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**NSW TRENDS IN ECSTASY AND
RELATED DRUG MARKETS 2004
Findings from the Party Drugs Initiative (PDI)**

NDARC Technical Report No. 221

**NEW SOUTH WALES
TRENDS IN ECSTASY AND
RELATED DRUG MARKETS
2004**



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

**Louisa Degenhardt, Maria Agaliotis, Bethany White
and Jennifer Stafford**

National Drug and Alcohol Research Centre
University of New South Wales

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ABBREVIATIONS

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
AODTS-NMDS	Alcohol and Other Drug Treatment Services National Minimum Data Set
ATSI	Aboriginal and/or Torres Strait Islander
BBV	Blood borne virus
BOCSAR	Bureau of Crime Statistics and Research
DASSA	Drug and Alcohol Services South Australia
FDS	Family Drug Support
GHB	Gamma-hydroxy-butyrate
HBV	Hepatitis B virus
HCV	Hepatitis C virus
HIV	Human Immunodeficiency Virus
IDRS	Illicit Drug Reporting System
KE	Key Expert(s)
LSD	<i>l</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
NSW	New South Wales
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 2004 sample provides data for the fifth year on trends in ecstasy and related drug markets. Data collected in 2003 and a feasibility trial of this methodology conducted in 2000, 2001 and 2002 are also included. Trends of the demographic characteristics and patterns of drug use among regular ecstasy users, their criminal behaviour, and perceived regular ecstasy users-related harms 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 (REU)

The 2004 results indicate that regular ecstasy users, a population defined in this study by the regular use of tablets sold as 'ecstasy', tend to be young, relatively well-educated, and likely to be employed or engaged in full time study. Less than one fifth reported engaging in crime, most of which is infrequent and accounted for by drug dealing. Two participants were currently in treatment for a drug-related problem, and three 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 half of whom nominated ecstasy as their favourite or preferred drug. On average, participants had used ten 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 other ecstasy and related drugs such as ketamine, GHB, MDA and base stabilised in 2004 which may suggest that while substantial minorities continue to report recent and lifetime use of these drugs, there are relatively few regular users who have access to these drugs. 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 report using less than monthly.

Ecstasy

Participants in the 2004 sample first used ecstasy at a median age of 18 and typically commenced monthly use when they were 19 years old. The reported frequency of use ranged from once a month to three times a week. Most (38%) participants had used ecstasy between monthly and fortnightly and between more than fortnightly and weekly (38%) and 25% percent had used ecstasy on more than one day per week in the preceding six months. Close to a third (28%) of participants reported they had binged (used continuously for more than 48 hours without sleep) on ecstasy and more than half (60%) had taken four or more tablets in a single use episode in the preceding six months. Most (84%) reported typically using more than one tablet per occasion of use. Consistent with previous years, participants primarily administered ecstasy orally. Although 10% reported having injected the drug at some time, only one reported that injection was their preferred route of ecstasy administration.

The use of other drugs in conjunction with ecstasy was commonly reported including alcohol, tobacco, cannabis, speed and 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 has remained stable at \$35 since 2001 and most participants reported that the price has remained stable. Most participants pay for ecstasy through employment or are given ecstasy as a gift. The majority report 'scoring' from friends and known dealers and the most frequently reported purchase location was a friends' home.

There is little consistency 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 remain stable since 2002/03.

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 activity, improvements in detection or more ecstasy being imported into the country or a combination of these factors. The supply of imported MDMA tablets may be being 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 the ecstasy attempting to compete with importers of the drug.

Methamphetamine

Virtually all (98%) participants in 2004 reported having used methamphetamine powder (speed) at some time and a large proportion (81%) reported using speed in the six months preceding interview. Most recent users reported using speed less than once a month with snorting and swallowing being the most common routes of administration. Lifetime and recent use of speed has remained stable across sampling years although frequency of use increased slightly in 2004.

Approximately two thirds (64%) of the 2004 sample reported lifetime base use and 39% 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. Frequency of base use has fluctuated while quantity of use has increased slightly. Median number of days of base used has fluctuated over time.

Over half the sample (68%) reported having used crystal at some time and a similar proportion (46%) reported using in the preceding six months. Prevalence of crystal use continued to increase in 2004. Frequency of use appears to have increased slightly over

time while quantity of crystal use seems to have remained relatively stable. Comparable to other forms of methamphetamine, the majority of recent users used less than month although data suggest median days of use has increased over time. In contrast to the other forms, the most common route of crystal administration was smoking. Clearly, there are risks associated with this route of administration. Reports of typical crystal use in conjunction with ecstasy stabilised (9%; 2004 comparable to 2003; 10%), however was more likely to have been used during a binge episode of use. (53% of those who had recently binged used crystal in 2004 compared to 37% in 2003).

The price of speed was commented on by over half (58%) of the sample with \$60 for one gram the most common purchase. Half (57%) agreed the price speed had remained stable. Close to one third of the sample (30%) 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 \$37.50 was paid. Most reported the price of base had remained stable (50%) or decreased (23%) although one third (27%) were unable to comment. Slightly more participants were able to comment on the current price of crystal (33%) with a 'point' of crystal the most frequently purchased amount for \$40. Most of those who commented reported the price of crystal had remained stable (47%) or decreased (18%) and only seven participants were unable to comment on the price of crystal in the preceding six months.

Most reported the availability of speed was 'very easy' to 'easy' to obtain. Reports of crystal (50% vs. 46 in 2003) and speed (47% vs. 32 in 2003) being 'very easy' to obtained increased, while base remained the same in 2004. The ease of obtaining all forms of methamphetamine was reported to have remained 'stable' over the preceding six months by the majority of those who commented.

Cocaine

The prevalence of lifetime cocaine use remained stable across sampling years, with the majority of participants reporting having used cocaine at some time. However, proportions of REU that reported recent cocaine use is comparable to 2003 data with less than half the sample reporting use in the preceding six months. Further, the median number of days used increased by one, with majority of recent users reported using less than once a month. Snorting was the most common route of administration.

One fifth (23%) of the sample commonly purchased a gram of cocaine for a median of \$200, with most (42%) reporting the price had increased. Of those who commented (n=24), most (50%) reported that cocaine was currently 'very easy' to obtain and half (50%) believed the availability had remained 'stable'.

Ketamine

The prevalence of ketamine use stabilised in 2004, although use has increased since 2000. The 2004 sample reported lifetime (58%), while recent ketamine use has decreased by 10% to 39%. Frequency of ketamine use by the majority of recent users was less than one a month which is comparable to previous years. Snorting was the most common reported route of administration.

Close to a quarter (24%) commented on the current price of ketamine. A gram was purchased for \$200. The majority (44%) reported the price as 'stable' although more than a quarter (28%) were unable to comment.

The majority of participants who commented reported that ketamine was ‘easy’ (40%), ‘difficult’ (40%) or ‘very difficult’ (12%) to obtain and over half reported that the availability of ketamine had become ‘more difficult’ (40%) in the preceding six months.

GHB

More than a fourth (28%) of the 2004 sample reported having used GHB at some time in their life, while a fifth (18%) had used the drug in the preceding six months. The prevalence of GHB use has increased over time, with substantial increases in reports of both lifetime and recent use since 2000. The frequency of GHB use is comparable across years although quantities used in ‘typical’ and ‘heavy’ occasions of use seem to have fluctuated.

Only a small proportion (10%) of participants in 2004 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 \$30. Three (30%) reported the price was ‘stable’ and four (40%) believed it to be ‘decreasing’, while two (10%) thought it to be fluctuating. A further two (20%) were ‘unable to comment’ on price changes which is consistent with the relatively limited experience with this drug. All those commenting reported the availability of GHB as ‘very easy’ (40%) while three report to be ‘easy’ and other three reported to be ‘difficult’ to obtain. The majority reported the availability of GHB in the preceding six months had remained ‘stable’ (50%).

LSD

Lifetime and recent use of LSD has decreased over time with three fifths (61%) of the 2004 sample reporting having ever used LSD and a quarter (20%) reporting use in the six months prior to interview. Frequency of LSD used by recent users also appears to have reduced while quantity of use has remained relatively stable, with most recent users reporting less than monthly use. Users typically use one tab per occasion of use and this has remained stable across sampling years. All recent users reported swallowing the drug.

Close to one fifth (18%) of the sample reported the current price of LSD to be \$20 a tab and most reported the price to be ‘increased’ (28%) or ‘stable’ (28%). Reports of the availability of LSD varied; while most (56%) thought LSD ‘difficult’ to obtain, a further five participants (28%) believed it to be ‘easy’ and two ‘very easy’ (11%). Reports of changes in availability of LSD in the preceding six months were similarly inconsistent most (39%) considered the availability of LSD had remained ‘stable’, five (28%) thought it had become ‘more difficult’ to obtain, two (11%) thought it ‘easier’, and four (22%) were ‘unable to comment’ on the availability of LSD.

MDA

Approximately one third of participants in 2004 had used MDA recently. Prevalence of lifetime and recent MDA use has increased over time, however in 2004 we have seen a slight reduction. Frequency of use has increased slightly while quantity of MDA use has remained stable.

One tenth (10%) of the sample reported the current price of MDA as \$47.50 per cap. User reports of current availability less consistent although most thought availability had remained ‘stable’ over 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 two days a week. Similarly, most of the 2004 sample reported recent cannabis use, the majority of who smoke on a median of two days per week. Tobacco use was common although just over half of those reporting recent use were daily cigarette smokers. Also comparable to previous years, half the 2004 sample had used benzodiazepines at some time. Those who reported recent benzodiazepine use did so less than once a month. A small number (3%) of the 2004 sample reported the recent use of antidepressants, one of whom used for reasons other than depression. The use of inhalants such as amyl nitrate and nitrous oxide appear to have remained stable across time.

Risk behaviour

One in five (23%) of the sample reported having injected a drug at some time in their lives and 11% reported injecting in the six months preceding interview. A median of 1.5 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 1-4) drugs.

One third (33%) of lifetime injectors reported injecting for the first time while under the influence of drugs (mainly speed and ecstasy). Of those that were lifetime injectors and had first injected while under the influence of drugs, the first drug injected was speed (46%) followed by heroin (17%).

When lifetime injectors were asked to specify how they learned to inject, two thirds (62%) reported that a friend or partner showed them how. Of those that injected in the preceding six months, two reported using a needle after someone else in the month preceding interview.

Thirty-five percent of the sample reported that they have never been vaccinated for Hepatitis B. A further 39% reported that they have completed the vaccination schedule, 13% did not finish the vaccination schedule and 14% did not know if they have been vaccinated. Of the sample 52% reported that they had never been tested for HCV, while 23% had been tested in the last year, 19% were tested more than a year ago and 6% either did not know or didn't get their result. Thirty two percent of the sample had been tested for HIV in the last year and a further 19% had been tested more than a year ago.

As expected among a sample of young adults, the majority (92%) of participants reported penetrative sex in the six months preceding interview. Most (48%) reported one sex partner during the preceding six months although one fifth (21%) of participants had penetrative sex with two people and almost a quarter (24%) reported sex with between three and five people. The majority (90%) of those reporting recent penetrative sex reported using drugs during sex in the previous six months. One third (33%) 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 take was ecstasy (56%) followed by cannabis (46%), alcohol (42%) and speed (40%).

Of those that were asked about tattooing and body piercing (n=104), 26% had received a tattoo and a 37% reported body piercing.

Health related issues

Of the PDI sample 12% of the participants had overdosed on either ecstasy or other related drugs. Of those that had overdoses the main drug used was ecstasy (58%) followed by GHB (17%). Of those who had overdosed ten had used more than one ecstasy and related drug. The most common drug used in conjunction reported by this sample was alcohol (80%) and ecstasy (20%), followed by methamphetamine powder (8%), crystal (10%), MDA (10%), ketamine (10%) and tobacco (8%).

For the first time in 2004 the severity of dependence scale (SDS) was used for ecstasy and methamphetamine. The SDS has been validated as a measure of dependence for a number of drugs including methamphetamine. It was administered with reference to ecstasy use to provide some information about users' concerns about their ecstasy use. The same cut-off score was used as that for methamphetamine; it is important to note that although both methamphetamine and MDMA are ATS (and therefore the cut-off probably a reasonable one for ecstasy), the SDS has not been formally validated for use in indicating ecstasy dependence.

The median SDS score for ecstasy was 2 (range 0-8). Most (32%) participants had obtained an SDS score of 0, 10% a score of 3, 23% obtained a score of 2 and 14% a score of 1. Twenty-one percent of participants who had used ecstasy in the last 6 months obtain a SDS score of 4 or more. Participants were asked if their ecstasy use was out of control with 63% reporting 'never or almost never', 76% reported that missing a dose did not make them feel anxious, almost half of the participants were not worried about their ecstasy use and 20% percent wished that sometimes they could stop using ecstasy.

Of those that had used methamphetamines the median SDS score was zero (range 0-13), with 21% scoring four or above, the level of dependence. Of those that scored above four on the SDS, 30% reported specifically using crystal methamphetamine, 46% speed, 10% base and 23% reported no specific methamphetamine. 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, 28% were 'sometimes' worried about their methamphetamine use, 16% 'sometimes' wished that they could stop and 14% found it quite difficult to stop using methamphetamine.

Participants in 2004 reported a range of other problems associated with their drug use. Participants were 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. Proportions reporting these harms predominantly attributed them to their use of ecstasy rather than other drugs.

Approximately two fifth of the sample had experienced financial problems (39%), occupational/study problems (38%) and relationship/social problems (31%) in the preceding six months attributable to the use of ecstasy and related drugs. Only a small number of participants reported legal problems; of the nine people who did, three attributed these problems at least in part to ecstasy and two reported having been cautioned by the police and one arrested.

Criminal activity, policing and market changes

Relatively few of the ecstasy users interviewed were involved in criminal activity apart from dealing drugs. Less than a fifth (12%) reported dealing drugs in the month preceding interview and most of them reported dealing less than once a week. Reports of criminal activity to fund the purchase of ecstasy have decreased over time. Small numbers were arrested and very few report a history of incarceration.

There was a marked decrease in the proportion of ecstasy users sampled who perceive 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). KE reports were consistent with this.

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

Conclusion

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 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 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 other 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 reported the benefit of these drugs was the ability to enhance effects or decrease the side effects of other drugs. Some KEs 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 ecstasy and 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 factor related to REUs' use of these other drugs is the risks associated with the combinations of drugs used, i.e. the polydrug use itself. In addition, although use of ketamine, GHB and MDA stabilised in 2003, there have been increases since 2000 and continued monitoring is required to ascertain if the markets will continue to grow.

The 2004 NSW PDI results highlight the use of crystal methamphetamine among regular ecstasy users has remained at levels similar to 2003, but anecdotal evidence from KEs suggested an increase among this group of users and some considered that much of the harm experienced by REU was related to the use of crystal specifically. The increases documented in 2004 in recent use, use of crystal in a "binge" session of use, other indicators of crystal use and an increase in the proportion that report crystal as 'very easy' to obtain, indicate an expanding market for this drug. This highlights issues for research, health and law enforcement. The market for crystal methamphetamine needs to be monitored, the routes of administration considered, and has been examined in separate research conducted at NDARC in 2004. In particular the harms associated with smoking need to be addressed.

For the first time in 2004 the PDI sample examined various risk behaviours such as injecting, sexual and driving risk behaviours, levels of overdose, health seeking behaviour, drug dependence and other problems. The findings of this assessment 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 is substantial. It is important to investigate risk-taking behaviour in this population and monitor blood borne virus infection

vaccination and testing as an outcome. This will allow to examine whether harm reduction messages are reaching this group and promote safe practices.

The regular ecstasy users interviewed generally report low levels of criminal activity, the most common of which was drug dealing. We found in 2004 that the majority of regular ecstasy users who deal drugs do so to pay for their ecstasy use (ecstasy profit) and a small minority tend to deal drugs for money (cash profit).

Continued monitoring of the ecstasy and other 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 Party Drugs Initiative (PDI) in 2005 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 by the National Drug Law Enforcement Research Fund (NDLERF), 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 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 other 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, the Drug and Alcohol Services South Australia (DASSA)[Formally 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-methylenedioxymethamphetamine; 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 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 drugs 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).

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 regular ecstasy users likely to be aware of trends in illicit drug markets, ii) interviews with 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 2004 New South Wales Ecstasy and Related Drug Trends report provides information regarding ecstasy and related drug trends in Sydney.

1.1 Aims

The aims of the 2004 NSW PDI were:

1. to describe the demographic characteristics of a sample of current ecstasy users interviewed in Sydney in 2004;
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 and 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 participant's 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 (2000-2003).

2.0 METHODS

The 2004 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 were 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 2005).

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]), fluctuate widely in availability (e.g., MDA), or are relatively new in the market and are not as widely used as ecstasy (e.g. ketamine and GHB). It 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 stimulant excluding ecstasy

provide the data that were sought. Therefore, regular ecstasy users have been used again in 2004 to provide information on ecstasy and related drug markets.

2.1.1 Recruitment

A total of 104 regular ecstasy users (REU) residing in the Sydney Metropolitan region were interviewed for the 2004 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 10.0 (SPSS inc 2001).

The data collected in 2004 were compared with data collected from comparable samples of ecstasy users: 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), funded by the National Drug Law Enforcement Research Fund (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 (KE) participation in the PDI is regular contact with a range of ecstasy users in the preceding six months. Regular contact was defined as average weekly contact and/or contact with ten or more ecstasy users throughout the past six months. A total of 23 KEs were interviewed. Nineteen KEs from various metropolitan regions of Sydney provided information on the ecstasy users with whom they had had recent contact, one with cannabis and five law enforcement personnel with knowledge of the markets for ecstasy and related drugs were also interviewed. Two KEs were able to comment on GHB use and overdose in a nightclub and clinical setting. All but one interview was conducted over the phone.

Of the 23 KEs who had regular contact with ecstasy users, eight were female and fifteen were male who represented a range of occupations. These included DJs and party promoters, nightclub medical officers, 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.

Four KEs commented on methamphetamine use. One KE was employed in health promotion and education settings, while the remainder worked in law enforcement; two were male and two were female. They comprised an intervention program coordinator, intelligence analysts, intelligence officers, and the commander of an inner city local area command.

Eleven KEs stated they knew about ecstasy users through both their work and social life, while ten obtained their knowledge solely through their work and two largely via social circles. Six KEs stated that they worked primarily with the gay and lesbian community, and one worked primarily with Human Immunodeficiency Virus (HIV) positive gay men, one worked primarily with youth and four worked with both gay/lesbian and youth.

The extent of KE contact with regular ecstasy users ranged from three to four days a week to daily over the preceding six months. In the six months preceding their interviews, two had meaningful contact with less than 10 users, five had contact with

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.

between 10 and 20 users, one had contact with between 51 and 100 users, and ten had contact with more than 100 users. KEs were either moderately (n=11) or very (n=12) certain of their information.

2.3 Other indicators

To complement and validate data collected from user 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; 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 (REU)

3.1 Demographic characteristics of the REU sample

One hundred and four regular ecstasy users were interviewed in 2004. Approximately two thirds (60%) of the sample was male (Table 1). The mean age of the sample was 26 years (SD 8; range 17-60), and there was no significant difference in age between males and females (27 vs. 24 years). The majority (95%) of the sample spoke English as their main language at home. A minority (7%) were of Aboriginal and/or Torres Strait Islander (ATSI) descent. Participants resided in a wide range of metropolitan regions of Sydney, including the inner west (33%), eastern suburbs (22%), northern suburbs (17%), inner city (13%), southern suburbs (10%), and south western (4%) and the western suburbs (2%). The majority lived in either rented premises (54%), in their parents' or family's house (37%) or in their own home (6%). The majority of participants nominated their sexual identity as heterosexual (69%).

