become a group firmly entrenched in the use of this drug; that in this group there are users who are no longer irregular users or ‘experimenters’, but who have experience with the drug and will continue to use it. This has implications for health promotion and health services. The market for crystal methamphetamine needs to be monitored, the routes of administration considered, and this has been examined in separate research conducted at NDARC in 2005 (e.g. McKetin, McLaren & Kelly, 2005a). The harms associated with smoking crystal need to be examined.

For the first time, in 2005, the PDI examined factors which regular ecstasy users believed affected the price and use of ecstasy, with findings suggesting that the large majority of respondents would reduce their use of ecstasy if their use caused social/relationship, legal, financial or occupational/study problems. Also for the first time in 2005, the PDI included a section which examined respondents’ drug information-seeking behaviour, the results of which will be considered in greater detail in the coming months.

The health effects of ecstasy and related drug use were often considered relatively benign by users in the study. However, the harms associated with injecting drug use, drug taking during sex and driving under the influence are substantial. It is important to investigate risk-taking behaviour in this population and monitor blood-borne viral infections (vaccination and testing) as an outcome. This will allow an examination of whether harm reduction messages are reaching this group, and promote safe practices.

The regular ecstasy users interviewed reported slightly higher levels of criminal activity, the most common of which was drug dealing. We found in 2005 that the majority of regular ecstasy users who deal drugs do so to pay for their ecstasy use (ecstasy profit).

Continued monitoring of the ecstasy and related drug markets will enable the collection and dissemination of information that will allow the implementation of timely policy responses to market developments. Continued monitoring will also enable the regular collection of indicative data relating to the size of the markets for other ecstasy and related drugs, such as GHB and ketamine, and will point to the need for research specific to such drugs. The replication of the Party Drugs Initiative (PDI) in 2006 in all jurisdictions across Australia will be a useful addition to current knowledge about ecstasy and related drug markets across the country.

1.0 INTRODUCTION

The Party Drugs Initiative (PDI) is an ongoing monitoring system funded in 2005 by the Australian Government Department of Health and Ageing and the Ministerial Council on Drug Strategy as a project under the cost-shared funding arrangement, which is run in a similar manner to the Illicit Drug Reporting System (IDRS), an ongoing data collection funded by the Australian Government Department of Health and Ageing and the National Drug Law Enforcement Research Fund (NDLERF). The IDRS provides a coordinated approach to the monitoring of the markets of heroin, methamphetamine, cannabis and cocaine. It is intended to serve as a strategic early warning system, identifying emerging trends of local and national concern. The IDRS was designed to be sensitive to emerging trends, providing timely data and direct more detailed research, rather than to describe issues in detail. 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.

In June 2000, NDLERF, administered by the Australasian Centre for Policing Research (ACPR), funded a two-year, two state trial in NSW and 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) in SA agreed to provide funding for two years to allow the trial to proceed in this state. The results of this trial are presented elsewhere (Breen, Topp et al. 2002). Regular ecstasy users were identified as an appropriate sentinel population to investigate ecstasy and related drug markets. The term ‘ecstasy and related drugs’ included any drug routinely used in the context of entertainment venues such as nightclubs or dance parties. ‘Ecstasy and related drugs’ includes drugs such as ecstasy (3,4-methylenedioxyamphetamine; MDMA), methamphetamine, LSD, ketamine, MDA (3,4-methylenedioxyamphetamine) and GHB (gamma-hydroxybutyrate).

To ensure the continuity of data collection over time, the study was conducted and funded by the National Drug and Alcohol Research Centre (NDARC) in NSW (White, Breen et al. 2003; White, Breen et al. 2004). In 2003, NDLERF provided funding for a two-year national trial to monitor ecstasy and related drug markets in all jurisdictions across Australia, under the title of the Party Drugs Initiative (PDI) (Breen, Degenhardt et al. 2004; Stafford, Degenhardt et al. 2005). In 2005 the PDI was funded by the Australian Department of Health and Ageing and the Ministerial Council on Drug Strategy as a project under the cost-shared funding arrangement.

As with the IDRS, the PDI involves the collection and analysis of three data components: i) a survey of current regular ‘ecstasy’ users, who represent a sentinel population of ecstasy users likely to be aware of trends in illicit drug markets; ii) interviews with key experts – professionals and volunteers who work with, or have regular contact with, regular ecstasy users; and iii) 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 2005 New South Wales 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 2005 NSW PDI were:

1. to describe the demographic characteristics of a sample of current ecstasy users interviewed in Sydney in 2005;
2. to examine the patterns of ecstasy and related drug use of this sample, including lifetime and recent use of over twenty 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 usual location of most recent use;
4. to investigate the benefit and risk perception of participants regarding their use of ecstasy and related drugs;
4. to examine participants' perceptions of the incidence and nature of ecstasy and other drug-related harm, 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 (2000-2004).

2.0 METHODS

The 2005 Party Drugs Initiative (PDI) used the methodology trialled in the feasibility study (Breen, Topp et al. 2002) 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 regular ecstasy users recruited in Sydney;
2. telephone interviews with key experts who, through the nature of their work, have regular contact with ecstasy users, other regular ecstasy users, or knowledge of the markets for these drugs in Sydney;
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 third most widely used illicit drug after cannabis and meth/amphetamines¹ with one in twelve (12%) of 20-29 year olds and 4.3% of 14-19 year olds reporting recent ecstasy use in the 2004 National Drug Strategy Household Survey (Australian Institute of Health and Welfare 2002).

A growing market for ecstasy (tablets sold purporting to contain MDMA) has existed here for more than a decade. 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 (Topp and Darke 2001) that it would be difficult to identify a regular user of GHB or ketamine who was not also an experienced user of ecstasy, whereas the reverse will often be the case. Ecstasy may be the first 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 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 drugs (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

¹ Australian Institute of Health and Welfare definition of meth/amphetamines includes all amphetamine-type stimulants excluding ecstasy

provide the data that were sought. Therefore, REU have been used again in 2005 to provide information on ecstasy and related drug markets.

2.1.1 Recruitment

A total of 101 REU residing in the Sydney Metropolitan region were interviewed for the 2005 NSW PDI. 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 (Dalgarno and Shewan 1996; Forsyth 1996; Peters, Davies et al. 1997) studies. 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 17 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 main 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 \$30 for their participation. Interviews took place in a location negotiated with participants, predominantly in coffee shops or at the Research Centre, and were conducted by the authors. 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, medians² 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 χ^2 . Gender differences are noted when significant. All analyses were conducted using SPSS for Windows, Version 12.0 (SPSS inc 2001).

The data collected in 2005 were compared with data collected from comparable samples of ecstasy users, including the sample interviewed for the 2002 ecstasy and related drugs module of the IDRS (n=88), and the trial of this methodology in 2001 (n=163) and 2000 (n=94;(Breen, Topp et al. 2002; White, Breen et al. 2003). Thus, comparisons drawn were based on samples recruited using the same methods.

2.2 Survey of key experts (KE)

The eligibility criterion for key experts participation in the PDI 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 ten or more REU throughout the past six months. A total of 22 KE were interviewed; these KE represented a wide range of industries and services from various metropolitan regions of Sydney and provided information on the REU with whom they had had recent contact. All but five interviews were conducted over the phone.

Of the 22 KE who had regular contact with REU, nine were female and thirteen were male. KE were involved in a wide range of occupations. These included DJs and party promoters, nightclub medical officers, first aid officers, emergency room department workers, health promotion officers with organisations such as the AIDS Council of NSW (ACON), drug and alcohol intervention workers and counsellors, adolescent and family therapists, program youth workers and researchers.

Eleven KE stated they knew about REU through both their work and social life, while seven obtained their knowledge solely through their work. Five KE worked within the gay/lesbian/transgender/bisexual (GLTB) population, four worked primarily with youth, two worked with IDU and one KE worked in a Needle and Syringe Program.

The extent of KE contact with regular ecstasy users ranged from once per week to daily over the preceding six months. In the six months preceding their interviews, two had meaningful contact with between 51 and 100 users, eight had meaningful contact with between 21 and 50 users, and eight had meaningful contact with more than 100 users. KE were either knowledgeable in most areas (n=10) or very knowledgeable in most areas (n=8).

² 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.

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, survey, 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;
- 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 incidents;
- Alcohol and Drug Information Service – calls regarding problematic drug use; and
- Family Drug Support – telephone support service for family members affected by problematic drug use and for users themselves.

3.0 OVERVIEW OF REGULAR ECSTASY USERS

3.1 Demographic characteristics of the REU sample

One hundred and one regular ecstasy users were interviewed in 2005. Over two-thirds (67%) of the sample were male (Table 1). The mean age of the sample was 26 years (SD 8; range 17-61); males were older than females (28 vs. 22, $t=-4.066$, $df = 96.398$, $p < .001$); and heterosexual respondents were younger than homosexual/bisexual respondents (24 vs. 30, $t = -3.641$, $df = 48.973$, $p = 0.001$). The majority (95%) of the sample spoke English as their main language at home. A minority (3%) were of Aboriginal and/or Torres Strait Islander (A&TSI) descent. Participants resided in a wide range of metropolitan regions of Sydney, including the inner west (36%), eastern suburbs (18%), northern suburbs (14%), inner city (17%), southern suburbs (5%), south western (4%) and the western suburbs (3%). The majority lived in either rented premises (62%), in their parents' or family's house (26%) or in their own home (7%). The majority of participants nominated their sexual identity as heterosexual (61%).

The mean number of years of school education completed by the sample was 12 years (SD 0.8; range 9-12), and the overwhelming majority (71%) of participants had completed high school education. More than half (54%) had completed courses after school, with 29% possessing a trade or technical qualification, and 25% having completed a university degree or college course. One-third of the sample (35%) was currently employed full-time, and 18% were employed on a part-time or casual basis. Over one-quarter (29%) were full-time students and 15% were unemployed. Six participants had previous convictions (Table 1).

The majority of the demographic characteristics of regular ecstasy users recruited for the PDI have varied little across years. Table 1 presents key demographic data for the current sample of REU ($n=101$), and the sample of REU from previous years. The mean age of participants was similar across samples. In all samples, the majority of participants were from English speaking backgrounds; most identified as heterosexual, however, this percentage has decreased steadily. Only small proportions of each sample were A&TSI or had a previous criminal conviction. The proportion of participants reporting full-time employment fluctuated over time. Current drug treatment was 5%, with the majority consisting of methadone.

Key expert comments

Key experts tended to have contact with specific groups and thus the information provided was limited to these groups. KE had contact with REU covering a broad age range (18-50 years), though generally REU were described as being from late teens to early twenties. Some KE distinguished specific age groups, such as 16-20; others indicated that heterosexual REU were aged between 18-30 while homosexual REU were aged between 25-35.

Reports regarding sexual orientation were mixed and depended on the REU that KE had contact with. KE reported that most REU were male, with the amount ranging from two-thirds to all; some KE estimated it was half males and half females. Almost all KE described REU as Anglo-Saxon/Caucasian of English speaking backgrounds, with some KE identifying small groups of users from other ethnicities, such as Asian and Middle Eastern groups.

Overall, REU were said to be well-educated, with most, if not all, having completed year 12 or nearly finishing school, and some KE identified that most REU had a tertiary background; one KE indicated a small percentage of REU had a tertiary background; another indicated that this was as high as 70-95%. The majority indicated that REU were employed full-time; one KE said that the REU they were in contact with had an unemployment rate as high as 30%.

There were low reports of REU in treatment, with seven KE unable to comment, and, of those who did, three identified crystal users as seeking treatment, and one identified GHB users. Criminal histories were also infrequently reported; ten were unable to comment, and, of those who were able to comment, petty crime and violence whilst under the influence of ecstasy and related drugs were mentioned. Of those involved in the manufacturing of drugs, most were thought to have criminal histories.

Table 1: Demographic characteristics of REU sample

Variable	2000 (n=94)	2001 (n=163)	2002 (n=88)	2003 (n=102)	2004 (n=104)	2005 (n=101)
Mean age (years)	25	25	25	26	26	26
Male (%)	69	58	67	63	60	67
English speaking background (%)	95	93	98	96	95	95
A&TSI (%)	6	6	2	7	7	3
Heterosexual (%)	78	68	63	69	69	61
Mean number school years	13	13	13	12	12*	12
Tertiary qualifications (%)	55	54	58	49	60	54
Employed full-time (%)	33	48	47	35	44	35
Full-time students (%)	12	20	26	26	23	29
Unemployed (%)	21	9	11	22	8	15
Previous conviction (%)	6	3	2	3	3	6
Current drug treatment (%)	-	-	-	-	2	5

Source: PDI Regular ecstasy user interviews

*question changed from 'How many years of school did you complete?' to 'What grade of school did you complete?'

3.2 Drug use history and current drug use

Participants were asked about lifetime and recent use of 20 different drug types. Polydrug use was the norm among this sample, with a mean of 11 (0-11) having been tried, and a mean of 7 (0-7) drug types having been used in the preceding six months (Table 2).

The similarities in levels of polydrug use among the samples interviewed over time are noteworthy; both in terms of number of drug types ever tried and drug types used recently (Table 2). These figures may appear slightly higher than those reported in 2004; however, this is predominantly due to an increase in the number of drug categories from 14 in 2004 to 20 in 2005. In 2005, mushrooms were considered as a separate drug from 'other drugs' under which it had previously been included. Nevertheless, the data suggest changes over time in patterns of use of specific drugs; the use of some appears to have declined and use of others has increased over the same timeframe. For example, the lifetime use of base, ketamine and GHB has increased, while the recent use of cocaine also increased; the lifetime and recent use of MDA have both declined, while the recent use of GHB has also declined (Table 2).

Alcohol (99%), speed (94%) and cannabis (92%) were the most commonly reported drugs ever used by the sample. The main drugs recently used were alcohol (96%), cannabis (82%) and speed (76%; Table 2).

Small proportions of the sample reported the use of drugs other than those listed in Table 2. In 2005 the range of 'other drugs' ever used was reported by 30% of the sample; 'other drugs' ever used by previous samples (28% reported doing so in 2003, 38% in 2002, 17% in 2001 and 14% in 2000) have included dexamphetamine, and these drugs were also reported by 2005 respondents.

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

Variable	2000 (n=94)	2001 (n=163)	2002 (n=88)	2003 (n=102)	2004 (n=104)	2005 (n=101)
Mean drug type ever used	10	10	12	10	10	11
Mean drug type used last 6 mths	7	7	7	7	7	7
Ever inject any drug (%)	28	20	27	22	23	27
Alcohol ever used (%)	100	99	99	100	100	99
used last 6 months (%)	95	98	94	96	99	96
Cannabis ever used (%)	99	95	98	96	99	92
used last 6 months (%)	90	82	90	82	85	82
Tobacco ever used (%)	84	82	90	92	92	82
used last 6 months (%)	72	77	81	72	73	72
Methamphetamine powder (speed) ever used (%)	92	99	100	97	98	94
used last 6 months (%)	75	87	85	79	81	76
Methamphetamine base (base) ever used (%)	36	34	59	63	64	63
used last 6 months (%)	22	20	44	42	39	43
Crystal meth (crystal) ever used (%)	12	43	43	56	68	62
used last 6 months (%)	6	26	19	48	46	40
Cocaine ever used (%)	78	77	80	78	79	76
used last 6 months (%)	53	57	64	46	46	55
LSD ever used %	80	74	73	66	61	71
used last 6 months %	37	23	33	24	20	33
MDA ever used (%)	36	43	56	56	54	32
used last 6 months (%)	16	14	35	35	30	19
Ketamine ever used %	25	31	59	59	58	65
used last 6 months %	14	15	49	49	39	39
GHB ever used (%)	5	23	35	33	28	32
used last 6 months (%)	<1	15	19	21	18	13
Amyl nitrate ever used (%)	66	62	68	66	66	65
used last 6 months (%)	29	36	40	28	27	37

Source: PDI Regular ecstasy user interviews

Table 2: Lifetime and recent polydrug use of REU, NSW (continued)

Variable	2000 (n=94)	2001 (n=163)	2002 (n=88)	2003 (n=102)	2004 (n=104)	2005 (n=101)
Nitrous oxide ever used (%)	54	48	50	44	40	44
used last 6 months (%)	22	11	14	8	14	13
Benzodiazepines ever used (%)	60	45	52	48	53	51
used last 6 months (%)	35	31	34	32	30	39
Anti-depressants ever used (%)	31	22	31	27	21	19
used last 6 months (%)	14	9	15	11	3	6
Heroin ever used (%)	32	19	22	24	17	22
used last 6 months (%)	17	6	6	9	4	4
Mushrooms ever used (%)	-	-	-	11	7	43
used last 6 months (%)	-	-	-	6	4	6
Methadone ever used (%)	6	3	10	6	4	6
used last 6 months (%)	0	1	3	4	1	4
Other opiates ever used (%)	22	12	27	12	20	30
used last 6 months (%)	6	3	13	3	5	20

Source: PDI Regular ecstasy user interviews

In 2005, ecstasy was the drug of choice for nearly two-fifths (38%) of respondents (Table 3). The next most commonly preferred drug was cocaine (18%). Cannabis (11%), crystal (10%) and LSD (6%) were nominated as drug of choice by small proportions of the sample. Four respondents each nominated speed, GHB and alcohol as their drug of choice; three nominated heroin and one each nominated meth base and benzodiazepines.

Compared to 2004, a larger proportion of the 2005 sample reported bingeing on one or more stimulant/ecstasy and related drugs in the preceding six months (43% in 2005 compared to 37% in 2003, 61% in 2002, 58% in 2001 and 44% in 2000). Bingeing was defined as using the drug on a continuous basis for more than 48 hours without sleep (Ovendon and Loxley 1996). The median length of the longest binge was three days (range 2-14 days). Ecstasy was the most commonly reported drug used in this way (by 42% of the sample). Speed (32%), alcohol (24%), crystal (19%), cocaine (12%), base (11%), amyl nitrate (10%), ketamine (9%), GHB (7%), LSD (6%), and MDA (3%) were other drugs mentioned by those who had recently binged.

Over one-quarter (27%) of the 2005 sample reported they had injected a drug in their lifetime (Table 2). Of those who had ever injected, 52% had first injected speed, 11% had first injected crystal and 11% had first injected heroin. Other drugs that were first injected included ecstasy (n=2), base (n=1), cocaine (n=1), other opiates (n=1), steroids (n=1) and one respondent first injected cocaine and heroin. The mean number of drugs

ever injected by this minority was 3.3 (range 1-9). Sixteen participants reported recently (i.e. in the last six months) injecting a mean of 1.8 (range 1-5) drugs

Three respondents were currently in methadone treatment. One participant nominated heroin as their favourite drug and only 2% of the sample had injected heroin in the preceding six months, on a median of three days (range 1-5). Thus, a small proportion of past and current heroin users were included in this sample. Despite this, the majority of this sample appeared to be primarily regular ecstasy users.

Key expert comments

Comments by KE regarding polydrug use varied according to the particular group of REU with whom they had recent contact. Many of the KE commented that polydrug use occurs. Ecstasy was reported to be combined with speed, ketamine or GHB, while one KE described combinations of amyl nitrate, Viagra® and crystal. One KE commented that users were taking drugs in multidoses.

Most of the KE who commented described polydrug use being associated with risk behaviours, with the most frequently cited risk behaviour being driving under the influence of alcohol, or driving under the influence of drugs (though the latter was mentioned by a small number of KE). Unsafe sexual behaviour was another risk behaviour that KE associated with polydrug use, and, while crystal was associated with unsafe sexual behaviour, one KE made the point that this was an unfair association to make, and that not all those who used crystal engaged in unsafe sexual behaviour, and not all of those who engaged in unsafe sexual behaviour used crystal. Another KE described that users were engaging in unsafe sexual behaviour even when not under the influence of drugs. Polydrug use was associated with bingeing, though one KE mentioned that those who binged were younger; one KE mentioned that bingeing was not occurring as often. The use of ketamine and GHB with other drugs was also mentioned to be linked to overdoses.

Detailed comments regarding each drug type, as well as behaviours associated with drug use, are documented throughout the relevant sections of this report.

3.3 Summary of polydrug use trends in REU

- Although both males and females of all ages use ecstasy, as with all illicit drugs, ecstasy use is more common among males.
- Ecstasy users tend to be young, most being aged in their early- to mid- 20s.
- The ecstasy users interviewed were relatively well-educated, with most having completed high school and more than half having obtained tertiary qualifications.
- While the proportion of respondents who are unemployed has fluctuated since 2000, a substantial proportion of regular ecstasy users interviewed were either employed or engaged in studies.
- Regular ecstasy users have little contact with the criminal justice system or with drug treatment agencies.
- Demographic characteristics of REU in Sydney appear to have changed little since 2000.
- Polydrug use appears to be the norm among regular ecstasy users.
- Ecstasy was the drug of choice for nearly two-fifths of respondents (compared to over half the respondents in 2004), followed by cocaine and cannabis. This suggests that this population use, and have access to, a wide variety of illicit drugs, strengthening the idea that this is a polydrug-using population.
- Large proportions reported recent use of alcohol, cannabis, speed and tobacco.
- The increases in proportions of REU reporting recent use of base, observed between 2000 and 2002, was sustained in 2005.
- There was a decrease in the lifetime and recent use of crystal, and, while some KE suggested a link between crystal and unsafe sexual behaviours, other believed that this association was not warranted.
- There was a decrease in lifetime and recent use of MDA and lifetime use of both ketamine and GHB. The prevalence of recent GHB use decreased in 2005.
- The use of LSD markedly increased in 2005 after a steady decline since 2000.
- Over one-quarter of the sample (27%) reported having injected a drug at some time.
- More than two-fifths (43%) of respondents reported bingeing on one or more stimulant/ecstasy and related drug in the preceding six months. The most common drugs involved were ecstasy, speed and alcohol.

4.0 ECSTASY

Ecstasy is a street term for a number of substances related to MDMA or 3,4-methylenedioxyamphetamine. 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 like 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'.

The median age at which participants in the 2005 sample first used ecstasy was 20 years (range 13-59; Table 3). Participants reported using ecstasy regularly at a median age of 19 years (range 15-60).

4.1 Ecstasy use among REU

Participants had used ecstasy on a median of 15 days in the preceding six months (range 6-96). Twenty percent reported using more than weekly, 33% reported using ecstasy between fortnightly and weekly, and 48% reported using ecstasy between monthly and fortnightly.

The median number of ecstasy tablets taken in a 'typical' or 'average' use episode in the preceding six months was two (range 0.25-9). More than three-quarters (77%) of the sample reported that they typically used more than one tablet. During their 'heaviest' use episode in the preceding six months, participants reported a median of four tablets (range 1-15).

In the six months preceding the interview, 96% of participants swallowed ecstasy, 63% had snorted ecstasy, 13% had shafted or shelved³, 6% had smoked it and 4% had injected. Nearly all (92%) participants nominated oral ingestion as their main route of ecstasy administration (Table 3). Two participants reported injection as their current main route of administration, 4% reported having injected in the last six months and 13% reported having injected ecstasy at any time. This suggests that the injection of ecstasy continues to occur by a minority of regular ecstasy users.

³ Inserting a tablet into the anus it known as 'shafting'; inserting a tablet into the vagina is known as 'shelving'.

Table 3: Patterns of ecstasy use among REU, NSW

Variable	2000 (n=94)	2001 (n=163)	2002 (n=88)	2003 (n=102)	2004 (n=104)	2005 (n=101)
Mean age first used ecstasy (years)	18	19	18	19	20	20
Median days used ecstasy last 6 months	12	20	20	12	20	15
Ecstasy 'favourite' drug (%)	53	63	51	55	59	38
Use ecstasy weekly or more (%)	34	29	42	22	42	40
Median ecstasy tablets in 'typical' session	1.5	1.5	2	2	2	2
Typically use >1 tablet (%)	53	62	74	74	84	77
Recently binged on ecstasy (%)	44	58	55	35	28	41
Ever injected ecstasy (%)	12	10	15	13	10	13
Mainly swallowed ecstasy last 6 mths (%)	89	98	92	100	98	92
Mainly snorted ecstasy last 6 mths (%)	6	1	6	-	1	6
Mainly injected ecstasy last 6 mths (%)	3	<1	0	-	1	2
Typically use other drugs in conjunction with ecstasy (%)	84	92	97	89	94	97
Typically use other drugs to 'come down' from ecstasy (%)	82	82	91	77	68	80

Source: PDI Regular ecstasy user interviews

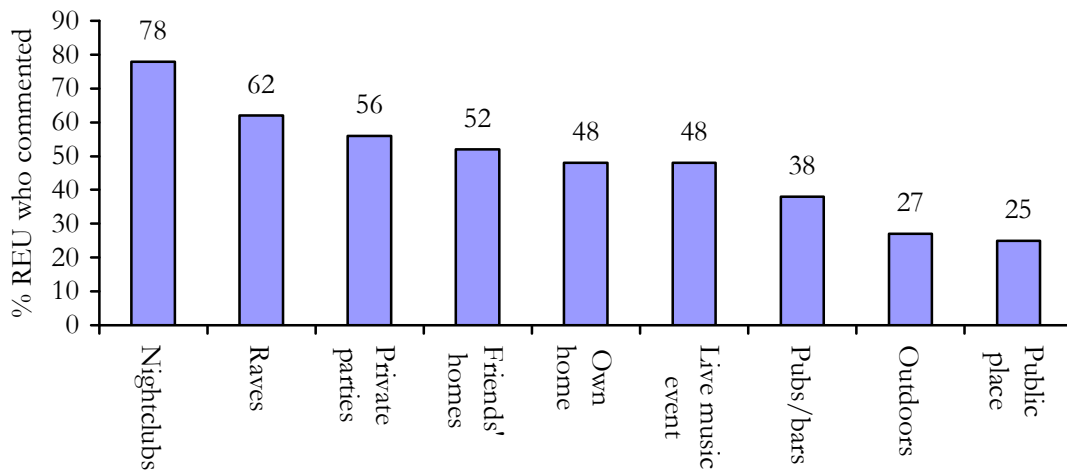
Most participants 'typically' (defined as on two-thirds or more occasions of ecstasy use in the preceding six months) used other drugs in combination with ecstasy (97%) and in the 'come down' (i.e. acute recovery period) following ecstasy use (80%). Other drugs were reported to be used with ecstasy, most frequently alcohol (75%), speed (58%), tobacco (55%), cannabis (49%), cocaine (24%), ketamine (22%), crystal (21%), base (15%) and amyl nitrate (10%). Smaller proportions reported typically using LSD (6%), GHB (5%), benzodiazepines (4%), and mushrooms (3%). Of those who typically drank alcohol while using ecstasy, 42% usually consumed more than five standard drinks.

Other drugs were reported to be used during the 'come down' period following ecstasy use, most frequently cannabis (69%), tobacco (57%), and alcohol (42%). Smaller proportions reported typically using benzodiazepines (28%), speed (7%), ketamine (5%), crystal (4%), cocaine (3%) and GHB (3%). Of those who typically drank alcohol to come down from ecstasy, 22% usually consumed more than five standard drinks.

Compared to the 2004 sample, a higher proportion of the 2005 sample reported using ecstasy weekly or more (42% in 2004). However, a greater proportion of the sample reported that they had binged on ecstasy in the preceding six months (41% vs. 28% in 2004).

Over three-quarters (78%) of the respondents in 2005 reported using ecstasy at nightclubs, raves (including ‘doofs’ and dance parties; 62%) and over half reported using at private parties (56%) in the preceding six months (Figure 1). More than half reported using ecstasy at friends’ homes (52%). Other reported locations included respondents’ own homes (48%) and live music events (48%), and at pubs/bars (38%). Other locations ecstasy had been usually used included in a public place (25%), in cars (15%), outdoors (8%), at dealers’ houses (8%), and at educational institutions (8%).

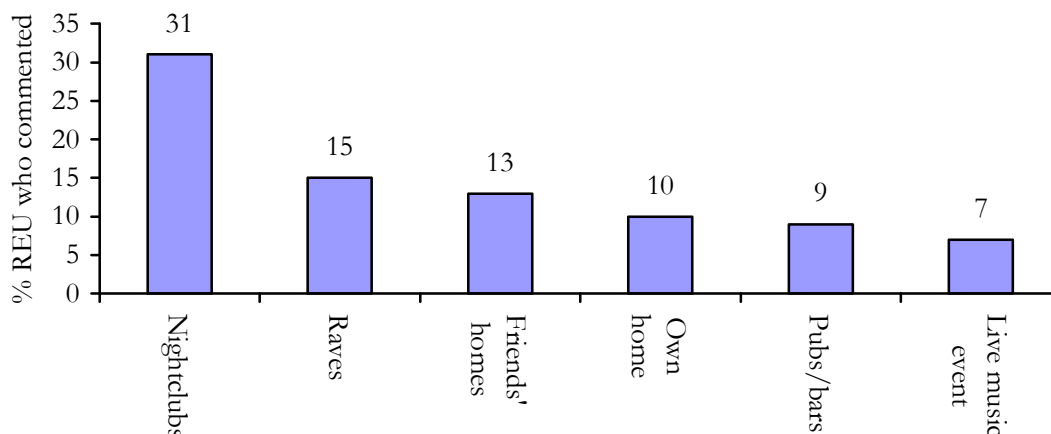
Figure 1: Usual location of ecstasy use, NSW 2005



Source: PDI Regular ecstasy user interviews 2005
 NB: Users could nominate more than one location.

The last location of ecstasy use was similar to the usual use locations in the preceding six months, with the most common being a nightclub (31%; Figure 2). Other recent locations of ecstasy use included at raves (including ‘doofs’ and dance parties, 15%), friends’ homes (13%), respondents’ own homes (10%), pubs (9%), and a live music event (7%).

Figure 2: Location of last ecstasy use, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

Key expert comments

Conflicting reports were given regarding the frequency of ecstasy use and the quantity of ecstasy being used, with reports being based largely on the populations that KE had contact with. While the average amount of ecstasy in an average session appeared to be between 2-3 tablets, one KE mentioned that an average quantity was 4-5 tablets, while another mentioned an average quantity of 5-10 tablets. The quantity used, on average, in a heavy session appeared to be around 4-5 tablets. Use in older populations was said to be sporadic, with a reduction in bingeing. Frequency of use ranged from weekly in more 'hardcore' users, to fortnightly/monthly or during special events such as parties, raves, or New Year's Eve; these events were linked to binge drug use.

All KE noted that the majority of REU take ecstasy in pill form, with small numbers using speed. While not seen, caps were mentioned by several KE, and these were linked with higher MDMA content.

All KE noted that the majority of REU swallowed ecstasy, with shafting, snorting and injecting happening less frequently, with the inference being that this occurs in more specialised populations (i.e. injecting ecstasy occurs in those who have experience injecting other drugs such as heroin).

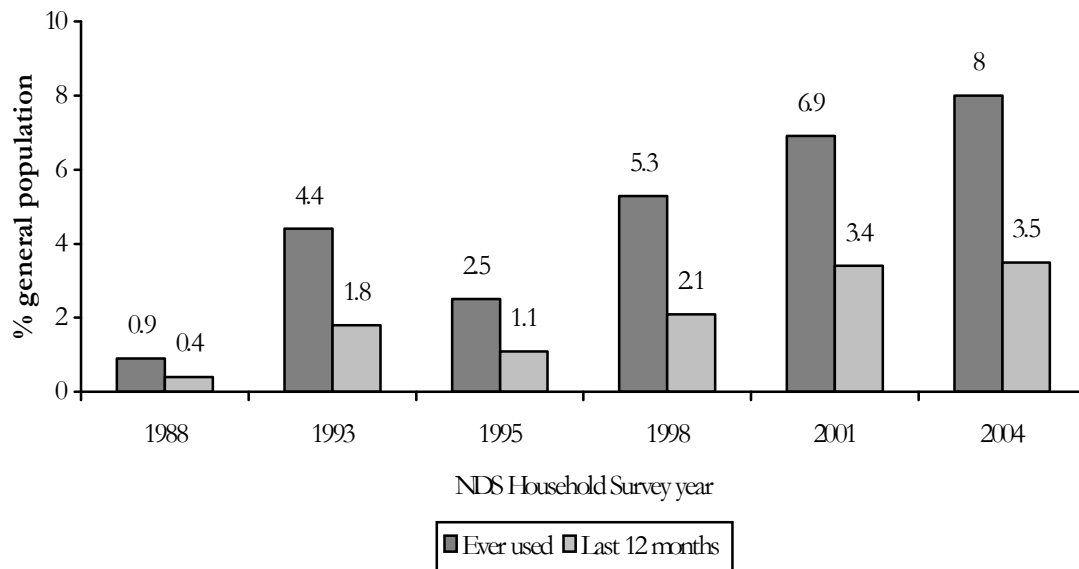
4.2 Use of ecstasy in the general population

Since ecstasy was first included in the National Drug Strategy Household Survey (NDSHS) in 1988, reported lifetime prevalence of ecstasy use among the general population increased; from 1% in 1988 to 7.5% in 2004 (Australian Institute of Health and Welfare 2002). Similarly, as shown in Figure 3, the proportion of the general population who reported using ecstasy in the preceding 12 months increased from 1% in 1988 to 3.4% in 2004 (Australian Institute of Health and Welfare 2002).

Comparable to the national prevalence, lifetime ecstasy use was reported by 6.9% of the NSW population aged 14 years and over in 2001 (Australian Institute of Health and Welfare 2002). Further, recent ecstasy use increased among this group from 2.1% in 1998 to 3.4% in 2001 (Australian Institute of Health and Welfare 2002). In 2004, 3.5% of the

population in NSW aged 14 years and over reported recent use of ecstasy ((Australian Institute of Health and Welfare 2002).

Figure 3: Prevalence of ecstasy use in NSW, 1988-2004



Source: National Drug Strategy Household Survey 1988-2004

4.3 Summary of patterns of ecstasy use

- Regular ecstasy users start using ecstasy in their late teens.
- All participants typically consume ecstasy orally although approximately two-thirds reported recently snorting.
- A wide range of patterns of ecstasy use were reported; however, most reported using the drug between fortnightly and weekly.
- More than three-quarters of regular ecstasy users typically use more than one tablet per use episode.
- Two-fifths of the sample recently used ecstasy on a continuous basis for 48 hours or more without sleep.
- Nearly all users report typically using other drugs in combination with ecstasy and most report typically using other drug to 'come down' from its acute effects.
- Some data suggest that the quantity and frequency of ecstasy use among regular ecstasy users may have increased over time.
- Nightclubs and raves (including 'doofs' and dance parties) were locations participants reported usually using ecstasy. The nightclub and own home were the most commonly reported last location of use.
- NSW prevalence of recent ecstasy use was similar to national prevalence.

4.4 Price

Ninety-seven users were able to comment on the price of ecstasy in Sydney. Respondents reported the price of ecstasy in regards to ‘tablets’; however, 30 respondents were able to comment on the price of ecstasy in regards to ‘caps’.

Participants were asked, ‘How much does ecstasy cost at the moment?’ and the median price of ecstasy was reported by users to be \$30 per tablet (range \$15-50). Most participants reported that the price had either remained ‘stable’ (54%) or ‘decreased’ (26%) in the preceding six months (Table 4).

The median price of a tablet of ecstasy has decreased from \$40 since 2000, and has remained stable since 2001 at \$35 before decreasing in 2005 at \$30 (Table 4).

Table 4: Price of ecstasy purchased by REU and price variations, NSW

Variable	2000	2001	2002	2003	2004	2005
Median price per tablet (range)	40 (30-50)	35 (10-70)	35 (18-50)	35 (20-55)	35 (13-50)	30 (15-50)
Price change:						
Increased (%)	3	4	6	12	3	11
Stable (%)	53	55	64	59	58	54
Decreased (%)	38	29	26	25	30	26
Fluctuated (%)	5	10	15	3	6	7
Don't know (%)	-	-	1	2	4	3

Source: PDI Regular ecstasy user interviews 2005

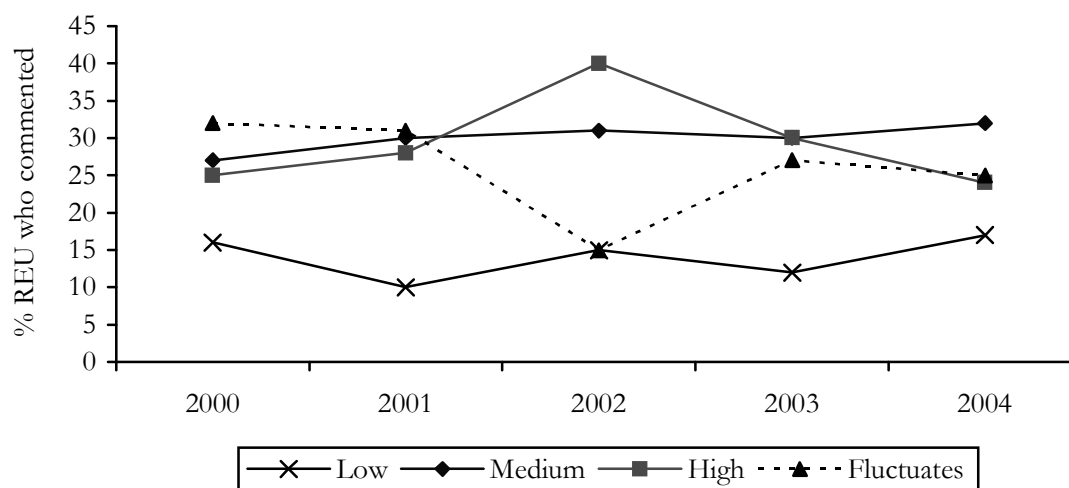
The two most common methods of paying for ecstasy in the preceding six months were paid employment (82%) and being given ecstasy as a gift (69%). Other methods of paying for ecstasy included: government allowances (28%), on credit from dealers (26%), borrowing money from friends (23%), obtaining money from parents (19%) and bartering other drugs or goods for ecstasy (18%). Smaller proportions reported that money from dealing drugs (13%), ecstasy profit from dealing drugs (12%), pawning goods (4%), property crime (4%) or fraud (2%) had funded their ecstasy use in the preceding six months.