The mean number of years of school education completed by the sample was 12 (SD 1.0; range 6-12), and the overwhelming majority (76%) of participants had completed high school education. More than half (60%) had completed courses after school, with 39% possessing a trade or technical qualification, and 20% having completed a university degree or college course. More than two fifths (44%) were currently employed full-time, and 18% were employed on a part-time or casual basis. Close to one quarter (23%) were full-time students and 8% were unemployed. Three participants had previous convictions (Table 1).

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 ecstasy users (n=104), the sample of ecstasy users from previous years. The mean age of participants was similar across samples. In all samples, the majority of participants were from English speaking backgrounds and most identified as heterosexual. Only small proportions of each sample were of Aboriginal or Torres Strait Islander (ATSI) or had a previous criminal conviction. The proportion of participants reporting full time employment fluctuated over time. Current drug treatment was 2% consisted of methadone and drug counselling.

Key experts' (KE) descriptions of the ecstasy users with whom they had had recent contact reflected the 2004 sample characteristics. Estimated age ranges were generally 15 years of age to 'late teens', or early-mid 20s to 40s with an overall average age of 27. One KE distinguished age groups for youth (15-18 modal age: 16-17) and gays and lesbians (30-45, modal age: early 30's). A majority of KEs all reported a male majority, with estimates ranging from 60-90%. Half (n=9) of the KE reported the group as mainly heterosexual, the other half (n=11) reported the group as predominately homosexual (primarily gay male). The majority who commented reported at least 50% (commonly 70%) were from English speaking backgrounds followed by South East Asian. Those who specified other groups mentioned contact with people of Middle East and Eastern European decent. Overall, the majority of KEs recognised that there is a mix of ethnic groups who use and supply ecstasy. Most KEs reported that regular ecstasy users were from the inner city, eastern suburbs or the inner west, although areas specified were largely determined by the location of KEs workplace or residence.

Almost all of the KEs reported the vast majority of users had completed year 12 and most estimated between 30-70% were in the process of completing university or had completed university with one or more degrees. The majority of the KEs reported approximately 70-100% of users were engaged in full time employment.

The majority reported that users were typically *not* receiving treatment for drug use problems, or were unable to comment. Four KEs mentioned treatment for crystal methamphetamine (“crystal”) use, and another five reported some knowledge of treatment histories for small minorities of the population. In terms of prison history, half were unable to comment (n=7) while a similar proportion (n=6) reported no prison history. Of those who knew about the prison history (n=3) among the group of users they had contact with, they indicated a small number of drug related gaol terms (less than 2%).

Table 1: Demographic characteristics of REU sample

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

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 19 different drug types. Polydrug use was the norm among this sample, with a mean of 10 drug types (range 5-18) having been tried, and a mean of 7 drug types (range 2-13) 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). It should be noted however, that the number of drugs asked about across time has also increased (from 20 in 2000, 19 in 2001 and 2002 and 21 in 2003 and 23 in 2004). 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 increase in lifetime and recent use of methamphetamine, (powder and base), ketamine, MDA and GHB observed from 2000 was sustained in 2004. The proportion of participants reporting lifetime and recent use of crystal methamphetamines, benzodiazepines and cannabis has increased also over time. The prevalence of LSD use among regular ecstasy users has continued to decline since 2000 (Table 2).

Alcohol (100%), cannabis (99%), “speed” (98%) and tobacco (92%) were the most commonly reported drugs ever used by the sample. The main drugs recently used were alcohol (99%), cannabis (85%) and speed (81%) (Table 2).

Small proportions of the sample reported the use of drugs other than those listed in Table 2. In 2004 the range of other drugs ever used by 23% of the sample was comparable to previous years including hallucinogenic mushrooms (29%), dexamphetamine (17%) and 2CI (13%). 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, GBL and hallucinogenic mushrooms.

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

Variable	2000 (n=94)	2001 (n=163)	2002 (n=88)	2003 (n=102)	2004 (n=104)
Mean drug type ever used	10	10	12	10	10
Mean drug type used last 6 mths	7	7	7	7	7
Ever inject any drug (%)	28	20	27	22	23
Alcohol ever used (%)	100	99	99	100	100
used last 6 months (%)	95	98	94	96	99
Cannabis ever used (%)	99	95	98	96	99
used last 6 months (%)	90	82	90	82	85
Tobacco ever used (%)	84	82	90	92	92
used last 6 months (%)	72	77	81	72	73

Source: PDI Regular ecstasy user interviews

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

Variable	2000 (n=94)	2001 (n=163)	2002 (n=88)	2003 (n=102)	2004 (n=104)
Methamphetamine powder (Speed)					
ever used (%)	92	99	100	97	98
used last 6 months (%)	75	87	85	79	81
Methamphetamine base (Base)					
ever used (%)	36	34	59	63	64
used last 6 months (%)	22	20	44	42	39
Crystal meth (Crystal)					
ever used (%)	12	43	43	56	68
used last 6 months (%)	6	26	19	48	46
Cocaine					
ever used (%)	78	77	80	78	79
used last 6 months (%)	53	57	64	46	46
LSD					
ever used %	80	74	73	66	61
used last 6 months %	37	23	33	24	20
MDA					
ever used (%)	36	43	56	56	54
used last 6 months (%)	16	14	35	35	30
Ketamine					
ever used %	25	31	59	59	58
used last 6 months %	14	15	49	49	39
GHB					
ever used (%)	5	23	35	33	28
used last 6 months (%)	<1	15	19	21	18
Amyl nitrate					
ever used (%)	66	62	68	66	66
used last 6 months (%)	29	36	40	28	27
Nitrous oxide					
ever used (%)	54	48	50	44	40
used last 6 months (%)	22	11	14	8	14

Source: PDI Regular ecstasy user interviews

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

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

Source: PDI Regular ecstasy user interviews

In 2004, ecstasy was the drug of choice for over half (59%) of respondents (Table 3, Page 14). The next most commonly preferred drug was cannabis (15%). Cocaine (7%), speed (6%), crystal (5%) and LSD (3%) were nominated as drug of choice by small proportions of the sample. One person each nominated methamphetamine base, MDA, GHB, alcohol, heroin and mushrooms.

Compared to earlier years, a smaller proportion of the 2004 sample reported bingeing on one or more stimulant/ecstasy and regular drugs in the preceding six months (34% in 2004 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 2-15 days). Ecstasy was the most commonly reported drug used in this way (by 28% of the sample). Speed (18%) crystal (18%), ketamine (8%), base (5%), cocaine (4%), LSD (2%), GHB (1%) and amyl nitrate (1%) were other drugs mentioned by those who had recently binged. Alcohol (21%) and cannabis (15%) were also used.

Comments by KEs regarding patterns of polydrug use varied according to the occupation of the KE and the particular group of ecstasy users with whom they had had recent contact. All but one KE described the use of ecstasy combined with at least two other drugs including some form of methamphetamine as well as ketamine, GHB benzodiazepines, cannabis and/or alcohol. Eight mentioned polydrug use in relation to attempts by users to increase intoxication levels, while another mentioned polydrug use was planned rather than ad hoc, and that things only got 'messy' when not planned; another three mentioned 'cocktailing' where, if users were unable to get one drug type,

they would substitute it with something else. KE described age differences in this behaviour, and felt that younger users tended to be less aware of circumstances when mixing different drugs. Two KEs reported that polydrug use remained high among users, with one stating that combinations such as alcohol and GHB were “acceptable” despite the known consequences of combining these drug types. Five KEs mentioned the increased use of crystal and GHB, while one KE mentioned younger groups are beginning to use dexamphetamine. Detailed comments by KEs regarding each drug type are documented throughout the relevant sections of this report.

Close to a quarter (23%) of the 2004 sample reported they had injected a drug in their lifetime (Table 2). The mean number of drugs ever injected by this minority was three (range 1-11). Most of the injectors commenced injecting with speed (46%), with minorities reporting heroin (17%) and steroids (13%). Eleven participants (11%) reported recently (i.e. in the last six months) injecting a mean of three (range 1-6) drugs, the most common being crystal methamphetamine (63%) followed by methamphetamine powder (55%). Five participants (45% of recent injectors) had injected ecstasy and methamphetamine base in the six months preceding interview and three had injected heroin (27%). Two participants had recently injected cocaine and MDA (18%).

To ensure that intravenous polydrug or primary opiate users were not over sampled and that this was primarily a sample of regular ecstasy users, a number of comparisons were drawn between those who had injected a drug at some time and those who had not. There were no differences between the two groups in terms of gender composition or education, but there was an age difference: those who had injected a drug were significantly older (29 vs. 25, $t_{102} = -2.5$; $p < .05$). There was no significant difference in likelihood of previous imprisonment although two of the three participants who had ever been to prison reported injecting a drug at some time.

There were also a number of significant differences between the two groups in terms of drug use: those who had injected a drug at some time had used a wider range of other drugs, both ever (14 vs. 10; $t_{102} = -5.9$; $p < .001$) and in the preceding six months (8 vs. 7; $t_{100} = -3.3$, $p < .005$). In particular, those who had injected a drug were significantly more likely to report both lifetime (54% vs. 6%; OR 17.72; 95%CI 5.29, 59.45) and recent heroin use (17% vs. 0%; $\chi^2 = 10.3$; $p < .001$). However, injectors had not used more ecstasy in their heaviest use episode compared to non-injectors (median 4 vs. 4).

One participant was currently in methadone treatment and one was receiving drug counselling. One participant nominated heroin as their favourite drug and only 3% of the sample had injected heroin in the preceding six months, on a median of two days (range 1-96). 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.

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 a substantial proportion with tertiary qualifications.
- A substantial proportion of ecstasy users interviewed were either employed or engaged in studies.
- Ecstasy users have little contact with the criminal justice system or with drug treatment agencies.
- Demographic characteristics of ecstasy users 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 over half of respondents, followed by cannabis and cocaine.
- Large proportions reported recent use of alcohol, cannabis, speed and tobacco.
- Increases in proportions of REU reporting lifetime and recent use of base and powder observed between 2000 and 2002 was sustained in 2004.
- The increase in lifetime and recent use of ketamine, GHB and MDA between 2000 and 2002 stabilised in 2004.
- The use of LSD has continued to decline since 2000.
- One fifth of the sample (23%) reported having injected a drug at some time and a small proportion (11%) recently injecting. The most commonly reported drugs recently injected were crystal and methamphetamine powder followed by ecstasy.

4.0 ECSTASY

Ecstasy is a street term for a number of substances related to MDMA or 3,4-methylenedioxyamphetamine. Ecstasy is classed as a hallucinogenic amphetamine. Tablets sold as ecstasy may contain a range of substances. 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 2004 sample first used ecstasy was 18 years (range 13-53; Table 3). Participants had been using for a median duration of five years (range 0-18). There were no significant gender differences in age of initiation. All participants had used ecstasy at least monthly at some time, and reported using ecstasy regularly at a median age of 19 years (range 14-55).

4.1 Ecstasy use among REU

Participants had used ecstasy on a median of 20 days in the preceding six months (range 6-72). Most (38%) participants had used ecstasy between monthly and fortnightly and between more than fortnightly and weekly (38%) and 25% percent had used ecstasy on more than one day per week.

The median number of ecstasy tablets taken in a ‘typical’ or ‘average’ use episode in the preceding six months was two (range 0.5-10). More than eighty percent (84% compared to 74% in 2003) of the sample reported that they typically used more than one tablet, and 16% typically used four or more tablets in a single use episode. During their ‘heaviest’ use episode in the preceding six months, participants reported a median of four tablets (range 1-40); more than half (60%) of the sample had taken four or more tablets in a single use episode in the preceding six months.

In the six months preceding the interview, all participants swallowed ecstasy; 67% had snorted ecstasy, 10% had shafted, 9% had smoked it and 5% had injected. Nearly all (98%) participants nominated oral ingestion as their main route of ecstasy administration (Table 3). One participant reported injection as their current main route of administration, 5% reported having injected in the last six months and 10% reported having injected ecstasy at some time. This suggests that the injection of ecstasy continues to occur by a minority of regular ecstasy users. The median age of first injection of ecstasy was 22 years (range 18-33).

More than a quarter (28%) of the sample reported bingeing on ecstasy in the preceding six months with 85% of those who had binged on any drug reported they had used ecstasy during the binge. As previously mentioned, 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 involving ecstasy was three days (range 2-15 days). In all cases other drugs (primarily speed (53%), crystal methamphetamine (53%) and ketamine (24%)) had also been used during the binge. Methamphetamine base (15%), cocaine (12%), and MDA (9%) were other drugs used in conjunction with ecstasy during a binge. Alcohol (65%) and cannabis (47%) were also commonly used.

In 2004, there was an increase in crystal methamphetamine (53% vs. 39% in 2003), cannabis (47% vs. 36% in 2003) and alcohol (65% vs. 57%) use and a decrease

methamphetamine power (53% vs. 67%), ketamine (24% vs. 36%) and cocaine (22% vs. 12%) compared to 2003.

There were no gender, age nor typical or heavy use of ecstasy differences between those who had binged on ecstasy in the preceding six months and those who had not, but those who had binged had used ecstasy on a significantly greater number of days in the preceding six months (mean 30 vs. 17 days; $t_{102} = -4.2$; $p < .001$). Those who had binged on ecstasy in the preceding six months also had a more extensive polydrug use history than those who had not; they had also used significantly more drugs both ever (12.4 vs. 10.6 $t_{102} = -3.1$; $p < .005$) and in the six months preceding interview (8.6 vs. 7.1, $t_{102} = -3.4$; $p < .001$).

Table 3: Patterns of ecstasy use among REUs, NSW

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

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 (94%) and in the 'come down' (i.e. acute recovery period) following ecstasy use (68%). A mean of 4.0 (range 1-7), other drugs types were typically used in conjunction with ecstasy, most frequently alcohol (69%), tobacco (55%), cannabis (34%), speed (18%), ketamine (11%),

cocaine (11%) and crystal (7%). Smaller proportions reported typically using base (4%) MDA (4%) and LSD (1%). Of those who typically drank alcohol while using ecstasy, 74% usually consumed more than five standard drinks.

A mean of 4.0 (SD 1.8; range 1-7) drugs types were typically used during the acute recovery period following ecstasy use, most frequently cannabis (70%), tobacco (42%), and alcohol (42%). Smaller proportions reported typically using benzodiazepines (14%), crystal methamphetamine (4%), heroin (3%), GHB (3%), ketamine (3%), antidepressants (1%) and base (1%) to come down from ecstasy. Of those who typically drank alcohol to come down from ecstasy, 70% usually consumed more than five standard drinks.

Compared to earlier samples, a higher proportion of the 2004 sample reported using ecstasy weekly or more (42% vs. 22% in 2003) and reported typically using more than one tablet (84% vs. 74%). However, a smaller proportion of the sample reported that they had binged on ecstasy in the preceding six month (28% vs. 35%). These data suggest a slight shift in the patterns of ecstasy use over time, moving from more discrete “binge” use patterns, to more frequent, heavier use for slightly shorter use occasions.

KE reports of ecstasy use varied widely according to their occupation and the particular group of ecstasy users with whom they had recent contact. All but four KEs reported at least some ecstasy users (ranging from 10% to 100%) used ecstasy on a weekly basis. Most thought that ecstasy use was typically on the weekend. There was variability in the ranges of tablets used per occasion of use, with most reporting between 1-3, although some mentioned much heavier patterns of typical use (up to 8 per session). Several KEs mentioned age differences in patterns of use, with younger users typically using 0.5-2 tablets, and older and more experienced users using between 2-10 tablets.

Four KEs commented that the quantity and frequency of ecstasy use had decreased in the preceding six months as a result of substituting other illicit drugs by some users, particularly crystal. One KE reported that people were “going out” less and as a consequence ecstasy use had decreased in terms of both quantity and frequency. KE reports of reduced frequency of ecstasy use were consistent with REU data (Table 3). Two KEs however, mentioned the increased frequency and quantity of ecstasy use. One reported an increase in quantity. The other KEs described increased frequency and quantity of use in the context of ecstasy use becoming more acceptable among regular ecstasy users and becoming the drug of choice superseding alcohol.

All KE reports of route of administration were consistent with results from the user survey with reports that most users swallow ecstasy with only a very small proportion (<5%) snorting and shafting/shelving. There was no record from KEs of regular ecstasy users injecting or smoking the drug.

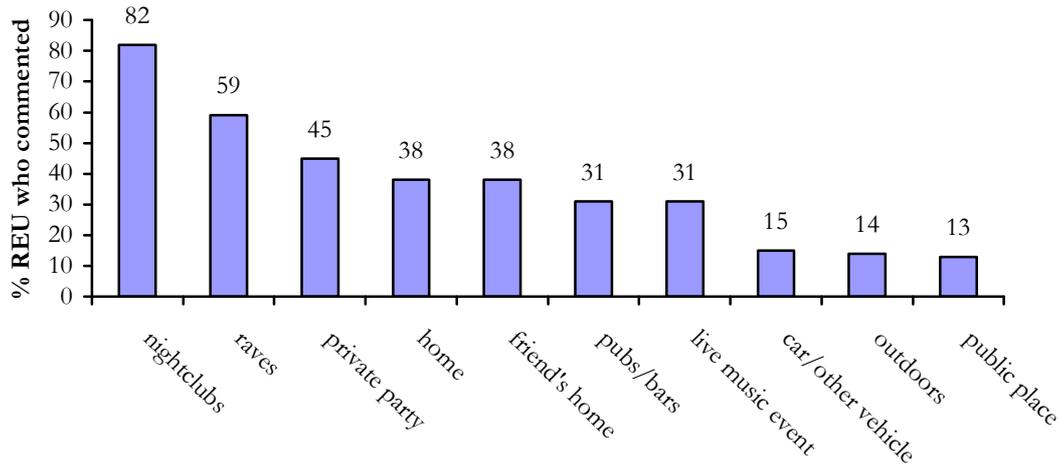
The majority (n=10) of KEs reported no changes or the same in the types or number of people using ecstasy in the preceding six months. Of the six KEs who commented, three mentioned that new users were slightly younger and using more often.

The majority of the respondents in 2004 commonly reported using ecstasy at nightclubs (82%), raves (including “doofs” and dance parties; 59%) and half reported using at private parties (45%) in the preceding six months (Figure 1). Smaller proportions reported using ecstasy at their own home (38%) or at friends’ homes (38%) and at pubs (31%) and live music venues (31%). Other locations ecstasy had been usually used

included in cars (15%), outdoors (14%), public place (13%) at dealers' houses (5%), in restaurants or cafes (4%), work (3%) and others, which comprised hotel room (2%), sex venue (1%) and sauna (1%).

Two KEs mentioned the change in location of ecstasy use, stating that this group was increasingly likely to use out at clubs and recovery parties (and purchase in clubs) as opposed to at home or private parties. In contrast, one KE also described a change in location of ecstasy use referred to use moving from clubs into the home.

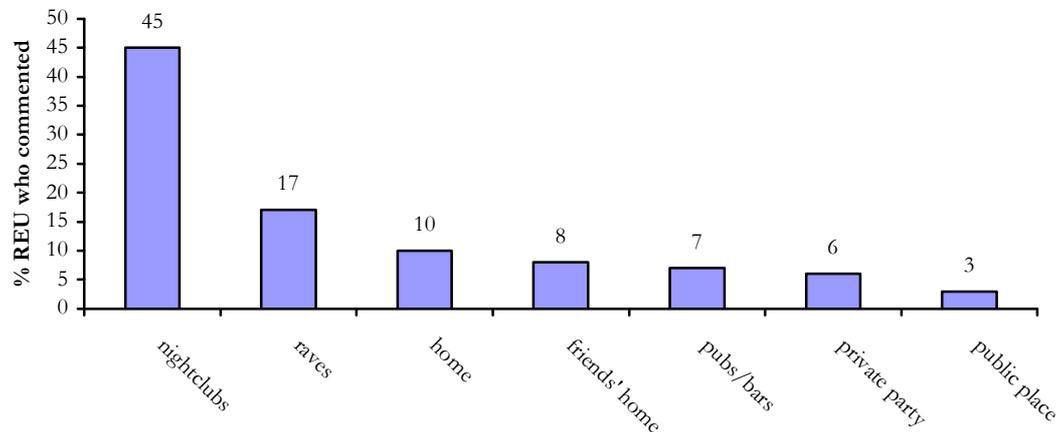
Figure 1: Usual location of ecstasy use, NSW 2004



Source: PDI Regular ecstasy user interviews 2004
 NB: Users could nominate more than one location.

The most recent location of ecstasy use was similar to the usual use locations in the preceding six months with the most common being a nightclub (45%; Figure 2). Other recent locations of ecstasy use included raves (including “doofs” and dance parties, 17%), home (10%), friends’ home (8%), pub (7%), private party (6%), public place (3%) and a live music event (2%). One participant each reported dealers’ home, passenger of car, outdoors and sauna as the location of their most recent occasion of ecstasy use.

Figure 2: Location of most recent ecstasy use, NSW 2004



Source: PDI Regular ecstasy user interviews 2004

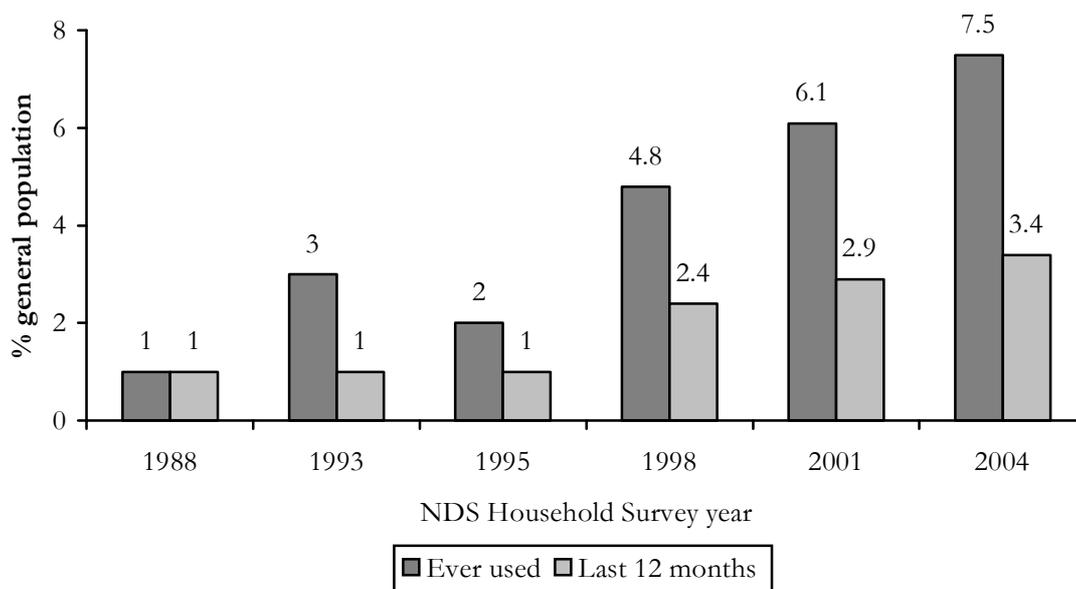
Participants in 2004 were asked to specify the proportion of friends who had used ecstasy. More than half (56%) reported that ‘most’ of their friends use ecstasy and one quarter (25%) reported ‘about half’. A smaller proportion (12%) reported ‘all’ their friends use ecstasy and 8% reported ‘only a few’.

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 2005). 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 2005).

Comparable to the national prevalence, lifetime ecstasy use was reported by 5.3% 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).

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



Source: National Drug Strategy Household Survey 1988-2004

4.3 Summary of patterns of ecstasy use

- Ecstasy users start using ecstasy in their late teens, although reports from some KEs suggest that the age of initiation is decreasing.
- All participants typically consume ecstasy orally although more than half reported recently snorting.
- A wide range of patterns of ecstasy use were reported, however, most reported using the drug between monthly and weekly.
- More than eighty percent of regular ecstasy users typically use more than one tablet per use episode.
- A substantial minority of regular ecstasy users have typically used four or more tablets in a single use episode.
- More than one quarter of the sample recently used ecstasy on a continuous basis for 48 hours or more without sleep, although prevalence of this pattern of binge use decreased compared to previous years.
- Most users report typically using other drugs in combination with ecstasy and to 'comedown' from its acute effects.
- Some data suggest that the quantity and frequency of ecstasy use among regular users may have increased over time.
- Nightclubs and raves (including "doofs" and dance parties) were locations participants reported usually using ecstasy and also the nightclub was the most commonly reported most recent location of use.
- NSW prevalence of ecstasy use was similar to national prevalence.

4.4 Price

All users were able to comment on the price of ecstasy in Sydney and agreed that the ecstasy available in Sydney in the six months preceding the interview came in tablet form. Virtually all KEs agreed that the vast majority of ecstasy available during this period came in tablet form. Four KEs mentioned caps, although most considered this as unusual and out of this four, one mentioned that there is the possibility people are getting confused with MDA. One KE mentioned that there was a reduction in "homemade" caps.

Participants were asked, "How much does ecstasy cost at the moment?" and the median price of ecstasy was reported by users to be \$35 per tablet (range \$13-50). Most participants reported that the price had either remained 'stable' (58%) or 'decreased' (30%) in the preceding six months (Table 4). KE reports of the price of ecstasy were consistent with the prices reported by users. The most commonly reported price was \$30 per tablet (n=5) and the most commonly reported ranges were \$20-35 (n=2), \$30-40 (n=2) and \$40-50 (n=2). Most KEs agreed that the price of ecstasy had remained stable or decreased over the preceding six months although two were unable to comment.

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

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

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

Source: PDI Regular ecstasy user interviews

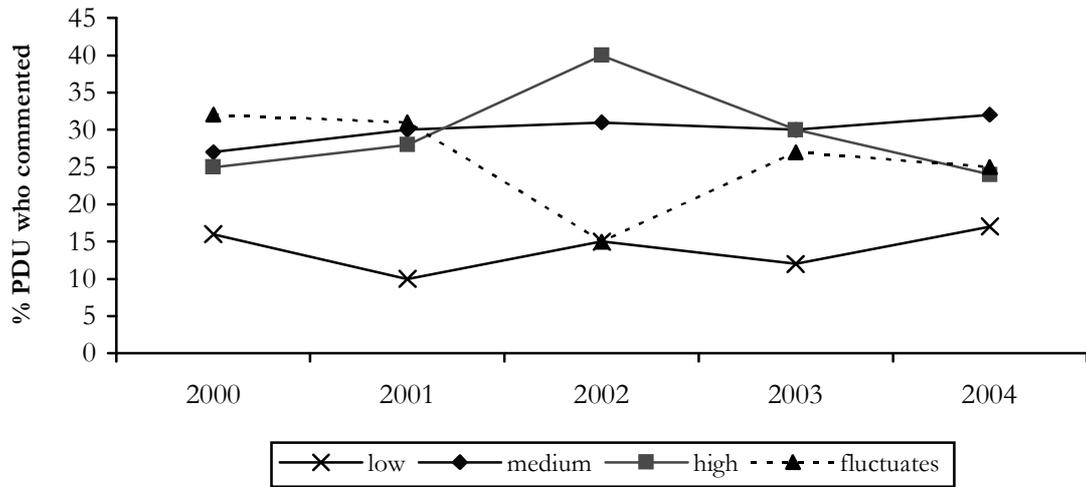
The two most common methods of paying for ecstasy in the preceding six months were paid employment (82%) and being given ecstasy as a gift (79%). Other methods of paying for ecstasy included: on credit from dealers (32%), dealing drugs (30%), bartering other drugs or goods for ecstasy (29%), borrowing money from friends (27%), and obtaining money from parents (22%). Smaller proportions reported that money from dealing drugs (19%), government allowances (15%), pawning goods (6%), property crime (2%) or fraud (1%) had funded their ecstasy use in the preceding six months.

For the first time in 2004 we asked PDI participants “What other drugs could you purchase from your dealer?” One quarter of the sample (25%) reported that they could have purchased other drugs from their ecstasy dealers. The most common drugs that were sold by dealers were cannabis (42%), crystal methamphetamine (32%), ketamine (25%), and cocaine (20%). Other drugs included LSD (15%) and MDA (11%), followed by GHB (8%), heroin (3%), 2CI (2%) and one participant mentioned MDMA powder (1%).

4.5 Purity

In 2004, there were variable reports from users of the current purity of ecstasy, similar to previous samples of ecstasy users (Figure 4). In 2004, a third of the sample reported the purity of ecstasy as ‘medium’ (32%), with around a quarter each reporting that it was ‘high’ or ‘fluctuated’. KE reports reflected this variability; five reported the current purity of ecstasy as low, three said it had fluctuated, another three reported the purity as medium and two were unable to comment on current purity. 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.

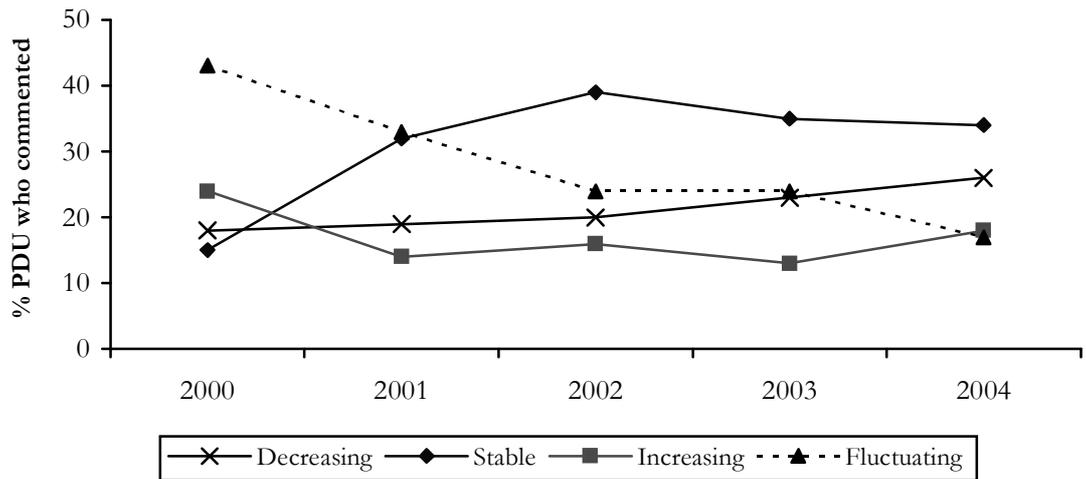
Figure 4: User reports of current ecstasy purity, NSW



Source: PDI Regular ecstasy users' interviews

Reports of changes in purity in the preceding six months were consistent with trends in previous years, with the most common response being 'stable', and the proportion of those reporting that it had 'fluctuated' being again slightly lower than 2003 (Figure 5). KE reports were somewhat inconsistent with users' comments: ten reported purity as stable, and five KEs mentioned that the quality of ecstasy tablets had increased.

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



Source: PDI Regular ecstasy users' interviews

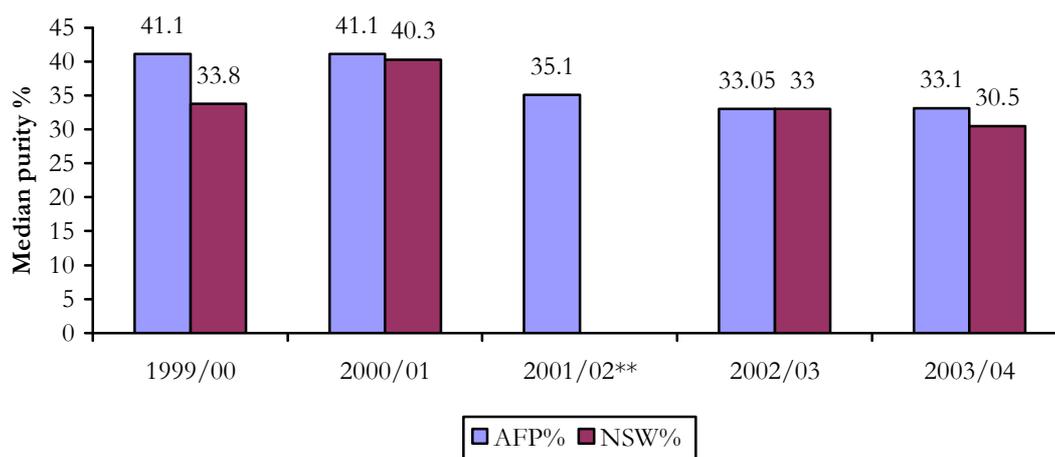
Estimates of purity are necessarily subjective and depend, among other factors, on users' tolerance levels. Laboratory analyses of the purity of seizures of ecstasy provide objective evidence regarding purity changes, and should therefore be more highly regarded than the reports of users. However, it 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), formally the Australian Bureau of Criminal Intelligence (ABCI). The ACC report both federal and state police seizure data including number and weight of seizures. In 1999-2000 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% and in 2003/04 decreased slightly to a median purity of 30%, 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 1990/00-2003/04.



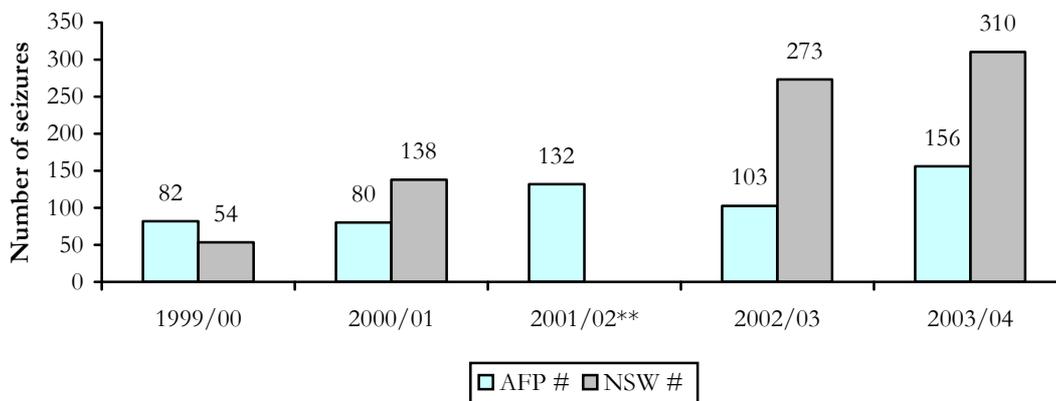
Source: Australian Bureau of Criminal Intelligence, (2001, 2002), Australian Crime Commission (2003, 2004)

*1999/2000 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 1999/00-2003/04



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

*1999/2000 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 and there was a high degree of consistency between users' and KE reports of the availability of ecstasy in 2004, similar to previous years. The majority of users considered that ecstasy was either 'easy' (28%) or 'very easy' (67%) to obtain, and similar proportions reported that the availability had either remained 'stable' (72%) or become 'easier' to obtain (14%) in the preceding six months (Table 5).

Thirteen KEs reported ecstasy as currently being very easy to obtain and five described it as easy. Only one KE thought that ecstasy was currently difficult to obtain. In line with user reports, the majority of KEs thought the availability of ecstasy had remained stable. One mentioned that it had become more difficult for small dealers to distribute ecstasy in clubs due to an increase in police raids.

In all NSW samples across the years, almost all participants described ecstasy as 'easy' or 'very easy' to obtain, and agreed that availability had either remained 'stable' or 'easier' to obtain.

In 2004, the majority of participants reported that in the six months preceding the interview they had obtained ecstasy from friends (76%) or known dealers (55%; Table 5). Other people from whom ecstasy had recently been obtained included acquaintances (15%), workmates (11%) and people unknown to participants (10%). One person reported they had obtained ecstasy over the Internet.

Ecstasy was most often obtained at friends' homes (51%), dealers' homes (40%), agreed public location (27%) and nightclubs (23%). Other purchase locations included own home (20%), raves (including "doofs" and dance parties; 20%), and pubs (11%). Three reported that they obtained ecstasy at work and one bought on the street. Other purchase locations reported by two participants at a private party and three participants at school.

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 agreed public locations.

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)
Current availability:					
Very easy (%)	70	72	71	63	67
Easy (%)	27	23	15	23	28
Availability:					
Stable (%)	69	68	72	73	72
Easier (%)	21	28	18	11	14
Persons Score from:					
Friends (%)	83	90	86	80	76
Known Dealers (%)	63	50	76	60	55*
Acquaintances (%)	30	28	38	27	15
Workmates (%)	12	12	11	15	11
Unknown people (%)	27	22	14	15	10
Locations scored from:					
Friends' home (%)	59	69	74	64	51
Dealer's home (%)	35	33	51	34	40
Nightclub (%)	37	35	40	42	23
Agreed public location (%)	-	-	-	-	27**
At own home (%)	45	30	32	29	20
Other (%)	20	20	11	8	5

Source: PDI Regular ecstasy user interviews

*changed from dealers to known dealers in 2004

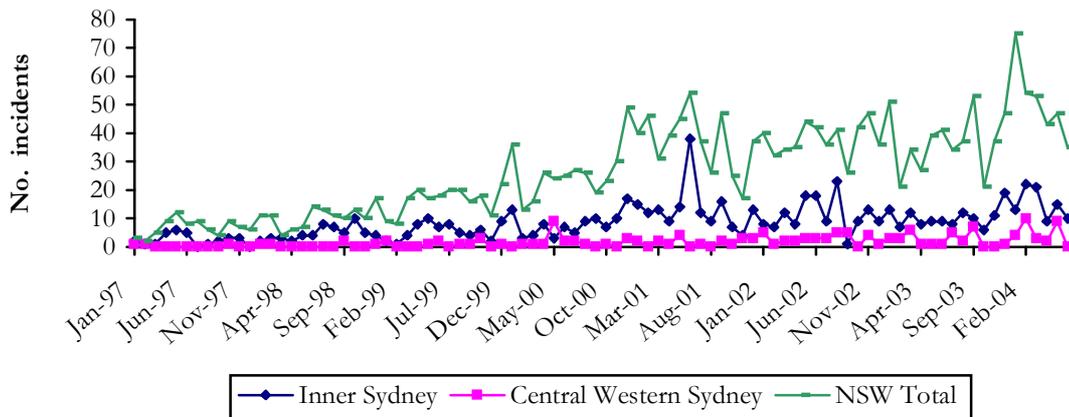
**question asked for the first time in 2004

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.