Participants were also asked ‘What other drugs could you purchase from your dealer?’ and 79% reported that they could buy other drugs from their main ecstasy dealer. The most common drugs that they could have purchased were meth powder (70%), cannabis (61%), crystal methamphetamine (42%), methamphetamine base (39%), cocaine (39%), ketamine (35%) and LSD (28%). Other drugs included MDA (18%), GHB (17%), heroin (11%) and pharmaceutical stimulants (10%). One participant mentioned steroids, one participant mentioned 2CI, one participant mentioned morphine, one participant mentioned Viagra®, one participant mentioned Xanax®, 2CI and 2CB, while one participant mentioned 2CI and DMT.

4.5 Purity

In 2005 there were variable reports from users of the current purity of ecstasy, with responses varying from those collected in 2004 (Figure 4). In 2005, nearly two-thirds (38%) of the sample reported the current purity of ecstasy as 'medium', with more than one-quarter (29%) each reporting that it was 'high' or had 'fluctuated'. This variability is consistent with reports that both domestic and imported tablets, of variable quality, and often containing methamphetamine instead of MDMA, are being sold in Australia.

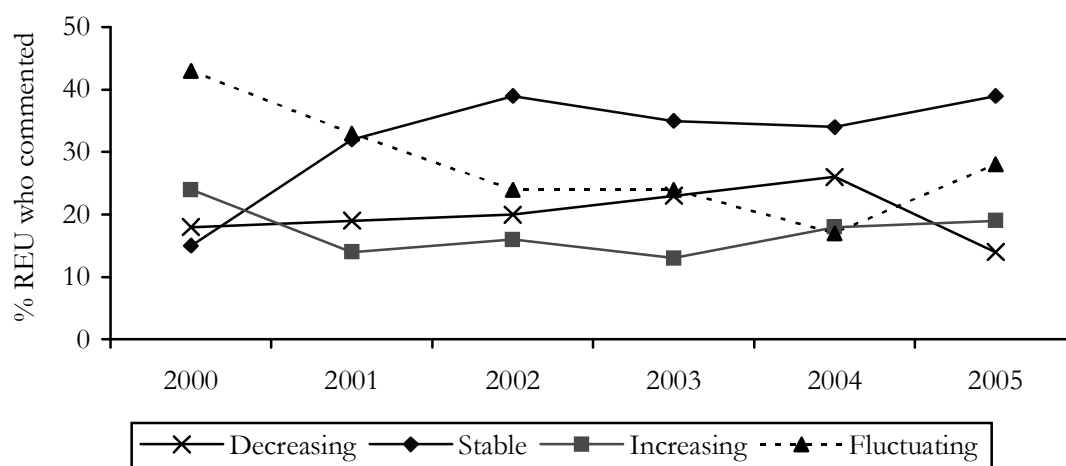
Figure 4: User reports of current ecstasy purity, NSW



Source: PDI Regular ecstasy users' interviews

Reports of changes in purity in the preceding six months were consistent with the reports of current purity, and differed from those reported in 2004 (Figure 5). Nearly two-fifths (39%) believed that the purity of ecstasy had remained 'stable' in the preceding six months while 28% reported it had 'fluctuated'. Nineteen percent reported the purity had 'increased' while 14% reported that the purity had 'decreased', with fewer respondents reporting this compared to 2004. One respondent was unable to comment.

Figure 5: REU reports of change in ecstasy purity in the preceding six months, NSW



Source: PDI Regular ecstasy users' interviews

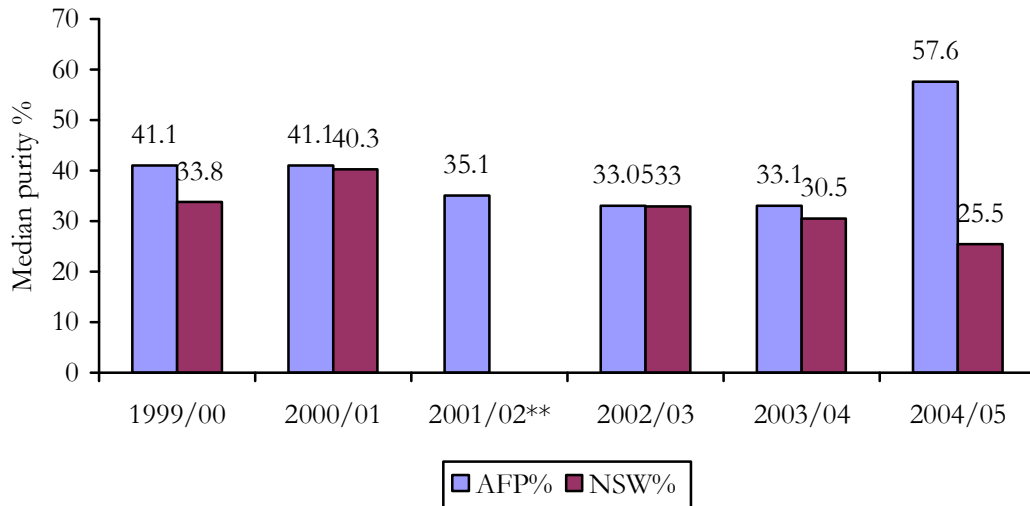
Estimates of purity are necessarily subjective and depend, among other factors, on users' tolerance levels. Laboratory analyses of the purity of seizures of ecstasy provide objective evidence regarding purity changes, and should therefore be more highly regarded than the reports of users. However, it 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 is provided by the Australian Crime Commission (ACC), formerly the Australian Bureau of Criminal Intelligence (ABCI). The ACC report 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 6 indicates that the median purity of phenethylamines seized by both the Australian Federal Police (AFP) and NSW police have remained relatively stable across time. Purity of seizures analysed by the AFP decreased slightly from 35% in 2001/02 to 33% in 2002/03 and remained stable in 2003/04. Purity data was not available from NSW police in 2001/02 but in 2002/03 AFP seizure purity was at 33%, 30% in 2003/04, and decreased slightly to a median purity of 25.5% in 2004/05, the lowest purity recorded. 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 vs. street dealers, and this in turn can influence the purity of the drug seized.

Figure 6: Median purity of phenethylamines* seizures 1999/00-2004/05.



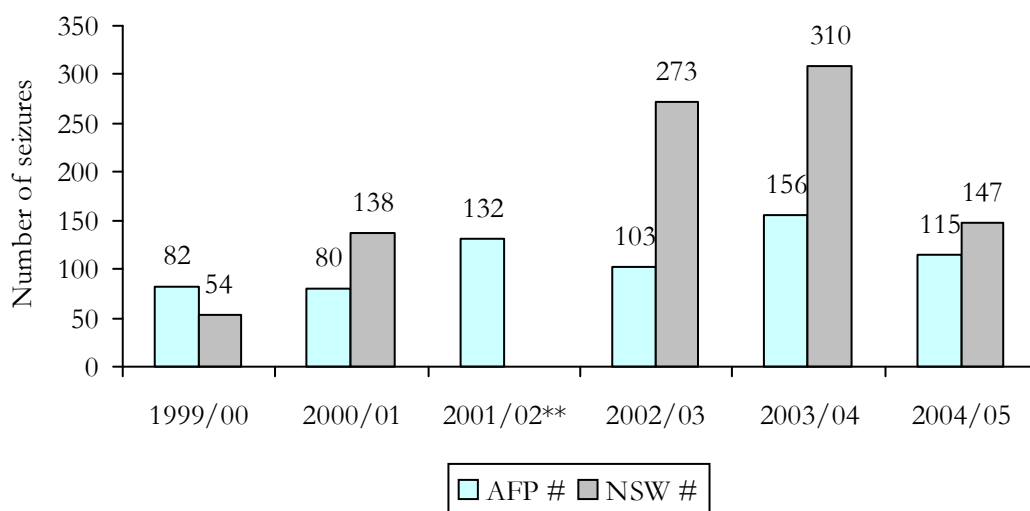
Source: Australian Bureau of Criminal Intelligence, (2001, 2002), Australian Crime Commission (2003, 2004)

*1999/00 indicate detection of MDMA. In 2000/01 this changed to phenethylamines

**NSW police data for 2001/02 was not available.

Figure 7 shows that the number of AFP seizures of phenethylamines increased up until the financial year 2001/02 and then stabilised in 2002/03 (Figure 7); however, in 2003/04 it has increased substantially. There has been an increase from 2000/01 in the number of NSW police seizures in 2003/04.

Figure 7: Number of phenethylamines* seizures 1999/00-2004/05



Source: Australian Bureau of Criminal Intelligence (2001, 2002), Australian Crime Commission (2003, 2004)

*1999/00 indicate detection of MDMA. In 2000/01 this changed to phenethylamines

**NSW police data for 2001/02 was not available.

4.6 Availability

All participants were able to comment on the availability of ecstasy. Nearly three-quarters of the respondents reported that ecstasy was 'very easy' (73%) to obtain while one-quarter (25%) reported that ecstasy was 'easy' to obtain; only one respondent each believed ecstasy was 'difficult' or 'very difficult' to obtain (Table 5). Three-quarters (75%) believed that the availability of ecstasy has remained 'stable' in the preceding six months, while 13% believed it had become 'easier' to obtain during this time. Eight participants (8%) believed it had become 'more difficult' to obtain and 4% believed it had 'fluctuated'.

In 2005, the majority of participants reported that in the six months preceding the interview they had obtained ecstasy from friends (80%) or known dealers (61%; Table 5). Other people from whom ecstasy had recently been obtained included acquaintances (28%), workmates (15%) and people unknown to participants (27%).

Ecstasy was most often obtained at friends' homes (67%), dealers' homes (51%), nightclubs (38%) and agreed public locations (32%). Other purchase locations included private parties (31%), raves (including 'doofs' and dance parties; 29%), own home (29%), pubs, (20%), and acquaintances' homes (13%). Eleven reported that they bought ecstasy on the street; six reported they obtained ecstasy at work and two at their educational institution.

The majority of all samples reported they normally obtained ecstasy from friends or known dealers (Table 5). The location of purchase was also comparable across years: ecstasy was most commonly purchased from friends' homes, dealers' homes and nightclubs.

Table 5: REU reports of availability of ecstasy in the preceding six months, NSW

Ecstasy variable	2000 (n=94)	2001 (n=163)	2002 (n=88)	2003 (n=102)	2004 (n=104)	2005 (n=100)
Current availability:						
Very easy (%)	70	72	71	63	67	73
Easy (%)	27	23	15	23	28	25
Availability:						
Stable (%)	69	68	72	73	72	75
Easier (%)	21	28	18	11	14	13
Persons score from:						
Friends (%)	83	90	86	80	76	80
Known dealers (%)	63	50	76	60	55*	61
Acquaintances (%)	30	28	38	27	15	28
Workmates (%)	12	12	11	15	11	15
Unknown people (%)	27	22	14	15	10	27
Locations scored from:						
Friend's home (%)	59	69	74	64	51	67
Dealer's home (%)	35	33	51	34	40	51
Nightclub (%)	37	35	40	42	23	38
Agreed public location (%)	-	-	-	-	27**	32
At own home (%)	45	30	32	29	20	29
Other (%)	20	20	11	8	5	1

Source: PDI Regular ecstasy user interviews

*changed from dealers to known dealers in 2004

**question asked for the first time in 2004

Key expert comments

KE reports on the price of ecstasy varied, with a range of \$18-\$50. Content and purity were two factors which KE mentioned affected the price of ecstasy. The majority of KE reported that the price of ecstasy had remained stable in the preceding six months (n=11).

The majority of KE (n=7) were unable to comment on the current purity of ecstasy. Of those who did comment on the current purity, five indicated the current purity was 'medium', four indicated it 'fluctuated', and two each commented that the current purity was 'low' or 'high'. The majority of KE (n=8) indicated that the purity of ecstasy had remained 'stable' in the preceding six months; four indicated the purity had 'fluctuated', three indicated the purity had slightly 'increased', while one KE indicated the purity had 'decreased'; five were unable to comment.

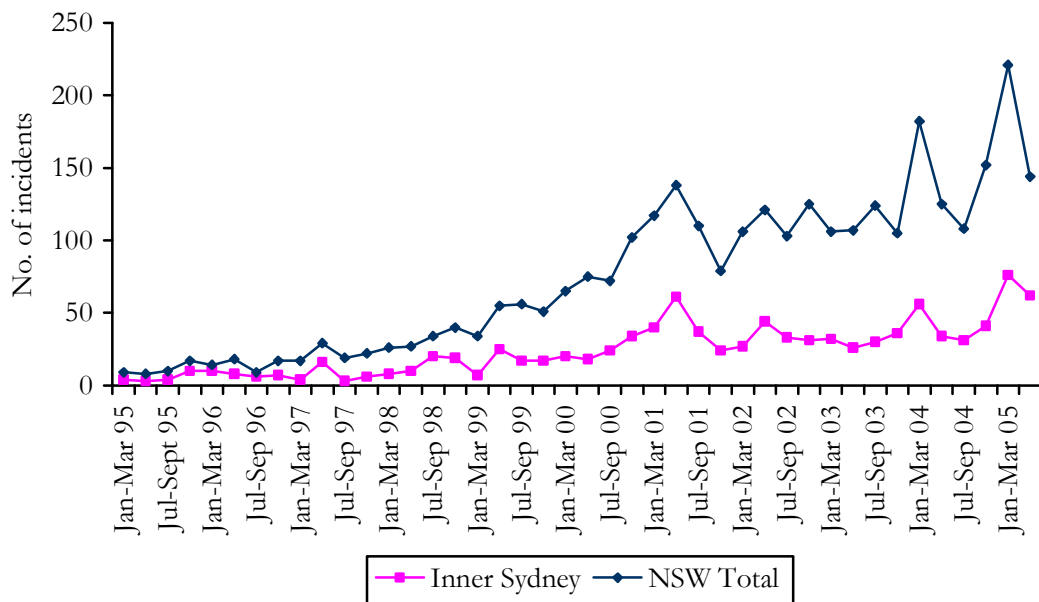
All KE reported that ecstasy was ‘very easy’ to obtain and that this had remained ‘stable’ in the preceding six months.

4.7 Ecstasy-related harms

4.7.1 Law enforcement

The greatest number of ecstasy use/possession incidents were recorded in the Inner Sydney area followed by the Central Western Sydney and St George-Sutherland areas (Figure 8). The number of recorded incidents has gradually increased over time.

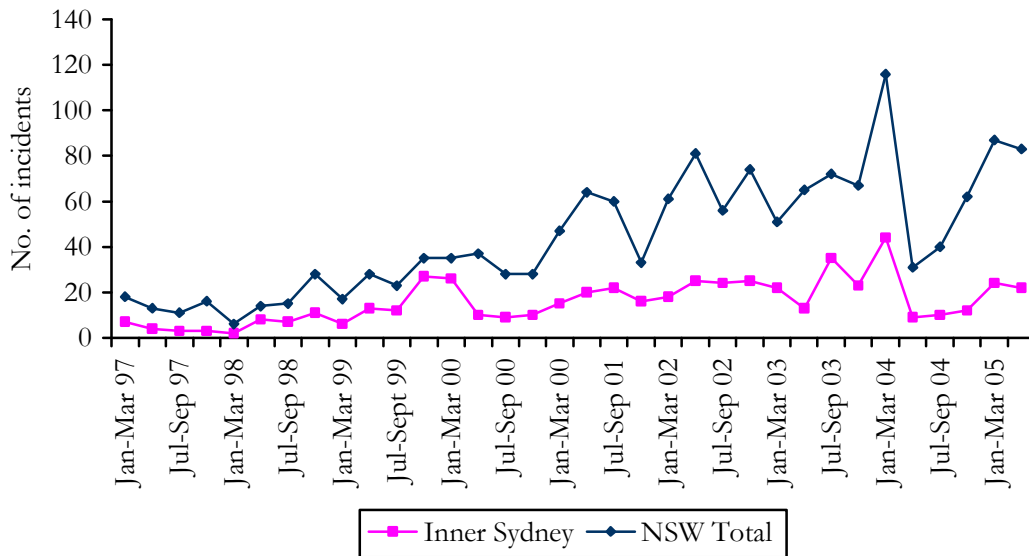
Figure 8: Number of police incidents recorded for ecstasy possession/use, January 1995-June 2005



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

Overall, the number of ecstasy deal/traffic incidents recorded since January 1995 has increased over time in the areas of the Inner Sydney and Central Western Sydney, with only slight increases in the Eastern Suburbs (Figure 9). The number of these incidents recorded in the Inner Sydney area, and in NSW as a whole, fluctuated in the preceding 12 months.

Figure 9: Number of police incidents recorded for ecstasy deal/traffic, January 1997-June 2005

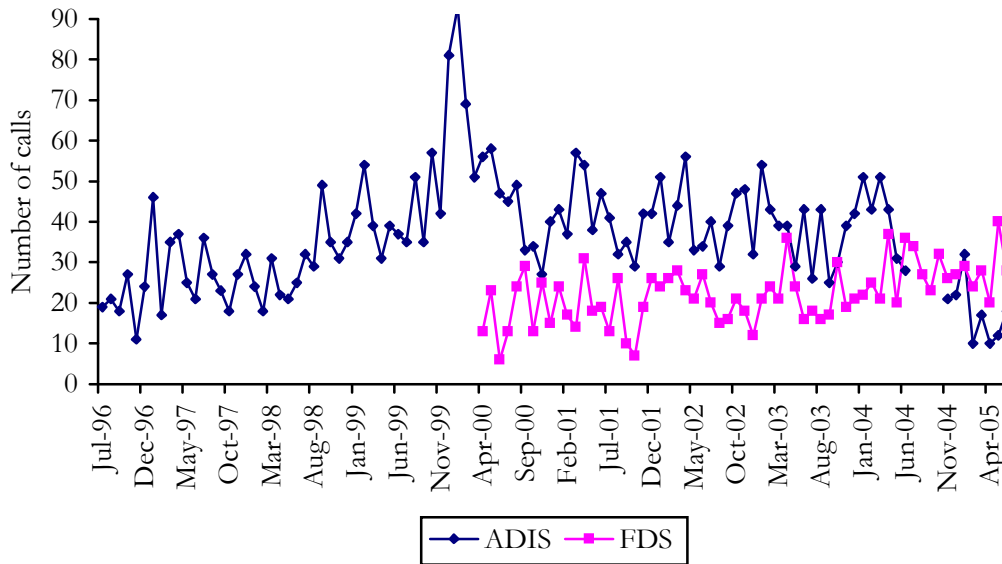


Source: NSW Bureau of Crime Statistics and Research (BOCSAR)

4.7.2 Health

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) provide over-the-phone support and referral. FDS data represent all calls in which ecstasy was mentioned. Figure 10 shows that the number of calls received by ADIS regarding ecstasy has remained relatively stable over time aside from a spike of calls around the new millennium. Calls received by FDS since April 2000 regarding ecstasy reflect a similar pattern. There appears to have been a decline in the number of calls received by ADIS relating to ecstasy beginning in early 2005.

Figure 10: Number of inquiries regarding ecstasy received by ADIS and FDS, 1996-2005

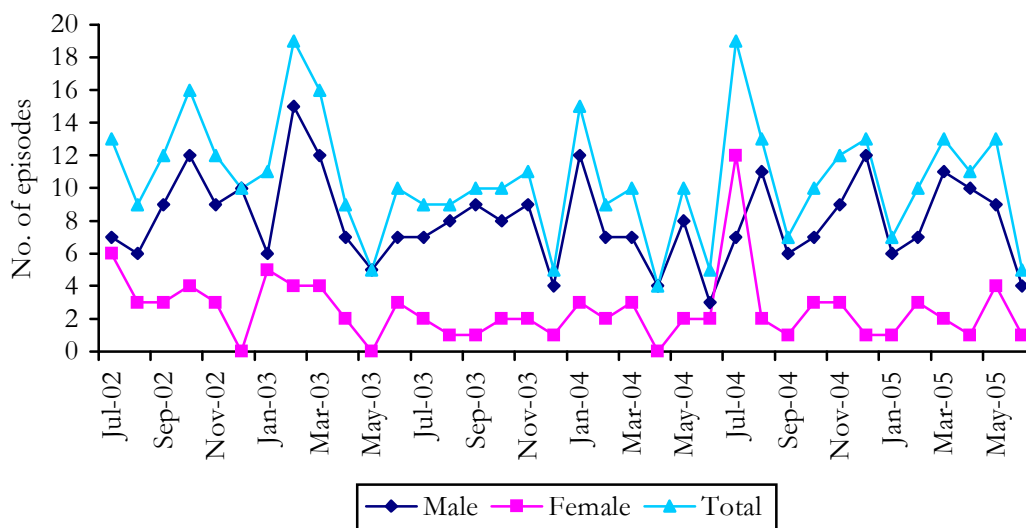


Source: NSW Alcohol and Drug Information Service & NSW Family Drug Support

NB. Family Drug Support data was only available from April 2000. Data from ADIS for July-October 2004 is 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 3 years with a maximum of 19 in May 2003 and a minimum of 5 in June 2005 in NSW (Figure 11). In line with the gender distribution of the 2005 NSW REU sample, males accounted for a greater number of treatment episodes than females.

Figure 11: Number of ecstasy treatment episodes by gender, NSW July 2002-June 2005

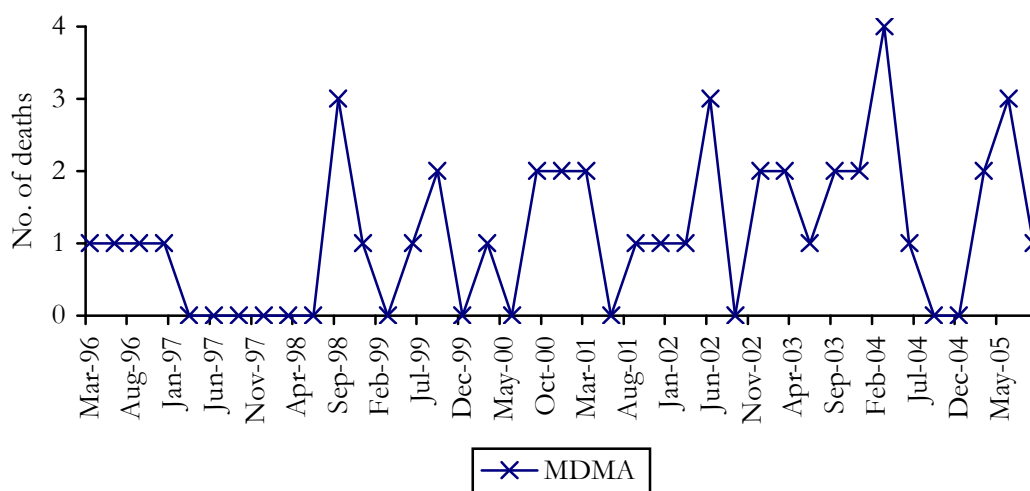


Source: NSW MDS DATS, NSW Department of Health.

N.B. 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.

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; MDMA was detected in only 1.2% of all suspected drug-related deaths since 1996 (Figure 12). It needs to be remembered that detection of MDMA does not imply that MDMA was causally related to the death.

Figure 12: Number of suspected drug-related deaths in which ecstasy was detected post-mortem, March 1996-September 2005



Source: Forensic Toxicology Laboratory database, Division of Analytical Laboratories

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

4.8 Benefit and risk perception

This is the third year running the PDI has collected this data from survey participants on the perceived risks and benefits associated with taking ecstasy and related drugs.

4.8.1 Perceived benefits

Respondents were asked to identify any benefits they perceived to be related to their ecstasy use. A wide range of benefits were reported and are summarised in Table 6. The whole sample identified that there were benefits with taking ecstasy. Ninety-six percent of the sample reported two or more. Participants were asked to select up to three benefits from 15 categories they might have perceived to be associated with their ecstasy use.

Fifty-three participants reported the enhanced feelings of closeness, bonding and empathy was a benefit stemming from ecstasy use. Many participants reported enhanced mood (n=43) and fun (having an enjoyable night or a good time; n= 39) as benefits related to ecstasy use. Other participants mentioned enhanced communication and sociability (n=30). Other commonly identified benefits included enhanced sexual experience (n=16) and enhanced energy (n=16). The perception that ecstasy could be used to relax or escape was a commonly reported benefit (n=14). Small proportions reported benefits such as ecstasy being cheap (n=3) and the feeling of being in control or focused (n=2).

Table 6: Perceived benefits of ecstasy use among those who commented, NSW 2005

Benefit variable	2005 <i>n=101</i>
Enhance closeness/bonding/empathy	53
Enhanced mood	43
Fun	39
Enhanced communication/talkativeness/more social	30
Increased confidence/decreased inhibitions	22
Increased energy	16
Enhanced sexual experience	16
Enhanced appreciation of music/dance	15
The high/rush/buzz	15
Relax/escape/release	14
Drug effects	10
Cheap	3
Feeling in control/focused	2

Source: PDI Regular ecstasy user interviews 2005

4.8.2 Perceived risks

Participants were asked whether they perceived any risks associated with taking ecstasy, and, if so, what these risks were. Participants were not asked whether they knew of these risks prior to taking the drug or if these perceived risks would deter them from taking drugs in the future.

The majority (91%) identified a range of potential health and other risks, with most respondents reporting more than one risk, a summary of which appears in Table 7. Nine participants reported they perceived no risks. For the third time, in 2005, we ran main themes with number of close-ended responses. These included: physical harms, psychological harms, harms related to illicit status, impaired decision making, neuropsychological harms, overdose, addiction/dependence, and other harms which comprised legal/police problems, financial problems, social/relationship problems and unknown long-term harm.

The most common risk that participants perceived to be associated with the use of ecstasy was potential psychological harms (n=53). Of those who mentioned risks associated with psychological harms, depression was the most frequently identified risk (n=31). Addiction/dependence (n=6) and anxiety/panic (n=6) were the next most commonly identified risks, followed by paranoia (n=5) and psychosis (n=4).

The second most common risk participants perceived to be associated with the use of ecstasy was the potential for physical harms (n=50). Of the physical harms, eleven participants identified dehydration, followed by long-term physical problems (for example, cardiac problems, lung problems, ulcers, respiratory problems, or nasal damage; n=10). Seven participants identified general acute physical problems (such as vomiting, headaches, trouble sleeping or weight loss) as a risk associated with ecstasy use. Fatal overdose (n=8) and non-fatal overdose (n=6) were also identified as risks, while a small number of participants identified over-hydration (n=4) and over-heating (n=4) as associated risks.

Other risks that participants identified as being associated with ecstasy use were unknown drug contaminants or cutting agents used with ecstasy (n=27) and unknown strength or purity of ecstasy (n=10); memory impairment (n=18); unknown long-term harm (n=17); and legal and police problems (n=15). This suggests that ecstasy users are aware of the potential problems that can be associated with their ecstasy use and that these concerns are not limited to one specific domain (such as law enforcement), but rather cross over many areas concerning their health and welfare.

The effects of intoxication were also, less frequently, identified, such as impaired decision making (n=5) and taking more drug than intended (n=5). Less frequently identified risks associated with ecstasy use included sex risk (n=3) and driving whilst under the effects of ecstasy (n=1); and lack of knowledge regarding the use of ecstasy, such as not being aware of the risks or not knowing how to use ecstasy safely, was reported by one respondent. Financial and employment problems (n=7 and n=4, respectively) associated with ecstasy use were other less commonly identified risks.

Table 7: Perceived risks of ecstasy use among those who commented, NSW 2005

Risk variable	2005 n=101
Depression	31
Unknown drug contaminants/cutting agents	27
Memory impairment	18
Unknown long-term harm	17
Legal/police problems	15
Damage to brain function (brain cells/neurological damage)	14
Fatal overdose	8
Financial problems	7
General acute physical problems	7
Addiction/dependence	6
Anxiety/panic	6
Cognitive impairment	6

Source: PDI Regular ecstasy user interviews 2005

4.9 Factors influencing the price and use of ecstasy

For the first time, in 2005, respondents were asked a series of questions relating to factors which they believed could influence the price of ecstasy. As can be seen in Table 8, the majority of respondents reported that knowing the supplier and buying ecstasy in larger quantities (79% and 88% respectively) would result in a 'decrease' in the price of ecstasy; that purchasing ecstasy at a special time of year and an increase in police activity would result in 'no change' to the price of ecstasy (67% and 84% respectively); and that buying ecstasy in a public venue would result in an 'increase' in price (71%). There were mixed reports regarding other factors that may influence the price of ecstasy.

Table 8: Factors influencing the price of ecstasy, NSW 2005

Variable	Don't know	Increase	Decrease	No change
Knowing supplier	0	2	79	19
Supplier close to source	24	2	56	18
High MDMA content	5	50	2	44
Decreased availability of brand/logo	7	30	1	62
Decrease in ecstasy availability	26	42	0	32
Special time of year	1	32	0	67
Not planning purchase in advance	10	45	0	46
Buying larger quantity	5	0	88	7
Increase in police activity	5	10	1	84
Buying in a public venue	15	71	1	13

Source: PDI Regular ecstasy user interviews 2005

Also for the first time in 2005, respondents were asked a series of questions relating to factors that could influence the use of ecstasy. As can be seen in Table 9, the majority of respondents believed that, if ecstasy, crystal or cocaine were easier to get, there would be 'no change' to their use of ecstasy (75%, 80% and 65% respectively). The majority of respondents believed that 'no change' would result in their use of ecstasy if the chance of being caught by police was high (67%) or low (90%). The majority of participants believed that there would be 'no change' in their use of ecstasy if the penalties for the use of ecstasy increased (80%) or decreased (80%). If there were a decline in the purity of ecstasy, the majority (85%) believed there would be a 'decline in' their ecstasy use.

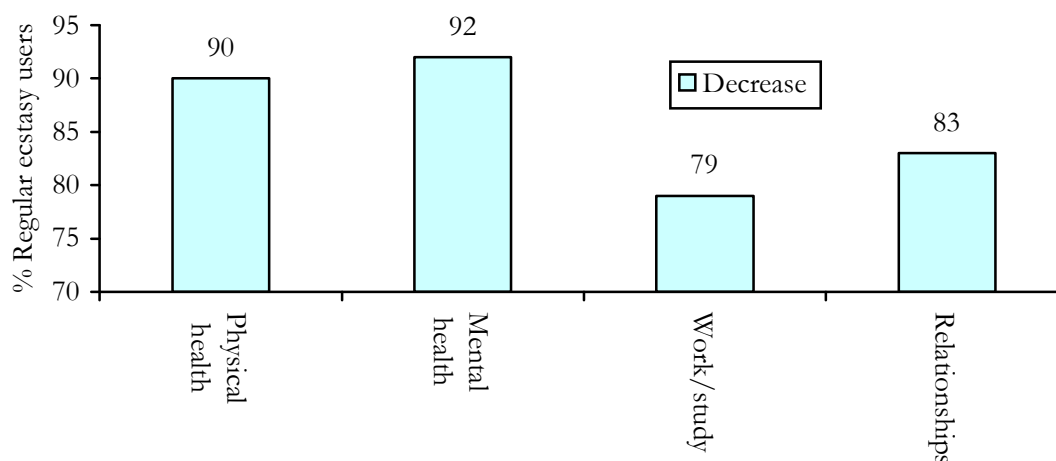
Table 9: Factors influencing the use of ecstasy, NSW 2005

Variable	Don't know	Increase	Decrease	No change
Price of ecstasy increases	4	1	40	55
Purity of ecstasy decreases	0	5	85	10
Ecstasy harder to get	2	0	58	40
Ecstasy easier to get	0	24	1	75
Crystal easier to get	10	0	10	80
Cocaine easier to get	7	0	28	65
Chances of being caught by police high	0	0	33	67
Chances of being caught by police low	0	9	1	90
Penalties for ecstasy use increase	2	0	18	80
Penalties for ecstasy use decrease	2	0	18	80
Friends stop using ecstasy	3	0	46	51
Friends increase ecstasy use	1	36	1	62

Source: PDI Regular ecstasy user interviews 2005

Respondents were asked whether their use of ecstasy would change if there were negative affects on their physical health, mental health, work or study, and relationships. As can be seen in Figure 13, respondents in the 2005 PDI study indicated that negative affects on these areas of their lives would result in a decrease in their use of ecstasy.

Figure 13: Impact of negative effects on ecstasy use, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

4.10 Summary of ecstasy trends

- Median price of ecstasy was reported to be \$30, which was lower than the \$35 reported in 2004 and reflects the steady decline in price of ecstasy since 2000. Respondents reported that this price had remained stable in 2005.
- User and KE reports of ecstasy purity suggest it is variable, and the purity of MDMA seizures made by AFP were 57.6% and NSW police were 25.5% in 2004/05.
- Both users and KE have consistently reported that ecstasy is 'very easy' or 'easy' to obtain in 2005.
- Comparable to previous years, the majority of participants obtained ecstasy from friends and purchased ecstasy from friends' houses.
- Recorded numbers of police incidences relating to the use/possession and dealing/trafficking of ecstasy have increased since 1997, although they have remained stable over the preceding 12 months.
- The number of telephone enquiries received by the Alcohol and Drug Information Service and Family Drug Support relating to ecstasy has remained relatively stable over time. Other health-related indicator data suggest fluctuations in the number of users seeking treatment for their ecstasy use, with peaks occurring in the earlier months of the year (usually associated with the 'party season').
- The most commonly identified benefits perceived to be related to ecstasy use were the enhanced feelings of closeness and bonding with others, followed by enhanced mood.
- The most commonly identified risks of ecstasy use were depression, and ecstasy containing unknown contaminants/cutting agents.

5.0 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).

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 – identified as becoming more widely available and used in all jurisdictions (Topp and Darke 2001; Topp, Degenhardt et al. 2002) – 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. ‘Base’ (also called paste, wax, point or pure), is thought to be an oily or guggy, damp, sticky, powder that often has a brownish tinge. Base is reported to be difficult to dissolve for injection without heating. Base is also thought to be manufactured in Australia. 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).

5.1 Methamphetamine use among REU

5.1.1 Methamphetamine powder (speed)

Virtually all (94%) participants in the 2005 survey reported lifetime speed use and three-quarters (76%) had used speed in the preceding six months. Speed had first been used at median age 18 years (range 13-36 years) and there was a significant difference between age of initiation and gender, with females using speed significantly younger than males (18 vs. 20, $t = -2.035$, $p < 0.05$). Twenty percent of respondents reported having ever injected speed, while only seven respondents reported injecting speed in the preceding six months.

Seventy-seven recent speed users reported using on a median of six days (range 1-96) in the preceding six months. Three-fifths (61%) reported using speed once a month or less,

one-fifth (21%) reported using speed between fortnightly and weekly, 10% reported using speed between once a month and fortnightly, 7% reported using speed between once and three times per week, and one respondent reported using speed 4 times per week. A small proportion of the sample (4%) nominated speed as their favourite drug. Of those who reported using other drugs with ecstasy, over half (56%) used speed with ecstasy, and, of those who reported using other drugs to come down from ecstasy, 6% reported using speed to come down from ecstasy.

The median amount of speed used in a 'typical' or 'average' use episode in the preceding six months was one gram (range 0.20-6). During their 'heaviest' use episode in the preceding six months, recent speed users reported the use of a median of two grams (range 0.33-12). Of those who reported recent bingeing, 74% had binged on speed. Recent speed use was also quantified in lines (n=22) and points (n=6). Two lines of speed were used during a 'typical' occasion of use (range 1-6) while four lines of speed were used during a 'heavy' occasion of use (range 1-10). Two points of speed were used during a 'typical' occasion of use (range 1-8) while three and a half points of speed were used during a 'heavy' occasion of use (range 1-7).

Most recent speed users reported snorting (91%) or swallowing (71%). Smoking (10%) and injecting (9%) were other routes of speed administration reported by small proportions of participants; one respondent reported shelving speed in the preceding six months.

Lifetime and recent use of speed has remained stable across sampling years (Table 10). Data presented in Table 8 suggest a slight increase in the quantity of use in 2005.

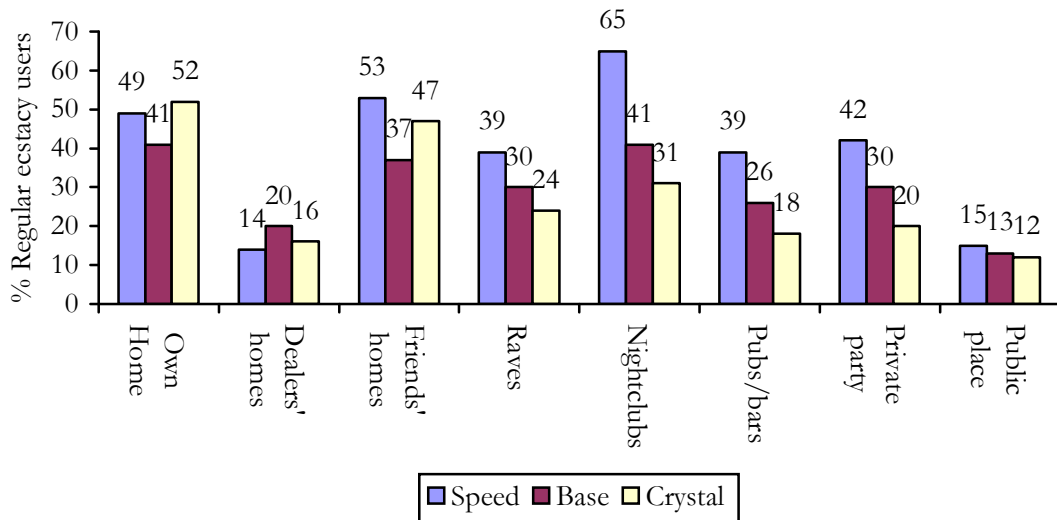
Table 10: Patterns of methamphetamine powder (speed) use of REU

Speed variable	2000 (n=94)	2001 (n=163)	2002 (n=88)	2003 (n=102)	2004 (n=104)	2005 (n=101)
Ever used (%)	92	99	100	97	98	94
Used preceding six months (%)	75	87	85	79	81	76
Of those who had used						
Median days used last 6 mths (range)	12 (1-180)	10 (1-180)	7 (1-72)	5 (1-60)	6 (1-96)	6 (1-96)
Median quantities used (grams)						
Typical (range)	0.5 (0.25-7)	1 (0.1-6)	0.5 (0.1-3.4)	0.5 (0.05-7)	.75 (0.1-3.5)	1 (0.20-6)
Heavy (range)	1 (0.5-28)	1 (0.1-6)	1 (0.1-10.5)	1 (0.1-12)	1.5 (0.15-7)	2 (0.33-12)

Source: PDI Regular ecstasy user interviews 2005

Speed was commonly used at nightclubs (65%), friends' homes (53%), own home (49%), private parties (42%), pubs (39%), raves (including 'doofs' and dance parties; 39%), live music events (33%), and in a car or other vehicle as a passenger (23%). Smaller proportions used speed at work (17%), in a public place (15%), at a dealer's home (14%), at acquaintances' houses (9%), in restaurants/cafes (5%) and at educational institutions (3%; Figure 14).