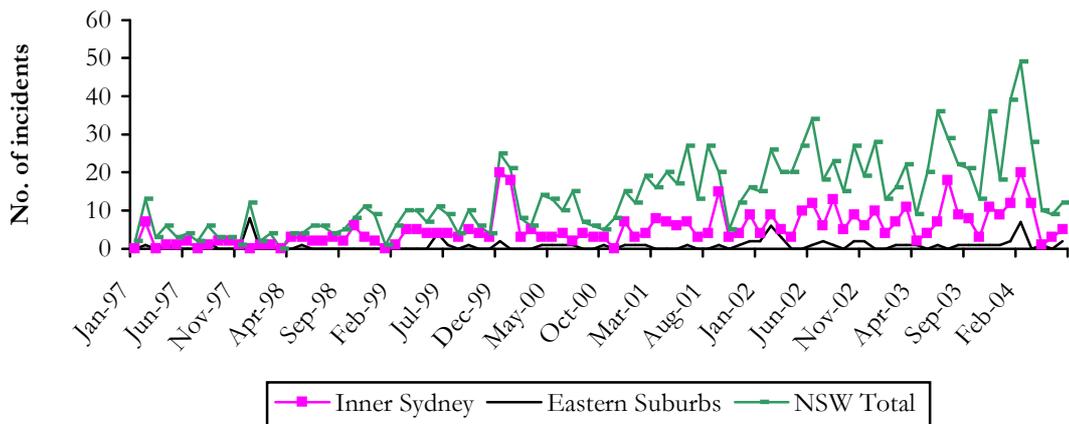
Figure 8: Number of police incidents recorded for ecstasy possession/use, January 1997-June 2004



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

Overall, the number of ecstasy deal/traffic incidents recorded since January 1997 has increased over time in the areas of the Inner Sydney, Central Western Sydney and 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 2004



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

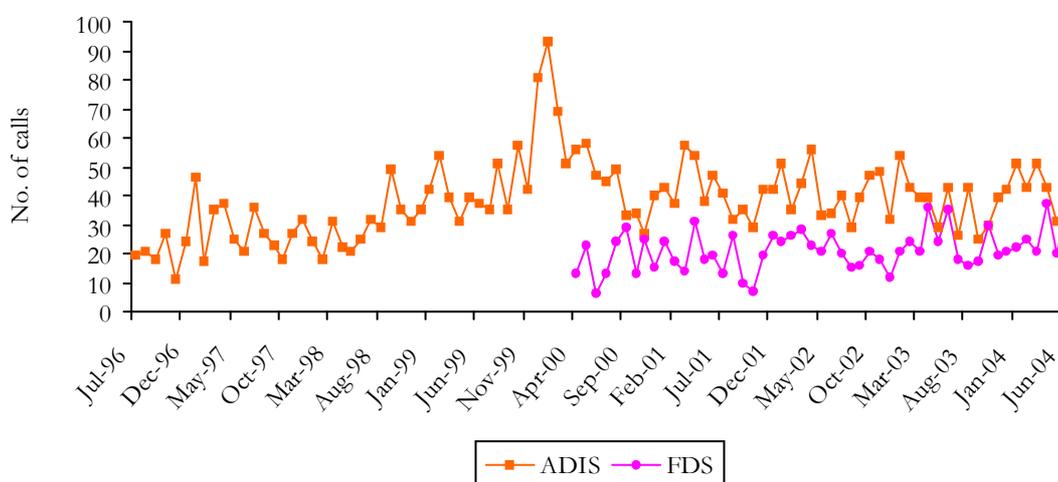
Only one KE mentioned the increasing number of clandestine MDMA labs detected in NSW within family homes with children present imposing a danger, although this was still considered to be relatively unusual. Two explanations for this increase were offered; the first being improved police response including greater collaboration with industry and enhanced intelligence, leading to greater rates of detection and the second, an increase in the number of labs in operation. Also mentioned was the increase in smaller, more mobile labs. See the Methamphetamine Section 4.5.1 for NSW police data reflecting detection of clandestine methamphetamine and MDMA labs. Interestingly, three MDMA labs were detected in the calendar year 2002; four were detected in 2003. (2004 data was not available at the time of this report).

4.7.2 Health

When asked whether they had experienced any problems ceasing or reducing ecstasy use, (30%) of the sample reported either wanting to or having tried to cut down on their use of ecstasy and found they could not.

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 in April 2000 regarding ecstasy reflect a similar pattern.

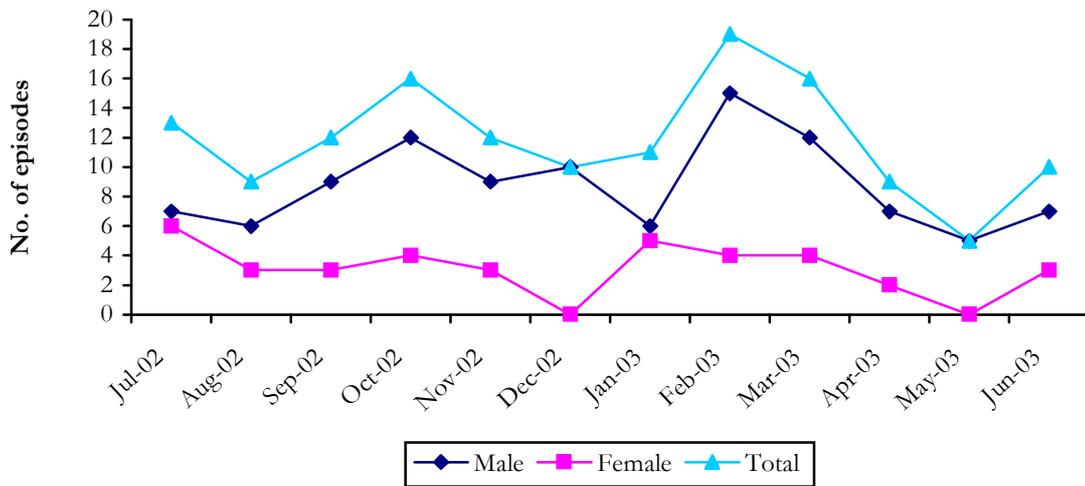
Figure 10: Number of inquires regarding ecstasy received by ADIS and FDS, 1996-2004



Source: NSW Alcohol and Drug Information Service & NSW Family Drug Support
NB. Family Drug Family Drug Support data was only available from April 2000

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 12 months with a maximum of 19 in February and a minimum of five in May (Figure 11). In line with the gender distribution of the 2004 REU sample, males accounted for a greater number of treatment episodes than females. 2004 data was not available at the time of printing of this report.

Figure 11: Number of ecstasy treatment episodes by gender, NSW July 2002–June 2004

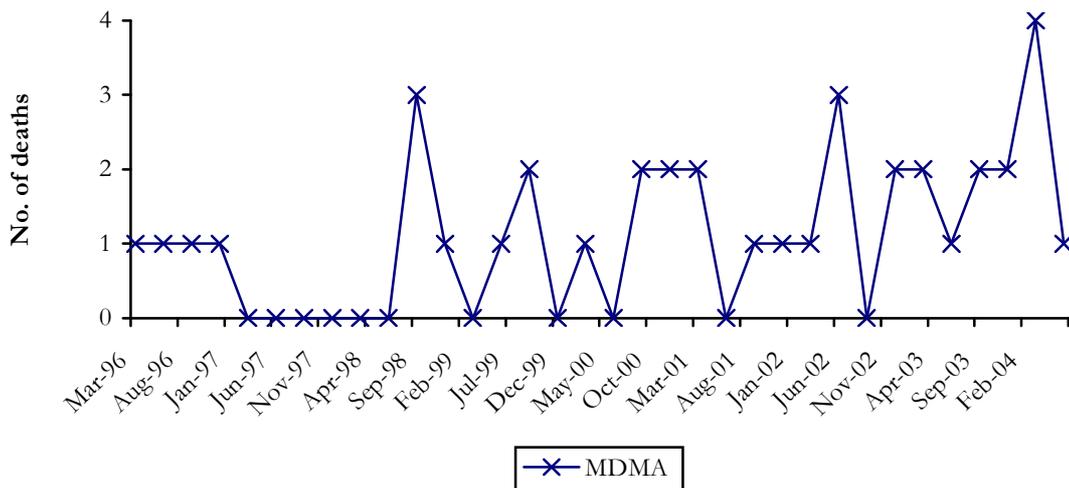


Source: NMDS-AODTS, NSW Department of Health.

N.B. The NMDS 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 a quarter; MDMA was detected in only 1.2% of all suspected drug-related deaths since 1996 (Figure 12).

Figure 12: Number of suspected drug related deaths in which ecstasy was detected post mortem, March 1996-June 2004



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 second year running we have 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 was reported and are summarised in Table 6. Ninety-seven percent of the sample identified at least one benefit with the majority of the sample reporting two or more. Three participants reported no benefits. Participants were asked to select up to three benefits from 15 categories they might have perceived to be associated with their ecstasy use.

Thirty-nine participants reported positive effects on mental state, the majority of whom reported enhanced mood (n=32) and the rush, high or buzz was also mentioned for seven participants. Many participants identified a range of benefits regarding the enhanced interaction with others, including enhanced communication, talkativeness and more sociability (n=38). Others mentioned feeling an enhanced closeness/bonding/empathy with others (n=24). Other commonly identified benefits of ecstasy use were increased confidence and decreased inhibition (n=27) followed by an increased energy, alertness and being able to stay awake were often reported as a benefit of ecstasy use (n=24). The perception that ecstasy could be used to relax or escape was a commonly reported benefit (n=13) and the increased appreciation of music and dance (n=10) and thirty-four participants reported the benefit of taking ecstasy was simply 'to have fun'.

Seven participants mentioned one benefit of ecstasy use was related to how it is different from alcohol (eg "non-violent", safer environment and no hangover) while nine participants reported that ecstasy enhanced sexual experience.

Smaller proportions reported other benefits of ecstasy use and there were strong themes that emerge. These included enhanced perception (8%), drug effects (5%), feeling in control (4%), cheap (4%), lesser effects of coming down from other drugs other than ecstasy (3%), and as a means of networking amongst workmates or friends (2%).

Table 6: Perceived benefits of ecstasy use among those who commented, NSW 2004

Benefit variable	2004 <i>n=101</i>
Enhanced communication/talkativeness/more social	38
Fun	34
Enhanced mood	32
Increased confidence/decreased inhibitions	27
Enhanced closeness/bonding/empathy with others	24
Increased energy/stay awake	24
Other	24
Relax/escape/release	13
Enhanced appreciation of music and/or dance	10
Enhanced sexual experience	9
The high/rush/buzz	7
Different to effects of alcohol	7
Drug effects	5
Feelings in control/focused	4
Cheap	4
None	3

Source: PDI Regular ecstasy user interviews 2004

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 (86%) identified a range of potential health and other risks, with most respondents reporting more than one risk, a summary of which appear in Table 7. Fourteen participants reported no risks and one person was unsure. For the first time in 2004, we ran main themes with number of close-ended responses They included: physical harms, psychological harms, harms related to illicit status, impaired decision making, neuropsychological harms, overdose, addiction/dependence and other harms which comprised of legal/police, financial problems, social/relationship problems and unknown long-term harm.

The most common risk participants perceived to be associated with the use of ecstasy was the potential short and long-term physical health risks associated with ecstasy use were identified (n=53). Of those who mentioned physical health risk, many reported acute physical health side effects including vomiting, headaches, trouble sleeping, and weight loss (n=19). Three participants perceived dehydration to be a risk associated with taking ecstasy and three participants specified body temperature regulation including the risk of overheating, drinking too much or not enough water. Eight participants mentioned longer-term physical health implications such as ulcers and possible cardiac, lung, respiratory and nasal damage. Five participants mentioned the risk of toxicity (n=1), renal failure (n=1), heart palpitations (n=1), liver damage (n=1) and the effects of drinking too much alcohol while on ecstasy (n=1).

The second most common risk participants perceived to be associated with the use of ecstasy was the potential for psychological harm (n=43). Depression was most commonly identified (n=15), followed by addiction or dependence (n=11), paranoia

(n=3), psychosis (n=2) and anxiety/panic (1%). Three participants were concerned with their general mental health, while 8% of participants expressed their concern regarding the risk of longer-term mental health harm. The risks of neuropsychological harm including damage to brain function (n=16) and memory impairment (n=16) as well as cognitive impairment (n=2) were described.

Interestingly, almost one fifth of the sample (n= 14) perceived overdose or death as a potential consequence of ecstasy use. Furthermore seven participants perceived death as a potential outcome of ecstasy use in general, without specifying a cause.

Other commonly identified risks perceived to be associated with ecstasy use were related to the nature of the unregulated black market from which ecstasy was purchased (n=21). The majority mentioned harms related to illicit status more specifically that pills could potentially contain harmful contaminants and eight participants reported unknown purity or strength. One person described their risk of getting a “bad pill”.

One sixth of the sample reported that while under the influence of ecstasy their effects of intoxication, leading to impaired judgement, increased vulnerability and potentially risky behaviour (n=12). Six participants described impaired decision-making and risk taking and one indicated an increase in vulnerability. Specific risk behaviours and situations resulting from impaired judgement included driving while under the influence of ecstasy (n=1) and four participants mentioned the risk of ‘taking more drug than intended’, however nil reported unprotected sex or risk of aggressive and violence behaviour.

Small numbers mentioned other risks such as the unknown long-term risk of ecstasy use (n=7) or the legal or law enforcement implications of their ecstasy use (n=10). Seven participants mentioned potential financial problems due to spending money on ecstasy, while two mentioned the potential social and relationship problems. No participants mentioned their acknowledgement of the risks associated with ecstasy use and how it could be managed. Only one person mentioned injecting as a risk associated with ecstasy use.

Table 7: Perceived risks of ecstasy use among those who commented, NSW 2004

Risk variable	2004 n=89
Physical harm (effects on physical health)	53
Psychological harm (effects on mental health)	43
Neuropsychological harms	34
Harms related to illicit status (unknown purity/ contaminants)	21
Overdose	14
None	14
Impaired decision making	12
Addiction/ dependence	11
Legal problems	10
Unknown long-term risks	7
Financial problems	7
Unsure	1

Source: PDI Regular ecstasy user interviews 2004

4.9 Summary of ecstasy trends

- Median price of ecstasy was reported to be \$35, which has remained stable since 2001; most participants across sampling years report the price as stable.
- User and KE reports of ecstasy purity suggest it is variable, and the purity of seizures made by AFP were 33% and NSW police were 31% in 2003/04.
- Both users and KEs have consistently reported that ecstasy is 'very easy' to obtain since 2000.
- Comparable to previous years, the majority of participants obtained ecstasy from friends and purchased ecstasy from friends' houses.
- Recorded numbers 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').
- The most commonly identified benefits perceived to be related to ecstasy use was interaction with others and to have fun.
- The most commonly identified risks of ecstasy use were related to the potential physical and psychological harms.

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 gluggy, 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 (98%) participants in the 2004 survey reported lifetime speed use and the majority (81%) had used speed in the preceding six months. Speed had first been used at median age 18 (range 12-54) and there were no gender differences in age of initiation. Of the fourteen participants (14%) who had injected speed at some time, the median age at first injection was 22 (16-32).

Eighty-four recent speed users reported using on a median of six days (range 1-96) in the preceding six months. The majority (55%) used less than once a month; more than a quarter (27%) had used speed between monthly and fortnightly; 12% between fortnightly and weekly and 6% used speed more than once a week. A small proportion of the sample (6%) nominated speed as their favourite drug.

The median amount of speed used in a ‘typical’ or ‘average’ use episode in the preceding six months was 0.75 grams (range 0.10-3.50). During their ‘heaviest’ use episode, recent speed users reported the use of a median of one and a half grams (range 0.15-7.00); 7% had used more than two grams on a single occasion in the last six months. Of those who reported recent bingeing, 53% had binged on speed. Recent speed use was also quantified in terms of points (n=2) and lines (n=6). Typically, 1.5 points of speed was used during an occasion of use (range 1.00-2.00). Recent speed use was also quantified in terms of lines; two lines (range 1-4) of speed were used during a typical occasion of use and three lines (range 1-6) were used during a heavy occasion of use.

Most recent speed users reported snorting (95%) or swallowing (66%). Smoking (12%) and injecting (7%) were other routes of speed administration reported by small proportions of participants.

Lifetime and recent use of speed has remained stable across sampling years (Table 8). Data presented in Table 8 suggest a slight increase in the quantity of use in 2004.

Table 8: 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)
Ever used (%)	92	99	100	97	98
Used preceding six months (%)	75	87	85	79	81
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)
Median quantities used (grams)					
Typical (range)	0.5 (0.25-7)	1 (0.1-6)	0.5 (0.1-3.4)	0.5 (.05-7)	.75 (0.1-3.5)
Heavy (range)	1 (0.5-28)	1 (0.1-6)	1 (0.1-10.5)	1 (0.1-12)	1.5 (0.15-7)

Source: PDI Regular ecstasy user interviews

All but three KEs reported the use of speed by the groups of ecstasy users with whom they had had recent contact. KEs estimated between 10-100% of the group used speed in the preceding six months. Snorting and swallowing were considered typical routes of administration. No KEs mentioned injecting or shelving/shafting methamphetamine powder. When it came to estimating frequency and quantity of use, the majority of KEs were less certain of this level of detail although most estimated that between weekly and monthly use was common. In terms of speed as a favourite drug: two KEs termed it as “old news” and not as popular with regular ecstasy users.

Speed was commonly used in nightclubs (75%), raves (including “doofs” and dance parties; 52%), friends’ homes (37%), home (35%), private parties (33%), pubs (30%) and at live music venues (18%). Smaller proportions used speed in car or other vehicle (15%),

public places (12%), work (12%), outdoors (10%), a dealers' house (8%), and in restaurants or cafes (2%).

Location at last use was commonly a nightclub (32%), at a friends' home (17%), at home (15%) or at a rave (including "doofs and dance parties, 13%). Small proportions reported at a pub (8%), work (7%) and private party (3%).

5.1.2 Methamphetamine Base

A substantial proportion (64%) of the 2004 sample reported lifetime methamphetamine base use and four in ten (39%) had used base in the preceding six months. Those who had used base at some time reported first doing so at median age of 20 years (range 12-41). There were no significant gender differences in age of initiation. Nine percent of the sample had injected base at some time. Median age of first base injection was 22 (19-41).

Forty participants who had recently used base reported a median of five days (range 1-36) of use in the preceding six months. The majority (85%) of participants had used base less than once a month. Twelve participants (12%) had used between monthly and fortnightly, two between fortnightly and weekly and two had used based once a week or more. One respondent nominated base as their drug of choice.

Of those who reported typical use base during the preceding six months, 22 quantified their use in terms of 'points' and four referred to 'grams'. Seven referred to 'lines' and one participant referred to their use in 'bumps' (for definition of bumps see *Section 6.1: Ketamine use among REU*). 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 two points during an episode of normal use (range 0.5-4) and a median of two points during a heavy occasion of use (range 0.5-10). Participants referring to grams had used a median of 0.175 grams of base on a typical occasion of use (range 0.05-0.50) and 0.25 gram (range 0.25-0.50) during a heavy use episode. Of those who reported bingeing in the preceding six months, 15% had binged on base.

Most participants had swallowed (68%) base in the preceding six months. Smaller numbers had snorted (40%), injected (13%) and smoked (10%) base.

Trends in base use across time are presented in Table 9. Since 2000, both lifetime and recent use of base have increased remaining stable since 2002. Frequency of base use has fluctuated while quantity of use has increased slightly.

Table 9: Patterns of methamphetamine base use of REU

Base variable	2000 (n=94)	2001 (n=163)	2002 (n=88)	2003 (n=102)	2004 (n=104)
Ever used (%)	36	34	59	63	64
Used last six months (%)	22	20	44	42	39
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)
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)
Heavy (range)	1.5 (1-10)	1.5 (1-10)	1 (0.1-10)	2.5 (0.1-10)	2 (0.5-10)

Source: PDI Regular ecstasy user interviews

Base was commonly used in nightclubs (50%) or at friends' homes (37%) followed by at home (33%), raves (including "doofs" and dance parties; 30%) and live music venues (20%). Smaller proportions reported using base in car or other vehicle (13%), outdoors (10%), public places (10%), private parties (10%) and dealers' house (10%). Other locations reported were at work (7%), pubs (7%) and in restaurants or cafes (3%).

Location of last occasion of base use was commonly at nightclub (23%), home (17%), live music venue (13%), friends' homes (13%) or a rave (including "doofs" and dance parties, 13%). Small proportions reported at a private party (3%) dealers' home (3%) and work (3%).

Six KEs reported no recent base use by the group of regular ecstasy users with whom they were familiar, and a further five were unable to comment. Of the twelve KEs who commented, five reported that base was "not very popular"; three KEs reported base as a drug of "occasional use" but were unable to comment on frequency or quantity of use. Two mentioned that base was injected and another two mentioned that base was used in conjunction with ecstasy.

5.1.3 Crystal Methamphetamine

Two thirds (68%) of the 2004 sample reported having ever used crystal methamphetamine and half (46%) reported using crystal in the preceding six months. The median age of first crystal use was 22 years (13-58). There were no significant gender differences in age of initiation. A small proportion (11%) reported lifetime crystal injection. The median age crystal was first injected was 27 (19-40). One KE thought there is also a younger age group (14-16) using crystal as their first drug.

Forty-eight recent crystal users reported a median of six days (range 1-120) of use in the preceding six months. Most (75%) used less than once a month; 13% of participants reported using between monthly and fortnightly, 7% between fortnightly and weekly and 5% more than once a week. Five respondents reported crystal methamphetamine as their favourite or preferred drug.

Most recent crystal users (n=48) described their use in terms of "points" (typically thought of 0.1g) while two quantified their use in terms of grams. Two participants described use in "tokens", while one described in "pipes". A token is a puff on a glass pipe

used to smoke crystal. Those who quantified their crystal use in terms of points reported for typical occasion of use a median of one point (range 0.25-8) and heavy occasion of use a median of two points (range 0.50-12). Those referring to grams used a median of 0.50 grams during a typical session of use and 0.75 grams (range 0.50-1.00) during their heaviest use episode. Of those who reported bingeing in the preceding six months, 53% had used crystal to do so, compared to 37% in 2003. Further, reports of typical crystal use in conjunction with ecstasy stabilised (9% vs. 10% in 2003).

The most common route of crystal administration was smoking (81%). Smaller proportions reported swallowing (31%), snorting (21%) and injecting (15%) crystal in the six months preceding the interview.

The prevalence of crystal use continued to increase in 2004 (Table 10). Frequency of use appears to have increased slightly over time while quantity of crystal use seems to have remained relatively stable.

Table 10: Patterns of crystal methamphetamine use of REUs, NSW

Crystal variable	2000 (n=94)	2001 (n=163)	2002 (n=88)	2003 (n=102)	2004 (n=104)
Ever used (%)	12	43	43	56	68
Used last six months (%)	6	26	19	48	46
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)
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)
Heavy (range)	2 (1-3)	1 (0.5-7)	2.5 (1-10)	1 (0.1-10)	2 (0.5-12)

Source: PDI Regular ecstasy user interviews

Crystal was most commonly used at home (62%) and friends' homes (53%) followed by nightclubs (38%), raves (including "doofs" and dance parties) (27%) and car or other vehicle (21%). Smaller proportions reported using at pubs (18%), private parties (15%), public place and work (12%). Outdoors (6%) were also mentioned followed by live music venue (3%) and dealers' home (3%; Figure 13).

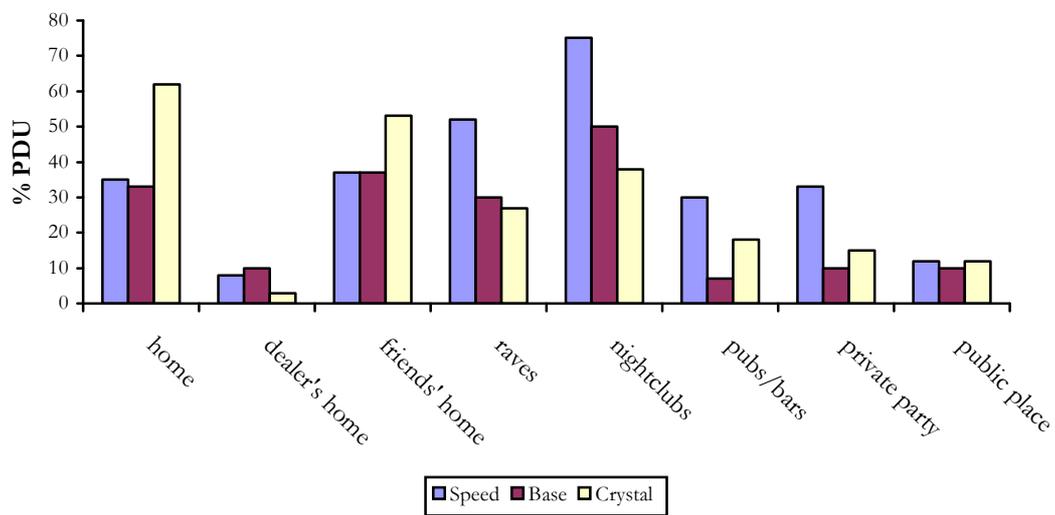
Location of last occasion of crystal use was consistent with usual locations of use and included in own home (41%), friends' homes (21%) and at a nightclub (15%). Small numbers mentioned in a car (3%), outdoors (3%), raves (including "doofs" and dance parties; 3%) and public place (3%; Figure 14).

KE reports of crystal use were consistent with the results of the user survey with almost all reporting stable levels of crystal use over the preceding six months. Sixteen of the 23 KEs reported the use of crystal among the ecstasy users with whom they were familiar. Five KEs had no direct contact with users and could not comment. Estimates of prevalence ranged from 10 to 20% of the group. Of the seventeen who commented on route of administration, nine reported smoking, three said small proportions inject (with one KE mentioning that injecting usual occurs in private residences), four mentioned swallowing and one said snorting. Reports of quantity and frequency of use also varied, although one point per occasion of use was considered to be typical. Use on two days per

month to a one day per week basis were common estimates of the frequency of use. Eleven KEs described patterns of use in detail: the majority reported that users would use crystal on special occasions, “binge” in conjunction with ecstasy, or would use crystal “opportunistically”.

Figure 13 below illustrates that the locations participants usually used the various forms of methamphetamine at are fairly comparable, however while speed and base were most commonly used in nightclubs, crystal was most often used at homes. Raves (including “doofs” and dance parties), private parties and friends’ homes were other common locations in which all three forms of methamphetamine were usually used by the 2004 sample.

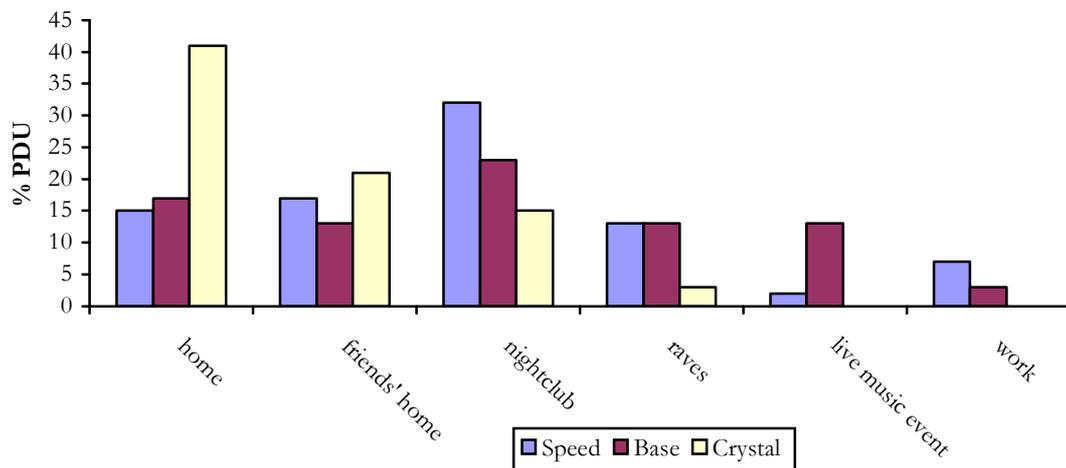
Figure 13: Location of usual methamphetamine use by form, NSW 2004



Source: PDI Regular ecstasy user interviews 2004

In Figure 14 shows, speed and base were last used most often in nightclubs (32% and 23% respectively) and crystal was most commonly reported to be used at home at home (41%).

Figure 14: Location of most recent methamphetamine use by form, NSW 2004



Source: PDI Regular ecstasy user interviews 2004

5.2 Price

Participants were asked 'How much are methamphetamines (speed, crystal and base) at the moment?' Over half (58%) of the 2004 sample was 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 (Table 11). Half grams were purchased for \$30 and eight balls for \$150. More than a half (58%) commented on the changes in speed price. Most (57%) reported the price had remained 'stable' or 'decreased' (17%) in the preceding six months while 15% were unable to comment specifically on price changes. This is similar to KEs reporting on the price of speed with an average cost of \$30 (range: \$20-\$120) with the majority indicating that price has remained stable over the last six to twelve months.

Thirty participants commented on the current price of base, the majority of who referred to its purchase in 'points' (Table 11). The median price paid for a point of base was \$37.50. Of the 30 participants who were able comment, the majority reported that the price of base had either remained 'stable' (50%) or 'decreased' (23%) in the preceding six months. Eight (27%) were unable to comment on recent price changes. No KE commented on current price on base.

Thirty-four participants referred to the purchase of crystal in terms of points, grams and half grams (Table 11). The median price paid for a point of crystal was \$40 while a gram was purchased for a median of \$200. Most of those who commented reported the price of crystal had 'remained stable' (47%), although similar proportions reported the price had increased (15%) and decreased (18%) in the six months preceding the interview. Seven participants (7%) were unable to comment on recent changes in the price of crystal. One KE mentioned about price in terms of points and provided a range of \$30-\$45 dollars.

Median price trends across sampling years are presented in Table 11. Prior to 2002, data concerning the price of speed was not collected in the regular ecstasy users' survey. Data suggest a slight increase in gram and a decrease in half-gram price of speed in the preceding 12 months; the 'point' price of base has decreased slightly over time while crystal has decreased from \$50 (2003) to \$40 a point in 2004.

Table 11: Price of various methamphetamine forms purchased by REUs, NSW

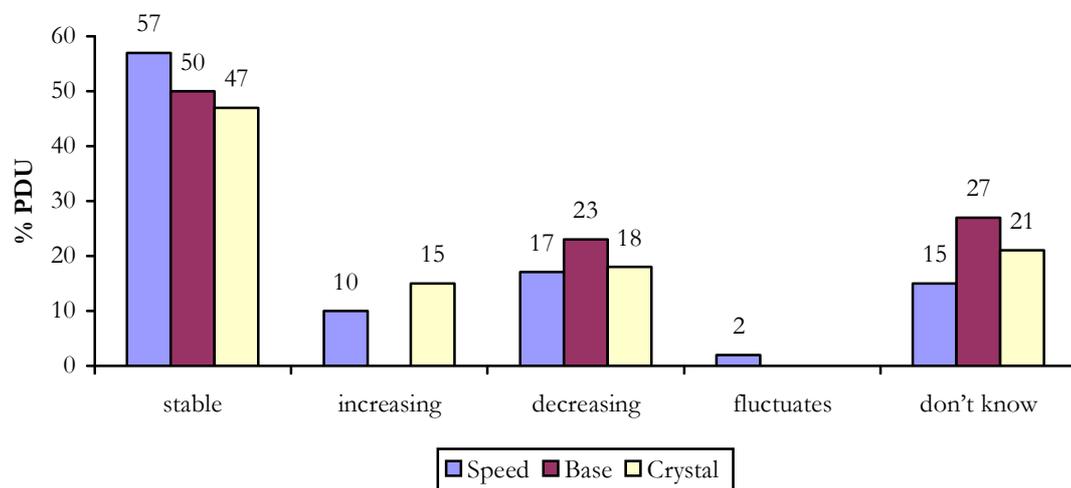
Median price (\$)	2001	2002	2003	2004
Speed	N/A	n=59	n=46	n=60
Half gram (or “half weight”)		40 (30-50) 60 (40-100)	35 (25-50) 55 (40-190)	30(20-50) 60 (60-90)
Gram		150 (75-750)	135 (100-180)	150 (100-250)*
Eight-ball (1/8 oz)		50(30-80)	30*	30 (20-40)*
Point		-	-	
Base	n=22	n=23	n=24	n=30
Point	50 (10-80)	40 (20-50)	40 (20-50)	37.50 (20-70)
Gram	80 (60-80)	175 (100-325)	175 (150-300)	150 (100-200)
Half gram	100 (80-180)	62.50 (50-150)	50*	100*
Five points	-	-	400*	75*
Eight-ball (3.5grams)	225*	140*	110 (70-150)*	600*
Ounce	1100 (1000-1200)*	1200*	3000 (2500-4000)	2300*
Crystal	n=31	n=11	n= 21	n=34
Point	50 (20-70)	50 (40-70)	50 (30-70)	40 (25-100)*
Gram	250 (80-400)	160 (100-500)	250 (250-350)	200 (150-400)
Half gram	80 (80-250)	-	70 (40-150)	150*

Source: PDI Regular ecstasy user interviews 2004

*n= 1

Figure 15 shows participants reports on the recent changes in price of various methamphetamine forms purchased by regular ecstasy users. Over the majority reported price as ‘stable’ (speed 57%, base 50% and crystal 47%)

Figure 15: Recent changes in price of various methamphetamine forms purchased by REUs, NSW 2004

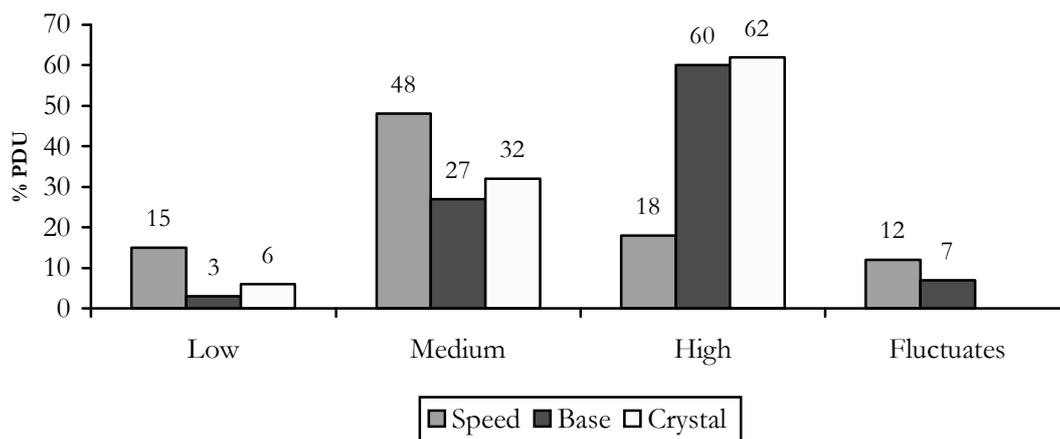


Source: PDI Regular ecstasy user interviews 2004

5.3 Purity

The consistency between regular ecstasy users' estimates of the purity of all forms of methamphetamine is noteworthy. The majority of those who commented reported the purity of speed (66%), base (87%) and crystal (94%) to be 'medium' or 'high' (Figure 16). No one reported the current strength of crystal to be fluctuating.

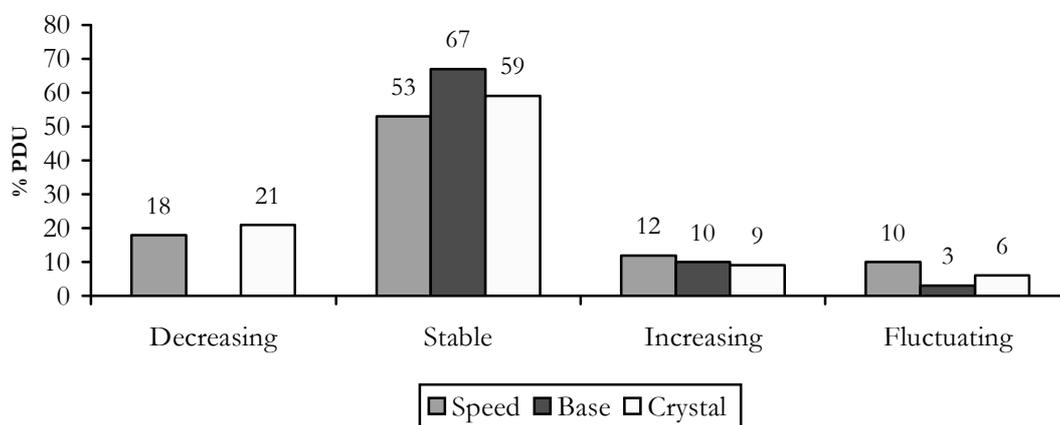
Figure 16: User reports of current methamphetamine purity, NSW 2004



Source: PDI Regular ecstasy user interviews 2004

The majority of those who commented reported the purity of all forms of methamphetamine had remained 'stable' during the preceding six months (Figure 17). Two KEs mentioned that purity of speed has decreased and the majority commented that it has remained 'stable' in the last six months to twelve months. Only one KE commented on base being less pure than previous years and has remained stable in the last six months, while crystal has currently has increased in purity and remained stable in the last six to twelve months.

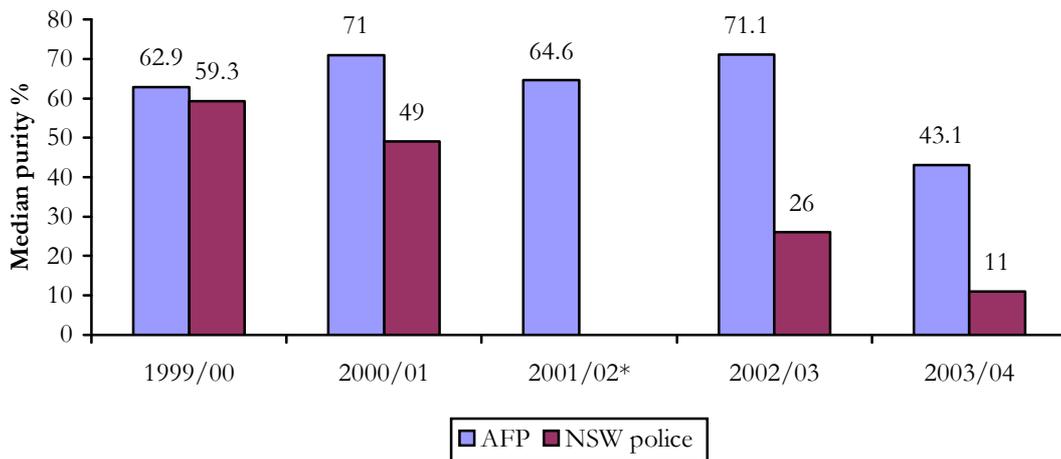
Figure 17: User reports of changes in methamphetamine purity in the past six months, NSW 2004



Source: PDI Regular ecstasy user interviews 2004

Figure 18 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 2003/04 it has fallen below 50%, although these are based on a relatively small number of analysed seizures (see Figure 19). In contrast, the purity of methamphetamine seized by NSW police appears to have decreased since 1999/00. Although these data were not available from NSW police in 2002, purity fell from 49% in 2001/02 to 11% in 2003/04.