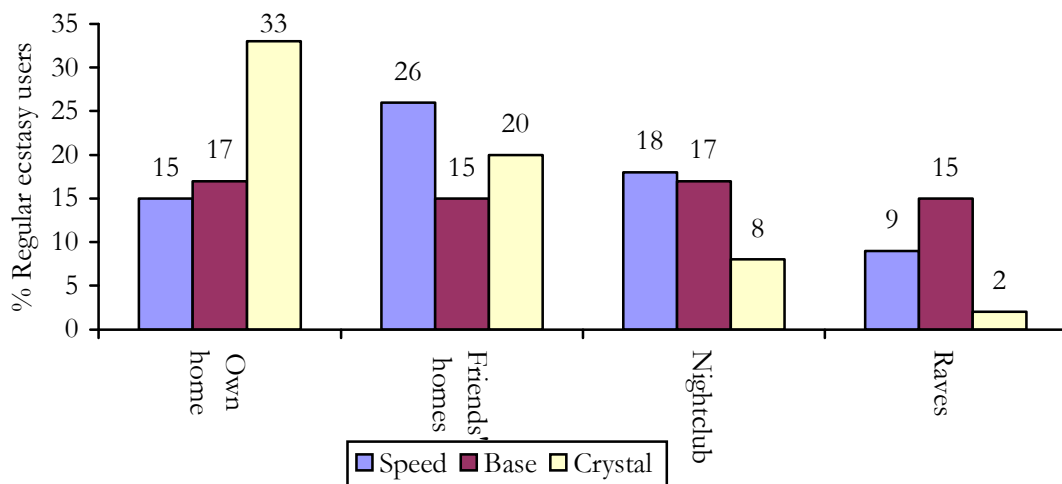
Figure 14: Location of usual methamphetamine use by form, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

Location of last use was commonly at friends' homes (26%), a nightclub (18%) or at respondents' own homes (15%). Small proportions reported raves (including 'doofs' and dance parties; 9%), at work (5%) and in a pub (5%; Figure 15).

Figure 15: Location of most recent methamphetamine use by form, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

Key expert comments

KE reports of speed use varied. While some reported that speed was used by most of the users they had contact with, others reported that only half used speed. Some reported that speed use had decreased. This may be a reflection of the populations that KE had contact with. Those in the health promotion field were more likely to indicate speed use was more frequent. Snorting speed was the most frequently reported route of administration, though KE did mention a small proportion of users inject speed.

Several KE noted that speed use had decreased as users switched to crystal. Others commented that speed was now a 'special occasion' drug, or taken only in combination with other drugs or used as a backup if crystal was not available.

5.1.2 Methamphetamine base

A substantial proportion (63%) of the 2005 sample reported lifetime methamphetamine base use and 43% had used base in the preceding six months. Those who had used base at some time reported first doing so at a median age of 20 years (range 14-40 years). There was a significant difference between gender and age of initiation, with females using base significantly younger than males (18 vs. 23, $t = -4.269$, $df = 57.491$, $p < 0.001$). Heterosexual respondents were significantly more likely to report a younger age of initiation than homosexual/bisexual respondents (20 vs. 24, $t = -2.154$, $df = 27.886$, $p < 0.05$). Fifteen participants had injected base at some time and five reported injecting base in the previous six months.

Forty-three participants who had recently used base reported a median of three days (range 1-96) of use in the preceding six months. The majority (84%) of participants had used base once a month or less, 14% reported using base more than once per month but less than four times per week, and one respondent reported using base four times per week. One respondent nominated base as their drug of choice. Of those who reported using other drugs with ecstasy, 15% used base with ecstasy, and, of those who reported using other drugs to come down from ecstasy, 1% reported using base to come down from ecstasy. Of those who reported bingeing in the preceding six months, 26% had binged on base, compared to 15% in 2004

Of those who reported typical base use during the preceding six months, 41 quantified their use in terms of 'points' and one referred to 'grams'. 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 of a gram. Those referring to points used a median of 1.5 points during an episode of normal use (range 0.25-9) and a median of 2.25 points during a heavy occasion of use (range 0.25-25).

Most participants had swallowed (86%) base in the preceding six months. Smaller numbers had snorted (30%), smoked (21%), injected (12%) and shelved (2%) base.

Trends in base use across time are presented in Table 11. Since 2000, both lifetime and recent use of base have increased, remaining stable since 2002; however, there appears to have been an increase in recent use of base. Frequency of base use has fluctuated, as has the quantity of use.

Table 11: Patterns of base methamphetamine use of REU

Base variable	2000 (n=94)	2001 (n=163)	2002 (n=88)	2003 (n=102)	2004 (n=104)	2005 (n=101)
Ever used (%)	36	34	59	63	64	63
Used last six months (%)	22	20	44	42	39	43
Of those who had used						
Median days used last 6 mths (range)	4 (1-48)	7 (1-70)	3 (1-30)	4 (1-96)	5 (1-36)	3 1-96)
Median quantities used (points)						
Typical (range)	1 (1-10)	1 (0.5-10)	1 (0.1-10)	1 (0.1-5)	2 (0.5-4)	1.5 (0.25-9)
Heavy (range)	1.5 (1-10)	1.5 (1-10)	1 (0.1-10)	2.5 (0.1-10)	2 (0.5-10)	2.25 (0.25-25)

Source: PDI Regular ecstasy user interviews

Base was commonly used in nightclubs (41%) and respondents' own homes (41%) followed by friends' homes (37%), private parties (30%), raves (including 'doofs' and dance parties; 30%), and pubs (26%). Smaller proportions reported using base in live music events (20%), dealers' homes (20%), outdoors (15%), public places (13%), acquaintances' houses (9%), at work (7%) and in saunas (7%; refer to Figure 14).

Location of last occasion of base use was commonly at nightclubs (17%), own home (17%), friends' homes (15%), or a rave (including 'doofs' and dance parties, 15%). Small proportions reported use at dealers' homes (11%), and at pubs (7%; refer to Figure 15).

Key expert comments

KE overwhelmingly indicated that base use was unseen or that they knew of no one using it. It appears to be less popular than the other forms of methamphetamine. Of those who indicated they had some knowledge regarding the use of base, it was reported that base was swallowed; one KE said that base was injected, though use was infrequent.

5.1.3 Crystal methamphetamine

Sixty-two percent of the 2005 sample reported having ever used crystal methamphetamine and two-fifths (40%) reported using crystal in the preceding six months. The median age of first crystal use was 21 years (14-40 years). There was a significant difference between males and females and age of initiation, with females using crystal significantly younger than males (19 vs. 25, $t = -4.457$, $df = 59.720$, $p < 0.001$). A small proportion (17%) reported lifetime crystal injection while 9% had injected crystal in the preceding six months. Ten respondents nominated crystal as their drug of choice; of those who reported using other drugs with ecstasy, 21% used crystal with ecstasy and of those who reported using other drugs to come down from ecstasy, 3% reported using crystal to come down from ecstasy. Sixty-eight percent reported using crystal once a month or less, while 30% reported using crystal between monthly and weekly; one respondent reported using crystal three times per week.

Most recent crystal users (n=35) described their use in terms of ‘points’ (typically thought of as 0.1g) while two quantified their use in terms of grams. Those who quantified their crystal use in terms of points reported for a ‘typical’ occasion of use a median of one point (range 0.30-6) and ‘heavy’ occasion of use a median of two points (range 0.33-10). Of those who reported bingeing (defined as the use of any stimulant for more than 48 hours continuously without sleep) in the preceding six months, 44% had used crystal while doing so, compared to 53% in 2004 and 37% in 2003.

The most common route of crystal administration was smoking (83%), although significant proportions also reported swallowing (35%), injecting (23%) and snorting (18%) crystal in the six months preceding the interview.

The prevalence of crystal appears to have stabilised or perhaps slightly decreased in 2005, though it is still higher than in the years from 2000 to 2003 (Table 12). Frequency of use appears to have increased slightly over time while quantity of crystal use seems to have remained relatively stable.

Table 12: Patterns of crystal methamphetamine use of REU, NSW

Crystal variable	2000 (n=94)	2001 (n=163)	2002 (n=88)	2003 (n=102)	2004 (n=104)	2005 (n=101)
Ever used (%)	12	43	43	56	68	62
Used last six months (%)	6	26	19	48	46	40
Of those who had used						
Median days used last 6 mths (range)	1 (1-20)	1 (1-50)	2 (1-15)	3 (1-96)	6 (1-120)	4 (1-72)
Median quantities used (points)						
Typical (range)	2 (1-3)	.25 (0.1-0.5)	1.5 (1-5)	1 (0.1-10)	1 (0.25-8)	1 (0.30-6)
Heavy (range)	2 (1-3)	1 (0.5-7)	2.5 (1-10)	1 (0.1-10)	2 (0.5-12)	2 (0.33-10)

Source: PDI Regular ecstasy user interviews

Crystal was most commonly used at own home (52%) and friends’ homes (47%), followed by nightclubs (31%), private parties (20%) and pubs (18%). Smaller proportions reported using crystal at dealers’ homes (16%), public places (12%), outdoors (12%), live music events (10%), acquaintances’ houses (10%), at work (6%), in saunas (4%) and in educational institutions (2%; refer to Figure 14).

Location of last occasion included respondents’ own homes (33%), friends’ homes (20%) and nightclubs (8%; Figure 14). Small proportions reported last using crystal in public places (6%), dealers’ homes (6%), acquaintances’ houses (4%) and raves (2%; refer to Figure 15). Speed was most often usually used at nightclubs, base was most often usually used at own home and nightclubs; and crystal was most often usually used at own home (refer to Figure 14). Speed was last used most often in friends’ homes and nightclubs, base was last used most often in respondents’ own homes and nightclubs, while crystal was most commonly last used at respondents’ own homes and friends’ homes (refer to Figure 15).

Key expert comments

KE reports regarding the proportion of crystal users varied, with a general range of 25%-40% reported to be using crystal, with other KE reporting that only a few REU were using crystal. This may be a reflection of the groups that KE have contact with. Those in health promotion or counselling were more likely to indicate that they knew more people using crystal. The most frequently cited route of administration was smoking, followed by a small proportion who injected. Some KE thought that crystal use was concentrated in the gay community with fewer heterosexuals using the drug; one KE noted that crystal use had become mainstream. KE also indicated a rise in the problems associated with crystal in the preceding six months. It was indicated that methamphetamine forms flow in a cycle: if speed increased it was because there was a lack of crystal available, and vice versa. One KE mentioned that crystal use was established in those who enjoyed it.

5.2 Price

Participants were asked 'How much are methamphetamines (speed, crystal and base) at the moment?' Over three-quarters (77%) of the 2005 sample were able to comment on the current price of methamphetamine powder (speed). Speed was commonly purchased in half grams and eight balls (3.5 grams). The median price paid for a gram of speed was \$60 (range \$30-\$200) (Table 13). Half grams were purchased for \$37.5 (range \$15-\$50) and eight balls for \$150 (range \$100-\$180). Of those who commented on the changes in speed price, nearly half (46%; 35% of the entire sample) reported the price had remained 'stable'; 10% (8% of the entire sample) reported that the price had 'decreased' and 8% (6% of the entire sample) reported that the price had 'increased'; 35% (27% of the entire sample) were unable to comment (Figure 16).

Nearly half the participants (46%) commented on the current price of base, the majority of who referred to its purchase in 'points' (Table 13). The median price paid for a point of base was \$30 (range \$10-\$200). Of those who commented, 44% (20% of the entire sample) reported that the price of base had remained 'stable', 11% (5% of the entire sample) reported that the price had 'decreased' and 2% (1% of the entire sample) reported that the price had 'increased'; 41% (19% of the entire sample) were unable to comment (Figure 16).

Fifty-one participants referred to the purchase of crystal in terms of points and grams (Table 13). The median price paid for a point of crystal was \$50 (range \$20-\$80) while a gram was purchased for a median of \$400 (range \$100-\$500). Of those who commented, 28% (14% of the entire sample) reported that the price had remained 'stable'; 24% (12% of the entire sample) reported that the price had 'increased'; 8% (4% of the entire sample) reported that the price had 'decreased'; 10% (5% of the entire sample) reported that the price had 'fluctuated'; and 31% (16% of the entire sample) were unable to comment (Figure 16).

Median price trends across sampling years are presented in Table 13. Prior to 2002, data concerning the price of speed was not collected in the regular ecstasy users' survey. Data suggested an increase in half-gram and a decrease in gram price of speed in the preceding 12 months; the 'point' price of base has decreased over time while crystal has decreased from \$50 (2003) to \$30 a point in 2005.

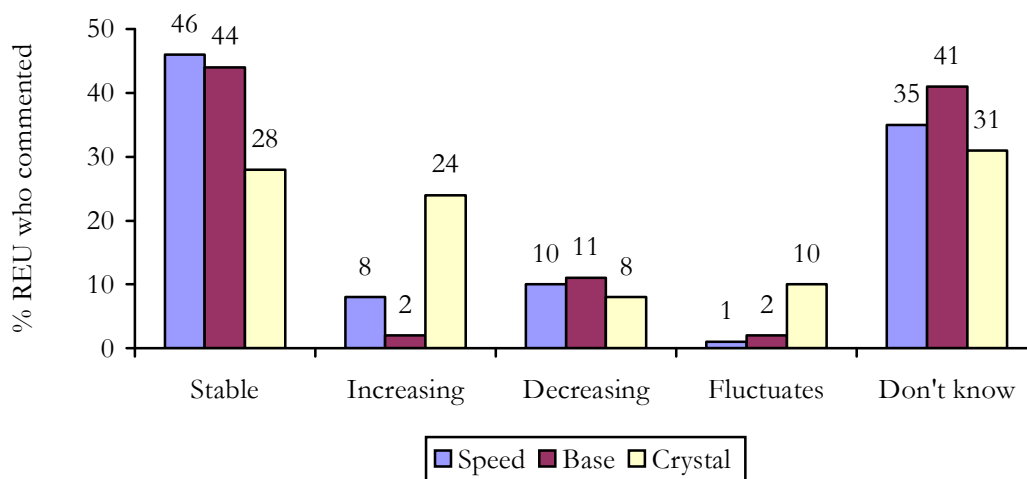
Table 13: Price of various methamphetamine forms purchased by REU, NSW

Median price (\$)	2001	2002	2003	2004	2005
Speed		n=59	n=46	n=60	n=78
Half gram	N/A	40 (30-50)	35 (25-50)	30(20-50)	37.5 (15-50)
Gram		60 (40-100)	55 (40-190)	60 (60-90)	60 (30-200)
Eight-ball (1/8 oz)		150 (75-750)	135 (100-180)	150 (100-250)*	150 (100-180)
Point		50(30-80)	30*	30 (20-40)*	40*
Base	n=22	n=23	n=24	n=30	n=51
Point	50 (10-80)	40 (20-50)	40 (20-50)	37.50 (20-70)	30 (10-200)
Gram	80 (60-80)	175 (100-325)	175 (150-300)	150 (100-200)	150 (100-260)
Half gram	100 (80-180)	62.5 (50-150)	50*	100*	50*
Five points	-	-	400*	75*	-
Eight-ball (3.5gms)	225*	140*	110 (70-150)*	600*	650*
Ounce	1100 (1000-1200)*	1200*	3000 (2500-4000)	2300*	1000*
Crystal	n=31	n=11	n= 21	n=34	n=51
Point	50 (20-70)	50 (40-70)	50 (30-70)	40 (25-100)*	50 (20-80)
Gram	250 (80-400)	160 (100-500)	250 (250-350)	200 (150-400)	400 (100-500)
Half gram	80 (80-250)	-	70 (40-150)	150*	-

Source: PDI Regular ecstasy user interviews 2005 n= 1

Figure 16 shows participants' reports on the recent changes in price of various methamphetamine forms purchased by regular ecstasy users. Large proportions reported the price as remaining 'stable' (speed 46%, base 44% and crystal 28%)

Figure 16: Recent changes in price of various methamphetamine forms purchased by REU, NSW 2005

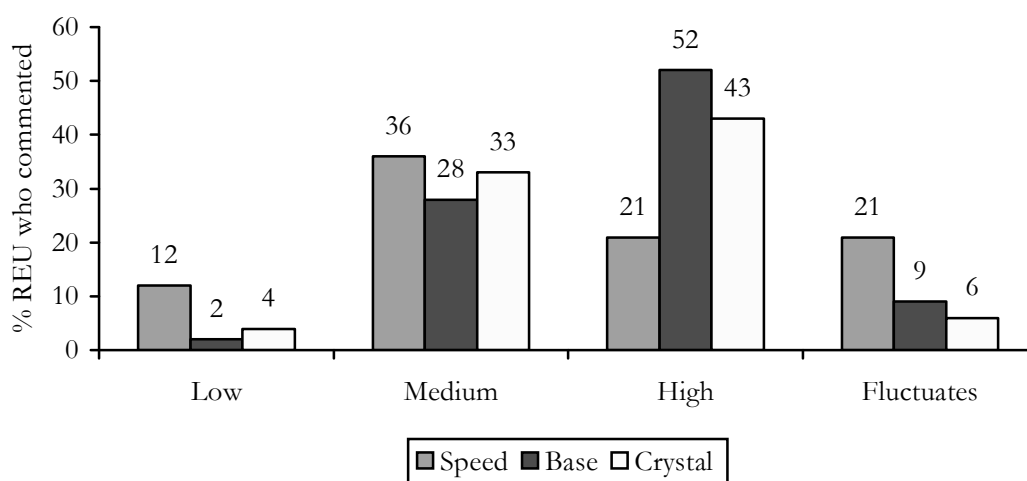


Source: PDI Regular ecstasy user interviews 2005

5.3 Purity

There appears to be slight variation between regular ecstasy users' estimates of the purity of all forms of methamphetamine. The majority of those who commented reported the purity of base (80%) and crystal (76%) to be 'medium' or 'high' while this was reported to be the case for speed by just over half of those who commented (57%; Figure 17). In 2004 no participants reported the purity of crystal to be fluctuating; however, in 2005 6% of those who commented reported that the purity of crystal had 'fluctuated'.

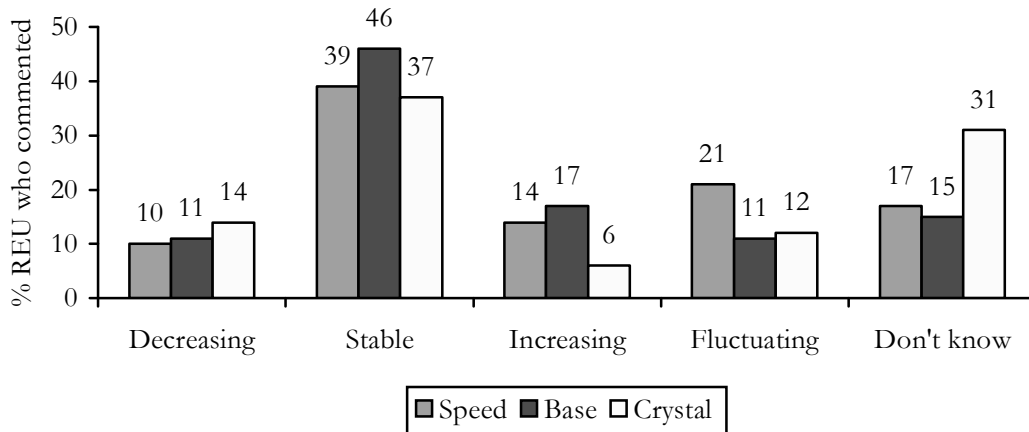
Figure 17: User reports of current methamphetamine purity, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

The majority of those who commented reported the purity of all forms of methamphetamine had remained 'stable' (speed 39%, base 46%, crystal 37%) during the preceding six months (Figure 18).

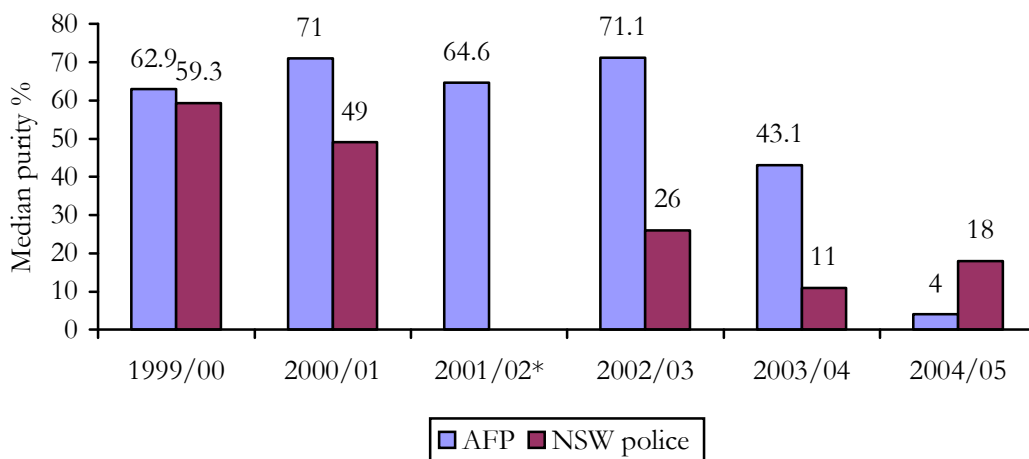
Figure 18: User reports of changes in methamphetamine purity in the past six months, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

Figure 19 represents the median purity of seizures obtained by the AFP and NSW police. The purity of seizures made by the AFP has remained high (over 60%) over time; however, in 2004/05 the purity reduced from 43.1% in 2003/04 to 4% in 2004/05, although these are based on a relatively small number of analysed seizures (see Figure 20). In contrast, the purity of methamphetamine seized by NSW police appears to have increased slightly from 11% in 2003/04 to 18% in 2004/05.

Figure 19: Median purity of methamphetamine seizures analysed in NSW 1999/00-2004/05.



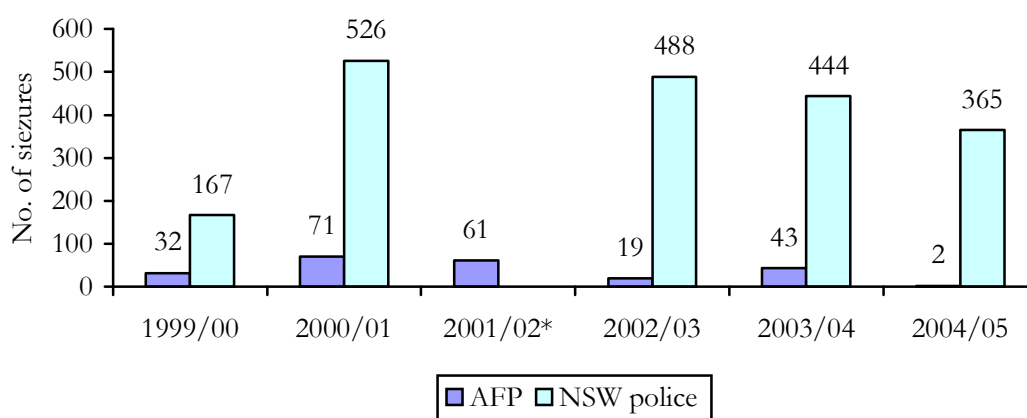
Source: Australian Bureau of Criminal Intelligence (2001, 2002), Australian Crime Commission (2003, 2004)

*NSW police data for 2001/02 was not available.

N.B. Since 2000/01, procedures to determine which seizures are analysed have changed, with those seized without an 'owner' and seizures of < 3g no longer being analysed.

Figure 20 shows the number of methamphetamine seizures by AFP and NSW police since 1999/00. The number of AFP methamphetamine seizures in NSW decreased from 43 in 2003/04 to 2 in 2004/05. NSW police seizure data was not available in 2001/02; however, the numbers of seizures by NSW police generally appear to have increased since 1999/00, reducing in 2004/05 to 365, from 444 in 2003/04. It should be noted that figures do not represent the purity levels of all methamphetamine 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 vs. street dealers, and this in turn can influence the purity of the drug seized.

Figure 20: Number of methamphetamine seizures analysed in NSW, 1999/00-2004/05



Source: Australian Bureau of Criminal Intelligence (1999-2002), Australian Crime Commission (2002-4)

*NSW police data for 2001/02 was not available.

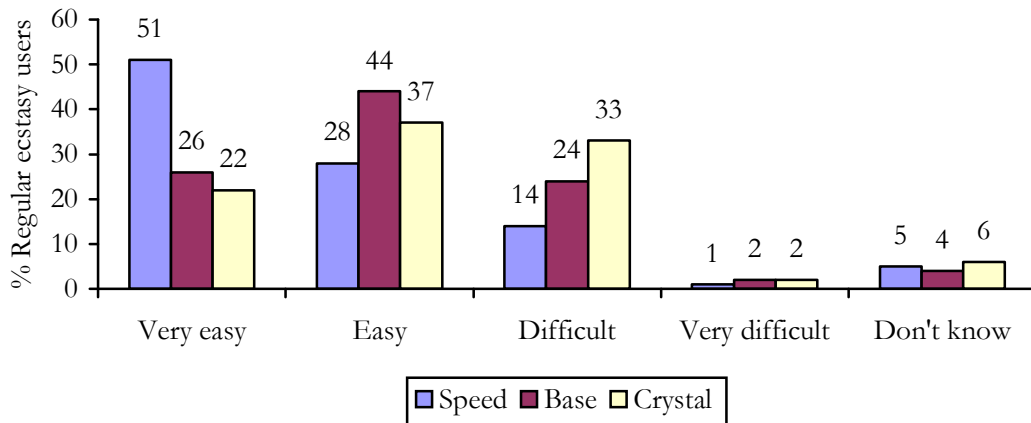
5.4 Availability

The majority of those who commented on the availability of speed reported it ‘easy’ (28%) or ‘very easy’ (51%) to obtain (Figure 21); most (69%) agreed speed availability had remained ‘stable’ over the preceding six months (Figure 22).

Conflicting reports were obtained for the current availability of base. Of those who commented, 44% reported base to be ‘easy’ to obtain while 24% reported it to be ‘difficult’ to obtain; 26% reported base to be ‘very easy’ to obtain (Figure 21). The majority thought the availability of base in the preceding six months had either remained ‘stable’ (50%) or had become ‘easier’ (33%) to obtain (Figure 22).

With regard to crystal, there were again conflicting reports, with 37% of those who commented reporting that crystal was ‘easy’ to obtain while 33% reported that it was ‘difficult’ to obtain; 22% reported crystal to be ‘very easy’ to obtain (Figure 21), and that the availability of crystal had remained ‘stable’ (37%) or had become ‘more difficult’ (24%) during the preceding six months; 20% reported the availability of crystal to have become ‘easier’ in the preceding six months (Figure 22).

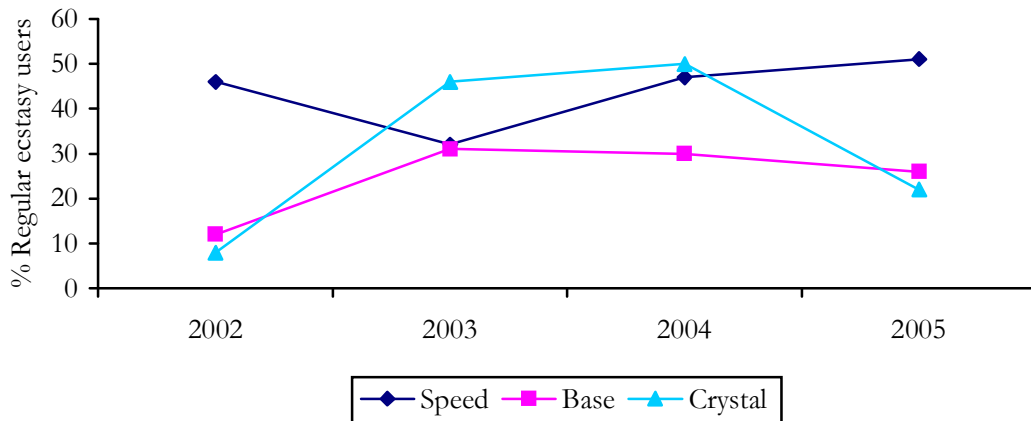
Figure 21: Current availability of methamphetamine forms, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

Figure 22 shows that, compared to the 2003 REU sample, larger proportions of the 2004 sample reported the availability of speed (32% vs. 47%) and (less markedly) crystal (46% vs. 50%) as ‘very easy’ to obtain. In contrast, the proportion of REU who reported base as ‘very easy’ to obtain did not change (31% vs. 30%). In 2005, the amount of respondents who believed speed to have been ‘very easy’ to obtain increased slightly, while those who reported crystal to be ‘very easy’ decreased. Base remained stable.

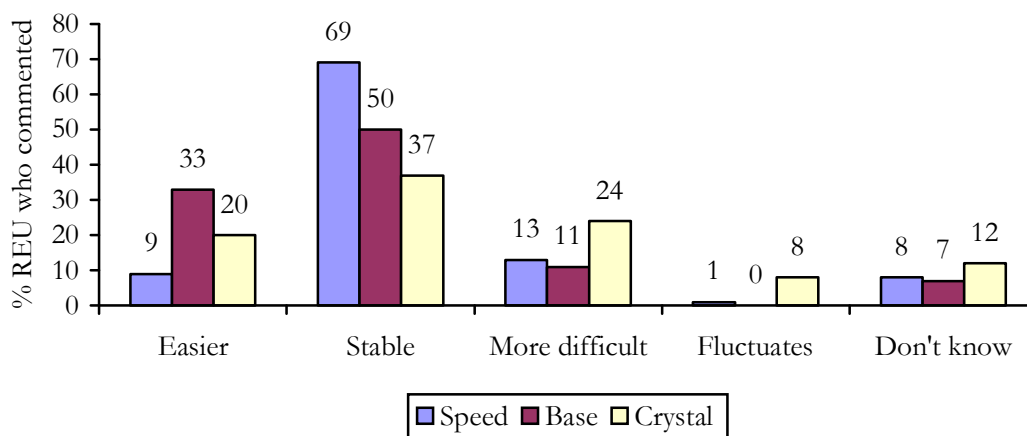
Figure 22: Changes to current availability over time: proportion of REU who report various forms of methamphetamine as ‘very easy’ to obtain in the six months preceding interview in NSW 2002-2005



Source: PDI Regular ecstasy user interviews 2002-2005

Figure 23 shows the majority of the 2005 sample reported the availability of speed and base had remained ‘stable’, while crystal was perceived to be ‘more difficult’ by slightly more of those who commented in the six months preceding interview, compared to the six months prior.

Figure 23: Change in the availability of various forms of methamphetamine in the preceding six months, NSW 2005



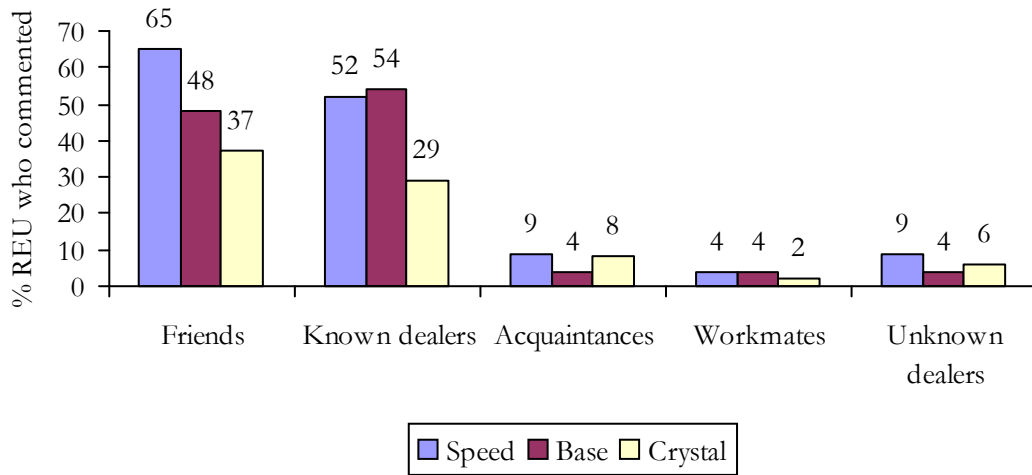
Source: PDI Regular ecstasy users' interviews 2005

Participants predominantly reported obtaining speed from friends (65%) or known dealers (52%; Figure 24). Other sources included people unknown to participants (9%), unknown dealers (9%) and acquaintances (9%). Locations at which speed was most often obtained were friends' homes (62%), dealers' homes (48%), agreed public location (27%), own home (25%), nightclubs (16%) and raves (including 'doofs' and dance parties (13%; Figure 25).

Base was commonly obtained from known dealers (54%) and friends (48%; Figure 24). A small number mentioned unknown dealers (4%), acquaintances (4%) and workmates (4%). The most common locations where base was purchased included dealers' homes (50%) and friends' home (31%) followed by an agreed public location (17%), own home (17%), nightclubs (13%), raves (including 'doofs' and dance parties; 11%), private parties (4%) and pubs (2%; Figure 25).

Crystal was commonly purchased from friends (37%) and known dealers (29%) with a small proportion mentioning acquaintances (8%) and unknown dealers (6%; Figure 24). Crystal was commonly obtained from friends' homes (35%), dealers' homes (28%) or agreed public locations (14%; Figure 25).

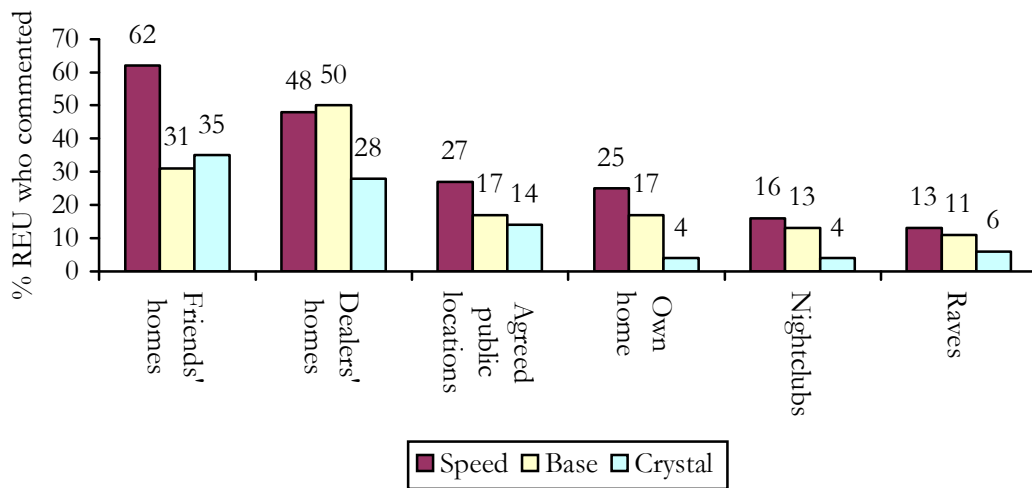
Figure 24: People from whom methamphetamine powder, base and crystal were purchased in the preceding six months, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

When asked to specify locations where methamphetamine was usually purchased, again reports were comparable across forms, with private residences including friends' and dealers' homes and agreed public locations the most commonly identified purchase locations (Figure 25). Small numbers reported purchasing methamphetamine in public places such as in nightclubs, at raves (including 'doofs' and dance parties) and pubs. Agreed public locations were also chosen as common places for purchasing methamphetamines.

Figure 25: Locations where methamphetamine purchased in the preceding six months, NSW 2005



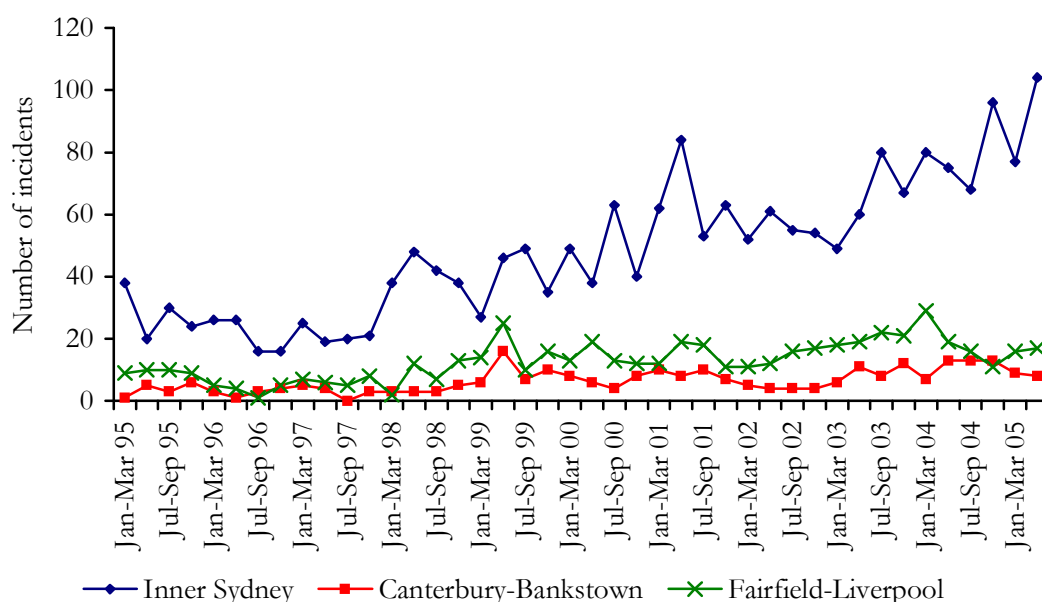
Source: PDI Regular ecstasy user interviews 2005

5.5 Methamphetamine-related harms

5.5.1 Law enforcement

Figure 26 shows that the number of police-recorded criminal incidents per quarter for amphetamine possession/use is higher in the Inner Sydney area than it is in Fairfield-Liverpool and Canterbury-Bankstown⁴. Recorded incidents in the Inner Sydney area have increased over the last two years, while they have remained fairly stable in Canterbury-Bankstown and Fairfield-Liverpool.

Figure 26: Recorded incidents of amphetamine possession/use by geographic area per quarter, January 1995-June 2005



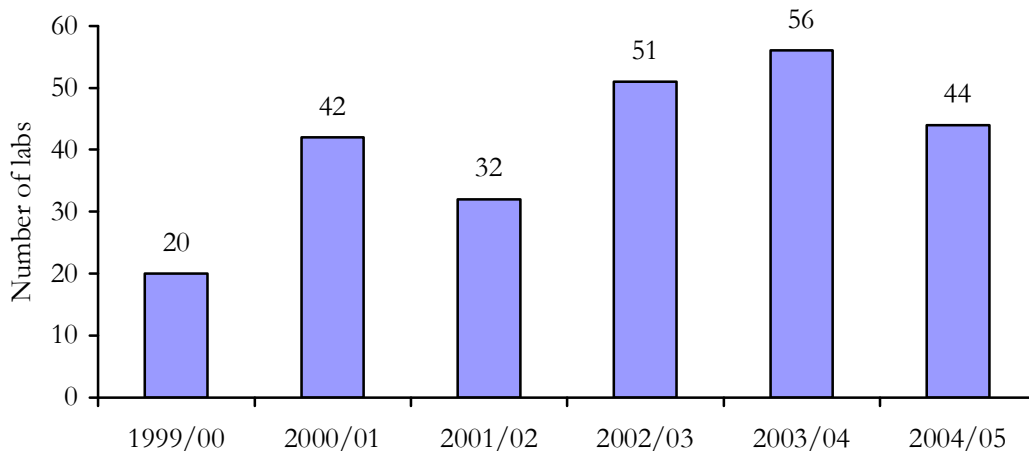
Source: NSW Bureau of Crime Statistics and Research

NB: Changes in the number of recorded incidents may be indicative of changes in police activity, or an increase in possession/use, or a reflection of both.

Figure 27 shows that the number of clandestine labs detected in NSW gradually increased over time from 20 in 1999/00 to 56 in 2003/04, before decreasing to 44 in 2004/05.

⁴ The regions Inner Sydney, Fairfield-Liverpool and Canterbury-Bankstown refer to ABS Statistical Subdivisions.

Figure 27: Number of clandestine methamphetamine and MDMA laboratories detected by NSW police 1999/00-2004/05

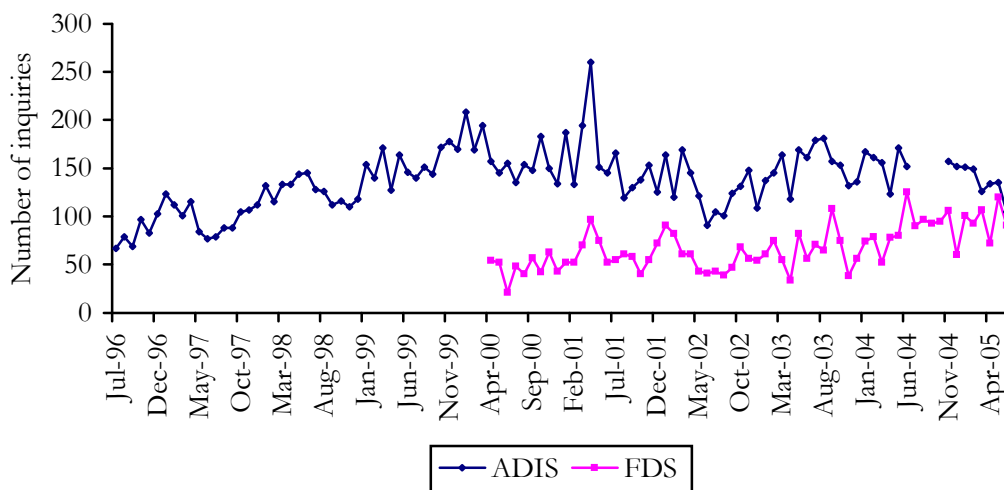


Source: NSW Police Service

5.5.2 Health

Figure 28 shows the number of calls to the ADIS and FDS lines regarding amphetamines. Similar to heroin, the number of enquiries to FDS regarding amphetamines was much lower than numbers received at ADIS during the period 2000 to 2003. Figures for ADIS remained relatively stable over the past three years, and were consistently higher than figures reported in the late 1990s. Calls to FDS have increased slightly over this period. Calls to both services regarding amphetamines increased in early 2001, simultaneous to the decrease in number of calls received regarding heroin. The proportion of calls to FDS relating to amphetamines has increased from approximately 15-20% in 1999 to 20-25% in 2005.

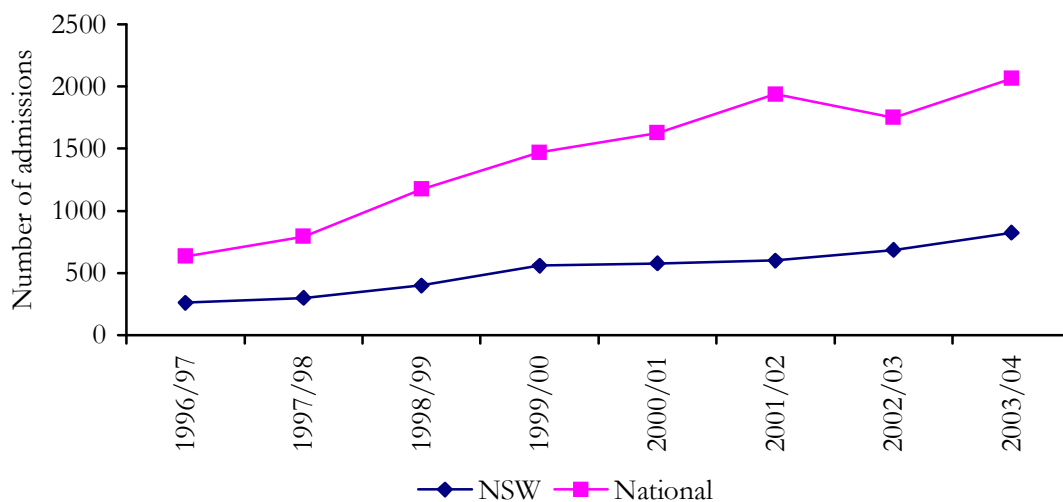
Figure 28: Number of inquiries to ADIS and FDS regarding amphetamines, 1996-2005



Source: NSW Alcohol and Drug Information Service and Family Drug Support
 Note: Data for ADIS from July-October 2004 are unavailable due to database changes

The number of inpatient hospital admissions among persons aged 15-54 years in which amphetamines were the principal diagnosis is shown in Figure 29 below. As outlined previously, diagnoses for the period 1998 to 2004 were recorded using ICD-10-AM codes, and, prior to this, ICD 9 CM was used to code hospital separations. A principal diagnosis is defined as having been chiefly responsible for occasioning the patient's episode of care in hospital. Figures have steadily increased over the study period in both NSW (from 260 in 1996/97 to 824 in 2003/04) and nationally (from 633 in 1996/97 to 2,066 in 2003/04).

Figure 29: Total number of inpatient hospital admissions for persons aged 15-54 where amphetamines were the principal diagnosis, NSW and nationally, 1996/97-2003/04

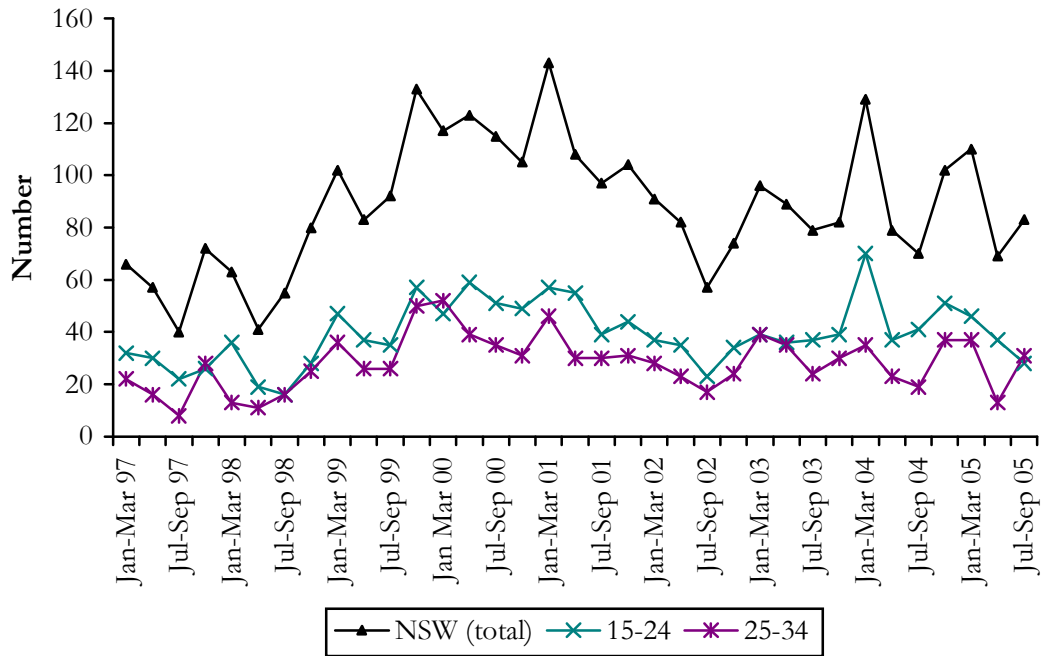


Source: National Hospital Morbidity Database; Roxburgh & Degenhardt (in press)

Overdose

The total numbers of amphetamine-related overdose presentations to NSW emergency departments have fluctuated over time (Figure 30). The two age groups that account for the majority of amphetamine-related overdoses are 15-24 and 25-35 year olds. This is consistent with other evidence suggesting that methamphetamine use may be particularly concentrated among these age groups.

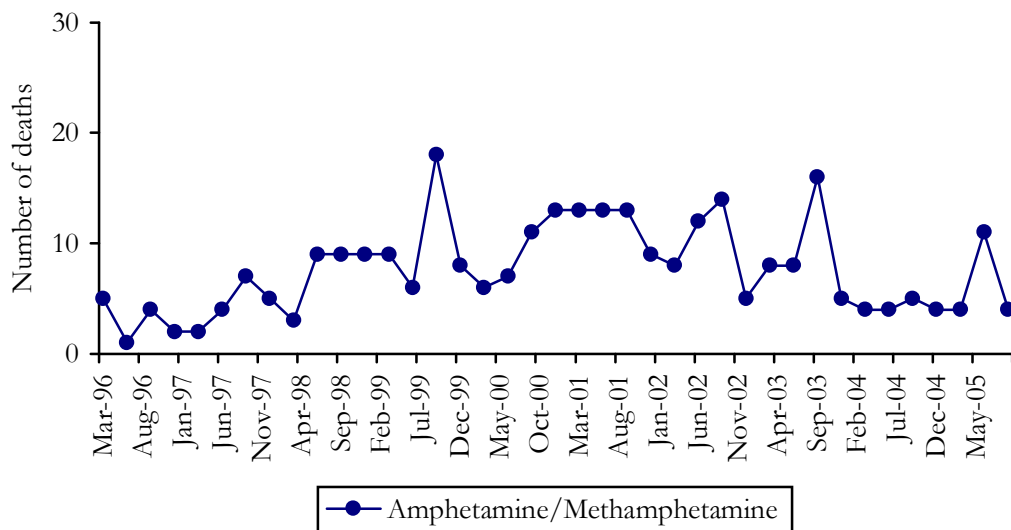
Figure 30: Amphetamine overdose presentations to NSW emergency departments by age group, January 1997-September 2005



Source: Emergency Department Information System, NSW Department of Health

The number of drug-related deaths in which methamphetamine has been detected has remained low and appears to have fluctuated over time (Figure 31).

Figure 31: Number of suspected drug-related deaths in which methamphetamine was detected in post-mortem March 1996-September 2005

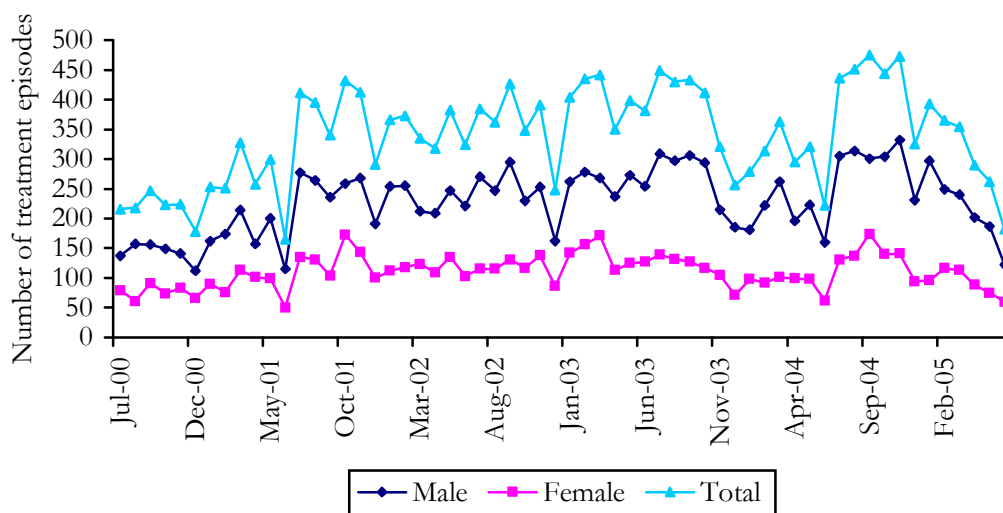


Source: Forensic Toxicology Laboratory database, Division of Analytical Laboratories

N.B. These numbers relate to deaths in which methamphetamine was detected; however, there may have also been other drugs present

The number of closed treatment episodes based on date of commencement where amphetamine was the principal drug of concern have increased over time, although they have decreased in the preceding 12 months (Figure 32). Males account for a greater proportion of this total compared to females.

Figure 32: Number of ATS treatment episodes by gender, NSW July 2000-June 2005



Source: NSW MDS DATS, NSW Department of Health

N.B. 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.

5.5.3 Prohibition of smoking paraphernalia

In 2006 the New South Wales State Government will seek to amend section 11A of the *Drug Misuse and Trafficking Act 1985*, which relates to the prohibition of the sale, supply and display of waterpipes (commonly known as ‘bongs’, which are frequently used to smoke cannabis). The sought amendment will seek to extend the operation of this section to ice pipes (also known as ‘crack pipes’), which can be used for the smoking or inhaling of the smoke or fumes resulting from the heating or burning of crystal meth.

The prohibition of the sale of these pipes raises the issue of safe administration of illicit substances. Amongst recent crystal users, 83% had smoked crystal in the preceding six months compared with 23% who had injected crystal in the preceding six months. Thus, smoking crystal appears to be the route of administration favoured amongst crystal users, and the prohibition of the sale and use of pipes may lead to some crystal users changing their route of administration. Given that just over one-quarter (27%) of the 2005 PDI sample had injected any drug, there may be some cause for concern regarding non-injectors experimenting with this route of administration. Future surveys will ensure to monitor the trends in preferential routes of administration.

5.6 Summary of methamphetamine trends

- Lifetime use of crystal decreased slightly, as did the recent use of both crystal and speed. However, recent use of base increased slightly. Females first used all forms of methamphetamines at a significantly younger age than males.
- KE reports of speed use suggested that fewer REU were using speed. KE overwhelmingly indicated that base was rarely used. KE reports of crystal use varied. There was an indication from KE that speed and crystal use cycled depending on which form of methamphetamine was available.
- Speed and base were most commonly used in nightclubs, followed by friends' homes or own homes. Crystal was most commonly used in own home and friends' homes.
- Speed was most commonly purchased in gram amounts for a median of \$60, an increase from \$55 in 2003 and remaining stable from 2004. A 'point' of base was purchased for \$30, a further reduction from \$37.50 in 2004 and \$40 in 2003, and the price of crystal increased to \$50 a 'point' from \$40 in 2004. More than half the respondents were able to comment on price changes, perhaps reflecting increased exposure to these drugs.
- The purity of all forms of methamphetamine were reported by most respondents to be of 'high' or 'medium' purity and the majority reported that the purity had remained 'stable' over the preceding six months. AFP seizure data also shows methamphetamine purity has dropped dramatically from 43% in 2003/04 to 4% in 2004/05; however, numbers were small.
- Speed was reported as 'very easy' or 'easy' to obtain, while base was reported to be 'easy' or 'difficult' to obtain. Crystal was reported as 'easy' or 'difficult' to obtain. The majority reported the availability of all methamphetamines had remained 'stable' during the preceding six months.
- All forms of methamphetamine were most commonly purchased from friends and known dealers and most likely to have been purchased from private residences including friends' and known dealers' homes.
- Indicator data showed a somewhat mixed picture with regard to amphetamine use, although all data showed increases during 2001. The majority of indicators have remained stable/continued to fluctuate, e.g. recorded incidents of possession/use in NSW as a whole, calls to ADIS (telephone helpline, overdose presentations) or increased slightly (e.g. recorded incidents of possession/use in inner Sydney, calls to FDS telephone helpline regarding methamphetamine, inpatient hospital admissions) over the past year. Seizure data from NSW police suggest a slight increase in purity over the preceding twelve months.

6.0 COCAINE

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 (little or no 'crack' cocaine is available or used in this country) (Australian Crime Commission, 2003). 'Crack' is a form of freebase cocaine (hydrochloride removed) which is particularly pure. Cocaine is a stimulant, like methamphetamine.

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.

Two-thirds of the 2005 sample of regular ecstasy users reported lifetime (76%) cocaine use, and more than half (55%) reported the use of cocaine in the six months preceding interview. The median age at which cocaine had first been used was 21 years (range 14-40 years). There was a significant difference between males and females regarding age of initiation, with females using cocaine at a younger age than males (20 vs. 22, $t = -2.949$, $df = 74.572$, $p < 0.01$), and heterosexual respondents were significantly more likely to report a younger age of initiation than homosexual/bisexual respondents (22 vs. 23, $t = -2.063$, $df = 74$, $p < 0.05$). A small number reported having injected cocaine (11%).

6.1 Cocaine use among REU

Fifty-six recent cocaine users reported a median of 2.5 days (range 1-84) of use in the preceding six months. The majority (82%) had used cocaine once a month or less, 14% had used cocaine approximately between once per month and once per week, while 4% reported using cocaine more than three times per week. Cocaine was reported as the drug of choice for 18% of respondents.

The majority of recent cocaine users quantified amounts used in terms of grams; 27 respondents reported using a median of one gram (range 0.25-10) during a 'typical' occasion of use and one gram (range 0.25-12) during a 'heavy' use period. Twenty-seven respondents referred to lines; a median of four lines of cocaine were used during a 'typical' occasion of use in the preceding six months (range 1-6) while 4.5 lines were used in a 'heavy' occasion of use (range 1-10). One respondent referred to points and one respondent referred to bumps; however, due to the low frequency of response, these data will not be reported. More than one-quarter (28%) of those who had recently binged on ecstasy and related drugs reported bingeing on cocaine.

Most (98%) respondents reporting recent cocaine had used cocaine intranasally. Cocaine had been swallowed by over a quarter (27%) of those who had used cocaine in the preceding six months; small portions reported injecting (7%; $n=4$), smoking (4%; $n=2$) and shelving (2%; $n=1$) cocaine in the preceding six months.

The prevalence of lifetime cocaine use remained stable across time, although the data suggest a reduction in reports of recent cocaine use since 2002 (Table 14). However, frequency of recent use appears to have increased in 2005 (55%) compared to 2003 (46%) and 2004 (46%). Quantity of cocaine use in a 'typical' and 'heavy' session of use was comparable between sampling years.

Table 14: Patterns of cocaine use of REU, NSW

Cocaine variable	2000 (n=94)	2001 (n=163)	2002 (n=88)	2003 (n=102)	2004 (n=104)	2002 (n=101)
Ever used %	78	77	80	78	79	76
Used last six months%	53	57	64	46	46	55
Of those who had used						
Median days used last 6 mths (range)	4 (1-90)	3 (1-96)	4 (1-48)	2 (1-24)	3 (1-48)	2.5 (1-84)
Median quantities used (grams)						
Typical (range)	0.25 (0.1-7)	0.5 (0.1-3)	0.5 (0.1-3.5)	0.5 (.25-2)	0.5 (0.13-2.5)	1 (0.25-10)
Heavy (range)	0.5 (0.1-26)	1 (0.1-7)	0.5 (0.1-10)	1 (0.3-5)	1 (0.13-4)	1 (0.25-12)

Source: PDI Regular ecstasy user interviews 2005

In 2005 cocaine was most frequently used in friends' homes (56%; Figure 33). This was followed by users' own homes (42%) and nightclubs (39%). Other areas also included pubs (29%), private parties (24%), live music events (14%) and at raves (including 'doofs' and dance parties, 9%) and outdoors (9%). Other less frequently cited locations include dealers' homes (7%).

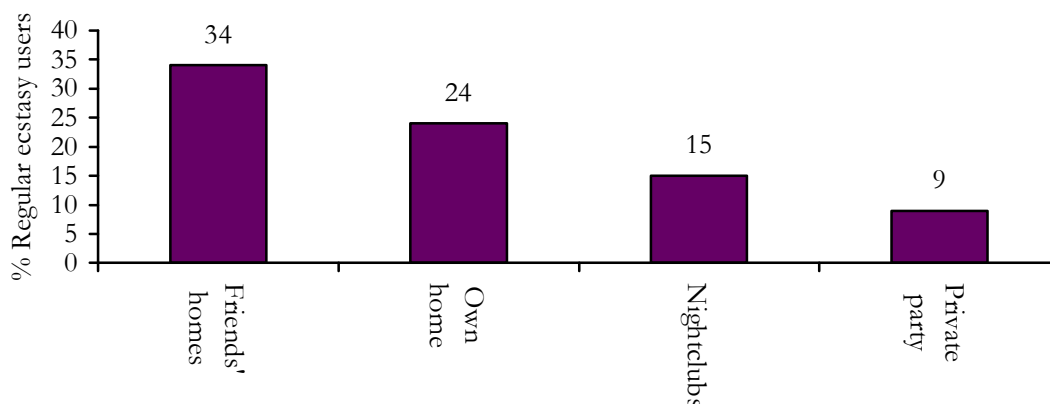
Figure 33: Usual location of cocaine use, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

Consistent with the usual location of use, common locations of last cocaine use were friends' homes (34%), respondents' own homes (24%), nightclubs (15%) and private parties (9%; Figure 34).

Figure 34: Location of most recent cocaine use, NSW 2005

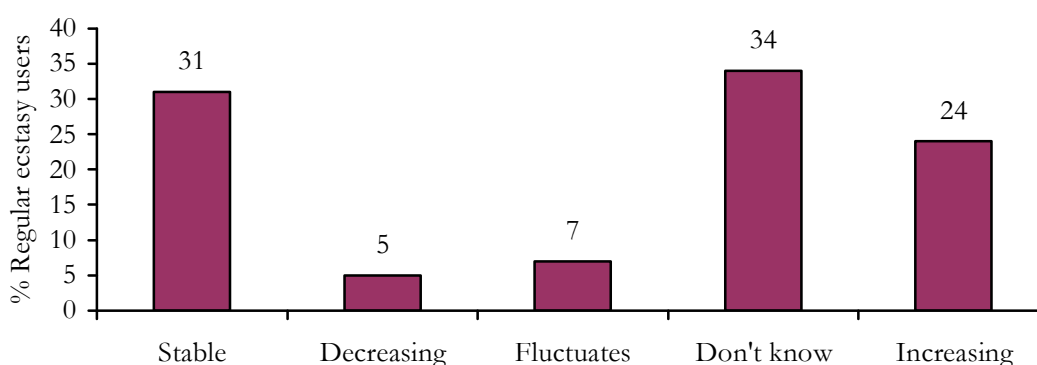


Source: PDI Regular ecstasy user interviews 2005

6.2 Price

Thirty respondents were able to comment on the price of cocaine in 2005, which was most commonly purchased in grams (n=30), and was reported as having a median price of \$270 (range \$70-\$500). Small proportions of respondents commented on the price of half weight (n=2), eight-ball (n=1), bag (n=1), half gram (n=1) and rock (n=1); however, due to the small frequencies these will not be reported. Of those who commented, 31% (18% of the entire sample) reported that the price of cocaine had remained 'stable' in the preceding six months while 24% (14% of the entire sample) reported that the price had 'increased'. Seven percent (4% of the entire sample) reported that the price had 'fluctuated' while 5% (3% of the entire sample) reported that the price had 'decreased'. One-third (34%; 20% of the entire sample) were unable to comment (see Figure 35).

Figure 35: Recent changes in price of cocaine purchased by REU, NSW 2005



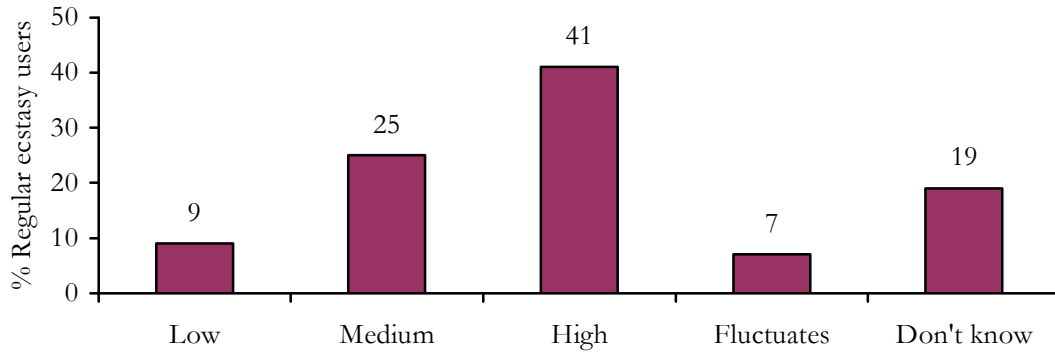
Source: PDI Regular ecstasy user interviews 2005

6.3 Purity

There was variability in the reports of the current purity of cocaine by those who commented in 2005. While 41% (24% of the entire sample) reported that the current purity was 'high', 25% (15% of the entire sample) reported it as 'medium' and 9% (5% of the entire sample) reported it as 'low'; 7% (4% of the entire sample) reported the current

purity to be fluctuating and 19% (11% of the entire sample) were unable to comment (Figure 36).

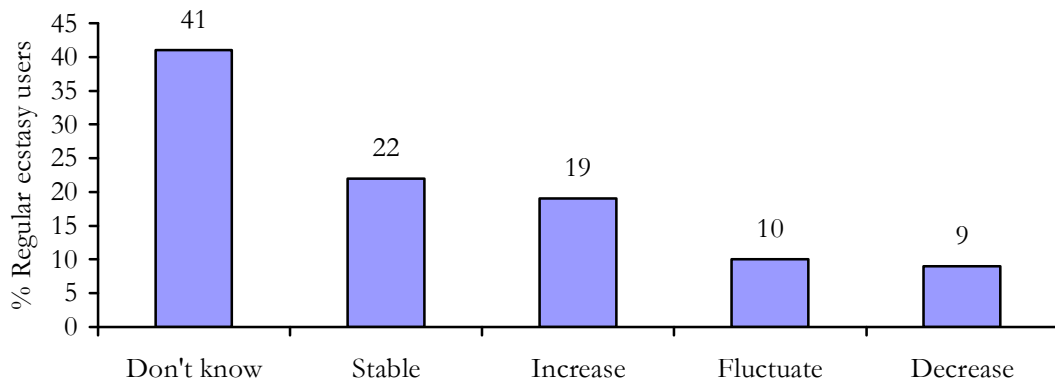
Figure 36: User reports of current purity of cocaine, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

Most users were unable to comment on the purity change in the preceding six months (41%; 24% of the entire sample). Of those who commented, nearly one-quarter believed the purity of cocaine had remained 'stable' (22%; 13% of the entire sample) in the preceding six months, while others reported it to have 'increased' (19%; 11% of the entire sample) or 'fluctuated' (10%; 6% of the entire sample; Figure 37).

Figure 37: User reports of changes in cocaine purity in the past six months, NSW 2005

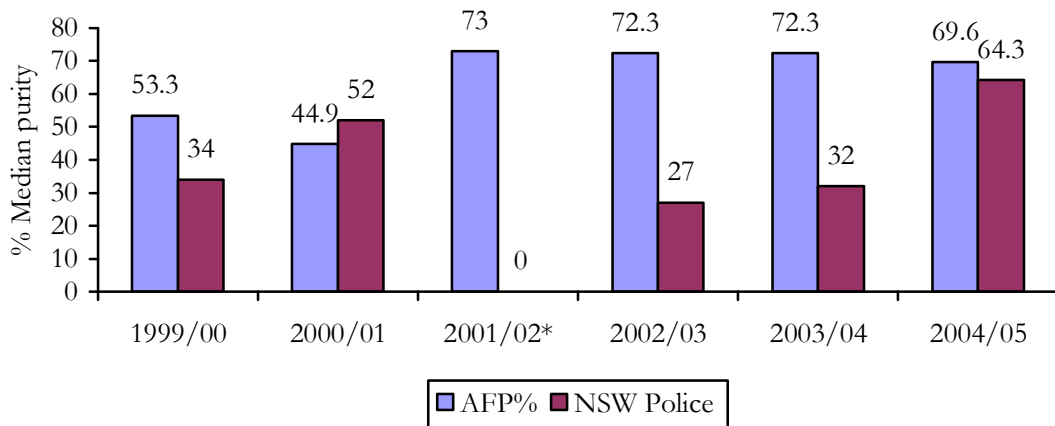


Source: PDI Regular ecstasy user interviews 2005

Figure 38 presents the median purity of cocaine seizures made by the AFP and NSW police between the financial years 1999/00 to 2004/05. The purity of the cocaine seized and analysed by the AFP during this time increased from 1999/00 and remained stable (approximately 70%) from 2001/02 to 2004/05. Purity of seizures made by NSW police (which are analysed by the Division of Analytical Laboratories) have varied during this period, increasing from 32% in 2003/04 to 64.3% in 2004/05, the highest level ever recorded. 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 vs. street dealers, and this in turn can influence the purity of the drug seized.

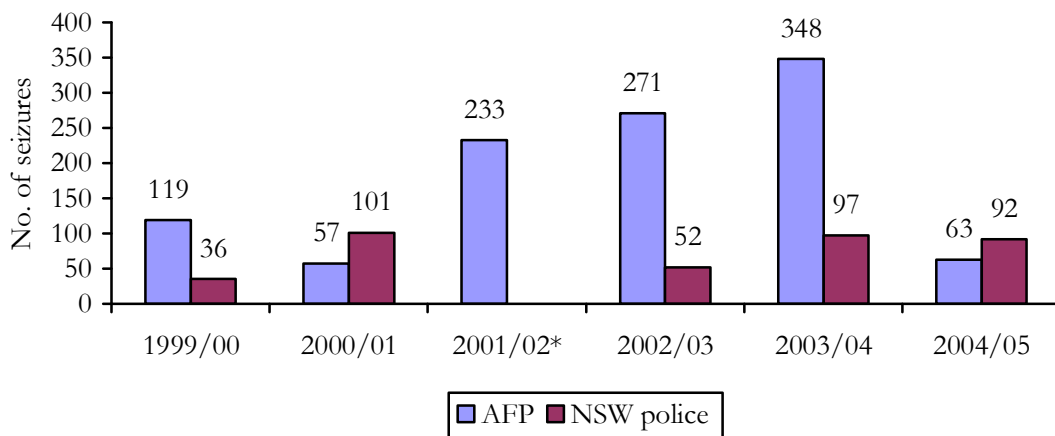
Figure 38: Median purity of cocaine seizures analysed in NSW 1999/00-2004/05



Source: Australian Bureau of Criminal Intelligence (2001, 2002), Australian Crime Commission (2004) *NSW police data for 2001/02 was not available.

The number of cocaine seizures analysed by the AFP has increased over time, reaching a peak of 348 seizures analysed in 2003/04. This number reduced dramatically to 63 in 2004/05 (Figure 39). In contrast, the number of seizures analysed by NSW police has been relatively lower, remaining stable at 92 analysed seizures in 2004/05 (97 in 2003/04).

Figure 39: Number of cocaine seizures analysed in NSW, 1999/00-2004/05



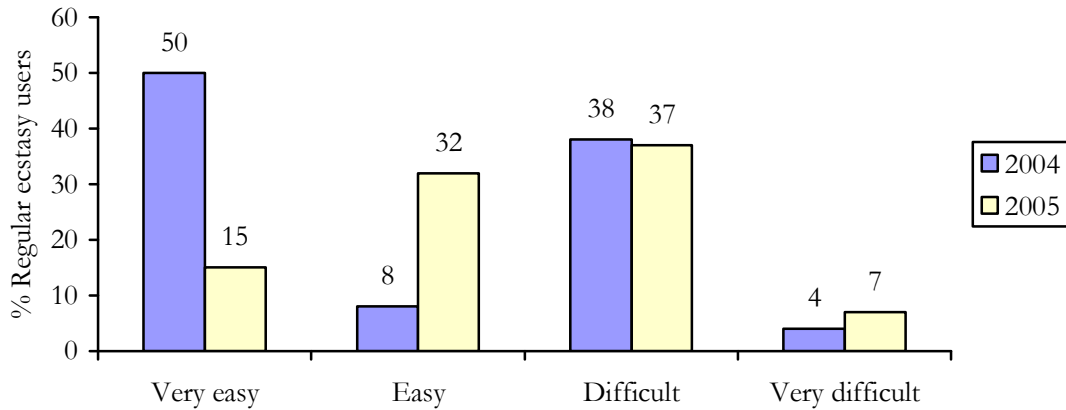
Source: Australian Bureau of Criminal Intelligence (2001, 2002), Australian Crime Commission (2004) *NSW police data for 2001/02 was not available.

6.4 Availability

There were conflicting reports about the current availability of cocaine from the fifty-nine respondents who commented (Figure 40). Over one-third (37%; 22% of the entire sample) reported that cocaine was ‘difficult’ to obtain while one-third (32%; 19% of the

entire sample) reported that cocaine was ‘easy’ to obtain. Fifteen percent (9% of the entire sample) reported cocaine as ‘very easy’ to obtain, 7% (4% of the entire sample) reported it as ‘very difficult’ to obtain, and 9% (5% of the entire sample) were unable to comment.

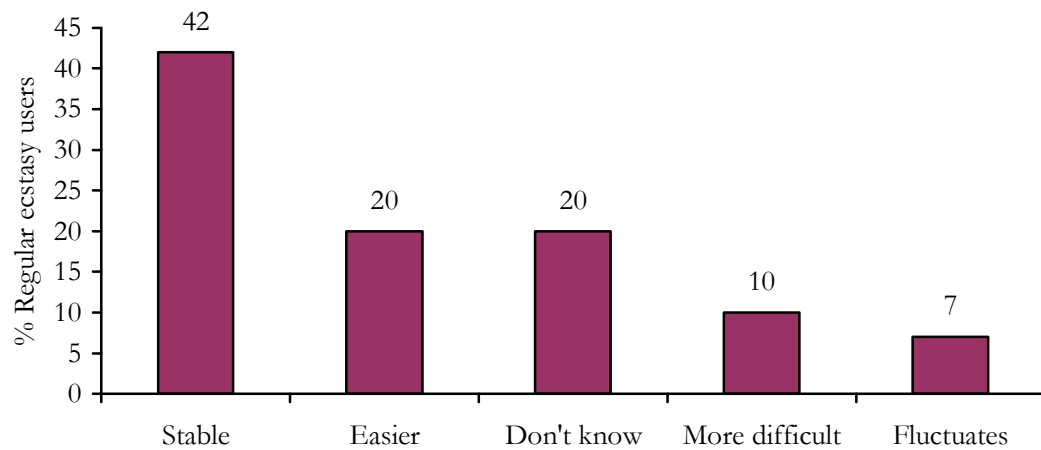
Figure 40: Current availability of cocaine, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

Most of those who commented (42%; 25% of the entire sample) reported that the availability of cocaine had remained ‘stable’ in the preceding six months, while 20% (12% of the entire sample) reported it had become ‘easier’ in the preceding six months (Figure 41).

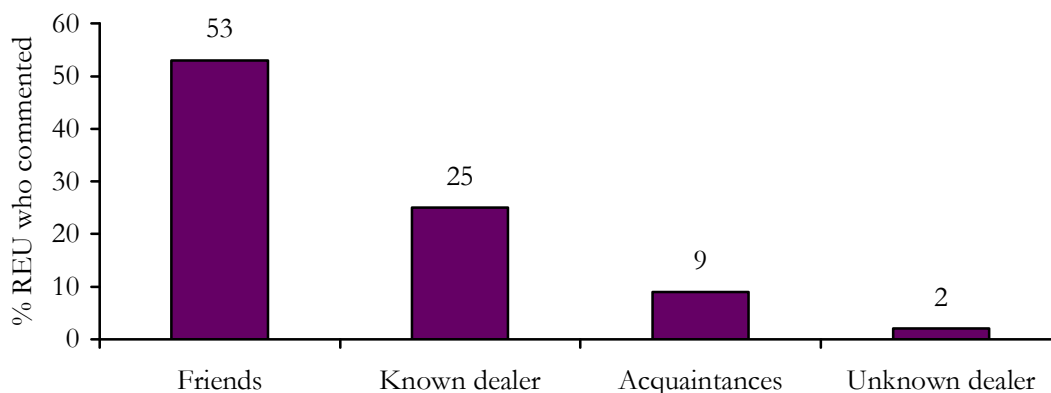
Figure 41: Changes in cocaine availability in the preceding six months, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

When asked to specify whom cocaine had been obtained from in the preceding six months, over half of the recent cocaine users reported friends (53%), while one-quarter nominated known dealers (25%; Figure 42).