Figure 18: Median purity of methamphetamine seizures analysed in NSW 1999/00- 2003/04



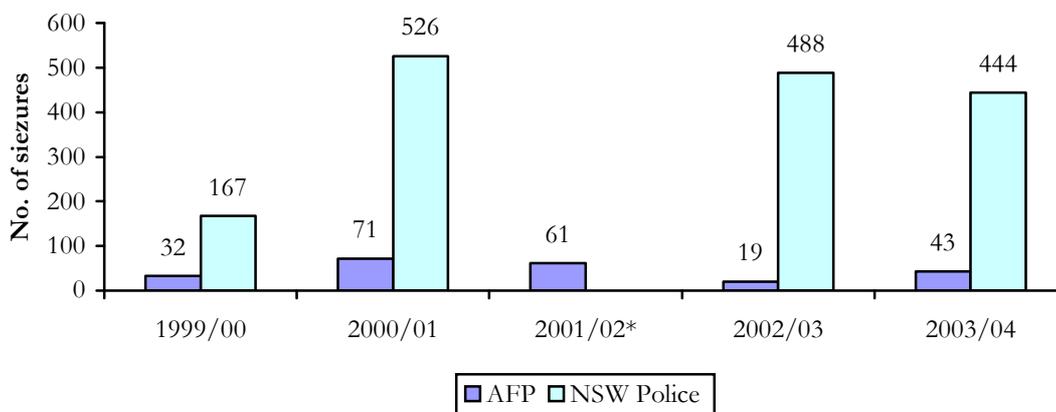
Source: Australian Bureau of Criminal Intelligence (2001, 2002), Australian Crime Commission (2003, 2004)

*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 19 shows the number of methamphetamine seizures by AFP and NSW police since 1999/00. The number of AFP methamphetamine seizures in NSW decreased in the 2002/03 financial year to 19 from 61 in 2001/02, and increased to 43 in 2003/04 financial year. 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. 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 19: Number of methamphetamine seizures analysed in NSW, 1999/00-2003/04



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

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

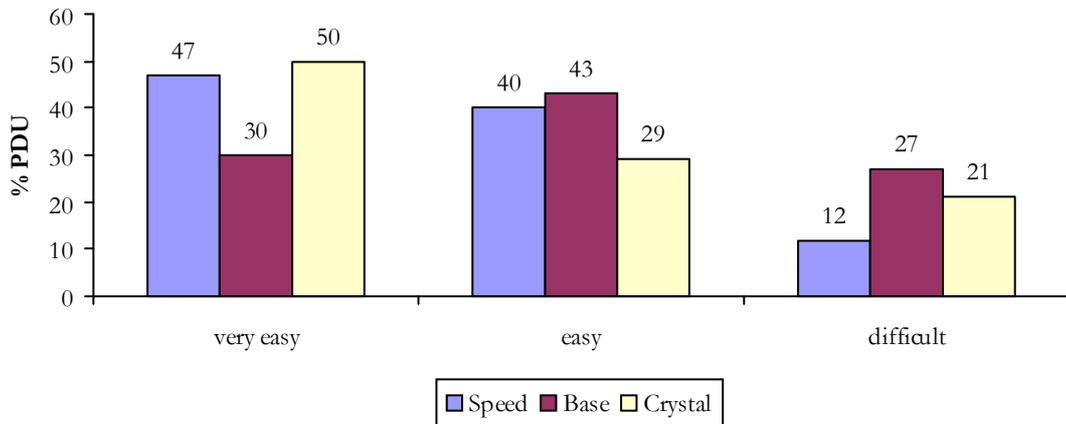
5.4 Availability

The majority of those who commented on the availability of speed reported it 'easy' (40%) or 'very easy' (47%) to obtain (Figure 20); most (68%) agreed speed availability had remained 'stable' over the preceding six months (Figure 22). When KEs were asked many reported the same as the participants, with one KE commenting that the availability of speed was easier than ecstasy and GHB and that this has remained stable over the last six to twelve months.

Similarly, most of those commenting on the availability of base thought it to be 'easy' (43%) or 'very easy' (30%) to obtain (Figure 20). The majority thought the availability of base in the preceding six months had either remained 'stable' (70%) or had become 'easier' (20%) to obtain (Figure 22). No KE specify the availability of base.

With regard to crystal, again most reported that the availability of this form of methamphetamine as 'easy' (29%) or 'very easy' (50%) to obtain (Figure 20), and that the availability of crystal had remained 'stable' (62%) or had become 'easier' (21%) during the preceding six months compared to the six months prior (Figure 22). The KE response to availability was similar to the PDI survey with three KEs mentioning that crystal had become easier to obtain.

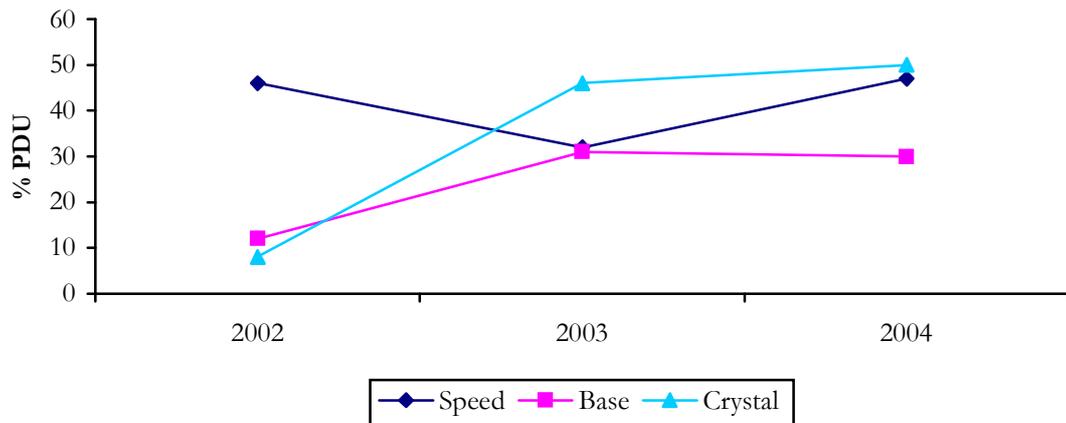
Figure 20: Current availability of methamphetamine forms, NSW 2004



Source: PDI Regular ecstasy user interviews 2004

Figure 21 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%).

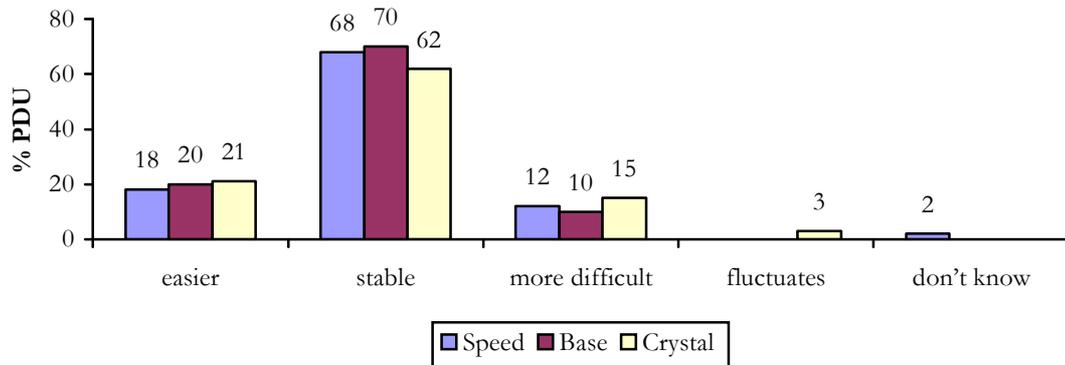
Figure 21: Changes to current availability over time: proportion of REU who report various forms of methamphetamine as ‘very easy’ to obtain in the six months preceding interview in NSW 2003 and 2004



Source: PDI Regular ecstasy user interviews 2003/2004

Figure 22 shows the majority of the 2004 sample reported the availability of all forms of methamphetamine had either remained ‘stable’ or had become ‘easier’ to obtain in the six months preceding interview compared to the six months prior.

Figure 22: Change in the availability of various forms of methamphetamine in the preceding six months, NSW 2004



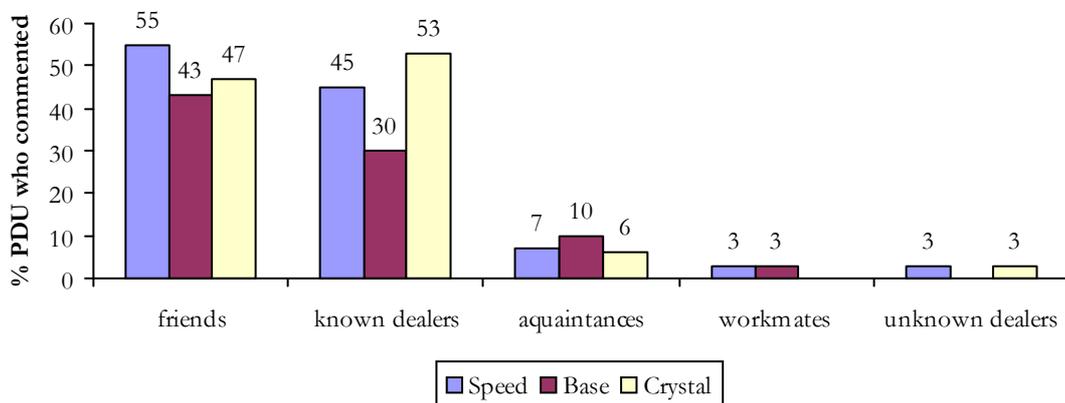
Source: PDI Regular ecstasy users' interviews 2004

Participants predominantly reported obtaining speed from friends (55%) or known dealers (45%; Figure 23). Other people included acquaintances (7%), people unknown to participants (3%) and workmates (3%). Locations at which speed was most often obtained were friends' homes (35%), dealers' homes (33%), agreed public location (15%), own home (12%), raves (including "doofs" and dance parties; 8%) and nightclubs (8%). Other purchase locations included; pubs (3%), work (2%) and school (2%; Figure 24).

Base was commonly obtained from friends (43%) and known dealers (30%; Figure 23). A small number mentioned acquaintances (10%) and workmates (3%). The most common locations where base was purchased included friends' homes (47%) and dealers' home (23%) followed by an agreed public location (13%), pubs (7%), participants own home (7%) and work (3%; Figure 24).

Similar to speed and base, crystal was commonly purchased from friends (47%) and known dealers (53%) with a small proportion mentioning acquaintances (6%) and unknown dealers (3%; Figure 23). Likewise, crystal was also commonly obtained from a friends' homes (32%), a dealers' home (32%) or agreed public locations (24%; Figure 24).

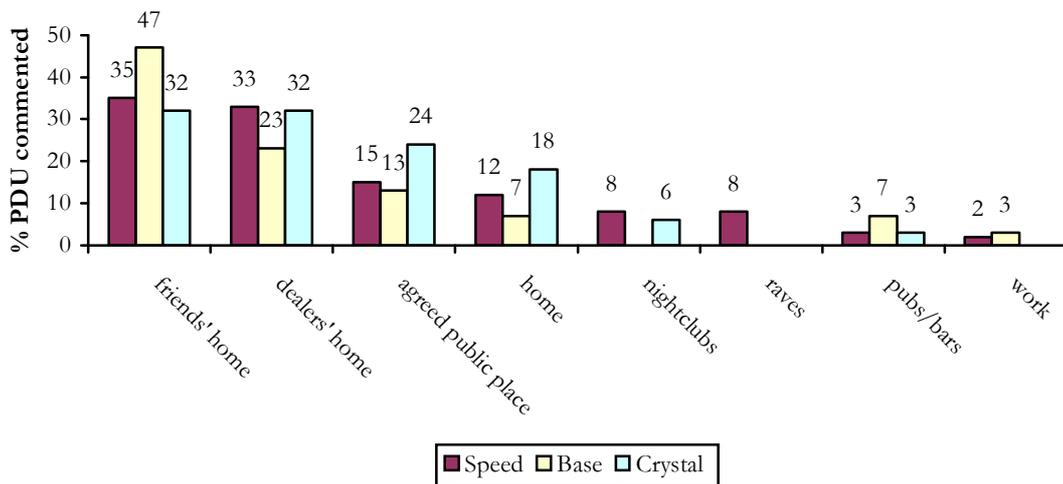
Figure 23: People from whom methamphetamine powder, base and crystal was purchased in the preceding six months, NSW 2004



Source: PDI Regular ecstasy user interviews 2004

When asked to specify locations where methamphetamine was usually purchased, again reports were comparable across forms, with private residences including friends', dealers' and agreed public locations the most commonly identified purchase locations (Figure 24). Small numbers reported purchasing methamphetamine in public places such as in nightclubs, at raves (including "doofs" and dance parties) and pubs. For the first time in 2004 two new locations of purchase were included: gyms, and agreed public locations. Close to 20% of users of all forms of methamphetamine reported purchasing from agreed public locations, while no participants reported purchasing methamphetamine in gyms.

Figure 24: Locations where methamphetamine purchased in the preceding six months, NSW 2004



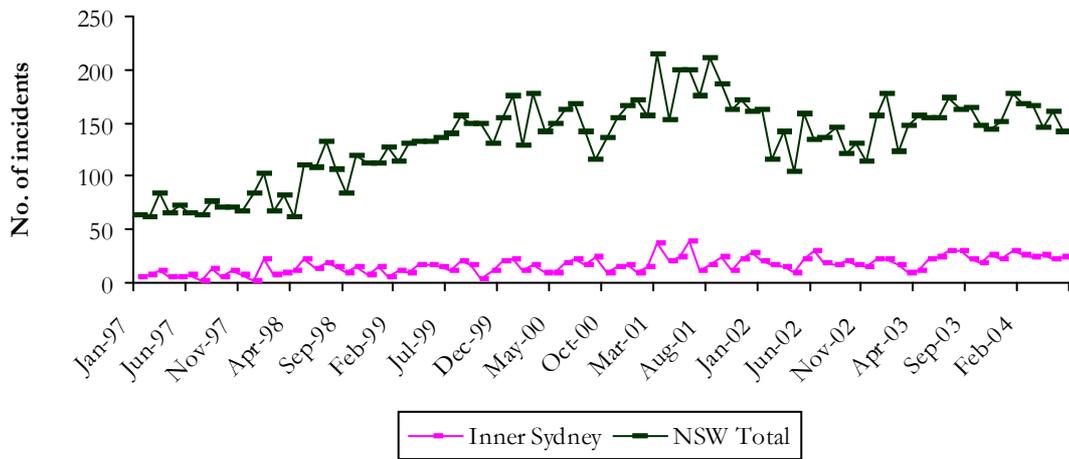
Source: PDI Regular ecstasy user interviews 2004

5.5 Methamphetamine related harms

5.5.1 Law enforcement

Figure 25 shows that the number of amphetamine use/possession incidents recorded per month by NSW police since January 1997 has fluctuated over time in the geographical locations, but generally increased. Notably, a large proportion of the incidents were *not* recorded in the Inner Sydney area, consistent with geographic spread of use of this drug type.

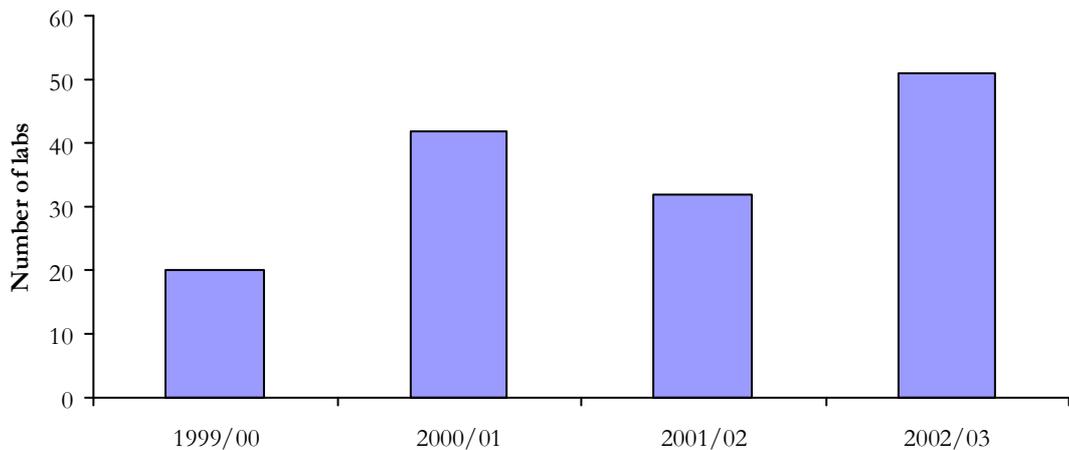
Figure 25: Incidents of amphetamine possession/use by geographic area January 1997-June 2004



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

Figure 26 shows that the number of clandestine labs detected in NSW gradually increased over time from 20 in 1999- 2000 to 51 in 2002/03. In 2002/03 seven of the 51 laboratories were producing MDMA. 2003/04 data was not available at the time of publication of this report.

Figure 26: Number of clandestine methamphetamine and MDMA laboratories detected by NSW Police 1999/00-2002/03



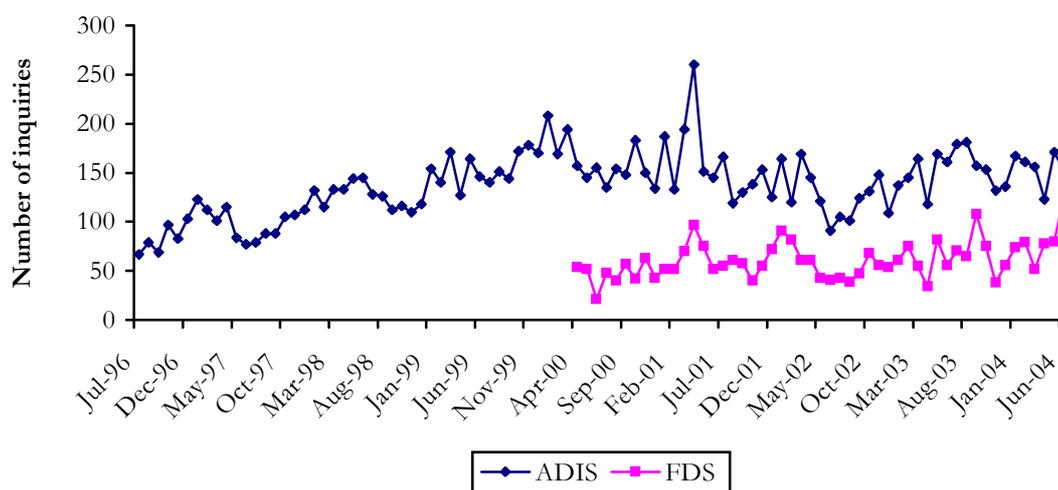
Source: NSW Police Service

Two law enforcement KEs commented on an increase in detecting under covered methamphetamine laboratories in the last 12 months due to the increase of the number of locally manufactured methamphetamine. Detection has become more sophisticated and the KEs commented on the current purity as 5% and have seized a total of 7.5 ounces of methamphetamines in the last 6 months.

5.5.2 Health

The number of calls received by ADIS since January 1996 and FDS since April 2000 regarding amphetamines are presented in Figure 27. The number of calls received by both ADIS and FDS has fluctuated over time with what appears to be a gradual increase in calls over the preceding 12 months. Four KEs mentioned weight loss and skin problems and other four KEs said they had noticed an increase in sexual risk behaviour particularly in the male gay community related to methamphetamine use.

Figure 27: Number of inquiries to ADIS and FDS regarding amphetamines, 1996-2004

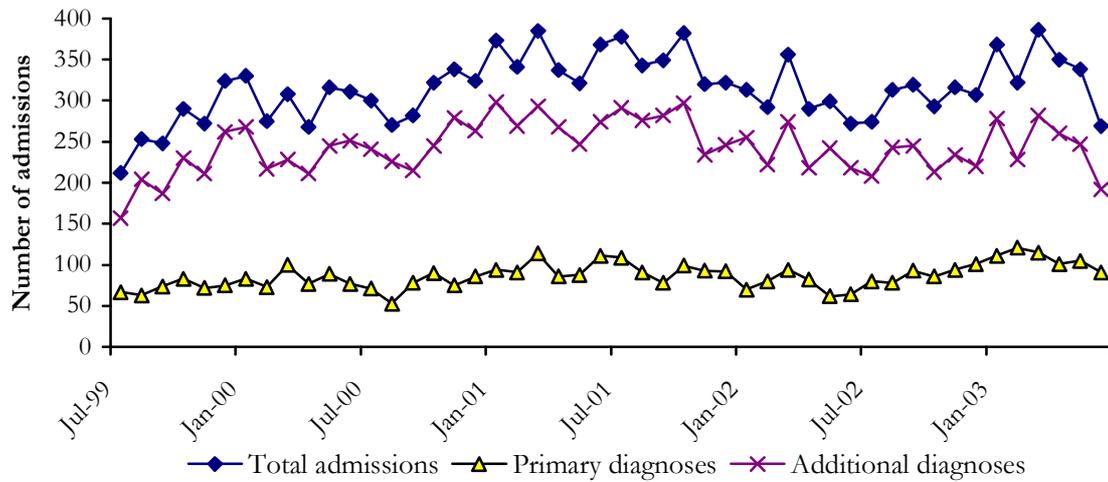


Source: NSW Alcohol and Drug Information Service and Family Drug Support

The number of inpatient hospital admissions among persons aged 15-54 years in which amphetamines were implicated as a principal and/or an additional diagnosis among are shown in Figure 28 below. As outlined previously, diagnoses are based on ICD-10 (Second Edition) codes, and it is possible for one admission to have amphetamines as both a principal and as an additional diagnosis³. These figures refer to persons aged between 15-54 years of age. Figures have fluctuated over the time period 1999/2000–2002/2003.