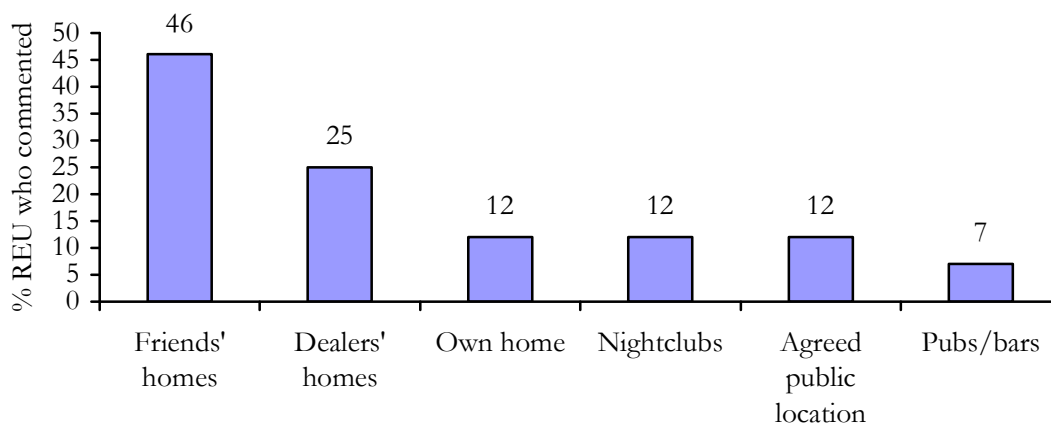
Figure 42: People from whom cocaine had been purchased the preceding six months, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

When asked to specify the locations cocaine had been purchased in the preceding six months, the most common locations reported were friends' homes (46%) and dealers' homes (25%; Figure 43). Users' own home (12%), nightclubs (12%) and agreed public location (12%) were also reported. Pubs, private parties and acquaintances' homes were also reported, though by a small number of participants.

Figure 43: Locations where cocaine had been purchased in the preceding six months, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

Key expert comments

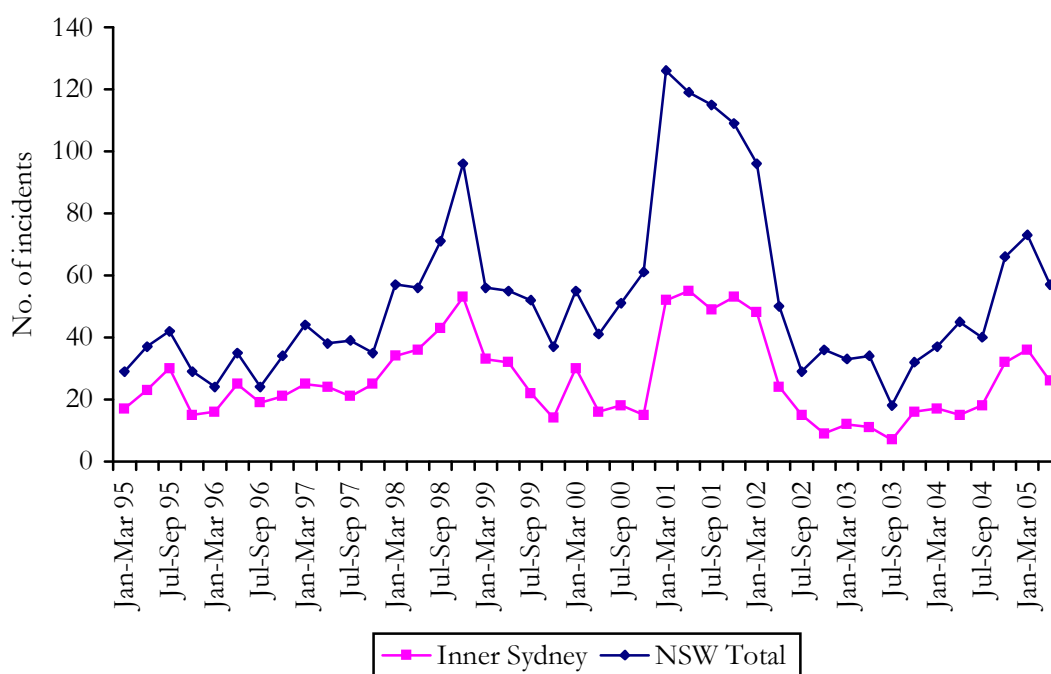
While there were a few reports that cocaine was used by 20-25% of REU, there was agreement amongst the majority of KE that cocaine is used by only a few REU. KE reports suggest that cocaine is used as a 'special occasion' drug because it is expensive. Cocaine use was seen to be sporadic; people mostly used if it was a gift for a special event such as a birthday. All the KE who commented reported that cocaine was snorted. KE reports indicate that cocaine purity is average to medium, though the purity can vary. The availability of cocaine was reportedly easy, though, again, its high cost appears to make its use less frequent.

6.5 Cocaine-related harms

6.5.1 Law enforcement

The number of cocaine-related possession/use incidents recorded by NSW police largely occurred in the Inner Sydney area. Incidents of cocaine possession and/or use in the Inner Sydney area peaked in mid-2001. Since the beginning of 2002, there has been a gradual decrease in the number of incidents recorded in Inner Sydney. In the past twelve months there has been a slight increase in the number of incidents in the Inner Sydney area (Figure 44).

Figure 44: Incidents of cocaine possession/use by geographic area, January 1995-June 2005

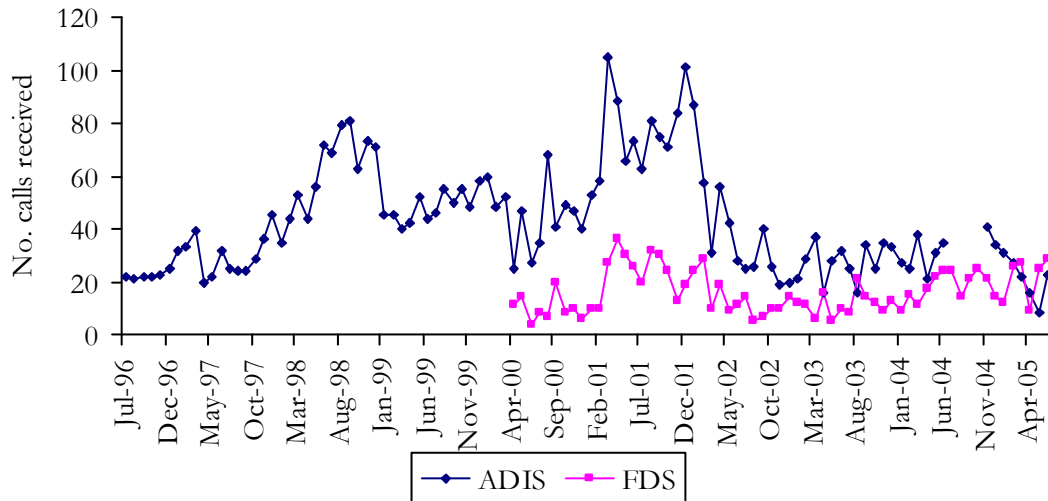


Source: NSW Bureau of Crime Statistics and Research (BOCSAR)

6.5.2 Health

Numbers of cocaine-related calls received by ADIS and FDS have fluctuated over time, although they appear to have remained stable since early 2002. They remain lower than numbers recorded throughout 2001 (Figure 45).

Figure 45: Number of inquiries to ADIS and FDS regarding cocaine, 1996-2005

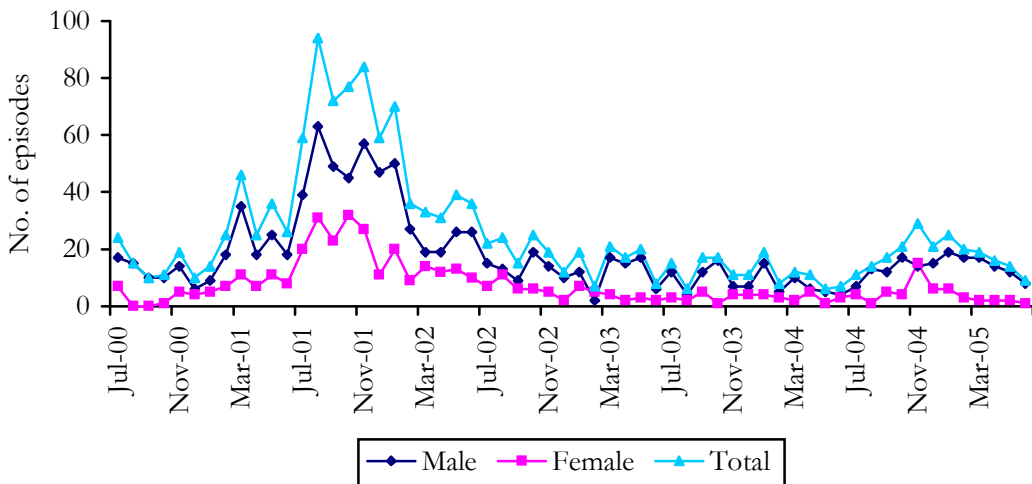


Source: Alcohol and Drug Information Service and Family Drug Support

N.B. Family Drug Support data was only available from April 2000. Due to database changes, ADIS data from July 2004-October 2004 has not been presented.

The number of cocaine-related treatment episodes based on date of commencement has fluctuated over the preceding 12 months, with a rise occurring in late 2004-early 2005 (possibly coinciding with the ‘party season’) before decreasing mid-2005 (Figure 46).

Figure 46: Number of cocaine treatment episodes by gender, NSW July 2000-June 2005



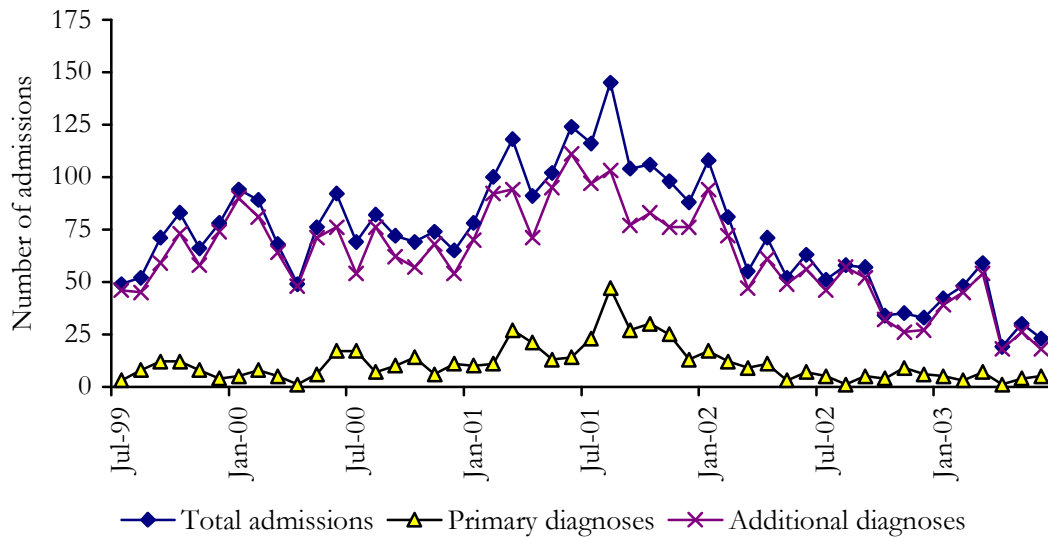
Source: NSW MDS DATS, NSW Department of Health.

N.B. 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.

The number of inpatient hospital separations in which cocaine was implicated as a principal and/or an additional diagnosis are shown in Figure 47. As outlined previously, diagnoses are based on ICD-10 (Second Edition) codes, and it is possible for one

admission to have cocaine as both a principal and as an additional diagnosis⁵. Similar to PDI data and other indicators, figures have remained lower over the past two years, following a peak in admissions during 2001.

Figure 47: Total number of inpatient hospital admissions in persons aged 15-54 where cocaine was implicated, NSW 1999-2004

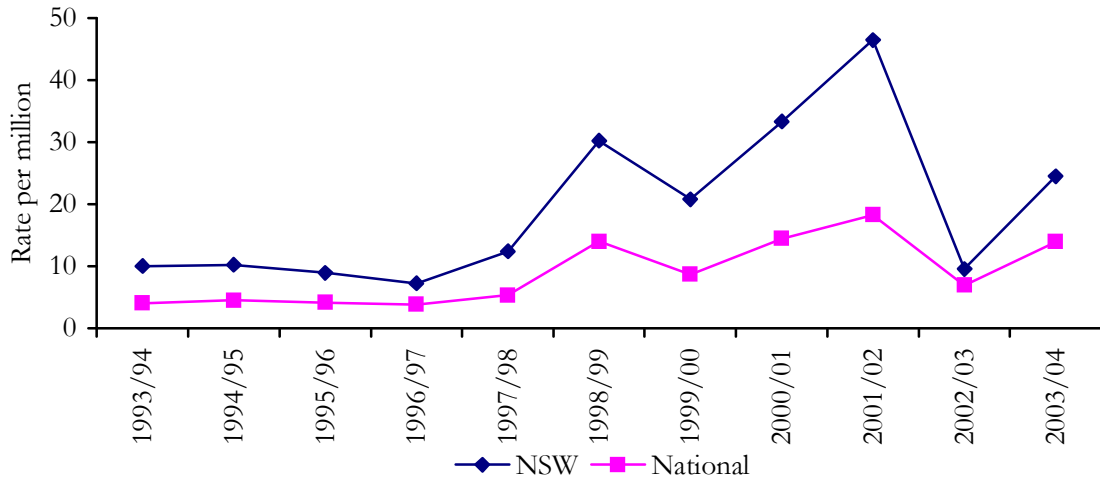


Source: National Hospital Morbidity Database; Roxburgh & Degenhardt (in press)

The rates of inpatient hospital admissions where cocaine was the principal diagnosis per million people aged 15-54 years are shown in Figure 48 below. In accordance with PDI and other indicators, rates in NSW peaked in 2001, and decreased quite markedly between 2001/02 and 2002/03. While there appears to be an increase in 2003/04, levels have not reached that seen in 2001.

⁵ Principal diagnosis: the diagnosis established (after study) to be chiefly responsible for occasioning the patient's episode of care in hospital. Additional diagnosis: a condition or complaint either co-existing with the principal diagnosis or arising during the episode of care.

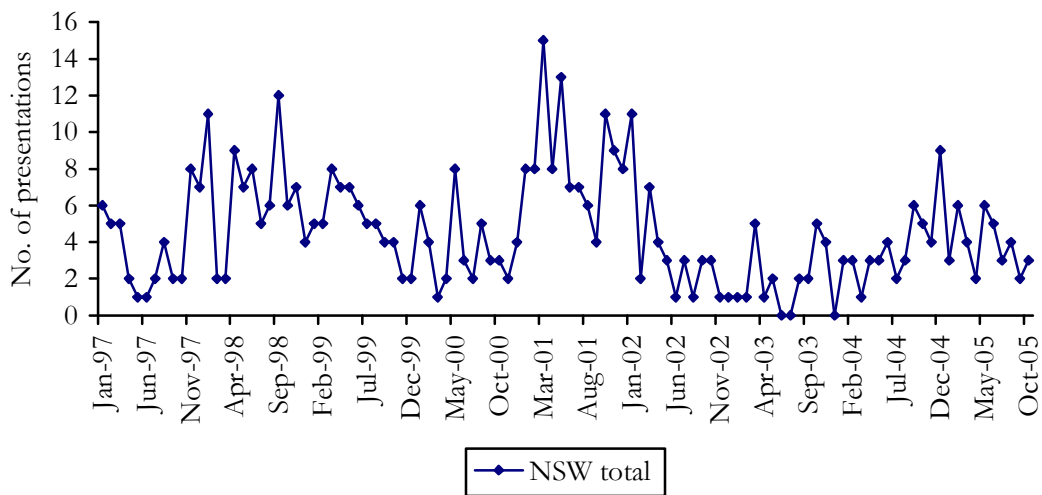
Figure 48: Rate of inpatient hospital admissions where cocaine was the principal diagnosis per million people aged 15-54 years, NSW and nationally, 1993/94 to 2003/04



Source: National Hospital Morbidity Database; Roxburgh & Degenhardt (in press)

Cocaine overdose presentations at NSW emergency departments have also remained stable over the preceding 12 months, although somewhat lower than those presenting throughout 2001 (Figure 49).

Figure 49: Cocaine overdose presentations to NSW emergency departments, January 1997- October 2005

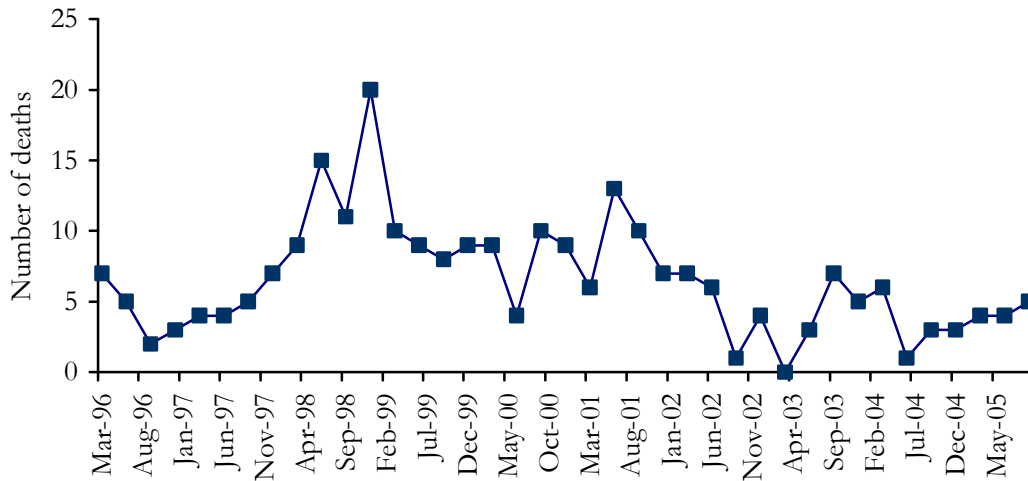


Source: Emergency Department Information System, NSW Department of Health

Mortality

The number of suspected drug-related deaths in which cocaine was detected has fluctuated over time, although the number appears to have decreased since mid-2001, remaining at less than five per quarter since that time (Figure 50). There has been a slight upward trend since June 2004.

Figure 50: Number of suspected drug-related deaths where cocaine was detected post-mortem, March 1996-September 2005



Source: Forensic Toxicology Laboratory database, Division of Analytical Laboratories

6.6 Summary of cocaine trends

- Prevalence of lifetime cocaine use remained stable across time, though this slightly decreased in 2005. However, recent cocaine use increased since 2004.
- Females first used cocaine at a significantly younger age than males.
- Frequency of cocaine use has fluctuated while quantities used have increased in 2005 after remaining comparable between sampling years.
- KE reports of cocaine use suggested that cocaine was used as a 'special occasion' drug and that, while the availability of cocaine was high, the high price meant many users were unable to use regularly.
- Recent cocaine users reported usually using cocaine at private residences such as friends' homes or own home, although nightclubs were also commonly reported. Most common location of last use was at friends' homes.
- The most commonly purchased amount of cocaine was a gram at a median price of \$270. Most reported that the price of cocaine had remained 'stable'.
- The majority of those commenting reported the purity of cocaine as 'high' or 'medium'.
- The median purity of cocaine seized and analysed by the AFP remained stable at around 70% over the preceding 12 months while NSW police cocaine seizure purity increased to around 64% in 2004/05. The number of seizures analysed by the AFP has increased over time, reaching a peak of 348 in 2003/04; however, this number reduced dramatically to 63 in 2004/05. The number of NSW police seizures analysed remained stable at 92 in 2004/05.
- Conflicting reports were obtained regarding cocaine availability. Most reported that cocaine was 'difficult' or 'easy' to obtain and that availability had remained 'stable'.
- Similar to other drug types, the majority of participants report obtaining cocaine from friends and known dealers.
- Indicator data also reflects user reports, with numbers of recorded use/possession incidents, calls to drug and alcohol referral lines, numbers of closed treatment episodes, numbers of inpatient hospital admissions, numbers of cocaine overdose and numbers of suspected drug-related deaths where cocaine was detected remaining 'stable' or 'increasing' over the preceding 12 months.

7.0 KETAMINE

Two-thirds (65%) the 2005 sample reported lifetime use of ketamine while only 39% reported recent use. Ketamine was first used at a median age of 21 years (range 15-61 years) and there was a significant difference between males and females regarding age of initiation, with females significantly more likely to report first using ketamine at a younger age than males (19 vs. 25, $t = -4.967$, $p < 0.001$). A small proportion (6%) of the 2005 sample reported injecting ketamine at some time while two respondents reported injecting ketamine in the preceding six months.

7.1 Ketamine use among REU

Thirty-nine respondents reported using ketamine in the preceding six months on a median of two days (range 1-72). Most (87%) used ketamine once a month or less, 10% used between monthly and fortnightly, 4% between fortnightly and once per month, and one respondent reported using ketamine three times per week. No participants nominated ketamine as their drug of choice. Twenty-two respondents (22%), of those who reported using other drugs with ecstasy, reported using ketamine with ecstasy. Four respondents, of those who used other drugs to come down from ecstasy, reported using ketamine to come down from ecstasy.

Recent ketamine users quantified their use in terms of 'bumps' ($n=26$) and lines ($n=8$). Small numbers mentioned points ($n=2$) and pills ($n=1$). 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. Respondents describing ketamine use in terms of bumps reported a median of three bumps as the amount used for a 'typical' occasion of use (range 0.5-10) and four bumps as the amount used for a 'heavy' (range 1-20) occasion of use in the preceding six months. Recent users reported snorting (85%) and, less often, swallowing (21%) ketamine; small numbers reported injecting ($n=2$) and shelving ($n=1$) ketamine in the preceding six months.

The prevalence of lifetime and recent use of ketamine has increased over time among this group. Frequency and quantity of ketamine use has remained relatively stable (Table 15). Of those who reported bingeing in the preceding six months, 21% had binged on ketamine.

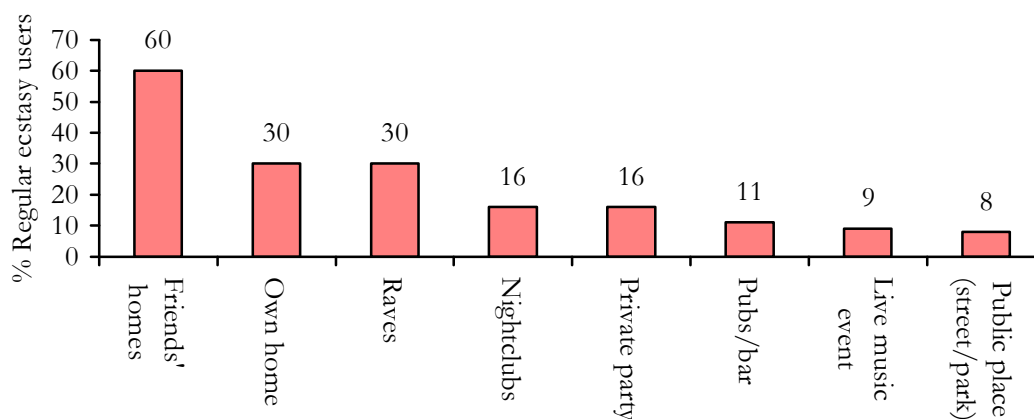
Table 15: Patterns of ketamine use of REU, NSW

Ketamine variable	2000 (n=94)	2001 (n=163)	2002 (n=88)	2003 (n=102)	2004 (n=104)	2005 (n=101)
Ever used (%)	25	31	59	59	58	65
Used last six months (%)	14	15	49	49	39	39
Of those who had used						
Median days used last 6 mths (range)	2 (1-30)	5 (1-24)	4 (1-30)	3 (1-100)	4 (1-30)	2 (1-72)
Median quantities used (bumps)						
Typical (range)	5 (2-20)	5 (1-15)	2 (0.5-15)	3 (1-20)	3 (0.5-15)	3 (0.5-10)
Heavy (range)	5 (2-50)	4 (1-30)	4 (1-15)	3 (1-20)	4 (2-15)	4 (1-20)

Source: PDI Regular ecstasy user interviews 2005

When asked to specify where ketamine was usually used, the most frequently cited location was a friend's home (60%). Respondents' own homes (30%), raves (including 'doofs' and dance parties; 30%) and nightclubs (16%), were the other most commonly nominated locations by recent users in 2005 (Figure 51).

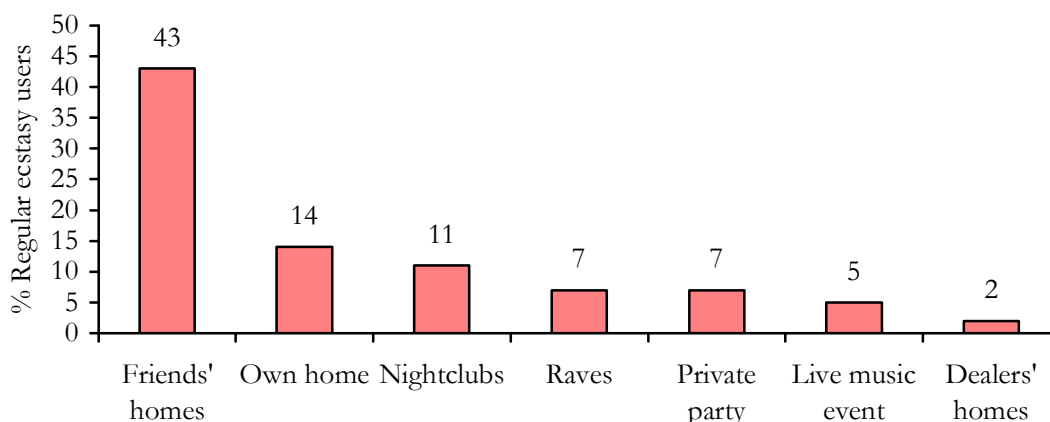
Figure 51: Location of usual ketamine use, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

The location of last use of ketamine varied, with the majority of participants reporting last using at friends' homes (43%), followed by their own home (14%) and at nightclubs (11%, Figure 52).

Figure 52: Location of most recent ketamine use, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

7.2 Price

Forty-four participants were able to report on the price of ketamine. In 2005 ketamine was commonly purchased in grams (n=13) and pills (n=4). The current median price for a gram of ketamine was reported as \$100 (range \$20-\$300) (Table 16). The majority of those who commented reported the price of ketamine had remained 'stable' (30%; 13% of the entire sample) in the preceding six months, while three respondents (7%; 3% of the entire sample) thought ketamine increased in price, and one participant (2%; 1% of the entire sample) thought it had decreased. Twenty-five respondents were 'unable to comment' on changes in the price of ketamine.

The proportion of users who were able to comment is almost double from that in 2004. The median price of ketamine appears to have decreased since 2000 (Table 16), though the proportion of users who were able to comment on the price of ketamine across sampling years is very small and accordingly these data must be interpreted with caution.

Table 16: Price of ketamine purchased by REU, NSW

Median price (\$)	2000 (n=3)	2001 (n=3)	2002 (n=32)	2003 (n=24)	2004 (n=24)	2005 (n=44)
Gram (range)	200 (no range)	150 (50-200)	160 (20-200)	150 (80-200)	200 (100-200)	100 (20-300)
Lowest gm \$ (range)	170 (140-200)	170 (50-180)	155 (20-200)	90 (84-175)	-	-
Highest gm \$ (range)	200 (no range)	200 (150-200)	200 (25-250)	140 (100-200)	-	-
Half gm \$ (range)	-	-	-	85 (50-100)	75 (30-100)-	-

Source: PDI Regular ecstasy user interviews 2005

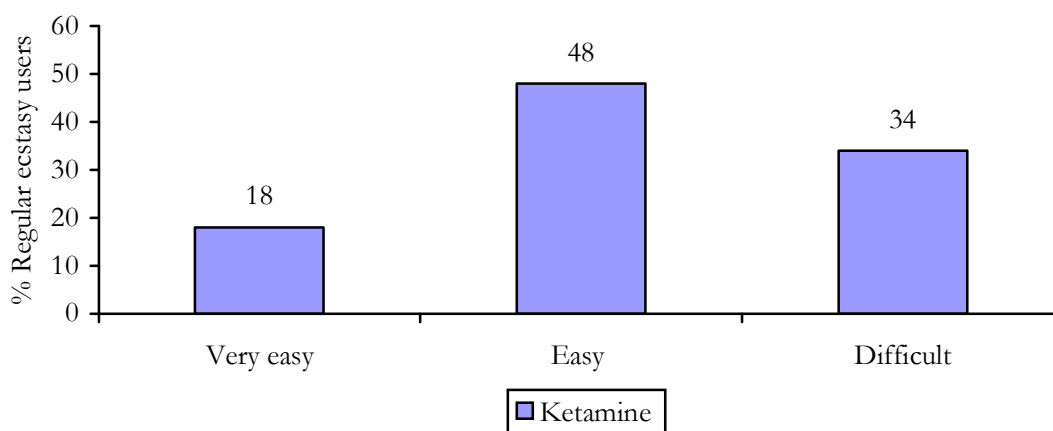
7.3 Purity

More than half of those who commented on the purity of ketamine reported that the current purity was 'high' (55%; 24% of the entire sample) while 21% (9% of the entire sample) reported the current purity as 'medium', and most thought the strength of ketamine had remained 'stable' (43%; 19% of the entire sample), while 11% (5% of the entire sample) believed the purity had 'fluctuated' in the preceding six months.

7.4 Availability

Varying availability was reported by users, with nearly half reporting that ketamine was 'easy' (48%; 21% of the entire sample) to obtain and one-third reporting that ketamine was 'difficult' (34%; 15% of the entire sample) to obtain (Figure 53). However, eight participants (18%; 8% of the entire sample) believed ketamine was 'very easy' to obtain.

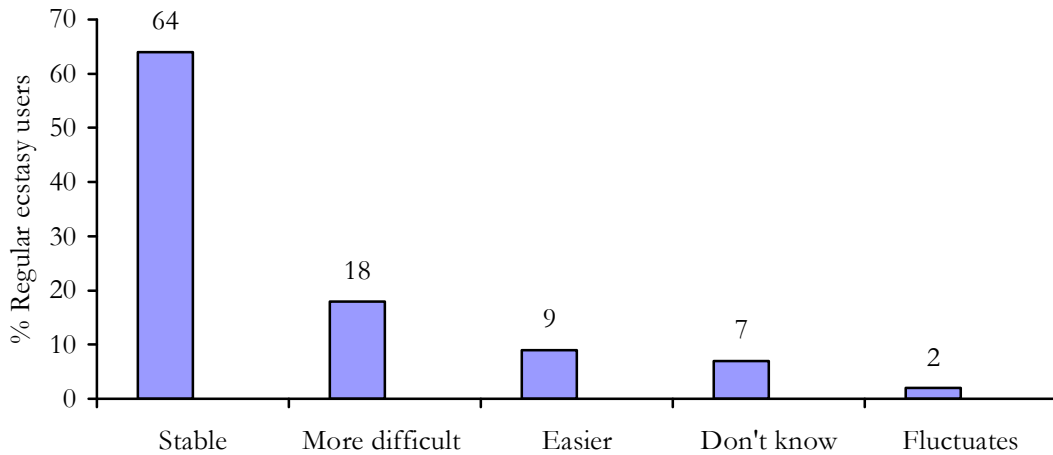
Figure 53: Current ketamine availability, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

Most reported that the availability of ketamine had remained 'stable' in the past six months' (64%; 28% of the entire sample). Only 9% (4% of the entire sample) believed ketamine had become 'easier' to obtain in the preceding six months, and 18% (8% of the entire sample) reported it had become 'more difficult' to obtain ketamine in the past six months (Figure 54).

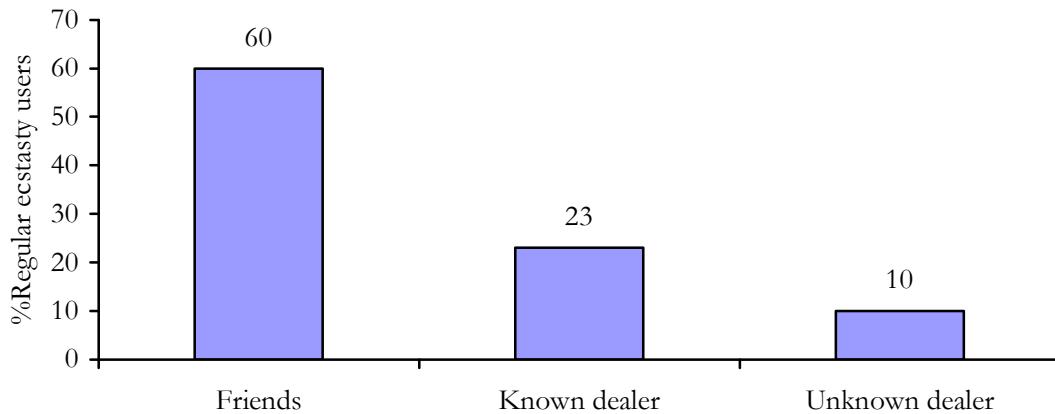
Figure 54: Changes in availability of ketamine over the past 6 months, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

Similar to other drug types, ketamine had most commonly been purchased from friends (60%) and known dealers (23%; Figure 55).

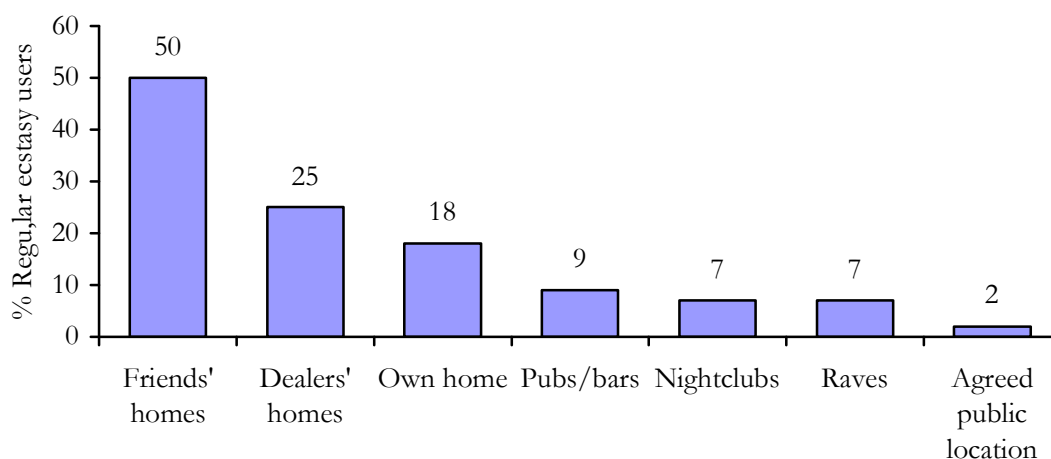
Figure 55: People from whom ketamine had been purchased in the preceding six months, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

When asked to specify the locations ketamine was normally purchased from, private residences such as friends' homes (50%), dealers' homes (25%) and own home (18%) were most often reported (Figure 56). Smaller proportions reported obtaining ketamine from pubs (9%), at nightclubs (7%) and raves (7%; Figure 56).

Figure 56: Locations ketamine had been purchased in the preceding six months, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

Key expert comments

There were variations in KE reports regarding the proportion of REU using ketamine. KE involved in nightclubs and dance events reported that most used ketamine, while others suggested only a few REU used ketamine. KE reports suggested that ketamine use is more prevalent in the gay community than in the heterosexual community. Several KE suggested that people who have had a bad experience using ketamine do not use it again. This may be why KE reports differ on proportions using ketamine: those who are in contact with people who have had bad experiences with ketamine may perceive user proportions as low. KE reports suggest that ketamine is used in combination with other drugs, in particular GHB. Cocaine and ecstasy were other drugs that KE reported were used with ketamine.

7.5 Ketamine-related harms

7.5.1 Law enforcement

Ketamine is scheduled differently in different jurisdictions across Australia, but some jurisdictions (such as NSW) have recently attempted to make ketamine a more tightly scheduled substance. In December 2003 the NSW Government added ketamine to the list of (S1) prohibited substances under the *Drug Misuse and Trafficking Act 1985*, as a measure to counter illicit use. Manufacturing or supplying ketamine for illicit purposes will now incur fines of \$5,500 to \$550,000 and/or prison terms from two years to 'life'. This is a stark increase from previous penalties under the *Poisons and Therapeutic Goods Act 1966*, which provided fines of up to \$2,200 and/or prison terms for up to two years.

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.

7.5.2 Health

Mortality

Drug-related deaths where ketamine has been detected are low. Data from the Forensic Toxicology Laboratory Database at the Division of Analytical Laboratories show there was one drug-related death in which ketamine was detected in 2000 and one in 2001. There were no deaths where ketamine was detected in 2002 and two in 2003. There were no deaths where ketamine was detected in 2004; however, there was one death in 2005 where ketamine was detected.

Treatment

Treatment-seeking for problems with ketamine use is low compared to other drugs. Data from the NSW Minimum Dataset show there were six closed treatment episodes based on the date of commencement where the principal drug of concern was ketamine (NSW MDS DATS, NSW Department of Health). One of these was in 2002 and four people nominated ketamine as their principal drug of concern in 2003. There was one treatment episode in 2005. All patients were male except in 2005; three entered counselling treatment, one for assessment only, and one entered residential rehabilitation. 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.

7.6 Summary of ketamine trends

- Reports of lifetime use have increased since 2000 and in 2005 there was a dramatic increase from 2004. Recent use of ketamine has remained stable in 2005 from 2004.
- Females first used ketamine at a significantly younger age than males.
- The median days of ketamine use in the previous 6 months has decreased from four in 2004 to two in 2005 while the quantity used has remained stable.
- Friends' homes were the most commonly nominated location of recent use, followed by own home and nightclubs.
- KE reports surrounding ketamine use varied, though ketamine was associated more with the homosexual community. Users who had had a bad experience using ketamine were described as not using again.
- Although only small proportions in previous years were able to comment, the gram price of ketamine appears to have decreased in 2005. Median price for a gram of ketamine in 2004 was \$200 while in 2005 this was \$100.
- Most respondents in 2005 reported the current purity of ketamine to be 'high' or 'medium' and that the purity had remained 'stable' over the preceding six months.
- Ketamine was 'easy' or 'difficult' to obtain for the majority of respondents in 2005. Most agreed the availability of ketamine has remained 'stable'.
- Similar to other drug types, friends were the people participants most commonly reported purchasing ketamine from in the preceding six months. Ketamine was commonly reported to have been purchased in friends' homes or dealers' homes.
- Indicator data suggests low rates of health-related harms, reflecting low rates of use.

8.0 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, 1-4B (1,4-butanediol) has also been documented (Ingels, Rangan et al. 2000). GBL and 1-4B are metabolised into GHB in the body. They may be used as substitutes for GHB, but are known to be pharmacologically different.

One-third of the 2005 sample (32%) reported lifetime GHB use while 13% reported using GHB in the preceding six months. GHB was first used at a median age of 22 years (range 13-40 years). There was no significant difference between males and females in age of initiation. Homosexual/bisexual respondents were significantly more likely to report lifetime use of GHB than heterosexual respondents ($\chi^2 = 9.126$, $p < 0.01$). All recent GHB users administered the drug orally. There were no reports of lifetime or recent injecting of GHB.

Two respondents in the 2005 survey reported lifetime use of 1-4B and one respondent reported 1-4B use in the preceding six months. Four respondents reported lifetime use of GBL while two reported having used GBL in the preceding six months. Given the small number, 1-4B and GBL price purity and availability data have not been reported. Further, although a greater proportion of participants than in past surveys provided price, purity and availability data on GHB, the numbers are small and therefore the following results should be interpreted with caution.

8.1 GHB use among REU

Thirteen participants reported using GHB in the preceding six months on a median of two days (range 1-72). Sixty-two percent reported using GHB less than monthly, while 31% reported using GHB between approximately once per month but less than 2 times per week; one respondent reported using GHB three times per week. GHB was the drug of choice for four participants.

Recent GHB users quantified their use in terms of millilitres while five participants also referred to 'vials'. A 'vial' refers to a small glass or plastic container in which GHB is sold. Those reporting millilitres used a median of 4mls during a 'typical' occasion of use (range 1.8-20) and 15mls (range 3-43.20) during a 'heavy' use episode in the preceding six months. Those referring to vials used a median of one vial during both a 'typical' and 'heavy' occasion of use. Of those who reported bingeing in the preceding six months, 16% had binged on GHB.

The prevalence of GHB use has increased over time, with substantial increases in reports of both lifetime and recent use since 2000 (Table 17). The frequency of GHB use is comparable across years, although quantities used in ‘typical’ and ‘heavy’ occasions of use seem to have fluctuated. Given the small numbers who report recent GHB use, and the apparent confusion among users regarding how many millilitres are contained in a ‘vial’ and the size of a typical dose, it is difficult to draw any definitive conclusions from these data.

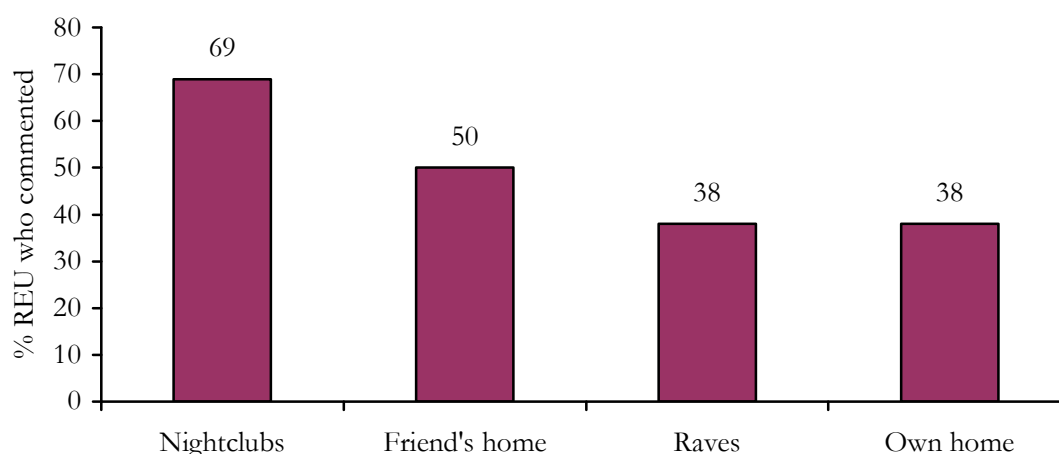
Table 17: Patterns of GHB use of REU, NSW

GHB variable	2000 (n=94)	2001 (n=163)	2002 (n=88)	2003 (n=102)	2004 (n=104)	2005 (n=101)
Ever used (%)	5	23	35	33	28	32
Used last six months (%)	1	15	19	21	18	13
Of those who had used						
Median days used last 6 mths (range)	1 (no range)	2 (1-10)	3 (1-30)	2 (1-30)	2 (1-26)	2 (1-72)
Median quantities used (ml)						
Typical (range)	1 (no range)	5 (1-35)	10 (1-70)	8.25 (5-30)	5 (2-30)	4 (1.8-20)
Heavy (range)	1 (no range)	5 (1-50)	12 (1-120)	8.75 (5-40)	12 (3-36)	15 (3-43.20)

Source: PDI Regular ecstasy user interviews 2005

When asked to specify usual locations of GHB use, virtually all participants reported nightclubs (69%; Figure 57). Friends’ homes (50%), raves (including ‘doofs’ and dance parties; 38%) and own home (38%) were other reported usual locations of GHB use.

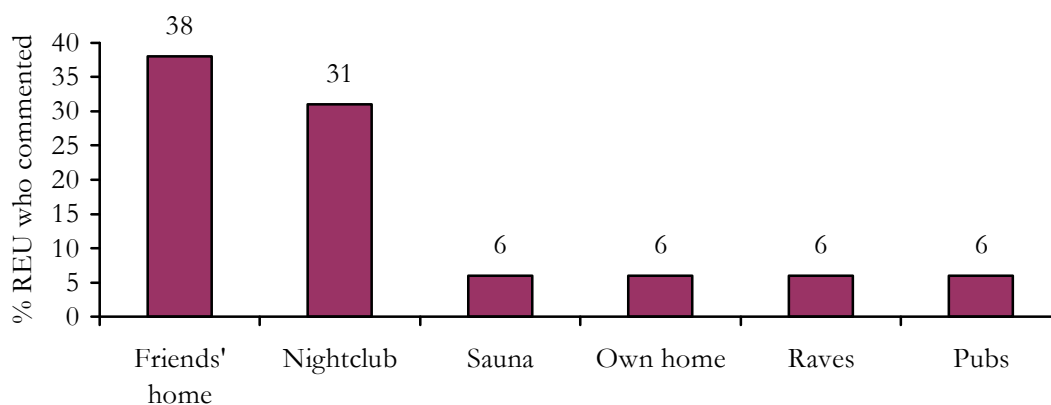
Figure 57: Usual location of GHB use, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

Consistent with typical locations of use, the frequently mentioned locations of last GHB use were friends' homes (38%; Figure 58), and nightclubs (31%); other responses included sauna (6%), own home (6%), raves (including 'doofs' and dance parties; 6%) and at a pub (6%).

Figure 58: Location of most recent GHB use, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

8.2 Price

GHB was most commonly purchased in 'mls' (Table 18). Of the sixteen participants who commented on the price change of GHB, 31% (5% of the entire sample) believed it had remained 'stable', 13% (2% of the entire sample) believed it to 'increase', while one respondent each believed it had either 'fluctuated' or had 'decreased'. Forty-four percent (7% of the entire sample) were unable to comment.

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 2004, ten participants were able to comment on the price of GHB; prices ranged from \$1 for 1ml, \$30 for a vial, \$12.50 for 2mls (range \$10-\$15), \$25 for 30mls (range \$20-\$30), and \$10,000 for 1L. In 2005, five participants were able to comment on prices for GHB; these ranged from \$5 for 1ml (range \$4-\$15), \$25 for a vial (range \$15-\$40), \$2 for 2mls, and \$40 for 15mls.

8.3 Purity

Of the sixteen participants who commented on current GHB purity, 50% (8% of the entire sample) believed the current purity to be 'high', while 19% (3% of the entire sample) believed it to be 'medium' and 19% (3% of the entire sample) believed that the current purity of GHB 'fluctuates'. Two respondents 'did not know' the current purity of GHB. When asked to comment on purity change in the preceding six months there were conflicting responses: six respondents believed the purity had remained 'stable', five believed it had 'decreased', and four were unable to comment.

8.4 Availability

Of the sixteen respondents who commented on the current availability of GHB, there were, again, conflicting responses, with five believing it to be ‘very easy’, four believing it to be ‘easy’ while four believing it to be ‘very difficult’ and two unable to comment. As with the change of purity, the respondents presented conflicting responses when asked about the changes of availability in the preceding six months – seven believed it had remained ‘stable’, five believed it had become ‘more difficult’ to obtain GHB and three were unable to comment. Only one participant believed that GHB had become easier to obtain in the preceding six months.

Key expert comments

KE reports of GHB prevalence were mixed. Some KE suggested that a large group of REU use GHB; one KE suggested half use GHB. Others suggested that it is used by only a few REU. One KE suggested that GHB was a novelty drug, with only a limited number of regular users. One KE indicated that GHB showed up every now and then, and that overdoses tended to mimic this trend.

A major theme that emerged from KE reports was that GHB was used discreetly, and that users do not talk about GHB use. This may be due to the negative associations GHB has with overdoses. GHB was reported to be taken at home, and one KE mentioned that it is used to come down after a long weekend. While GHB has been associated with overdoses, KE reported that users were now more aware of the concerns surrounding the drug’s use and that users looked out for their friends.

KE reports indicated that GHB is taken in liquid form, usually mixed with other liquids. KE reports indicated it was used predominantly in the gay community, although the heterosexual population was coming into contact with it more often.

8.5 GHB-related harms

8.5.1 Law enforcement

GHB is a controlled substance in Australia, and possession of GHB is an offence. However, it is not currently possible to obtain data on any police apprehensions of persons caught supplying, manufacturing or in the possession of GHB, as GHB is not separately recorded in police databases.

Information on cases where individuals have been arrested in possession of amounts of GHB or GBL has suggested that persons supplying this drug may also be suppliers of other ecstasy and related drugs such as ecstasy, crystal methamphetamine and ketamine. This is consistent with some anecdotal reports from regular ecstasy users, some of whom noted that it was possible to obtain a range of ecstasy and related drugs from one dealer.

8.5.2 Health

Overdose

One of the reasons for the considerable media attention around GHB has derived from numerous anecdotal and case reports of GHB overdose. GHB is known as a drug with a steep dose-response curve, which means that the difference between a ‘desired’ dose and one that renders the users unconscious is very small (Nicholson and Balster 2001). In recreational settings, the additional factors of inconsistent potency, variable individual

response to GHB, environmental conditions and polydrug use may increase risks of GHB overdose despite the best intentions of users to reduce these risks. In one Australian study, half (53%) of a sample of GHB users had overdosed at some time (overdosing was defined as losing consciousness and being unable to be woken) (Degenhardt, Darke et al. 2003).

Concerted media attention on GHB-related overdoses has certainly existed in Australia, with wide media reporting of occasions where multiple GHB overdoses have occurred receiving wide media coverage. It was not possible at this time, however, to report statistics on the numbers of GHB overdoses presenting to emergency departments and hospitals in Australia, nor on the number of suspected GHB deaths. This is because GHB is not a separately recorded drug type in ICD-9 or ICD-10 (the classification system used in these settings), and no alternative mechanism for routinely documenting GHB overdoses has yet been developed around the country. It is certainly the case, however, that emergency departments in Sydney collect their own data on the number of presenting cases of GHB overdose. It has been reported by staff from one Sydney emergency department located close to a nightclub district that they receive several cases of GHB overdose each weekend night, some of whom require life support and remain in intensive care. It was recently reported that over 150 cases of GHB overdose had presented to this hospital in early 2004 alone.

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

Data from the Forensic Toxicology Laboratory Database at the Division of Analytical Laboratories show that, since 2000, there has been two suspected drug-related deaths in which GHB was detected. These deaths occurred in March and September of 2003. There were no deaths in which GHB was detected in 2004 and 2005.

Treatment

Data from the NSW Minimum Dataset show there have been five treatment episodes since 2003, with one each in 2003 and 2004 and three in 2005 (NSW MDS DATS, 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.

8.6 Summary of GHB trends

- Small numbers of users provided information on the price, purity and availability of GHB; therefore results should be interpreted with caution.
- The prevalence of GHB use has increased over time. In 2005 there was an increase in lifetime use although a decrease in recent use.
- Frequency of use is comparable between years while quantity of use appears to have changed in 2005, with a decrease in the 'average' quantity used but an increase in the quantity used in 'heavy' sessions of use. Again, given the small numbers who commented, cautious interpretation is required.
- KE reports are generally consistent with results from the user surveys; of those who were able to comment, most considered GHB to be used by small numbers of users infrequently. Several KE suggested that GHB use is not spoken about anymore, and this may be associated with the harms that have been attributed to GHB use in the past.
- Similar to other drugs, GHB was most likely to have been used in nightclubs.
- In 2005, GHB was most commonly purchased in a 'vial' for which a median of \$25 was paid, a further decrease from \$30 in 2004, \$35 in 2003 and \$50 in 2002 and this was reported as having remained 'stable'. Prices reportedly paid for other amounts by small numbers of respondents were inconsistent, as were comments regarding changes in price.
- Most participants reported GHB current purity as 'high'. Conflicting reports regarding purity of GHB over the preceding six months were obtained, with most frequent responses ranging from 'stable' to 'decreased'.
- The availability reports of GHB were also conflicting, with reports ranging from 'very easy' and 'easy' to 'difficult'. The change in availability in the preceding six months also garnered conflicting reports, ranging from 'stable' to 'more difficult'.

9.0 LSD

Lysergic acid diethylamide is commonly known as LSD, 'trips' or 'acid', which became popular in the 1960s. 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 sold in perforated sheet form. 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 three-quarters (71%) of the 2005 sample reported lifetime use of LSD. One-third (33%) reported using LSD in the preceding six months. LSD had first been used at a median age of 18 years (range 13-35 years) and there was a significant difference between males and females regarding age of initiation, with females using LSD at a younger age than males (18 vs. 19, $t = -2.060$, $df = 53.241$, $p < 0.05$). No participants reported ever injecting LSD.

9.1 LSD use among REU

Thirty-three participants reported a median of two days of use in the preceding six months (range 1-72; Table 18). Seventy-nine percent reported using LSD less than once per month in the preceding six months, while 21% reported using LSD once a month or more in the preceding six months. LSD was the drug of choice for six respondents, and six respondents who reported using other drugs with ecstasy reported using LSD with ecstasy.

The median number of LSD tabs taken in a typical episode was one (range 0.50-3) and in a heavy episode was one and a half (range 0.50-15). Fourteen percent of those who had recently binged used LSD to do so, compared to six percent in 2004. All but one recent LSD user reported swallowing the drug; one respondent reported shelving LSD in the preceding six months.

Table 19 suggests a staggered pattern in the prevalence of lifetime and recent LSD use over time. Frequency of LSD used by recent users appears to have slightly increased while quantity of use also appears to have slightly increased.

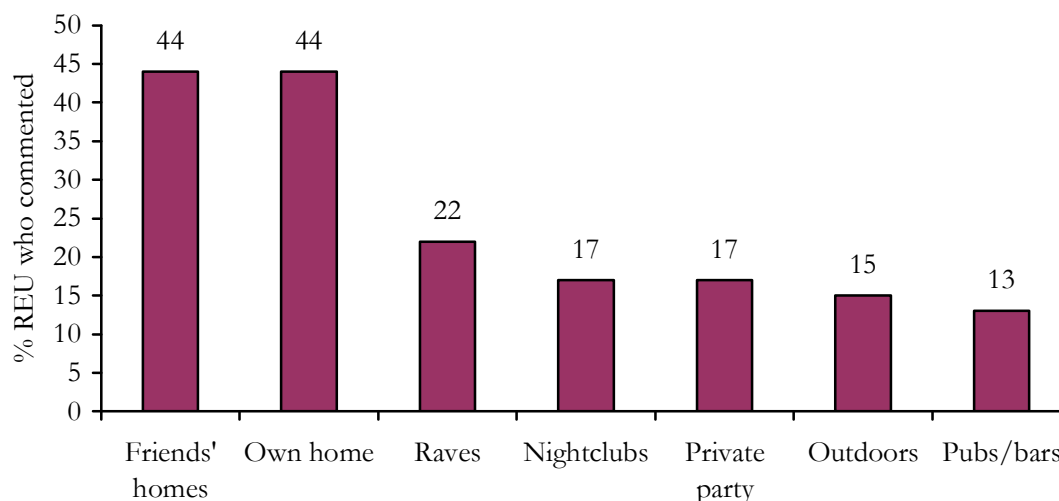
Table 18: Patterns of LSD use of REU, NSW

LSD variable	2000 (n=94)	2001 (n=163)	2002 (n=88)	2003 (n=102)	2004 (n=104)	2005 (n=101)
Ever used (%)	80	74	73	66	61	71
Used last six months (%)	37	23	33	27	20	33
Of those who had used						
Median days used last 6 mths (range)	2 (1-74)	5 (1-70)	3 (1-24)	1 (1-20)	1 (1-20)	2 (1-72)
Median quantities used (tabs)						
Typical (range)	1 (0.25-1)	1 (0.25-1)	1 (0.3-3)	1 (0.5-3)	1 (0.25-4)	1 (0.50-3)
Heavy (range)	1 (0.25-4)	1 (0.25-4)	2 (0.3-6)	1 (0.5-12)	1 (0.5-4)	1 (0.50-15)

Source: PDI Regular ecstasy user interviews 2005

When asked to specify usual locations of LSD use, respondents' own home (44%) and friends' homes (44%) were the most frequently cited locations (Figure 59). Raves (including 'doofs' and dance parties; 22%), nightclubs (17%), private parties (17%), outdoors (15%) and pubs (13%) were also commonly mentioned.

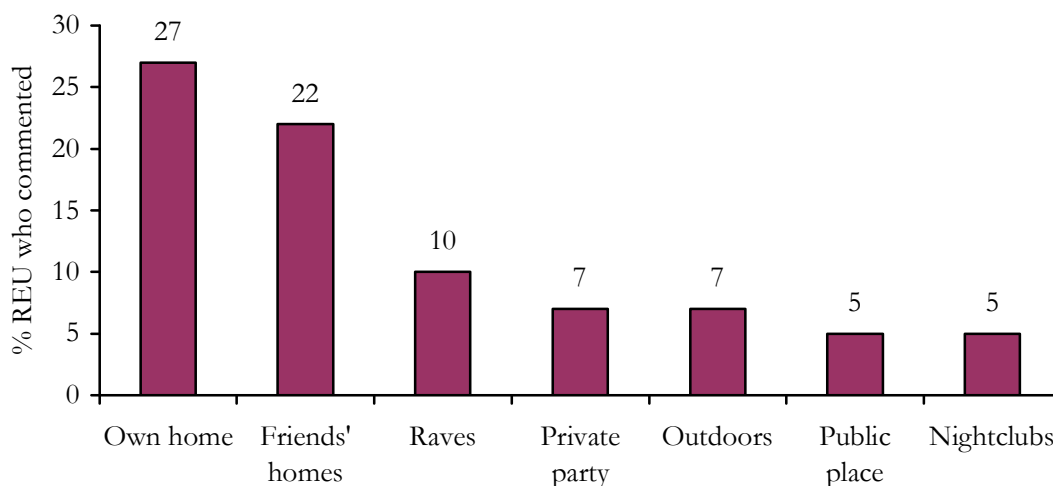
Figure 59: Usual location of LSD use, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

Consistent with typical locations of use, the frequently mentioned location of last LSD use was respondents' own homes (27%), followed by friends' homes (22%) and at raves (including 'doofs' and dance parties) (10%; Figure 60).

Figure 60: Location of most recent LSD use, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

9.2 Price

The median price paid for a tab of LSD in 2005 was \$20. Of the thirty-eight respondents who commented, the majority (52%; 22% of the entire sample) reported that the price of LSD in the preceding six months had remained 'stable'; 14% (6% of the entire sample) reported that the price had increased; 7% (3% of the entire sample) reported that it had decreased; two respondents believed it had fluctuated; and 21% (9% of the entire sample) were unable to comment on the price changes in the preceding six months. As indicated in Table 19, the price of LSD tabs has increased slightly across sampling years.

Table 19: Prices of LSD purchased by REU, NSW

Median price (\$) LSD	2000 (n=16)	2001 (n=46)	2002 (n=39)	2003 (n=23)	2004 (n=18)	2005 (n=38)
Tab (range)	10 (3-25)	10 (5-45)	15 (8-25)	15 (4-30)	20 (10-35)	20 (5-40)
Lowest tab price (range)	10 (1-15)	10 (1-30)	10 (2-15)	10 (5-20)	-	-
Highest tab price (range)	20 (10-25)	15 (10-45)	20 (10-30)	15 (15-40)	-	-

Source: PDI Regular ecstasy user interviews 2005

9.3 Purity

Forty-two respondents were able to comment on the current purity of LSD and there were conflicting reports. The majority reported purity as 'high' (45%; 19% of the entire sample); 21% (9% of the entire sample) reported the current purity as 'low'; while 14% (6% of the entire sample) reported the current purity as 'medium'. One respondent reported the current purity as 'fluctuating'; 17% (7% of the entire sample) were unable to comment on current purity. There were conflicting reports regarding purity change in the preceding six months, with 26% (11% of the entire sample) reporting the purity as having remained 'stable' in the preceding six months; 17% (7% of the entire sample) reported the purity as having 'increased'; while 10% (4% of the entire sample) reported

the purity as having 'decreased'. Six respondents reported purity as 'fluctuating' while 33% (14% of the entire sample) could not comment on the purity change in the preceding six months.

9.4 Availability

Reports on the current availability of LSD were inconsistent. Twenty-nine percent (12% of the entire sample) reported that LSD was 'difficult' to obtain; 26% (11% of the entire sample) reported it as either 'easy' or 'very easy' to obtain; 10% (4% of the entire sample) reported LSD as 'very difficult' to obtain; and the same amount were unable to comment. Of those who were able to comment, 57% (24% of the entire sample) believed that the availability of LSD had remained 'stable' in the preceding six months; 12% (5% of the entire sample) believed that it had become 'easier'; 10% (4% of the entire sample) believed it had become 'more difficult'; and 21% (9% of the entire sample) were unable to comment on the availability change in the preceding six months.

Key expert comments

LSD use was reported by KE as rare or sporadic, with estimated proportions of REU using LSD being between 5-10%. KE reports suggest that those who do use LSD are younger and are experimenting; LSD is seen in younger groups as something to try, while older users see it as a drug they have tried and won't be using again.

9.5 Summary of LSD trends

- The prevalence of both lifetime and recent LSD use appears to have dramatically increased in 2005 after having decreased since 2000. Median days used has also increased from one day in 2004 to two days in 2005. Females first used LSD at a significantly younger age than males.
- Of the KE who were able to comment, it was reported that LSD use is associated with younger drug users experimenting and that use is sporadic.
- The price of LSD has remained stable and most who commented believed the price to have remained 'stable' over the preceding six months.
- Reports regarding the purity of LSD were conflicting, with respondents reporting purity as either 'high' or 'low'; purity over the preceding six months was thought to have remained 'stable' or to have 'increased'.
- Reports regarding the availability of LSD were also conflicting, with respondents reporting that LSD was either 'difficult', 'easy' or 'very easy' to obtain; the majority believed that the availability of LSD in the preceding six months had remained 'stable'.

10.0 MDA

MDA (3,4-methylenedioxyamphetamine) is part of the phenethylamine family. Like ecstasy, MDA is classed as a stimulant hallucinogen. MDA has similar effects to ecstasy. It generally comes in powder or tablet form and occasionally as pills sold as ecstasy.

One-third (32%) of the 2005 sample reported lifetime use of MDA and one-fifth (19%) reported using MDA in the preceding six months. The median age of initiation was 21 years (range 16-35 years) and there were no significant sex differences at age of initiation; however, heterosexual respondents were significantly more likely to first use MDA at a younger age than homosexual/bisexual respondents (20 vs. 23, $t = -2.058$, $df = 30$, $p < 0.05$). Ten percent of those who had ever used MDA reported having ever injected MDA at some time; however, only one respondent reported having injected MDA in the preceding six months. Homosexual/bisexual respondents were significantly more likely to report lifetime use of MDA than heterosexual respondents ($\chi^2 = 6.653$, $p = 0.010$).

10.1 MDA use among REU

Nineteen participants reported using MDA on a median of two days (range 1-72) in the preceding six months. All respondents except one had used MDA once a month or less; one participant reported using MDA three times per week in the preceding six months.

The majority of recent MDA users quantified their use in terms of caps ($n=19$) although one respondent referred to grams. Those who reported MDA use in terms of caps used a median of one cap during both a 'typical' (range 0.50-4) and 'heavy' (range 1-4) occasion of use. No respondents reported MDA as their drug of choice.

The most common route of administration reported by recent MDA users was swallowing (90%). One-third (32%) reported snorting MDA, one participant had injected, one participant had smoked, and one had shelved MDA in the preceding six months. Of those who reported bingeing in the last six months, 7% had used MDA to do so. Only one respondent of those who reported using other drugs with ecstasy used MDA with ecstasy, and no respondents reported using MDA to come down from ecstasy.

Table 20 shows the prevalence of lifetime and recent MDA use has increased over time however, in 2005 there has been a marked decline in the frequency of both lifetime and recent MDA use.

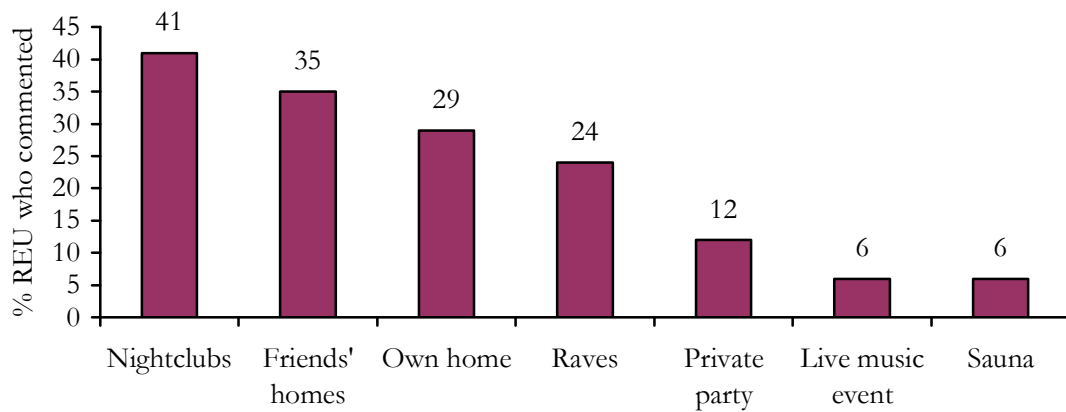
Table 20: Patterns of MDA use of REU, NSW

MDA variable	2000 (n=94)	2001 (n=163)	2002 (n=88)	2003 (n=102)	2004 (n=104)	2005 (n=101)
Ever used (%)	36	43	56	56	54	32
Used last six months (%)	16	14	35	35	30	19
Of those who had used						
Median days used last 6 mths (range)	2 (1-12)	2 (1-30)	4 (1-20)	1 (1-14)	2 (1-23)	2 (1-72)
Median quantities used (caps)						
Typical (range)	1 (1-2)	1 (1-2)	1 (1-3)	1 (0.25-4)	1 (0.25-4)	1 (.50-4)
Heavy (range)	1 (1-2)	1 (1-2)	1.5 (1-6)	1 (0.25-6)	1 (0.25-4)	2 (1-4)

Source: PDI Regular ecstasy user interviews 2005

When asked to specify usual locations of MDA use, virtually all participants reported nightclubs (41%), followed by friends' homes (35%) and own home (29%; Figure 61).

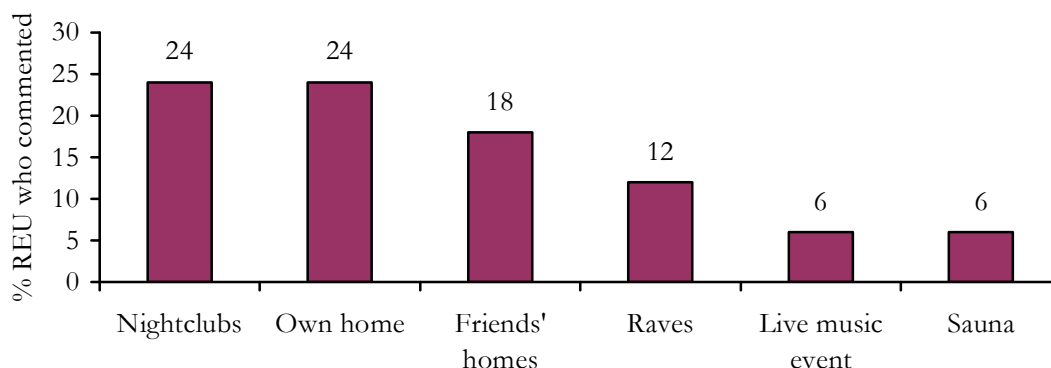
Figure 61: Usual locations of MDA use, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

Consistent with typical locations of use, the frequently mentioned location of last MDA use was at nightclubs (24%) and own home (24%), followed by friends' homes (18%) and raves (including 'doofs' and dance parties; 12%; Figure 62).

Figure 62: Location of most recent MDA use, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

10.2 Price

The median price for an MDA cap reported by REU in 2005 was \$37.50. Of those who commented, 29% (5% of the entire sample) reported that the price of MDA had remained 'stable' in the preceding six months, while 12% (2% of the entire sample) believed that the price had 'decreased'; only one participant believed the price had 'increased'. The majority (53%; 9% of the entire sample) were unable to comment on the price change in the preceding six months.

The proportion of users who were able to comment on the price of MDA across sampling years is relatively small, and accordingly these data must be interpreted with caution. Nevertheless, the price of MDA has 'decreased' since 2004 (\$47.50) and is at the lowest price reported across the six years (Table 21).

Table 21: Price of MDA purchased by REU, NSW

Median price MDA (\$)	2000 (n=8)	2001 (n=24)	2002 (n=26)	2003 (n=21)	2004 (n=10)	2005 (n=8)
Capsule price (range)	50 (40-60)	50 (20-80)	50 (25-60)	45 (30-60)	47.50 (35-60)	37.5 (20-80)
Lowest capsule price (range)	40 (35-50)	40 (20-60)	35 (15-45)	50 (30-60)	-	-
Highest capsule price (range)	55 (40-60)	50 (45-100)	50 (35-60)	60 (35-70)	-	-

Source: PDI Regular ecstasy user interviews 2005

10.3 Purity

Seventeen respondents commented on the purity of MDA. Forty-one percent (7% of the entire sample) reported the purity of MDA to be 'high' while 29% (5% of the entire sample) reported the purity of MDA to be 'medium'; 12% (2% of the entire sample) reported the purity to be 'low' while 18% (3% of the entire sample) 'did not know' the current purity of MDA. Almost half of those who commented (47%; 8% of the entire sample) believed the purity had remained 'stable' in the preceding six months. Two respondents believed the purity had 'fluctuated' while one believed it 'increased'; 35% (6% of the entire sample) 'did not know' whether the purity of MDA had changed in the preceding six months.

10.4 Availability

Three-fifths (59%; 10% of the entire sample) believed that MDA was currently 'easy' to obtain while 24% (4% of the entire sample) believed it was 'difficult' to obtain MDA; three participants 'did not know' about the current availability of MDA. Most (65%; 11% of the entire sample) believed that the availability of MDA had remained 'stable' in the preceding six months, with one participant each believing it had either become 'more difficult' or had 'fluctuated'. Four participants were unable to comment on the change of availability of MDA in the preceding six months.

Key expert comments

KE reports regarding the use of MDA varied slightly; while two KE suggested that 50% of REU were using MDA, the majority (n=10) suggested that no one was using MDA or that its use was very rare. It was suggested that most people are unable to differentiate between MDA and MDMA. Of those who were able to comment, it was reported that MDA was swallowed in cap form, while a small proportion snort.

10.5 Summary of MDA trends

- Prevalence of lifetime and recent MDA use has dramatically decreased in both lifetime and recent use since 2004.
- Frequency of use and quantity of MDA use has remained stable.
- KE reported that relatively small numbers of regular ecstasy users also used MDA infrequently, with the suggestion that many users were unable to differentiate between MDA and MDMA.
- The price of an MDA cap decreased from \$47.50 in 2004 to \$37.50 in 2005.
- The majority of respondents reported the purity of MDA was 'high' or 'medium' and that the purity had remained 'stable' in the preceding six months.
- User reports of current availability of MDA were conflicted, and, while most believed it was 'easy' to obtain, there were ample numbers suggesting it was 'difficult'. Most believed that availability had remained 'stable' over the preceding six months.

11.0 OTHER DRUGS

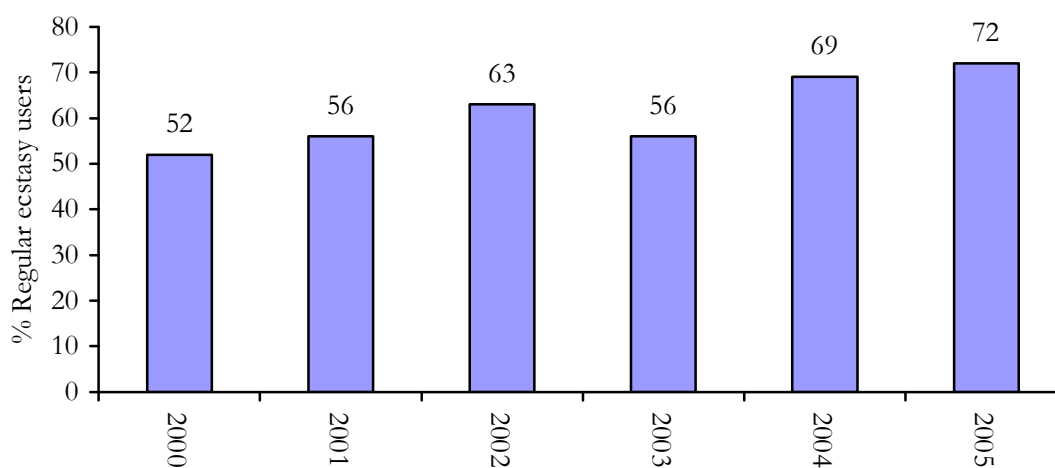
Significant proportions of regular ecstasy users have reported the use of other licit and illicit drugs across sampling years.

11.1 Alcohol

The use of alcohol was reported by almost all 2005 respondents, with 99% reporting lifetime use of alcohol and 96% reporting recent use. Of those that reported lifetime use of alcohol, the median age at initiation was 14 years (range 5-21 years) and there were no significant sex differences at age of initiation. The proportion of regular ecstasy users reporting alcohol use was similar across time (see Table 2). Alcohol was consumed a median of once per week by those who had consumed alcohol in the previous six months (24 days; range 1-180). Seventeen percent had consumed alcohol four times per week or more.

The proportion of participants who reported typically drinking alcohol while using ecstasy appeared to be stable in 2005 compared with 2004 (52% in 2000, 56% in 2001, 63% in 2002, 56% in 2003, 69% in 2004, and 72% in 2005; Figure 63). The quantity of alcohol consumed in conjunction with ecstasy has fluctuated, with varying proportions reporting usually drinking more than five standard drinks when taking ecstasy (61% in 2000, 59% in 2001, 70% in 2002, 56% in 2003, 74% in 2004 and 58% in 2005). Nevertheless, these data suggest that substantial proportions of ecstasy users consume large quantities of alcohol in conjunction with their ecstasy use. The proportion of the 2005 sample reporting that they typically drink alcohol during the recovery period following ecstasy use has also remained stable across sampling years (31% in 2000, 23% in 2001, 41% in 2002, 23% in 2003, 42% in 2004 and 34% in 2005).

Figure 63: Prevalence of regular ecstasy users consuming alcohol with ecstasy, NSW 2000-2005



Source: PDI Regular ecstasy user interviews

Key expert comments

KE indicated that most, if not all, REU engage in the use of alcohol. Bingeing was a common problem that was associated with the use of alcohol, and alcohol was associated with an increase in anti-social behaviour such as aggression and violence. KE reports indicated that REU were mixing ecstasy or GHB with alcohol.

11.2 Cannabis

Nearly all (92%) of the 2005 respondents reported lifetime cannabis use and the majority (82%) had used cannabis in the preceding six months. Median age at initiation was 15 years (range 8-24 years) and there was a significant difference between males and females regarding age of initiation, with females using cannabis at a younger age than males (15 vs. 16, $t = -2.586$, $df = 90.807$, $p < 0.05$). The prevalence of lifetime and recent use of cannabis have remained stable across sampling years (see Table 2). Eighty-three participants used cannabis on a median of two days per week (48 days; range 1-180) in the preceding six months. Thirty percent reported using every day in the preceding six months. Nearly half of those who typically used other drugs with ecstasy used cannabis with ecstasy (48%) and this has fluctuated over the years (50% in 2000, 34% in 2001, 57% in 2002, 32% in 2003 and 34% in 2004). Of those who used other drugs to come down from ecstasy, nearly three-fifths (56%) reported using cannabis, compared to 66% in 2000, 54% in 2001, 67% in 2002, 55% in 2003 and 70% in 2004).

Key expert comments

KE reports suggest that 50-80% of REU use cannabis, with the majority of cannabis users smoking the drug and a small proportion eating the drug. KE reported that cannabis was used at home and indoors, though there was a small proportion (approximately 2%) that used cannabis at clubs. It was indicated that cannabis had become more mainstream and 'middle class'. Some KE suggested cannabis was used mainly by younger REU. KE reports indicated it was used at the end of the night to come down from other drugs.

11.3 Tobacco

More than eighty percent (82%) of the 2005 sample reported lifetime use of tobacco, and two-thirds (72%) had used tobacco in the six months preceding interview. The median days used in the preceding six months was 180 days (range 1-180); 52% of those who had used tobacco in the preceding six months were daily smokers. The median age of initiation was 14 years (range 8-30 years) and there were no sex differences at age of initiation. The proportion of users reporting smoking in 2005 is comparable to previous sampling years, though lifetime use of tobacco appears to have declined since 2004 (see Table 2). Of those who use other drugs with ecstasy, more than half (55%) use tobacco with ecstasy, and, of those who use other drugs to come down from ecstasy, 46% reported using tobacco to come down from ecstasy.