³ 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.

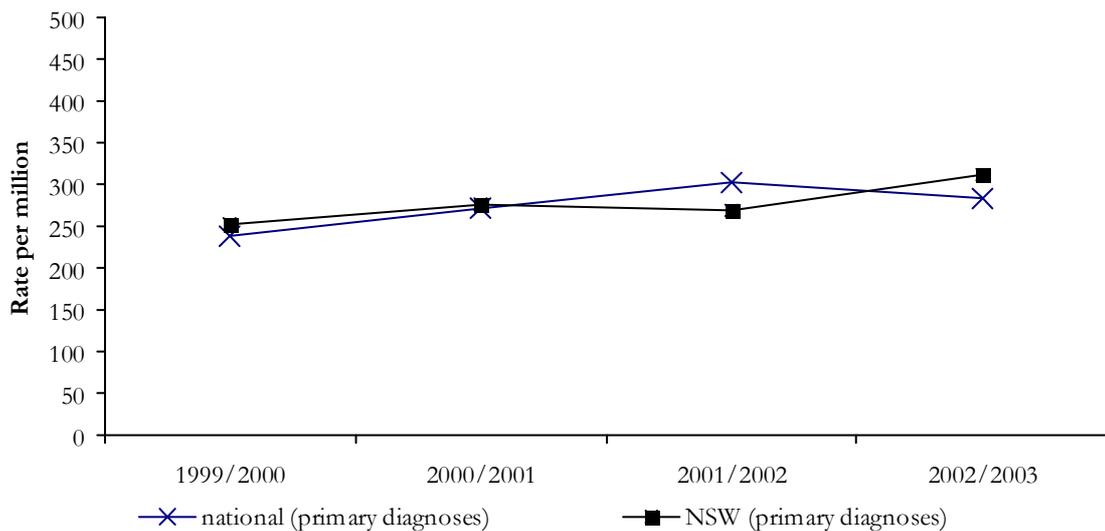
Figure 28: Total number of inpatient hospital admissions in persons aged 15-54 where amphetamines were implicated, NSW July 1999- June 2003



Source: Australian Institute of Health and Welfare

Figure 29 shows the rates of hospital admissions where amphetamines were the primary diagnosis per million people aged 15-54 years. Rates have remained similar across all four years and are comparable to the national rate over this period. Between 1999/2000 and 2002/2003, NSW has accounted for approximately one third of all inpatient admissions where amphetamines were the primary diagnosis.

Figure 29: Rate of inpatient hospital admissions where amphetamines were the primary diagnosis per million people aged 15-54 years, NSW and nationally, 1999/2000 to 2002/2003

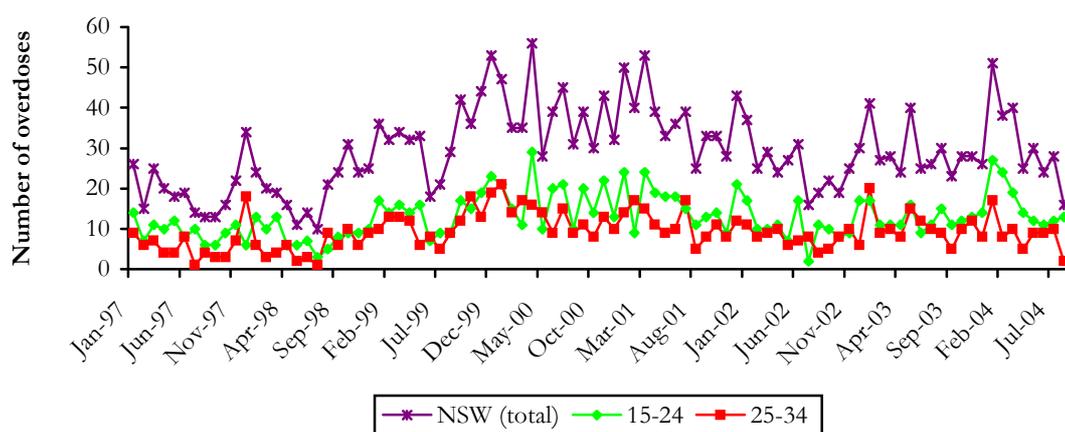


Source: Australian Institute of Health and Welfare

Overdose

The total numbers of amphetamine related overdose presentations to NSW emergency departments have fluctuated over time although there was an increase in the preceding 12 months from 23 in September 2003 to 51 in January 2004 (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.

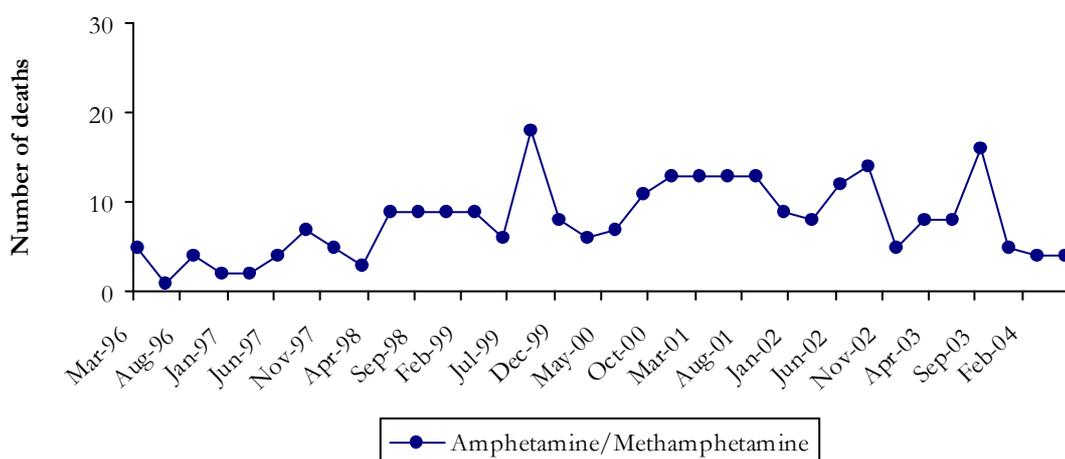
Figure 30: Amphetamine overdose presentations to NSW emergency departments by age group, January 1997-August 2004



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 appear 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 -June 2004

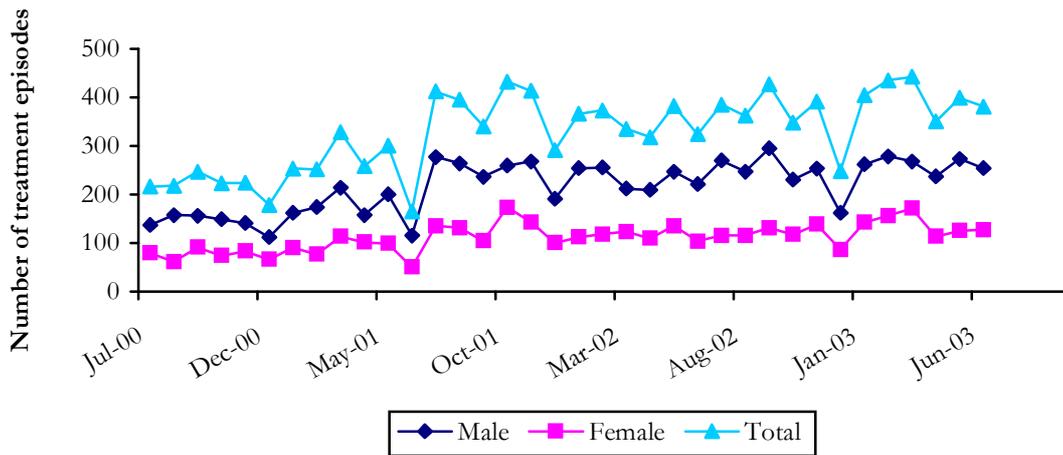


Source: Forensic Toxicology Laboratory database, Division of Analytical Laboratories

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 remained relatively stable in the preceding 12 months (Figure 32). Males account for a greater proportion of this total compared to females. 2004 data was not available at the time of this report.

Figure 32: Number of ATS treatment episodes by gender, NSW July 2000-June 2004



Source: AODTS-NMDS, NSW Department of Health

N.B. The NMDS is based on closed treatment episodes and so some episodes may be excluded if they did not finish in the given period.

5.6 Summary of methamphetamine trends

- Lifetime and recent use of speed has remained stable across sampling years. Prevalence of base use has increased over time although it has remained stable since 2002. Reports of crystal use have increased over time with a notable increase since 2002.
- KE reports of speed and crystal use were consistent with those of the users while KE reports of base use were less consistent which may reflect specific patterns of use among different groups.
- Similar to ecstasy, speed and base were most commonly used in nightclubs although crystal was most often used at home. Raves (including “doofs” and dance parties), private parties and friends’ homes were other common locations in which all three forms of methamphetamine were usually used by the 2004 sample.
- Speed was most commonly purchased in gram amounts for a median of \$60, an increase from \$55 in 2003. A ‘point’ of base was purchased for \$37.50, a slight reduction in price compared to 2003 (\$40) and the price of crystal also reduced to \$40 a ‘point’ for the first time since 2001. Many were unable to comment on price changes in base and crystal reflecting the relatively limited experience this group has with these forms of methamphetamine.
- The purity of all forms of methamphetamine were reported by most respondents to be of ‘medium’ or ‘high’ 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 this first time since 2002/03 financial year from 71% to 43%.
- Most respondents reported that all forms of methamphetamine were ‘very easy’ or ‘easy’ to obtain. The proportion of regular ecstasy users reported speed and crystal as ‘very easy’ to obtain increased in 2004. 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’, known dealers’ and agreed public locations.
- Indicator data do not show a clear trend for the preceding 12 months, with fluctuations occurring in; the number of people presenting for 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 has however, been a gradual increase over time recorded across many of the datasets.

6.0 COCAINE

The majority of the 2004 sample of regular ecstasy users reported lifetime (79%) cocaine use, and just less than half (46%) reported the use of cocaine in the six months preceding interview. The median age at which cocaine had first been used was 20 years (range 15-37). There were no sex differences in age of initiation. A small number reported having injected cocaine (10%); the median age of first injection was 22 years (20-36).

6.1 Cocaine use among REU

Forty-eight recent cocaine users reported a median of three days of use in the preceding six months (range 1-48). The majority (85%) used cocaine less than once a month; 12% had used between monthly and fortnightly, 3% between fortnightly and weekly and 1% more than once a week. Seven participants nominated cocaine as their drug of choice.

The majority of recent cocaine users quantified amounts used in terms of grams; 32 respondents reported using a median of half a gram (range 0.13-2.5) during a typical occasion of use and one gram (range 0.13-4) during a heavy use period. Thirteen respondents also referred to lines; two lines of cocaine were used during both typical (1-4) and heavy (1-10) occasions of use in the preceding six months. Close to one tenth (12%) of those who had recently binged on ecstasy and related drugs reported bingeing on cocaine.

Most (98%) participants reporting recent cocaine use had used cocaine intranasally. Small proportions had swallowed (21%), smoked (13%) and injected (4%) cocaine.

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 12). Further, frequency of use appears to have decreased (as indicated by fewer reports of very frequent use). Quantity of cocaine use in a typical and heavy session of use was comparable between sampling years.

Table 12: Patterns of cocaine use of REU, NSW

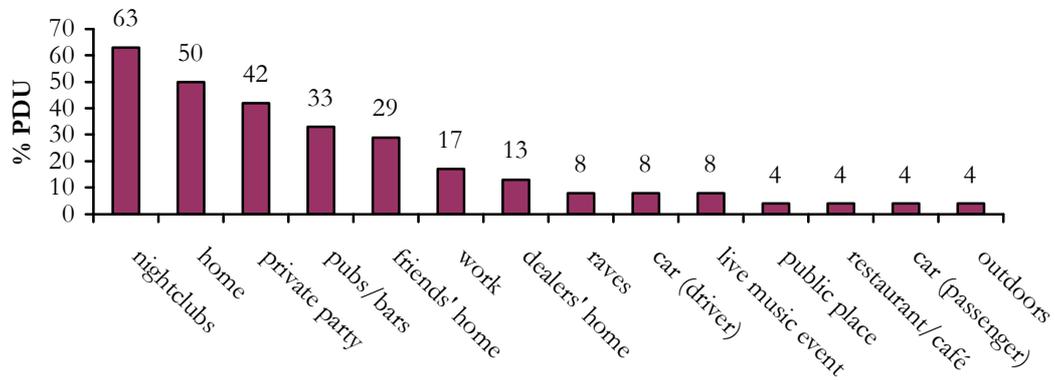
Cocaine variable	2000 (n=94)	2001 (n=163)	2002 (n=88)	2003 (n=102)	2004 (n=104)
Ever used %	78	77	80	78	79
Used last six months%	53	57	64	46	46
Of those who had used					
Median days used last 6 mths (range)	4 (1-90)	3 (1-96)	4 (1-48)	2 (1-24)	3 (1-48)
Median quantities used (grams)					
Typical (range)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

Source: PDI Regular ecstasy user interviews 2004

Of the twenty-three KEs who had direct contact with ecstasy users, most (n=16) reported that a small proportion of the group (5-10%) used cocaine. Consistent with user reports, most believed cocaine used was infrequent among this minority; estimates ranged from once a week to occasional use. Five reported snorting to be the typical route of administration. Two KEs mentioned the binge use of cocaine, and three mentioned that cocaine was used differently depending on the age of the user, availability and cost of cocaine.

Cocaine in 2003 was usually used at private residences, however in 2004 it was most commonly reported to be used in public venues such as nightclubs (63%). This was followed by users' own home (50%) and private parties (42%). Other areas also included pubs (33%), friends' homes (29%), work (17%) and dealers' home (13%; Figure 33). One twelfth (8%) of recent cocaine users reported using at raves (including "doofs" and dance parties), with less than ten participants reporting usually using at public places, outdoors, live music event, restaurants, or in cars.

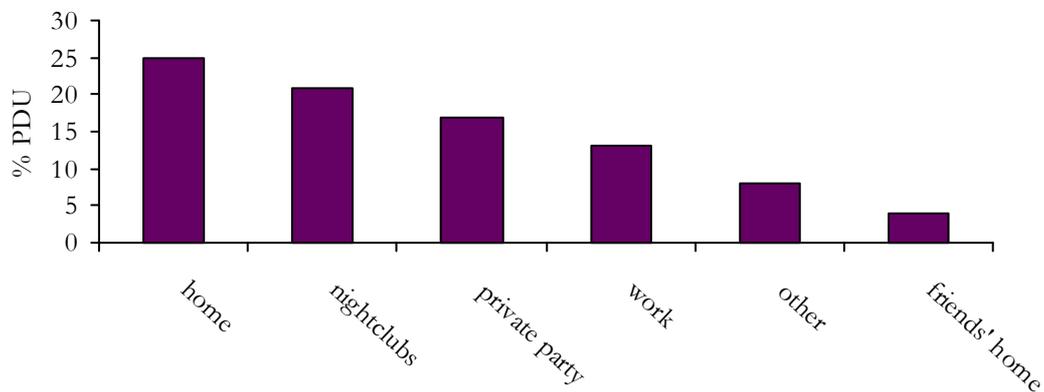
Figure 33: Usual location of cocaine use, NSW 2004



Source: PDI Regular ecstasy user interviews 2004

Consistent with the usual location of use, common locations of last cocaine use were own home (25%), nightclubs (21%) and private parties (17%; Figure 34).

Figure 34: Location of most recent cocaine use, NSW 2004

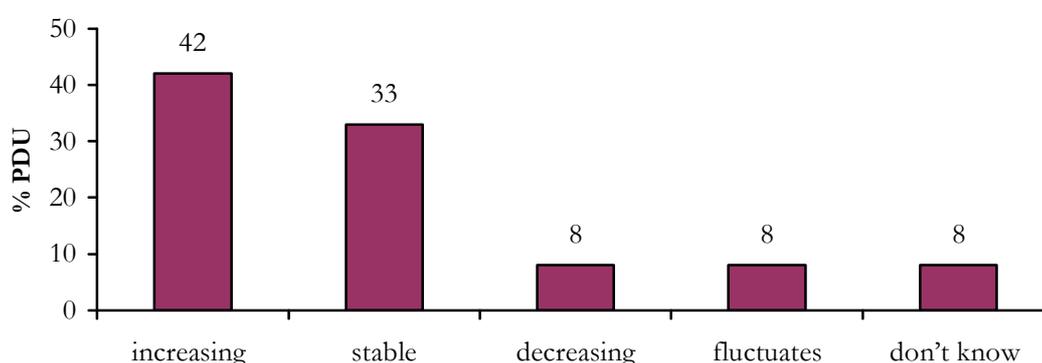


Source: PDI Regular ecstasy user interviews 2004

6.2 Price

In 2004, one fifth (23%) of the sample commented on the price of cocaine, which was most commonly purchased in gram amounts (n=17) and half weight (n=1) was also reported. The current median price for a gram of cocaine was \$200 (range \$200-450). The majority of those who commented reported that the price of cocaine had increased (42%) or remained 'stable' (33%) in the preceding six months (Figure 35). Twenty five percent indicated the price was decreasing, fluctuating or were unable to comment on changes in the price of cocaine. Three KEs commented on the price of cocaine. One gave current costs ranging from \$200-\$300 dollars a gram to \$5,000-\$8,000 dollars an ounce, while the other two commented that price depended upon purity of the product, and that as the amount purchased increased, so too did purity.

Figure 35: Recent changes in price of cocaine purchased by REU, NSW 2004

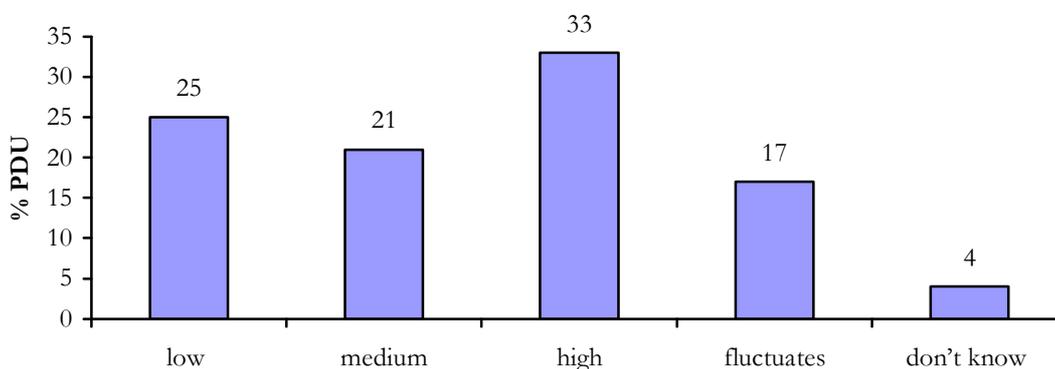


Source: PDI Regular ecstasy user interviews 2004

6.3 Purity

There was variability in reports of cocaine purity by the ecstasy users interviewed in 2004. Although one in three (33%) reported cocaine purity was 'high', one in four reported it to be 'low' (25%) and one in five reported it as 'fluctuating' (17%; Figure 36).