Key expert comments

KE reports regarding the prevalence of the use of tobacco varied, and this may be an indication of the groups the KE had contact with. Reports ranged from only a few REU engaging in the use of tobacco; that half were using tobacco; and that most were using tobacco. KE suggested that the use of tobacco was decreasing, with some KE indicating the new smoking laws were causing people to reduce tobacco use or to quit. KE reports suggested that younger people were taking up smoking, and that more females were smoking.

11.4 Benzodiazepines

Half (51%) of the 2005 sample reported having ever used benzodiazepines and 39% had used benzodiazepines in the six months preceding interview. These rates are similar to those of previous years (see Table 2). Median age of initiation for those who reported having ever used benzodiazepines was 19 years (range 14-44 years). Benzodiazepines had been used on a median of six days (range 1-180) in the preceding six months. Only four respondents of the 2005 sample reported the use of benzodiazepines with ecstasy; however, 23% (n=23 people) of those who reported using drugs to come down from ecstasy reported using benzodiazepines. This is somewhat higher than 2001 (15%), 2002 (13%), 2003 (7%) and 2004 (14%).

Key expert comments

KE reports suggest that half of REU use benzodiazepines, though they are used sporadically. Users were reported to be older, and they were reported to be used more in the gay community. Benzodiazepines were reported to be used to come down from other drugs; one KE suggested that they were used after crystal. Valium and temazepam were the benzodiazepines that KE cited as being used by REU.

11.5 Anti-depressants

Nineteen percent of respondents reported lifetime anti-depressant use. Only six respondents reported using anti-depressants in the preceding six months; however, frequency was low; one respondent reported using anti-depressants between monthly and fortnightly. The median age of initiation was 20 years (range 16-40 years).

Key expert comments

Ten KE were able to comment on the use of anti-depressants by REU. All of the KE reported that those who used anti-depressants did so with legal prescriptions.

11.6 Inhalants

The prevalence of lifetime use of amyl nitrate has remained stable since 2000 (see Table 2), with 65% of the respondents in 2005 reporting having ever used amyl. However, the prevalence of recent use has risen in comparison to 2003 (28%) and 2004 (27%), with 37% of respondents in 2005 having used amyl nitrate in the preceding six months. The median age of initiation was 19 years (range 13-50 years) and was used on a median of three days (range 1-72) in the preceding six months; over two-thirds (68%) reported using once a month or less. Only ten respondents who reported using other drugs with ecstasy used amyl nitrate with ecstasy, and only one participant, of those who reported using other drugs to come down from ecstasy, reported using amyl nitrate to come down from ecstasy. Homosexual/bisexual respondents were significantly more likely to report lifetime use of amyl nitrate than heterosexual respondents ($\chi^2 = 11.865$, $p < 0.01$).

Forty-four percent of respondents reported the lifetime use of nitrous oxide at a median age of initiation of 17.5 years (range 13-35 years). Only thirteen respondents reported using nitrous oxide in the last six months, and eleven of these respondents reported using nitrous oxide less than monthly.

Key expert comments

The majority of KE ($n=8$) indicated that they knew of no one using inhalants. Of those who were able to comment, reports suggested that few REU used inhalants, although there were small numbers who were always using amyl nitrate, and that amyl nitrate was more commonly used in the gay community as a drug to enhance sexual sensations, often used in combination with Viagra.

11.7 Other opiates

Thirty percent of the 2005 sample reported lifetime 'other opiate' use while 20% had used 'other opiates' in the preceding six months; these numbers have increased from previous years (see Table 2). Median age of initiation was 19 years (range 13-30 years) and had been used for a median of four days in the preceding six months (range 1-90) with 80% having used 'other opiates' less than once per month.

11.8 Mushrooms

The 2005 survey was the first year where respondents were asked about the use of mushrooms. Over two-fifths (43%) of the sample reported a lifetime use of mushrooms while only six participants reported using mushrooms in the preceding six months. Of those who reported lifetime use, the median age of first use was 21 years (range 18-25 years). Mushrooms had been used for a median of five days in the preceding six months (range 1-24), with two respondent using mushrooms on one day, one respondent using mushrooms on three days, two using between once per month and once per fortnight, and one participant using mushrooms once per week. All six respondents had swallowed mushrooms in the preceding six months while one respondent also indicated that they had smoked mushrooms.

11.9 Other drugs

From the REU interviews we found five participants who reported having ever used 2CB, with a median age of initiation of 19 years (17-20 years). All five participants indicated they had used 2CB in the preceding six months, with a median of one day (range 1-4) of use.

Six participants reported having ever used 5-HTP with a median age of initiation being 21.5 years (18-23 years). Five of the participants reported using 5-HTP in the preceding six months; one respondent each reported using 5-HTP for five and six days in the preceding six months, while one respondent had used 5-HTP for 20 days and one reported having used 5-HTP for 24 days in the preceding six months.

Four participants reported having ever used DXM, with a median age of first use being 19 years (range 16-24 years). Use in the preceding six months was low; only two participants had used DXM in the preceding six months, with one participant having used DXM on one day and the other participant having used DXM on two days.

Three participants reported having ever used kava, with a median age of initiation being 19 years (range 16-19 years); none of these participants had used kava in the preceding six months. One participant reported having ever used mescaline; one participant reported having ever used glue; and one participant reported having ever used hash oil.

Key expert comments

Some KE reported that 2CI and 2CB were talked about, but not seen. One KE reported that younger groups were using pharmacological stimulants.

11.10 Summary of other drug use

- Almost all party drug users consume alcohol on a median of one day a week with a minority using at least four days a week.
- Reports of alcohol used in conjunction with ecstasy have increased over time, with almost three-quarters of the 2005 sample reporting drinking alcohol with ecstasy.
- Cannabis use was common, with nearly one-third of participants reporting cannabis use every day in the preceding six months, and the use of cannabis was common when coming down from ecstasy.
- A large proportion (73%) of the 2005 sample reported recent tobacco use and over half (52%) were daily smokers.
- Two-fifths (39%) of the 2005 sample reported recently using benzodiazepines, although the majority reported using once a month.
- A minority of participants (19%) reported lifetime anti-depressant use and only six respondents reported recent use, though frequency of use was low.
- Lifetime use of amyl nitrate remained stable; however, recent use has risen in comparison to 2003 and 2004; most (68%) reported using once a month or less. Forty-four percent of the sample reported lifetime use of nitrous oxide, though only thirteen respondents reported use in the past six months.
- Lifetime use of mushrooms was reported by over two-fifths of the sample in 2005, though recent use was reported by only six respondents, with frequency of use low.
- There were significant gender differences regarding age of initiation of speed, base, crystal, cocaine, ketamine, LSD and cannabis, with females using these drugs at a significantly younger age than males.

12.0 RISK BEHAVIOUR

12.1 Injecting risk behaviour

One in four (27%) respondents in the 2005 sample reported having injected at some time in their lives and 17% reported injecting in the six months preceding interview. A median of 3.5 drugs (range 1-11) had ever been injected, while those who reported injecting in the preceding six months had injected a median of two (range 1-7) drugs (Table 22).

Table 22: Injecting risk behaviour among REU, NSW 2005

Variable	2005 (n=101)
Ever injected (%)	27
Mean number of drugs ever injected* (range)	3.3 (1-9)
Injected last 6 months*	17
Mean number of drugs injected last 6 months* (range)	1.8 (1-5)

Source: PDI Regular ecstasy user interviews 2005

*Among those that had injected

12.1.1 Lifetime injectors

Patterns of injecting drug use

Those who reported injecting a drug at some time first did so at a mean age of 31.8 years (SD 8.3 years, range 18-44 years). A median of 3.5 drugs (range 1–11) had ever been injected. Participants were asked whether they were under the influence of drugs when they first injected: 42% of lifetime injectors reported that they had been under the influence of ecstasy and related drugs when they had first injected. The most frequently reported drugs that participants were under the influence of when they first injected were ecstasy (15%), cannabis (15%), alcohol (15%), speed (4%), and MDA (4%).

Table 23: Injecting drug use history among REU injectors, NSW 2005

Variable	Ever injected (%)
Speed	20
Ice	17
Heroin	16
Base	15
Ecstasy	13
Ketamine	6
Other opiates	4
MDA	3
Pharmaceutical stimulants	2
GHB	1

Source: PDI Regular ecstasy user interviews 2005

Lifetime injectors were significantly more likely to be male ($\chi^2= 5.343$, $p < 0.05$), and lifetime injectors were older than non-injectors (24 vs. 31, $t = -4.141$, $df = 99$, $p < 0.001$). Lifetime injectors were significantly more likely to be homosexual/bisexual ($\chi^2= 7.095$, $p < 0.01$)

Context of initiation to injecting

Two-fifths (42%; $n=11$) of lifetime injectors reported injecting for the first time while under the influence of drugs. Ecstasy ($n=4$), cannabis ($n=4$) and alcohol ($n=4$) were most often reported as the drugs used preceding first injection, followed by speed ($n=1$), MDA ($n=1$), and methadone ($n=1$).

When lifetime injectors were asked to specify how they learned to inject, more than three-quarters (77%) reported that a friend or partner showed them how.

Patterns of injecting drug use

Among those who reported injecting in the preceding six months, recent patterns of injecting drug use were consistent with lifetime patterns; methamphetamine was the most commonly injected drug in the preceding six months with over half reporting recently injecting crystal (53%; Table 24). Approximately two-fifths reported recent speed (41%) injection while 29% reported recent base injection. One-quarter of respondents reported recent cocaine (24%) and ecstasy (24%) injection. Although small numbers necessitate cautious interpretation of these data, speed was the most frequently injected drug followed by cocaine and ecstasy. No one reported the daily injection of any drug.

Crystal was most often reported as last drug injected (35%), while four participants reported last injecting cocaine (24%) and two reported last injecting speed (12%; Table 24).

Table 24: Recent injecting drug use patterns (recent injectors) among REU, NSW 2005

Variable	% injected past 6 months n=11	Median days injected last 6 months*	Last drug injected (%) n=11
Crystal	53	4 (1-96)	35
Speed	41	10 (2-96)	12
Base	29	4 (1-96)	0
Cocaine	24	9.5 (4-24)	24
Ecstasy	24	9 (2-72)	6
Ketamine	12	5 (3-7)	0
Heroin	12	3 (1-5)	0

Source: PDI Regular ecstasy user interviews 2005

* Of those who had injected in the preceding six months

Injecting risk behaviour

No one reported using a needle and syringe after another person (borrowing) in the month preceding interview and no respondents reported lending a needle and syringe to another person in the preceding six months. Two-fifths (41%; $n=7$) of those who had recently injected reported using other equipment after someone else. The most frequently cited equipment was spoons ($n=4$) and tourniquets ($n=4$), followed by filters ($n=2$) and then water ($n=1$).

Context of injecting

Most (65%) recent injectors reported that they injected themselves 'every time'. Two respondents each reported that they injected themselves 'sometimes', 'rarely' and 'never' (Table 26). Nearly three-quarters (71%) reported that they usually injected with 'close friends' while nearly half (47%) reported that they usually injected with a 'regular sex partner'; 24% reported that they usually injected with a 'casual sex partner', 18% reported that they usually injected with an 'acquaintance' while only 6% reported that they usually injected alone (Table 25).

The majority of recent injectors reported typically injecting at home (82%), while three-fifths (59%) reported typically injecting at friends' homes (59%; Table 25). One-third typically injected at dealers' homes (35%); one respondent each nominated a venue toilet, a public toilet or a sex venue. Forty-one percent of recent injectors reported that they had injected while both under the influence of drugs and coming down from drugs.

Table 25: Context and patterns of recent injection among REU, NSW 2005

Variable	Recent injectors (n=17)
Frequency of self injection	
Every time (%)	65 (n=11)
Sometimes (%)	12 (n=2)
Rarely (%)	12 (n=2)
People usually inject with*	
Close friends (%)	71 (n=12)
Regular sex partner (%)	47 (n=8)
No one (%)	6 (n=1)
Locales injected*	
Own home (%)	82 (n=14)
Friend's home (%)	59 (n=10)
Dealer's home (%)	35 (n=6)
Sex venue (%)	6 (n=1)
Public toilet (%)	6 (n=1)
Venue toilet (%)	6 (n=1)
Median times injected any drug last 6 months	20 (1-120)
Injected under the influence and coming down (%)	41 (n=7)
Median times injected any drug under the influence/coming down last 6 months	5.5 (2-25)

Source: PDI Regular ecstasy user interviews 2005

*could nominate more than one response

Obtaining needles

The majority of recent injectors obtained needles from NSPs (67%) or chemists (59%) in the preceding six months. Other sources included from a friend (12%) and from a dealer (12%), with two people reporting they obtained needles from work (12%). One participant (6%) reported difficulty obtaining needles in the preceding six months.

12.2 Blood-borne viral infections (BBVI)

BBVI vaccination and testing may be considered a marker of awareness of the risks involved with injecting. Therefore, those who reported injecting in the preceding six months were compared to those who reported never having injected a drug, to investigate whether they were more likely to report hepatitis B (HBV) vaccination and hepatitis C (HCV) and human immunodeficiency virus (HIV) testing.

Twenty-four percent of the sample reported that they have never been vaccinated for hepatitis B. A further 59% reported that they have completed the vaccination schedule, 6% did not finish the vaccination schedule and 6% did not know if they have been vaccinated.

Participants were asked if they have been tested for HCV. Of the sample 42% reported that they had not been tested for HCV ever, while 34% had been tested in the last year, 18% were tested more than a year ago and 4% either did not know or didn't get their result. Of those that had injected recently, eight respondents had been tested for HCV in the last year compared to 22 respondents who had never injected. Two of the recent injectors were positive for HCV (Table 26).

Thirty-six percent of the sample reported that they have never been tested for HIV. Forty-one percent of the sample had been tested for HIV in the last year and a further 21% had been tested more than a year ago. Of those that had injected recently, seven respondents had been tested for HIV in the last year compared to 30 respondents who had never injected. Four of the recent injectors reported a positive HIV test in the last year.

Table 26: BBVI vaccination, testing and self-reported status, NSW 2005

Variable	Never injectors (n=73)	Recent injectors (n=17)
HBV vaccination completed	n=26	n=10
HCV test last year	n=22	n=8
If yes		
Positive	n=0	n=2
HIV test last year	n=30	n=7
If yes		
Positive	n=0	n=4

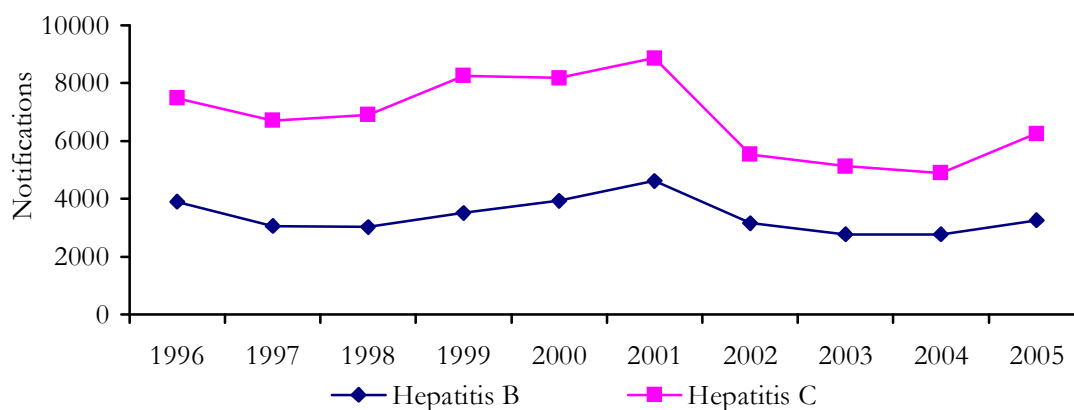
Source: PDI Regular ecstasy user interviews 2005

People with a history of injecting drug use are at significantly greater risk of acquiring HBV, HCV and HIV than the general population (NCHECR, 2002). This is because BBVIs can be transmitted through the sharing of needles, syringes and other equipment.

Figure 64 shows the total number of notifications for HBV and HCV in NSW. Incident (newly acquired) infections and unspecified infections (i.e. notifications where the timing of the disease acquisition is unknown) are presented. HCV continued to be more commonly notified than HBV, and there remains a downward trend in notifications of

HCV since 2001. HBV notifications have increased from 2,702 in 2003 to 3,678 in 2005 but remain lower than levels reported in 2001.

Figure 64: Total notifications for (unspecified and incident) HBV and HCV infections, NSW 1996-2005.



Source: Communicable Diseases Network – Australia – National Notifiable Diseases Surveillance System⁶
NB: The 2005 data are provisional only.

Trends in the number of incident notifications for HBV and HCV in NSW are shown in Figure 64. HBV incident reporting has decreased in the past twelve months from 70 in 2003 to 33 in 2004. A dramatic decline occurred in the number of HCV incident notifications, from 115 in 2003 to 13 in 2004.

12.3 Sexual risk behaviour

The majority (91%) of the 2005 sample reported penetrative sex in the six months preceding interview. Penetrative sex 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.

Recent sexual activity

Of those who reported penetrative sex in the preceding six months, more than two-fifths (44%) reported one sexual partner during this time and one-fifth (22%) reported sex between two people. Participants were asked about the use of ‘protective barriers’, which were defined as ‘condoms, dams or gloves’ with each partner type. In the 2005 sample, 14% reported using a barrier ‘always’ with a regular partner, compared with 26% who ‘always’ used a barrier with a casual partner. Over one-third (37%) of those who reported having penetrative sex reported having anal sex in the preceding six months (Table 27).

⁶ *Notes on interpretation*

There are several caveats to the NNDSS data that need to be considered. As no personal identifiers are collected, duplication in reporting may occur if patients move from one jurisdiction to another and are notified in both. In addition, notified cases are likely to only represent a proportion of the total number of cases that occur, and this proportion may vary between diseases, between jurisdictions, and over time.

Table 27: Prevalence of sexual activity and number of sexual partners in the preceding six months, NSW 2005

Variable	2005 n=101
Penetrative sex (%)	91 n=91
No. of sexual partners (%)*	
One person	44
Two people	22
3-5 people	18
6-10 people	7
10+ people	10
With a regular partner (%):	
Use a protective barrier every time	14
Use a protective barrier sometimes	20
Never use a protective barrier use (%)	26
With a casual partner (%):	
Use a protective barrier every time	26
Use a protective barrier sometimes	4
Never use a protective barrier use (%)	7
Anal sex (%)*	37
No. of times has anal sex (%)	
Monthly or less	43
Fortnightly or less	14
Weekly or less	43

Source: PDI Regular ecstasy user interviews 2005

* of those who had penetrative sex in the last 6 months

Drug use during sex

The majority (80%) of those reporting recent penetrative sex reported using drugs during sex in the previous six months. Drug use during sex was reportedly frequent with the majority reporting that drug use during sex had occurred at least three to five times (37%) in the preceding six months, followed by six to ten times (19%). The drugs most commonly used were ecstasy (90%), followed by alcohol (40%), speed (37%), cannabis (36%) and crystal (21%). Participants were asked about barrier use during sex combined with party drugs. The majority (38%) of those who had penetrative sex combined with party drugs with a regular partner reported 'never' using a barrier, followed by 'sometimes' (15%) and 'every time' (14%). This pattern appeared to be reversed for casual partners, with the majority (22%) of those who had penetrative sex combined with ecstasy and related drugs with a casual partner reporting using barriers 'every time', followed by 'often' (19%), 'sometimes' (8%) and 'never' (4%; Table 28).

Table 28: Drug use during sex in the preceding six months, NSW 2005

Variable	2005 N=101
Penetrative sex while on drugs* (%)	80
<i>Of those who had penetrative sex under the influence of drugs</i>	
Number of times	
Once	18
Twice	8
3-5 times	37
6-10 times	19
Ten +	18
Drug used (%)	
Ecstasy	90
Cannabis	36
Alcohol	40
Speed	37
Base	15
Ice	21
Cocaine	18
Ketamine	11
GHB	10
Sex with a regular partner using drugs	
Use a protective barrier every time	14
Use a protective barrier sometimes	15
Never use a protective barrier use (%)	38
Sex with a casual partner using drugs	
Use a protective barrier every time	22
Use a protective barrier sometimes	8
Never use a protective barrier use (%)	4

Source: PDI Regular ecstasy user interviews 2005

* of those who had penetrative sex in the last 6 months

12.4 Driving risk behaviour

Participants were asked about driving soon after taking a drug. Of this sample, 58% had driven within one hour of taking a drug. The most commonly reported drugs used prior to driving were ecstasy (69%) followed by cannabis (55%), speed (36%) and crystal (26%; Table 29).

Table 29: Drug driving in the last six months among REU, NSW 2005

Variable	2005 n=101
Driven soon after* taking a drug (%)	58
<i>Of those who'd driven soon after</i>	
Drug (%)	n=73
Ecstasy	69
Cannabis	55
Speed	36
Crystal	26
Cocaine	17
Ketamine	14
Base	12
Pharmaceutical stimulants	7
LSD	5
GHB	5
Amyl nitrate	5
Benzodiazepines	5
Methadone	2
Heroin	0
Other opiates	0
Alcohol	0
Nitrous oxide	0
MDA	0

Source: PDI Regular ecstasy user interviews 2005

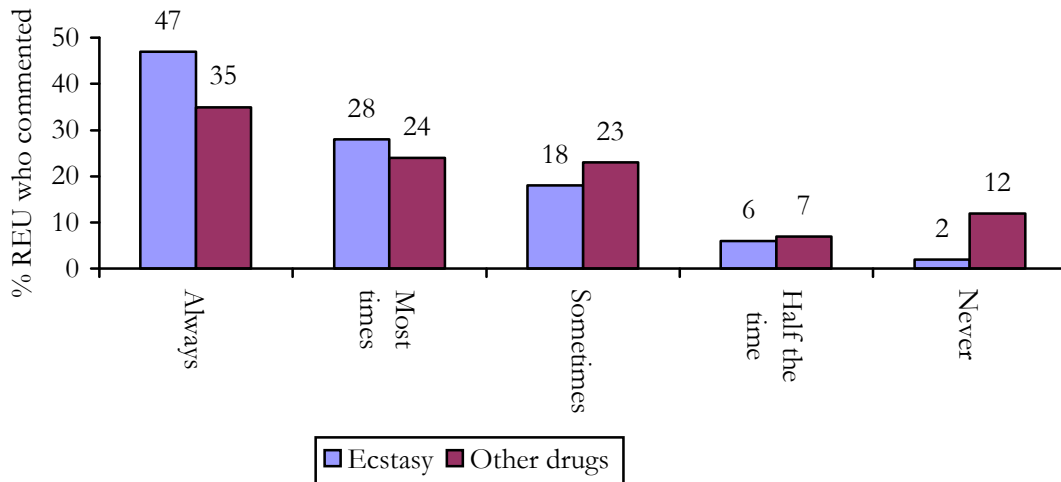
*within one hour of taking

12.5 Drug information-seeking behaviour

For the first time, in 2005, a series of questions investigating respondents' drug information-seeking behaviour were included in the PDI survey. Specifically, these questions probed such topics as finding the content and purity of ecstasy and related drugs and whether this information impacted on respondents' drug-taking behaviours.

Nearly half (47%) of respondents indicated that they 'always' found out the content and purity of ecstasy, while nearly one-third (28%) indicated that they sought to find the content and purity of ecstasy 'most times' (Figure 65). More than one-third (35%) indicated that they 'always' found out the content and purity of other drugs (not including ecstasy) whilst 24% indicated that they did this 'most times'.

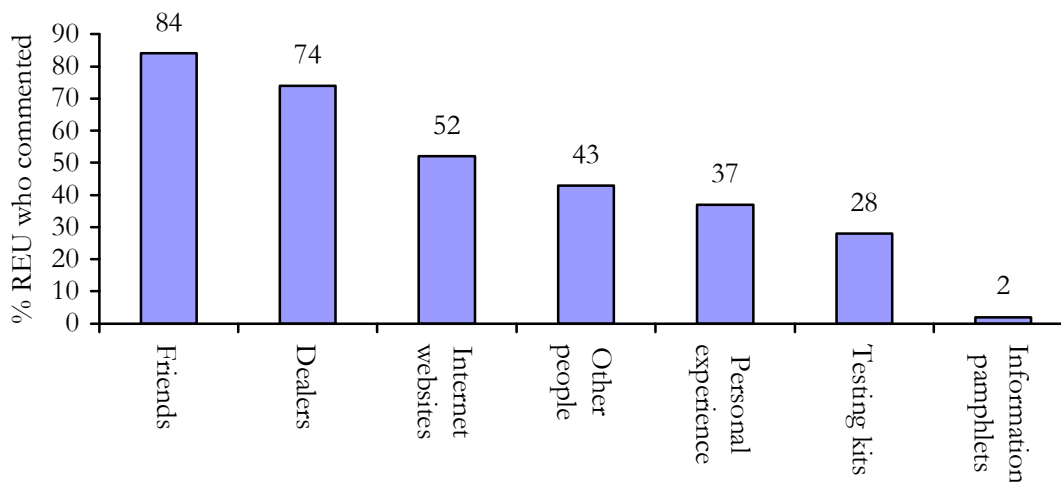
Figure 65: Frequency of seeking content and purity of ecstasy, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

Amongst those who reported finding out the content and purity of ecstasy, friends (84%) were the most frequently cited sources of information, followed by dealers (74%) and internet websites (52%; Figure 66).

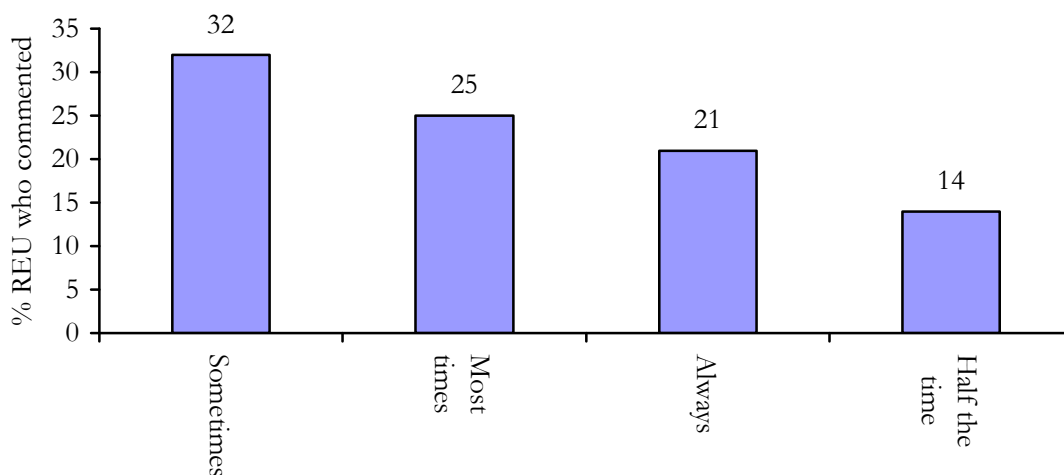
Figure 66: Sources of ecstasy content and purity, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

Of those who reported using testing kits (n=28), 21% indicated that they used these 'always' while 25% indicated that they used these 'most times' (Figure 67). Nearly two-thirds (64%) of respondents who used testing kits were aware of the limitations to using these kits. The majority (96%) indicated that they would take a pill if it contained an ecstasy-like substance, 86% would continue to take a pill if it contained an amphetamine-like substance and half (50%) would continue to take a pill if it contained ketamine. If the test had no reaction, only 19% indicated they would continue to take a pill.

Figure 67: Frequency of testing kit use*, NSW 2005

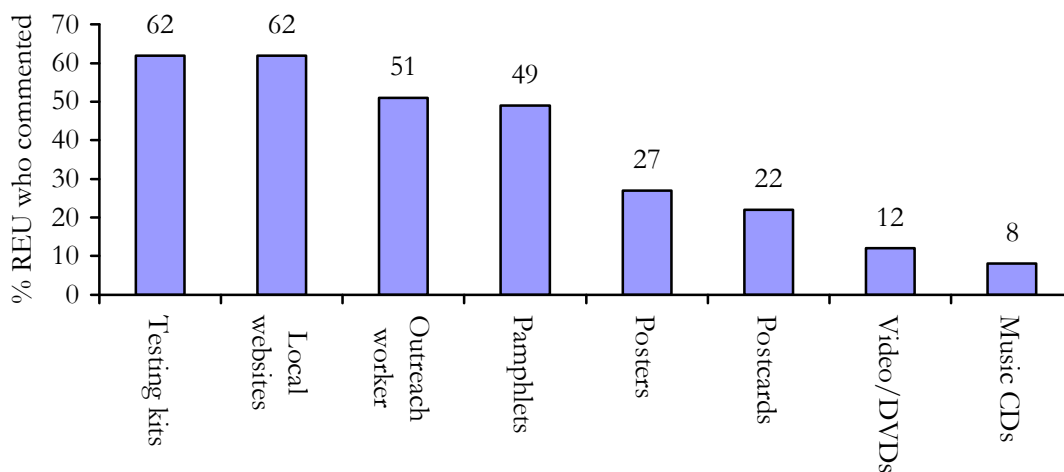


Source: PDI Regular ecstasy user interviews 2005

*Amongst those who used testing kits

Respondents were asked to indicate which information resources they would personally find useful if available locally. The majority indicated testing kits (62%) and local websites (62%) would be the most useful resource (Figure 68).

Figure 68: Information resources that would be useful to REU, NSW 2005



Source: PDI Regular ecstasy user interviews 2005

Respondents were asked about their beliefs towards ecstasy content and purity. While 35% indicated that logos on ecstasy pills were ‘never’ a good indication of what a pill will be like, 34% indicated that this was ‘sometimes’ the case and 25% indicated that this was ‘often’ the case; only 5% indicated that this was ‘always’ the case and less than 2% indicated that they ‘did not know’.

Thirty-five percent of respondents believed that most of the ecstasy they obtained ‘often’ contained MDMA, with 32% indicating this was the case ‘sometimes’ and 23% indicating this was the case ‘always’. Three percent indicated that this was ‘never’ the case and 7% reported that they ‘did not know’.

12.6 Summary of risk behaviour

- One in four (27%) respondents reported having injected at some time in their lives and 17% reported injecting in the six months preceding interview.
- A median of 3.5 drugs (range 1-11) had ever been injected, while those who reported injecting in the preceding six months had injected a median of two (range 1-7) drugs.
- Two-fifths (42%) of lifetime injectors reported injecting for the first time while under the influence of drugs (mainly ecstasy and cannabis).
- When lifetime injectors were asked to specify how they learned to inject, three-fifths (62%) reported that a friend or partner showed them how.
- Of those that injected in the preceding six months, no participants reported using a needle after someone else in the month preceding interview.
- Twenty-four percent of the PDI sample reported that they have never been vaccinated for HBV. A further 54% reported that they have completed the vaccination schedule, 6% did not finish the vaccination schedule and 6% did not know if they have been vaccinated.
- Of the sample, 42% reported that they had not been tested for HCV ever, while 34% had been tested in the last year, 18% were tested more than a year ago and 4% either did not know or didn't get their result.
- Forty-one percent of the sample had been tested for HIV in the last year and a further 21% had been tested more than a year ago.
- As expected among a sample of young adults, the majority (91%) of participants reported penetrative sex in the six months preceding interview.
- Most (44%) reported one sex partner during the preceding six months, although one-fifth (22%) of participants had penetrative sex with two people and 18% reported sex with between three and five people.
- The majority (80%) of those reporting recent penetrative sex reported using drugs during sex in the previous six months.
- Two-fifths (41%) of those who reported penetrative sex in the preceding six months had had anal sex.
- Of the sample, 48% had driven within one hour of taking a drug. The drug most commonly taken was ecstasy (69%) followed by cannabis (46%), speed (36%) and ice (26%).
- Nearly half (47%) of respondents reported that they 'always' found out the content and purity of ecstasy and more than one-fifth (28%) indicated that they 'always' sought to find out the content and purity of other party drugs. Twenty-eight respondents had used pill testing kits.

13.0 HEALTH-RELATED ISSUES

13.1 Overdose

Participants were asked if they had overdosed on ecstasy or related drugs. Overdose was defined as ‘passed out or fallen into a coma’. Of the sample, 15% of the participants had overdosed on either ecstasy or other related drugs in the last six months. Of those that had overdosed, the main drug used was GHB (33%) followed by alcohol (27%; Table 30).

Respondents were asked what the last drug they had overdosed on was. Of those who had overdosed, 53% (n=8) had last overdosed on GHB, 47% (n=7) had last overdosed on ecstasy, 47% (n=7) had last overdosed on alcohol, 13% (n=2) had last overdosed on ketamine, 13% (n=2) had last overdosed on cannabis, and one respondent each reported last overdosing on crystal, cocaine, and LSD.

Table 30: Overdose in the last six months among REU, NSW 2005

Variable	2005 n=101
Overdosed on ecstasy or related drugs (%)	15
Main drug used (%)*	
GHB	33
Alcohol	27
Ketamine	20
Cannabis	7
Ecstasy	7
Speed	0
Ice	0

Source: PDI Regular ecstasy user interviews 2005

* Percentage of those reporting overdose

Key expert comments

Five KE were able to discuss issues surrounding overdose. The number of emergency department presentations associated with ecstasy and related drug use varied, from 15 in the last 12 months to 200 in the last six months. The number of people presenting with problems associated with ‘party drug’ overdose in the past 12 months also varied, from one overdose to four in the last six months. However, these overdoses were overwhelmingly associated with GHB, with one KE reporting that 90% of overdoses were related to GHB.

Most users who presented at emergency departments did so on weekends, with Friday through to Sunday being the most frequently cited days of the week. Most had commonly used other drugs, with one KE reporting that 100% of emergency department presentations had been polydrug users. The main drugs were alcohol mixed with other drugs, ecstasy or GHB mixed with alcohol, GHB and ketamine, GHB and crystal, or crystal alone; one KE reported a combination of ecstasy, GHB, speed and alcohol.

The majority of emergency department presentations are male, ranging from 70-75%. The mean age varies, with a range of 16-40 years, with some KE indicating specific age groups (e.g. gay men are usually 25-35 years of age while straight men are usually 18-30 years of age). The majority (50-70%) are brought in by ambulance, while the percentage of those who require admission to an inpatient ward varies; most did not know the number, though one KE reported that 80% of those overdosing on GHB stayed for 24 hours and this percentage was 60% for crystal users.

Three KE discussed the number of users who discharged without treatment, and this number was reported to be high; most discharge without treatment because they feel better; only 5-10% stay in hospital. Only small proportions request information or a referral, and this number was approximately 10%. The number of presentations tended to be higher mainly on the weekends, during the summer, or after big events such as dance parties.

13.2 Self-reported symptoms of dependence

For the second time, in 2005, participants were asked questions from the severity of dependence scale (SDS) for both ecstasy and methamphetamine; previous research has suggested that a cut-off of four is indicative of dependence for methamphetamine users (Topp and Mattick 1997).

13.2.1 Ecstasy

The median SDS score for ecstasy was 0.5 (range 0-8). There were no significant differences between genders for the SDS ecstasy score. Most (50%) participants had obtained an SDS score of zero, 16% obtained a score of one and 4% a score of two. Seventeen percent of participants who had used ecstasy in the last 6 months obtained an SDS score of four or more.

A majority of participants reported that their use of ecstasy was 'never' or 'almost never' out of control (73%), while close to one-fifth reported 'sometimes' (19%), followed by a small percentage reporting 'often' (7%). No participants indicated that they felt their ecstasy use was 'always' or 'nearly always' out of control.

Asked whether the prospects of missing a dose makes them anxious or worried, 76% responded with 'never' or 'almost never', 19% responded with 'sometimes', followed by a small percentage responding to 'often' (2%) and 'always or nearly always' (3%). The same pattern occurred when the survey asked participants if they are worried about their ecstasy use, with 5% reporting 'always' or 'nearly always'. A majority responded 'never' or 'almost never' (59%) and 'sometimes' (31%) with a small proportion indicating that they worry about their ecstasy use 'often' (4%).

When asked if they wished to stop, most of the sample reported that they 'never' or 'almost never' wished to stop (75%) and 22% reported they 'sometimes' wish to stop. However, a small proportion of the sample reported wanting to stop 'often' (2%).

When asked if they thought it would be difficult to stop or go without ecstasy, a majority of the sample responded it would 'not be difficult' (80%), followed by 'quite difficult' (16%) and three participants indicated that it would be 'very difficult'.

13.2.2 Methamphetamine

Of those that had used methamphetamine, the median SDS score was zero (range 0-11), with 15% of users scoring four or above; this score has previously been validated as an appropriate cut-off level to indicate dependence (Topp and Mattick 1997).

A majority of participants reported that their use of methamphetamine was 'never or almost never' out of control (74%), while one-fifth reported 'sometimes' (20%), followed by a small percentage recording 'often' (2%). Three participants indicated that they felt their ecstasy use was 'always or nearly always' out of control.

When asked whether the prospects of missing a dose makes them anxious or worried, 76% responded with 'never or almost never', 19% responded with 'sometimes', followed by a small percentage responding to 'often' (5%) and 'always' or 'nearly always' (5%). The same pattern occurred when the survey asked participants if they were worried about their methamphetamine use, with 6% reporting to be 'always' or 'nearly always' worried about their methamphetamine use. A majority responded to 'never' or 'almost never' (71%), 21% responded that they 'sometimes' worry about their methamphetamine use and a small proportion indicating that they worry about their methamphetamine use 'often' (6%).

When asked if they wished to stop, most of the sample reported that they 'never' or 'almost never' wished to stop (81%) and 17% reported that they 'sometimes' wished to stop. However, a small proportion of the sample reported wanting to stop 'often' (2%).

When asked if they thought it would be difficult to stop or go without methamphetamine, a majority of the sample responded it would 'not be difficult' (87%), followed by 'quite difficult' (10%) and four participants indicated that it would be 'very difficult'.

13.3 Help-seeking behaviour

Participants were asked if they had accessed any medical or health services in relation to their ecstasy and related drug use in the last six months. Of this sample, 28% had accessed either a medical or health service in the preceding six months of the interview. Of those who had sought help, the majority accessed their general practitioner (GP; 44%), counsellor (27%), alcohol and other drug worker (19%), social worker (12%), psychologist (12%) or first aid (11%); smaller proportions reported accessing an ambulance (7%), emergency department (7%), had been hospitalised (7%), or had seen a psychiatrist (4%).

Table 31 below presents the proportion of participants who accessed health help by main drug used. For those who saw a GP (n=12), drugs involved were ecstasy (n=3) and benzodiazepines (n=2) while polydrug use was the most common (n=4). The main reason for seeing a GP was dependence or addition, followed by receiving information or advice on drugs. Seven respondents reported seeing a counsellor, with the main drug involved being ecstasy (n=3) followed by cannabis (n=2) and polydrug use (n=2). The main reason for seeing a counsellor for those who reported seeing a counsellor was depression, followed by receiving information or advice on drugs.

Table 31: Proportion of REU who accessed health help by main drug type and main reason, NSW 2005

Variable	Drug involved (n)	Main reason
GP	Polydrug use (4), ecstasy (3), benzos (2)	Dependence/addiction, information/advice
Counsellor	Ecstasy (3), cannabis (2), polydrug use (2)	Depression, information/advice
AOD	Ecstasy (1), crystal (1), cocaine (1), Cannabis (1), polydrug use (1)	Dependence/addiction, depression
Social worker	Ecstasy (1), cannabis (1), alcohol (1)	Information/advice
Psychologist	Ecstasy (1), cocaine (1), alcohol (1)	Depression
First aid	Ecstasy (1), cocaine (1), GHB (1)	Acute physical problems
Emergency	Ecstasy (2)	Acute physical problems, not specified
Ambulance	Alcohol (2)	Overdose, aggressive/violent behaviour
Hospital	Ecstasy (1), GHB (1)	Overdose, acute physical problems

Source: PDI Regular ecstasy user interviews 2005

Key expert comments

KE were asked to describe the mental problems which they saw in REU, whether there were any changes in these in the last six months, or changes in treatment-seeking behaviours. The mostly frequently cited mental health problems were anxiety and depression related to ecstasy use, and one KE mentioned that this depression was specifically linked to the comedown from ecstasy. Paranoia was another mental health problem cited by KE. While those that commented linked most of these to ecstasy, one KE linked anxiety to cannabis use, and another linked delirium, anxiety and psychosis to amphetamine and ecstasy use. Antisocial or withdrawing from social networks was linked to crystal use.

In general, most KE indicated there had been no change in the past six months. One KE reported an increase in psychotic episodes; another reported a slow increase in amphetamine-induced anxiety; while another reported an increase in aggression related to alcohol use. Some KE mentioned that REU were opening up more and talking about their problems. Other KE mentioned a reduction in mental health problems, with one specifically citing a reduction in crystal users, as those who used crystal were 'burnt out' from frequent use and thus were using less.

In regards to a change in treatment-seeking behaviour, most KE (n=8) indicated no change had occurred. Others mentioned that a small number of people were looking at what was available but not taking treatment. Others mentioned that users were now assessing whether drug use and their lifestyle went together. One KE mentioned an increase in crystal users attending forums, such as the AIDS Council of NSW's (ACON) Self Management and Recovery Training (SMART) recovery group.

13.4 Other problems

Participants in 2005 reported a range of other problems associated with their drug use. Participants were asked if they had experienced any occupational/study, relationship/social, financial, or legal/police problems in the six months preceding interview that they would attribute to their drug use. In all categories, the drug most frequently attributed to their problems was ecstasy. Given that ecstasy was not asked about specifically (in contrast to the side effects section), this suggests that other drugs are not perceived as related to problems of the same degree as ecstasy by this group. However, as all participants had used ecstasy and varying proportions of the sample had used other drugs, the lower prevalence of these other drugs may be reflected in these responses.

Approximately two-fifths of the sample had experienced occupational/study problems (39%), financial problems (36%) and relationship/social problems (35%) in the preceding six months attributable to the use of ecstasy and related drugs; 7% reported legal/police problems (Table 32). Of the seven respondents who reported legal/police problems, two attributed these problems in part to ecstasy and the main problems concerned included being cautioned by police (n=2), felt like being followed or being under surveillance (n=2), and imprisonment (n=2).

Crystal (n=8) and cannabis (n=7) were the most commonly cited drugs related to occupational/study problems after ecstasy, while polydrug use (n=7) and cannabis (n=5) were common amongst those who reported financial problems. Polydrug use (n=6) and crystal (n=5) were also frequently cited in regards to relationship/social problems.

Table 32: Self-reported drug-related problems, NSW 2005

Variable	Any drug (n=101)	Ecstasy (%)	Speed (%)	Base (%)	Crystal (%)	Cannabis (%)	Alcohol (%)	Polydrug (%)
Occupational /study (%)	39	46	3	0	21	18	5	5
Financial (%)	36	39	6	6	8	14	6	19
R'ship/social (%)	35	46	6	3	14	3	9	17
Legal/police (%)	7	29	14	0	14	14	14	14

Source: PDI Regular ecstasy user interviews 2005

Key expert comments

One issue mentioned by several KE was how drug use appeared to be causing financial and social problems in users. One KE reported that friends and partners were complaining about having nights out ruined by having to care for others under the influence of drugs. Friends were also expressing concern about peers taking too many drugs. Sleep deprivation and weight loss were two other issues that KE reported. One other recurring theme reported by KE was that there appeared to be a group of users that were reflecting on drug use and how it fitted with their lifestyle; many of these appeared to be reducing their drug intake. Others appeared to be concerned regarding their drug use and how this would impact on their work and study.

13.5 Summary of health-related issues

- Fifteen percent of the participants had overdosed on either ecstasy or related drugs.
- Of those who had overdosed, the main drug used was GHB (33%) followed by alcohol (27%).
- For the second time, in 2005, the severity of dependence scale (SDS) was used for ecstasy and methamphetamine. The median SDS score for ecstasy was 0.5 (range 0-8).
- Participants were asked if their ecstasy use was out of control, with 73% reporting 'never or almost never', 76% reporting that missing a dose did not make them feel anxious, more than half of the participants were not worried about their ecstasy use, and 22% percent wished that sometimes they could stop using ecstasy.
- Of those that had used methamphetamine, the median SDS score was zero (range 0-11), with 15% scoring four or above, which has previously been validated as an acceptable cut-off to indicate dependence.
- Twenty percent of those that had used methamphetamines believed that their methamphetamine use was 'sometimes' out of control, 15% reported that missing a dose 'sometimes' made them feel anxious, 21% were 'sometimes' worried about their methamphetamine use, 17% 'sometimes' wished that they could stop and 10% found it quite difficult to stop using methamphetamine.
- Of the sample, 28% had accessed either a medical or health service in the preceding six months of the interview.
- Of those who had sought help, the majority accessed a GP (44%), followed by a counsellor (27%) or followed by a drug and alcohol worker (19%).
- Occupational or study problems (39%) and financial (36%) problems were most commonly reported by regular ecstasy users.
- Relationship or social problems attributed to ecstasy and related drug use were reported by 35% of the sample. A small proportion (7%) also reported legal/police problems.

14.0 CRIMINAL ACTIVITY, POLICING AND MARKET CHANGES

14.1 Reports of criminal activity among REU

More than one-quarter (29%) of the 2005 sample had committed a crime in the month preceding the interview (Table 33). Twenty-three percent of the sample had dealt drugs in the previous month, though frequency of drug dealing was low, with most of those who had dealt drugs doing so once a week or less. Eight percent of the sample had committed a crime against property, and again the frequency was low, with most reporting less than once a week. Two respondents reported committing fraud in the past month and one respondent reported violence in the past month.

Since 2000, smaller proportions of regular ecstasy users have reported involvement in any criminal activity; however, the proportion appears to have risen in 2005 (Table 33). Whilst there was a decrease in fraud and violence, there was an increase in dealing drugs and property crime in 2005, a deviation on the general trend since 2000 of the rates for these responses to have declined. There was, however, a reduction in the number of participants who had been arrested in the preceding 12 months, almost halving from 11% in 2004 to 6% in 2005.

Table 33: Criminal activity reported by REU, NSW

Criminal activity in the last month	2000 (n=94)	2001 (n=163)	2002 (n=88)	2003 (n=102)	2004 (n=104)	2005 (n=101)
Any crime	49	44	43	30	19	29
Drug dealing	40	38	40	28	12	23
Property crime	11	4	5	4	5	8
Fraud	3	4	1	1	4	2
Violent crime	2	4	2	5	4	1
In the preceding six months:						
Paid for ecstasy through dealing drugs (ecstasy profit)	35	36	22	19	19	12
Paid for ecstasy through property crime	4	3	0	3	2	4
Arrested last 12 months	-	-	-	-	11*	6

Source: PDI Regular ecstasy user interviews 2005 * Not recorded prior to 2004

Key expert comments

Only one KE was able to comment on property crime. It was suggested that property crime was mainly sporadic and seasonal (occurring mainly in summer) and was related to petty theft, such as theft of mobile phones.

Twelve KE were unable to comment on the dealing of drugs. Of those who were able to comment, most of the reports indicated that drug dealing was done in social networks, i.e. people tended to deal drugs to people they knew, and that users tended to buy from people they knew. The 'bulk buying' of drugs was also commented on by KE, i.e. users were buying their drugs in larger amounts for a cheaper price. It is not known whether users are aware of the different penalties that are applicable by law for being found in possession of different quantities of substances.

Only one KE reported on the issue of fraud, and this was in relation to one case of forging a prescription for Viagra.

Violent crimes were overwhelmingly associated with the use of alcohol as well as the use of methamphetamine, with some KE signalling that this was particularly related to crystal users.

14.2 Perceptions of police activity towards REU

Since 2003, there has been an increase in the proportion of respondents that have reported a perceived increase in police activity towards ecstasy users and the ecstasy and related drug market in general (Table 34). In 2005, half (49%) of the sample reported a perceived 'increase' in police activity, while 36% reported that police activity had remained 'stable', a decrease from 41% in 2004. Only two respondents reported that they perceived police activity had 'decreased', while 14% were unable to comment.

Those who reported increased police activity were asked to specify changes in activity. Increased police presence in nightclubs and raves (including 'doofs' and dance parties) including the use of drug detection (sniffer) dogs, random searches, at-door searchers and undercover police officers were commonly reported. Other perceived changes in police activity included more raids and searches in clubs and private parties, including increased security. Some also mentioned increased police presence on trains, train stations, on the streets and outside clubs.

Despite the perceptions of a recent increase in police activity, the majority (92%; n=93) of the 2005 sample reported that police activity had not made it more difficult for them personally to obtain illicit drugs recently⁷. However, whilst 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.

Reports regarding other aspects of police activity varied little across years. In all six sampling years, very few participants reported a perceived decrease in recent police activity. However, the majority of all samples reported that police activity had failed to make it more difficult recently for them to obtain illicit drugs.

⁷ Participants were asked 'Has police activity made it more difficult *for you* to score drugs in the last six months?' (yes/no).

Table 34: Perceptions of police activity by REU, NSW

Perception	2000 (n=94)	2001 (n=163)	2002 (n=88)	2003 (n=102)	2004 (n=104)	2005 (n=101)
Recent police activity:						
Decreased	5	5	2	7	1	2
Stable	52	34	16	36	41	36
Increased	32	49	78	37	45	49
Don't know	11	12	3	20	13	14
Did not make scoring more difficult	87	94	88	80	85	92

Source: PDI Regular ecstasy user interviews 2005

Key expert comments

There were varying reports regarding police activity, with three KE each indicating that police activity had increased, decreased, or remained stable. Of those who commented that police activity had changed, there were again conflicting reports, with some KE indicating that police were less visible and there were fewer drug detection 'sniffer' dogs, while other KE reported an increase in uniformed police activity and presence, and an increase in the use of drug detection (sniffer) dogs. Those KE involved in law enforcement reported an increased focus by law enforcement on MDMA precursors, as well as working more closely with pharmaceutical companies.

14.3 Perceptions of changes in ecstasy and related drug markets

More than half (58%) of the 2005 sample had perceived changes in the ecstasy and related drug market in Sydney. Three broad themes were identified from participant responses, which included: age differences in drug use; changes in the types and quantities of drugs; and changes in drug purity. Whilst these responses are reported under these themes, the small numbers responding requires careful interpretation of results.

There was a large consensus that younger age groups are increasing their drug use, in that they are using more drugs and using more drugs more frequently. The 18-20 year age group was singled out as increasing their drug use. This group was also cited as increasing its use of ecstasy and GHB. They were also reported to be using drug combinations that combined 'hard' drugs. There were reports that, as a whole, the under-30 age group was increasing drug use. There were age-related reports that some groups were decreasing their drug use and drug bingeing because they were now employed full-time or had entered relationships; that as respondents got older, they tended to use fewer drugs. However, some respondents commented that drug bingeing had increased. Some respondents singled out an emerging group of drug users: these were older, such as 45 years and above, who were increasing their drug use; however, there were also reports that this age group was decreasing drug use.

Many respondents who commented on the changes in the ecstasy and related drug market commented on the changes in individual drugs. While there were conflicting results, the general trend appeared to be that ecstasy use was on the increase, and that people were using more ecstasy in single sessions. GHB was reported to be on the increase by some, although a few respondents did report it was on the decrease. GHB was specifically cited in relation to girls, in that more girls were using GHB. Overall, GHB use was reported to have risen. Ketamine was reported as increasing, as was cocaine. Crystal meth was reported to have increased, and crystal use was linked to a rise in injecting drugs, and gay men were singled out as a group who had increased their injecting behaviour. Speed was reported to have decreased, although there were conflicting reports. Overall, polydrug use appears to be the rule rather than the exception.

Some respondents claimed that drug purity had increased, and thus some drugs (such as ecstasy) were being taken in fewer quantities. Others reported that the purity of drugs such as cocaine had also increased.

Again, due to the small numbers commenting on these themes, caution should be taken in interpreting the responses.

14.4 Summary of criminal and police activity

- More than one-quarter (29%) of the sample had committed a crime in the month preceding interview, with 23% of the sample having dealt drugs in the month preceding interview, though the frequency of doing so was low.
- There was a marked decrease in the proportion of ecstasy users sampled who perceived recent increases in police activity. However, of those who did report an increase, the majority reported increase police presence in nightclubs, dance parties and raves (including 'doofs' and dance parties) as well as increased use of drug detection dogs.
- The majority of ecstasy users reported that police activity had not made it more difficult for them to obtain drugs.
- Most perceived changes in the ecstasy and related drug market in Sydney as being centred on age-related changes in drug users, changes in the drugs people were using, as well as changes in purity of drugs available.

15.0 SUMMARY

15.1 Demographic characteristics of REU

The current results are consistent with previous years in indicating that regular ecstasy users, a population defined by monthly or more frequent use of tablets sold as 'ecstasy', tend to be young, relatively well-educated, and likely to be employed or engaged in studies. Few participants reported having engaged in crime other than drug dealing. Two participants were currently in treatment for a drug-related problem and three participants had previously been incarcerated. Demographic characteristics of ecstasy users interviewed in Sydney appear to have changed little since 2000.

15.2 Patterns of polydrug use

As with other Australian samples of regular ecstasy users, and previous PDI samples, the participants interviewed in the 2005 PDI study were extensive polydrug users. One-third indicated that ecstasy was their drug of choice, a reduction from 2004, where half indicated ecstasy was their drug of choice.

Although in general the rates of polydrug use remained stable between 2000 and 2005, there have been recent changes in the use of some drugs, such as a decrease in lifetime and recent use of MDA and a decrease in the recent use of GHB in 2005. On the other hand, there was a dramatic increase in the use of LSD in 2005.

Ecstasy was the drug of choice for over one-third of respondents, followed by cocaine and cannabis. Large proportions reported recent use of alcohol, cannabis, speed and tobacco.

One in four respondents (27%) in the sample reported having injected a drug at some time.

15.3 Ecstasy

The regular ecstasy users interviewed started using the drug in their late teens. All participants typically consume ecstasy orally, although more than half reported recently snorting the drug.

A wide range of patterns of ecstasy use were reported; however, most reported using the drug between fortnightly and weekly. More than two-thirds of regular ecstasy users typically use more than one tablet per use episode. More than two-fifths of the sample recently binged on ecstasy, i.e. used ecstasy on a continuous basis for 48 hours or more without sleep. Nearly all users report typically using other drugs in combination with ecstasy and to 'come down' from its acute effects. Some of the data on patterns of ecstasy use suggest that the quantity and frequency of ecstasy use among regular users may have increased over time.

Ecstasy is scored from a variety of people and used in many locations. Comparable to previous years, the majority of participants continued to obtain ecstasy from friends and purchased ecstasy from friends' houses. Nightclubs and raves (including dance parties and 'doofs') were locations participants reported usually using ecstasy, and also the nightclub and own home were the most commonly reported locations of most recent use.

The median price of ecstasy was reported to be \$30, which was lower than the \$35 reported in 2004 and reflects the steady decline in the price of ecstasy. Respondents reported that this price had remained stable in 2005. The user and KE reports of ecstasy purity are varying; and purity of seizures made by AFP were 57.6% and NSW police were 25.5% in 2004/05.

Ecstasy remains a drug that can be easily accessed. Both users and KE have consistently reported that ecstasy has been 'very easy' to obtain since 2000.

The most commonly identified benefits perceived to be related to ecstasy use was the enhanced feelings of closeness and bonding with others, followed by enhanced mood. The most commonly identified risks of ecstasy use were depression and ecstasy containing unknown contaminants/cutting agents.

Indicator data on ecstasy reflect the relatively widespread use of this drug and its stability in recent years. Recorded number of offences relating to the use/possession and dealing/trafficking of ecstasy have increased since 1997, although they have remained stable over the preceding 12 months. The number of telephone enquiries received by the Alcohol and Drug Information Service and Family Drug Support relating to ecstasy has remained relatively stable over time. Other health-related indicator data suggest fluctuations in the number of users seeking treatment for their ecstasy use, with peaks occurring in the earlier months of the year (usually associated with the 'party season').

15.4 Methamphetamine

The dynamic methamphetamine market and the use of different forms of methamphetamine has resulted in increased interest among researchers, law enforcement and health professionals. The PDI provides further information on use of the different forms.

The lifetime use of crystal decreased slightly in 2005, as did the recent use of both crystal and speed. However, the recent use of base increased slightly. KE reports of speed use indicated that speed was becoming less popular, while crystal was becoming more popular, and that these two drugs appeared to cycle amongst themselves. KE reports indicated that base was rarely used.

Speed and base were most commonly used in nightclubs, followed by friends' homes or at their own homes. Crystal was most commonly used in their own homes or at friends' homes.

Speed was most commonly purchased in gram amounts for a median of \$60, remaining 'stable' from 2004. A 'point' of base was purchased for \$30, a further reduction from \$37.50 in 2004, while the price of crystal increased to \$50 a 'point' from \$40 in 2004. More than half of the respondents were able to comment on price change, perhaps reflecting increased exposure to these drugs.

The purity of all forms of methamphetamine was reported by most respondents to be of 'high' or 'medium' purity and the majority reported that the purity had remained 'stable' over the preceding six months. AFP seizure data also shows methamphetamine purity has dropped dramatically for the first time since the 2002/03 financial year from 71% to

43%, probably reflecting the wide range of products being manufactured both domestically and internationally that are sold as speed, base and crystal.

Speed was reported to be 'very easy' or 'easy' to obtain, while conflicting reports were provided in regards to the availability of base, with responses ranging from 'easy' to 'difficult' to obtain. Mixed reports were also provided for crystal; respondents reported that crystal was 'easy' or 'difficult' to obtain. The majority reported that the availability of all methamphetamines had remained 'stable' in the preceding six months.

All forms of methamphetamine were most commonly purchased from friends and known dealers and most likely to have been purchased from private residences including friends' and dealers' homes.

Indicator data do not show a clear trend for methamphetamine in the preceding 12 months, with fluctuations occurring in the number of people presenting with amphetamine overdose, the number of people calling help lines regarding problematic amphetamine use, number of inpatient hospital admissions and the number of incidents recorded for possession/use of amphetamines. There have, however, been gradual increases over time recorded across many of the datasets.

15.5 Cocaine

Prevalence of lifetime cocaine use remained stable across time, although this slightly declined in 2005. However, recent cocaine use has increased since 2004. Frequency of cocaine use has fluctuated while quantities used have increased in 2005 after remaining comparable between sampling years. KE reports of cocaine indicated that it was used during 'special occasions', mostly because the price of cocaine was high.

Recent cocaine users reported usually using cocaine at private residences such as friends' homes or at their own homes, although nightclubs were also commonly reported. The most common location of last use of cocaine was at friends' homes.

Cocaine was most commonly purchased in grams at a median price of \$270 per gram, which was an increase from \$200 per gram in 2004; most reported that the price of cocaine had remained 'stable' in the preceding six months. The majority of those commenting reported that the purity of cocaine was 'high' or 'medium' and that the purity of cocaine had remained 'stable' or had 'increased' in the preceding six months.

The median purity of cocaine seized and analysed by the AFP remained stable at 72% over the preceding 12 months while NSW police cocaine seizure purity was 32%. Number of seizures analysed by the AFP have increased over recent years to 348 in 2003/04 while the number of NSW police seizures analysed has increased to 97 in 2003/04.

Conflicting reports were obtained regarding cocaine availability, with most reporting that cocaine was 'difficult' or 'easy' to obtain and that availability had remained 'stable'. The majority of participants reported that cocaine was obtained from friends and known dealers and that cocaine was most commonly purchased from friends' homes.

Indicator data also reflects user reports, with use/possession incidents, calls to drug and alcohol referral lines, inpatient hospital admissions, treatment episodes, overdose and detections among suspected drug-related deaths all remaining 'stable' or 'increasing' over the preceding 12 months.

15.6 Ketamine

There has been an increase in proportions reporting use of ketamine since 2000. Although reports of lifetime and recent use of ketamine have remained stable since 2002, there was a dramatic increase in the lifetime use of ketamine in 2005 while recent use of ketamine remained stable. There was a decrease in the median days used in the preceding six months, from four days in 2004 to two in 2005. The quantity of ketamine being used remained stable. Friends' homes were the most commonly nominated location of recent use, followed by respondents' own homes and nightclubs.

Forty-four respondents were able to comment on the price of ketamine in 2005, which was reported to be a median of \$100 per gram, a decrease in price from 2004 (\$200 per gram). Most respondents reported that the purity of ketamine was 'high' or 'medium' and that the purity had remained 'stable' in the preceding six months. Ketamine was 'very easy' or 'difficult' to obtain and this remained 'stable' in the preceding six months.

Similar to other drug types, friends were the people participants most commonly reported purchasing ketamine from in the preceding six months, and was most commonly reported to have been purchased in friends' homes or from dealers' homes.

Consistent with the low patterns of use among REU interviewed, indicator data suggests low rates of health-related harms.

15.7 GHB

The prevalence of GHB use has increased over time, with substantial increases in reports of both lifetime and recent use since 2000. In 2005 there was an increase in the number of respondents who reported lifetime use of GHB, yet there was a decrease in the number of respondents who reported recent use of GHB. The majority had used GHB once a month in the preceding six months; four respondents chose GHB as their drug of choice.

The quantity of GHB being used fluctuated in 2005; the 'average' quantity used decreased, yet there was an increase in the quantity used in 'heavy' sessions of use. Similar to most other ecstasy and related drugs, GHB was most often used in nightclubs. While the use of this drug appears to be largely occasional, it nevertheless remains the case that many GHB users (even occasional users) experience relatively severe consequences related to their use (Degenhardt, Darke et al. 2002; Degenhardt, Darke et al. 2003).

The median price of a 'vial' of GHB decreased from \$30 in 2004 to \$25 in 2005 and the price of GHB was reported as having remained 'stable' in the preceding six months. Most respondents reported GHB purity as 'high' although the reports regarding the stability of GHB purity in the preceding six months were conflicting, ranging from the purity having remained 'stable' to having decreased. Conflicting reports regarding the availability of GHB were also provided, with reports ranging from 'very easy' to 'difficult', and respondents reported that the availability in the preceding six months ranged from 'stable' to 'more difficult'.

KE reports indicated that GHB was used; however, use of GHB was done so discreetly. KE also indicated that users were aware of the harms associated with using the drug and had become more vigilant in looking out for friends who were under the influence. KE reports suggested that GHB was used in combination with ecstasy, alcohol or ketamine.

15.8 LSD

Prevalence of both lifetime and recent LSD use has dramatically increased in 2005 after having decreased since 2000. KE reports suggested that LSD use was sporadic and used mostly amongst younger groups who were experimenting with drug use.

The price of LSD has remained stable and most of those who were able to comment believed that the price had remained 'stable' in the preceding six months. The price of LSD had increased from \$10 in 2000 and 2001 to \$15 in 2002 and 2003, before again increasing to \$20 in 2004 and remaining at \$20 in 2005. LSD was usually used at friends' homes and at users' own homes, followed by raves and nightclubs.

Reflecting the increase in the use of LSD, forty two respondents were able to comment on the purity of LSD. Reports were conflicting, with respondents reporting purity as either 'high' or 'low'. Purity in the preceding six months was thought to have remained 'stable' or to have 'increased'. Reports regarding the availability of LSD were also conflicting, with respondents reporting that LSD was either 'difficult', 'easy' or 'very easy' to obtain, though the majority of those who commented believed that the availability of LSD had remained 'stable' in the preceding six months.

15.9 MDA

The prevalence of lifetime and recent MDA use has dramatically decreased since 2004. Reports of frequency of use have remained stable, as has the quantity of MDA being used. KE reports suggest small numbers using MDA, and many KE suggested that many REU would be unable to differentiate between MDA and MDMA.

Only 5% of the sample was able to comment on the price of MDA, which had decreased from \$47.50 a cap in 2004 to \$37.50 a cap in 2005. The majority of those who commented reported that the purity of MDA was 'high' or 'medium' and this had remained 'stable' in the preceding six months. Availability was reported as 'easy' to obtain by more than half that commented, though 24% reported that MDA was 'difficult' to obtain.

15.10 Other drugs

Almost all regular ecstasy users consumed alcohol in the six months preceding interview on a median of one day per week, with a substantial minority drinking alcohol at least four days a week. The proportion of participants who reported typically drinking alcohol while using ecstasy has steadily increased across time, with the data suggesting that substantial proportions of ecstasy users consume large quantities of alcohol in conjunction with their ecstasy use.

A majority of the sample reported recent use of cannabis, using on a median of two days per week, with 30% reporting that they used cannabis every day in the preceding six months. Cannabis was used in combination with ecstasy by nearly half the sample, and more than half of the sample reported using cannabis to come down from ecstasy. Tobacco was used by a majority of the sample and was used daily by half the sample.

The number of respondents who used benzodiazepines was comparably to previous years and were used on a median of once per month by those who had used in the preceding six months. Anti-depressant use was low; only six respondents had used anti-depressants in the preceding six months and frequency of use was low.

In comparison to previous years, the prevalence of recent amyl nitrate use had risen. Amyl nitrate was used on a median of three days in the preceding six months, with the majority of recent users indicating they used amyl nitrate once a month or less.

Small numbers reported the recent use of mushrooms, and frequency of use was low. Five respondents had used 2CB in the preceding six months and five respondents reported having used 5-HTP in the preceding six months. Again, for both these substances, frequency of use was low.

15.11 Risk behaviour

One in four (27%) of the sample reported having injected at some time in their lives and 17% reported injecting in the six months preceding interview. A median of 3.5 drugs (range 1-11) had ever been injected while those who reported injecting in the preceding six months had injected a median of two (range 1-7) drugs.

Two-fifths (42%) of lifetime injectors reported injecting for the first time while under the influence of drugs – mainly ecstasy, cannabis and alcohol. Of those that were lifetime injectors and had first injected while under the influence of drugs, the most frequently cited drug users reported being under the influence of were ecstasy, cannabis and alcohol.

When lifetime injectors were asked to specify how they learned to inject, three-quarters (77%) reported that a friend or partner showed them how. Of those that injected in the preceding six months no participants reported using a needle after someone else in the month preceding interview.

Twenty-four percent of the PDI sample reported that they had never been vaccinated for hepatitis B. A further 59% reported that they had completed the vaccination schedule, 6% did not finish the vaccination schedule and 6% did not know if they had been vaccinated.

Of the sample, 42% reported that they had not been tested for HCV ever, 34% had been tested in the last year, 18% were tested more than a year ago and 4% either did not know or didn't get their result. Forty-one percent of the sample had been tested for HIV in the last year and a further 21% had been tested more than a year ago.

As expected among a sample of young adults, the majority (91%) of participants reported penetrative sex in the six months preceding interview. Most (44%) reported one sex partner during the preceding six months, although one-fifth (22%) of participants had penetrative sex with two people. The majority (80%) of those reporting recent penetrative sex reported using drugs during sex in the previous six months. Two-fifths (41%) of those who reported penetrative sex in the preceding six months had had anal sex.

Of the sample, 48% had driven within one hour of taking a drug. The drug most commonly taken was ecstasy (69%) followed by cannabis (55%), speed (36%) and crystal (26%).

For the first time, in 2005, respondents were asked about their drug information-seeking behaviours. Forty-seven percent of respondents 'always' found out the content and purity of ecstasy, with the most frequently cited sources being friends (84%) and dealers (74%). Testing kits had been used by 25% of respondents. More than one-fifth (28%) indicated that they 'always' sought to find out the content and purity of other party drugs.

15.12 Health-related issues

Of the REU sample, 15% of the participants had overdose on either ecstasy or other related drugs. Of those that had overdosed, the main drug used was GHB (33%) followed by alcohol (27%).

For the second time, in 2005, the severity of dependence scale (SDS) was used for ecstasy and methamphetamine. The median SDS score for ecstasy was 0.5 (range 0-8). Participants were asked if their ecstasy use was out of control, with 73% reporting 'never or almost never', 76% reporting that missing a dose did not make them feel anxious, 59% of the participants were not worried about their ecstasy use, and 22% percent wished that sometimes they could stop using ecstasy.

Of those that had used methamphetamines, the median SDS score was zero (range 0-11), with 15% scoring four or above, the level of dependence. Twenty percent of those that had used methamphetamine believed that their methamphetamine use was 'sometimes' out of control, 19% reported that missing a dose 'sometimes' made them feel anxious, 21% were 'sometimes' worried about their methamphetamine use, 17% 'sometimes' wished that they could stop and 10% found it quite difficult to stop using methamphetamine.

Of the REU sample, 28% had accessed either a medical or health service in the preceding six months of the interview. Of those who had sought help, the majority accessed a general practitioner (44%), followed by a counsellor (27%) and drug and alcohol worker (19%). For those who saw a general practitioner, four reported that the main issue involved was polydrug use, followed by ecstasy (n=3), and the main issue of concern was dependence/addiction.

Participants were also asked if they had experienced any occupation, social, financial or legal problems in the six months preceding interview that they would attribute to their drug use. Occupational/study problems were reported by the highest proportion of regular ecstasy users in the sample (39%), followed by financial (36%). Relationship or social problems attributed to ecstasy and related drug use were reported by 35% of the sample. A small proportion (7%) also reported legal/police problems

15.13 Criminal and police activity

More than one-quarter (29%) of the 2005 sample had committed a crime in the month preceding the interview. Drug dealing was the most common criminal activity reported. The frequency of drug dealing in the last month was low with most of those that had committed any type of crime reporting they had done so once a week or less.

While half (52%) of the participants perceived an increase in police activity, a small majority (32%) reported police activity had remained stable. The majority (87%) of the sample reported that police activity had failed to make it more difficult for them to obtain illicit drugs recently.

16.0 IMPLICATIONS

There is increasing evidence that the use of ecstasy is widespread and that the market has increased or stabilised in recent years. The results of general population surveys – showing an increased prevalence of use over time, increases in arrests for possession or dealing ecstasy, increases in calls to telephone help lines about ecstasy, and reports from regular users – suggest that over time, this group is increasing in size and that ecstasy is being used more heavily. The PDI survey data show that regular ecstasy users score from a range of people and use in a wide variety of locations. All this information suggests that, despite Australia's continued effort to reduce both the importation and local manufacture of ecstasy, it has remained readily available in Sydney since 2000. Continued monitoring of the market for ecstasy will ensure policymakers are well placed to respond to changes in the market or to the nature and extent of ecstasy-related harms in a timely fashion.

There is evidence to suggest that ecstasy (MDMA) may be neurotoxic to serotonergic neurons in the brain, which are involved in mood regulation and memory function (Hegadoren, Baker et al. 1999; Boot, McGregor et al. 2000). The long-term consequences of ecstasy use are not as well understood. Results from the PDI suggest that there is the potential to reduce the harm associated with ecstasy and related drug use in this population. The challenge of harm reduction strategies is to incorporate messages that are credible and acceptable to the population.

The vast majority of ecstasy users perceive a wide range of psychological, neurological and physical harms related to their use of the drug, yet they continue to use in ways that may be considered harmful. Substantial proportions report recently bingeing on ecstasy and using large amounts of alcohol in conjunction with ecstasy. Both these patterns of behaviours are likely to increase the risks associated with ecstasy use and should perhaps be considered by health educators as harmful behaviour worth targeting.

Although many users were able to identify harms related to the use of ecstasy and related drugs, there were users that did not know the risks associated with use. As regular ecstasy users are also polydrug users, it is important to provide accurate information to users regarding combinations of specific ecstasy and related drugs and their effects. The provision of evidence-based information to reduce the harm associated with the use (and poly use) of these drugs may help to avoid some of these harms. Further research may be required to provide a better understanding of harms associated with specific drug combinations. In addition it is important to acknowledge that users may be using specific combinations of drugs to enhance effects or decrease the side effects of others. Some users of speed, ketamine, GHB and amyl nitrate reported that the benefit of these drugs was the ability to enhance effects or decrease the side effects of other drugs. Some KE also made comments consistent with this. It is a challenge to provide effective harm reduction strategies to this group, acknowledging their knowledge of the drugs while also attempting to limit harm.

The content of 'ecstasy' tablets is variable, and this is an issue of concern that could be potentially addressed by the consistent analysis of seizures by law enforcement agencies. Since 1997, the Victoria Police Forensic Services Department, Chemical Drugs Intelligence Team, has maintained a database on drug seizures. Over the last seven years this database has developed into a comprehensive record of drug seizures and trends

within Victoria. This database will contain a greater number of seizures from other jurisdictions in the future, but, at time of publication, data for NSW was not available.

The use of other related drugs such as ketamine, GHB, MDA and LSD appears to be more sporadic. Consistent with a relatively low level of use of these drugs, only small numbers felt confident about commenting on the price, purity and availability of them. Consequently, many people who report the recent use of such drugs may not deliberately seek them out. This use may be more opportunistic and, hence, they are unfamiliar with market indicators such as changes in their price, purity and availability. The relatively low rate of exposure to the regular use of these drugs is in itself an indicator of the smaller size of the markets for them. However, the use of these drugs, however, infrequent, is of interest as it may be that the most important concern related to REU use of these other drugs is the risks associated with the combinations of drugs used, i.e. the polydrug use itself. Continued monitoring is required to ascertain if the markets will continue to grow.

The 2005 NSW PDI results highlight that the use of crystal methamphetamine among regular ecstasy users has slightly decreased this year after steady increases, though anecdotal evidence by KE have suggested that there is a stable group of crystal users. The increases in the proportions that recently used crystal, used crystal in a binge, and reported they typically used crystal with ecstasy, along with an increase in the frequency of crystal use and an increase in the proportion that report crystal as 'very easy' to obtain, indicate an expanding market for this drug. In addition, fifteen percent of this group scored four or above on the Severity of Dependence Scale for methamphetamine (most commonly the powder and crystal forms), indicating dependent use in previous validation studies (Topp and Mattick 1997). Furthermore, a small number reported that they had sought help (health/medical) for methamphetamine-related problems, particularly anxiety. This highlights issues for research, health and law enforcement. The market for crystal methamphetamine needs to be monitored, and the routes of administration considered. In particular the harms associated with smoking crystal need to be addressed. Further, small numbers of KE considered that much of the harm experienced by REU was related to the use of crystal specifically.

This raises concerns about how to deal with an increase in demand for assistance with problems associated with methamphetamine use. The problems associated with the use of methamphetamine (e.g. amphetamine psychosis, amphetamine dependence, paranoia and cardiac difficulties) may develop more quickly with sustained use of the potent crystal form (Degenhardt and Topp 2003), and health and law enforcement professionals who work with drug-using populations may need to develop strategies for managing these negative effects. Clear and practical harm reduction information on the use of methamphetamines should be developed and distributed to users and health workers, in addition to the development and implementation of practical strategies and training for dealing with affected individuals.

The regular ecstasy users interviewed generally reported low levels of criminal activity, with proportions reporting dealing drugs infrequently. We found in 2005 that the majority of regular ecstasy users who do deal do so to pay for their ecstasy use (ecstasy profit).

Indicator data on treatment suggest that relatively small numbers of persons using the drugs used by this group seek treatment for dependent use. Despite this, the addition of questions assessing concern about problematic use suggested that a significant minority of persons were concerned about their methamphetamine use; furthermore, using

previously validated cut-off scores indicating dependent use of methamphetamine (Topp and Mattick 1997), 15% of users met the cut-off for dependent use. Coupled with the trend documented across years of increasing crystal methamphetamine use among this group, this finding raises concern about potentially increasing treatment needs for this group for assistance with problematic methamphetamine use, a possibility that has been increasingly reported by KE over time.

The group of users interviewed in 2005 reported on a range of risk behaviours, with 17% having recently injected. It is important for harm reduction information to be disseminated to this group, many of whom may not be accessing traditional harm reduction initiatives through NSPs since they may be obtaining needles from pharmacies.

The reports of users regarding driving under the influence of drugs was a concerning finding in this year's PDI. It is important to disseminate information to users about the effects of different drug types upon driving ability, and indeed of the negative effects of polydrug use on such abilities. NSW will be introducing random roadside drug testing, as has recently been introduced in Victoria.

Continued monitoring of the ecstasy and related drug markets will enable the collection and dissemination of information that will allow the implementation of timely policy responses to market developments. Continued monitoring will also enable the regular collection of indicative data relating to the size of the markets for ecstasy and related drugs, such as GHB and ketamine, and will point to the need for research specific to such drugs.

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