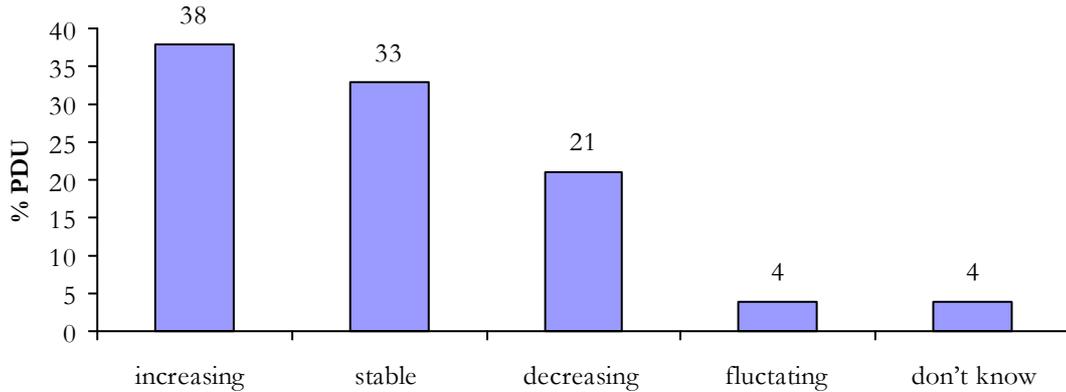
Figure 36: User reports of current purity of cocaine, NSW 2004



Source: PDI Regular ecstasy user interviews 2004

Most users believed the purity of cocaine had increased (38%) or remained 'stable' (33%) over the preceding six months (Figure 37).

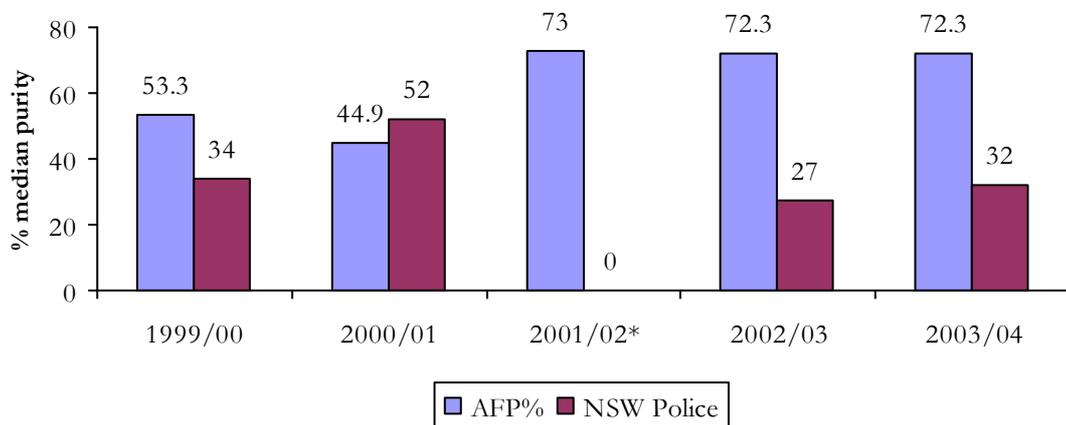
Figure 37: User reports of changes in cocaine purity in the past six months, NSW 2004



Source: PDI Regular ecstasy user interviews 2004

Figure 38 presents the median purity of cocaine seizures made by the AFP and NSW police between the financial years 1999/00 to 2003/04. The purity of the cocaine seized and analysed by the AFP during this time increased from 1999/00 and remained stable (approximately 72%) from 2001/02 to 2003/04. Purity of seizures made by NSW police (which are analysed by the Division of Analytical Laboratories) have varied during this period, with a median purity of 32% being recorded in 2003/04. 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.

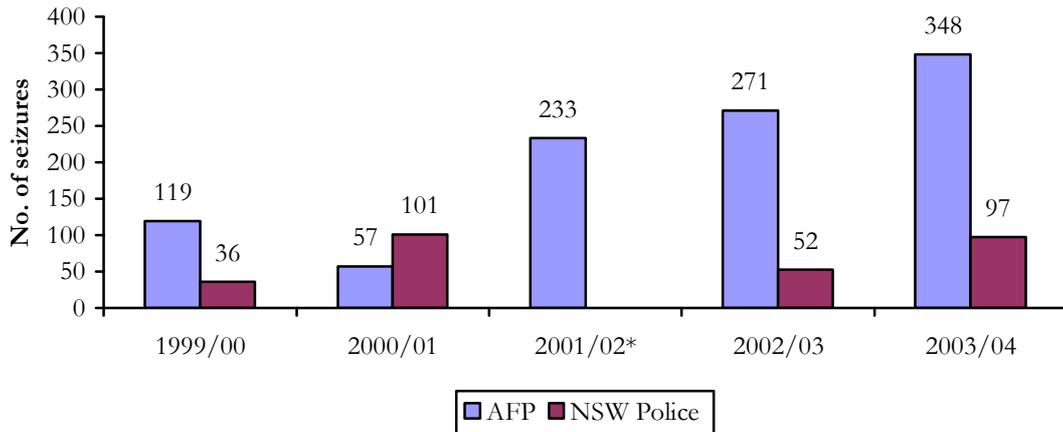
Figure 38: Median purity of cocaine seizures analysed in NSW 1999/00-2003/04



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, with 348 seizures analysed in 2003/04 (Figure 39). In contrast, the number of seizures analysed by NSW police has been relatively lower with 97 analysed in 2003/04, an increase from 52 in 2002/03.

Figure 39: Number of cocaine seizures analysed in NSW, 1999/00-2003/04

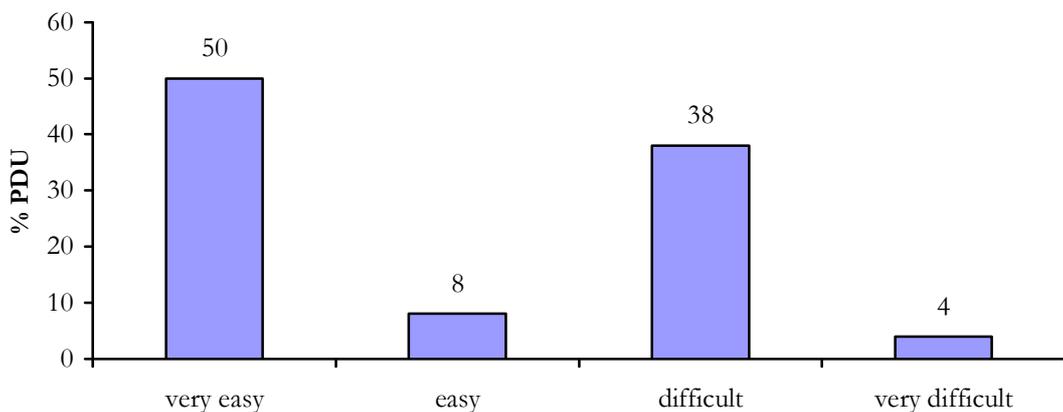


Source: Australian Bureau of Criminal Intelligence (2001, 2002), Australian Crime Commission (2004) *NSW Police data for 2001/02 was not available.

6.4 Availability

Cocaine was reported to be ‘very easy’ to obtain by half (50%) of the twenty-four participants who commented (Figure 40). A further four in ten (38%) reported it to be ‘difficult’ to obtain.

Figure 40: Current availability of cocaine, NSW 2004

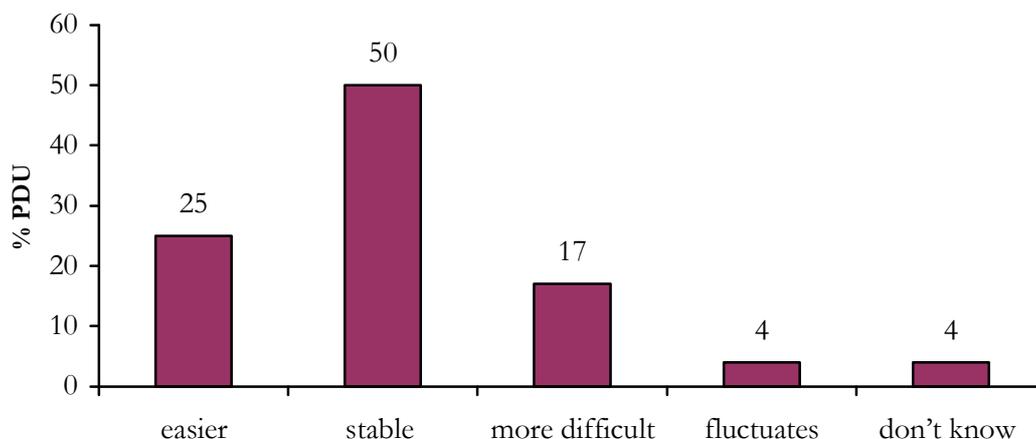


Source: PDI Regular ecstasy user interviews 2004

*moderately removed as an option in 2004

Half of the sample (50%) reported the availability of cocaine had remained ‘stable’ over the preceding six months (Figure 41). This was also consistent KE data.

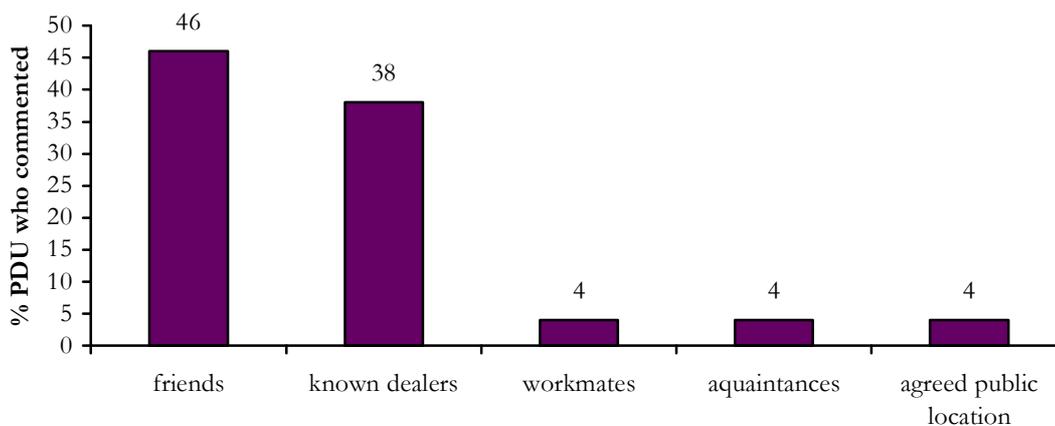
Figure 41: Changes in cocaine availability in the preceding six months, NSW 2004



Source: PDI Regular ecstasy user interviews 2004

Similar to other drug types, when asked to specify whom cocaine had been obtained from in the preceding six months, close to half of the recent cocaine users reported friends (46%) and another four in ten reported known dealers (38%; Figure 42).

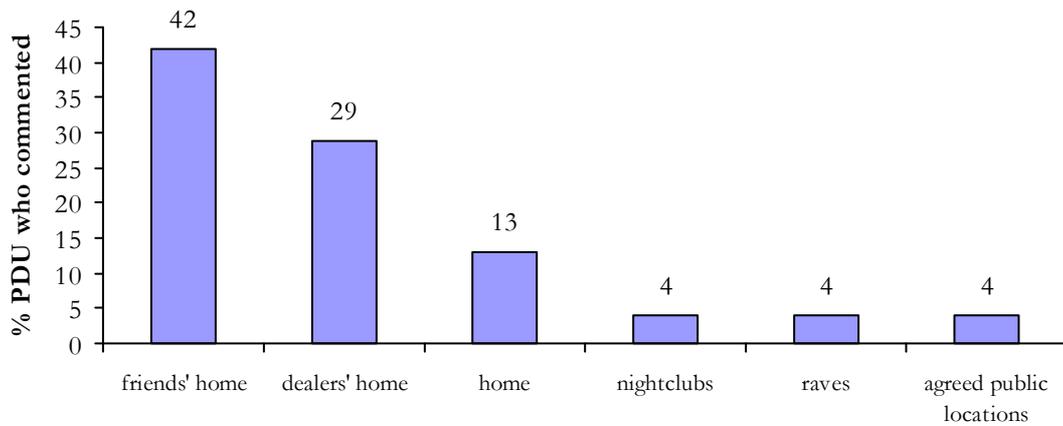
Figure 42: People from whom cocaine had been purchased the preceding six months, NSW 2004



Source: PDI Regular ecstasy user interviews 2004

When asked to specify the locations cocaine had been purchased from in the preceding six months, unlike other drug types, the most common locations reported were friends' homes (42%) and dealers' homes (29%; Figure 43). Users' own home (13%), nightclubs (4%), raves (including "doofs" and dance parties; 4%) and agreed public location (4%) were reported by small numbers of participants.

Figure 43: Locations where cocaine had been purchased in the preceding six months, NSW 2004



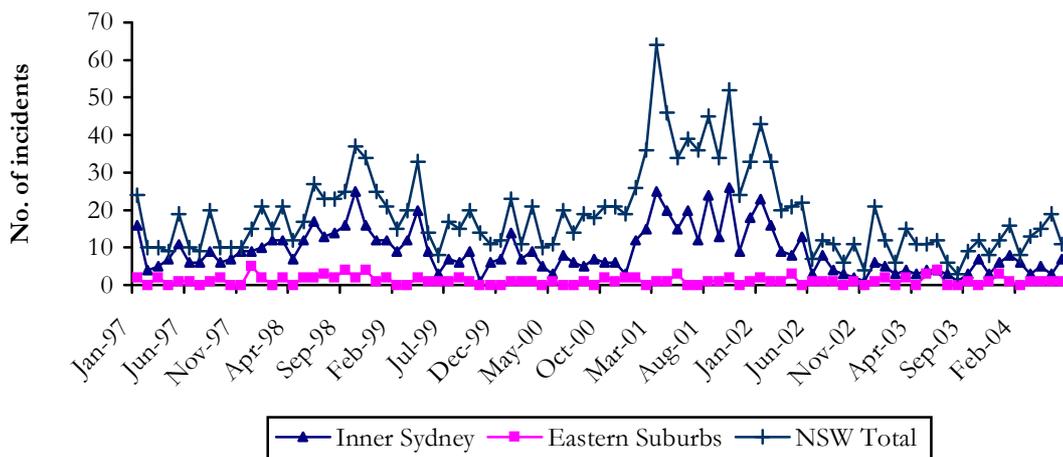
Source: PDI Regular ecstasy user interviews 2004

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. Since mid 2002, there has been a gradual decrease in the number of incidents recorded in the Inner Sydney; this is reflected in the overall state total (Figure 44).

Figure 44: Incidents of cocaine possession/use by geographic area, January 1997-June 2004

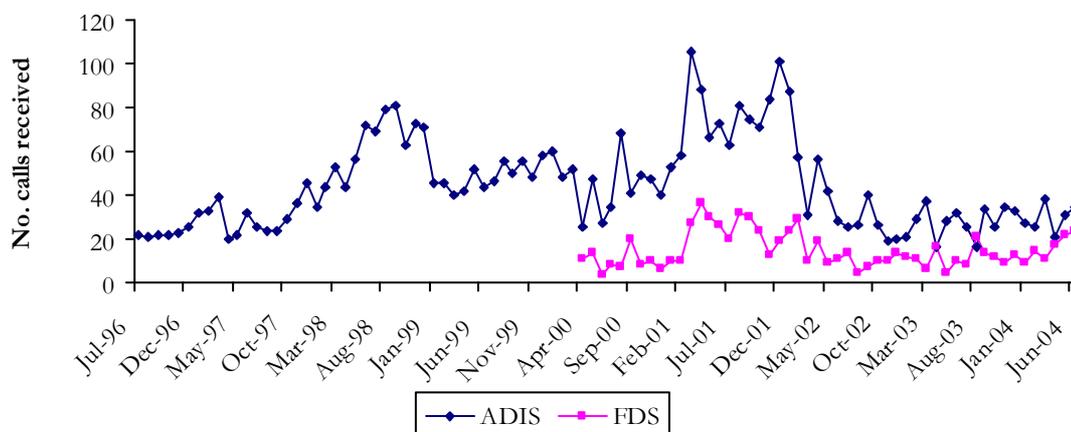


Source: NSW Bureau of Crime Statistics and Research

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, 1996-2004

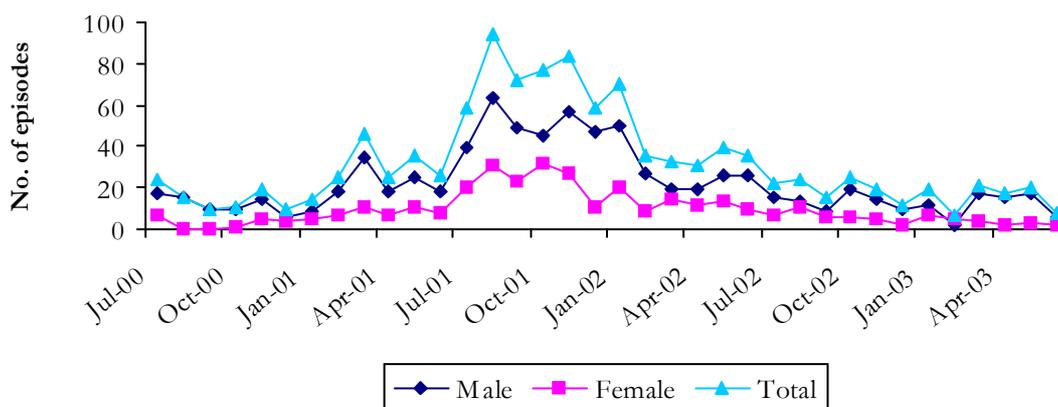


Source: Alcohol and Drug Information Service and Family Drug Support

N.B. Family Drug Support data was only available from April 2000

The number of cocaine related treatment episodes based on date of commencement has remained relatively stable over the preceding 12 months and again, they remain lower than numbers entering treatment for cocaine in 2001 (Figure 46; 2004 data was not available at the time of this report).

Figure 46: Number of cocaine treatment episodes by gender, NSW July 2000-June 2004



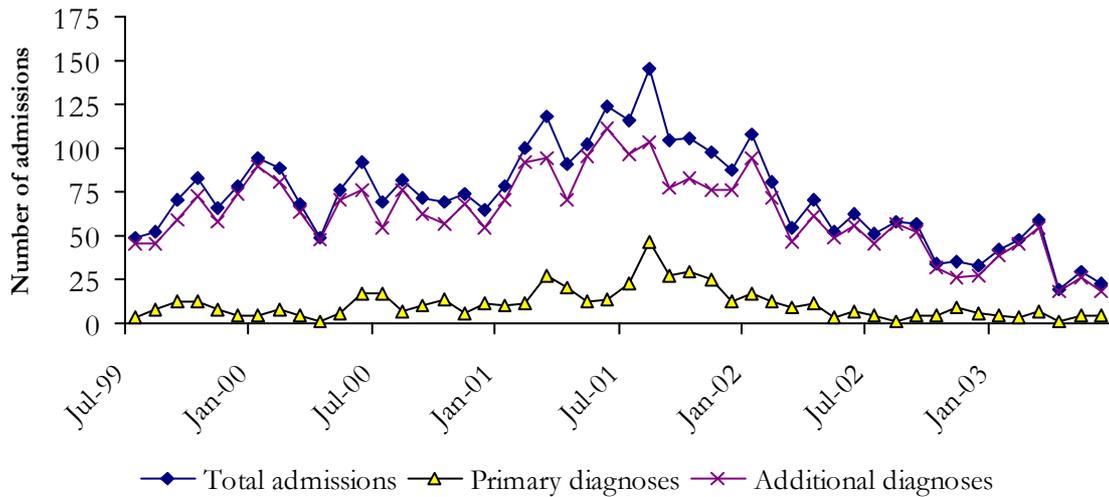
Source: NMDS-AODTS, NSW Department of Health.

N.B. The NMDS 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 diagnosis⁴. Similar to PDI data and other indicators, figures have remained lower over the past two years, following a peak in admissions during 2001.

⁴ 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.

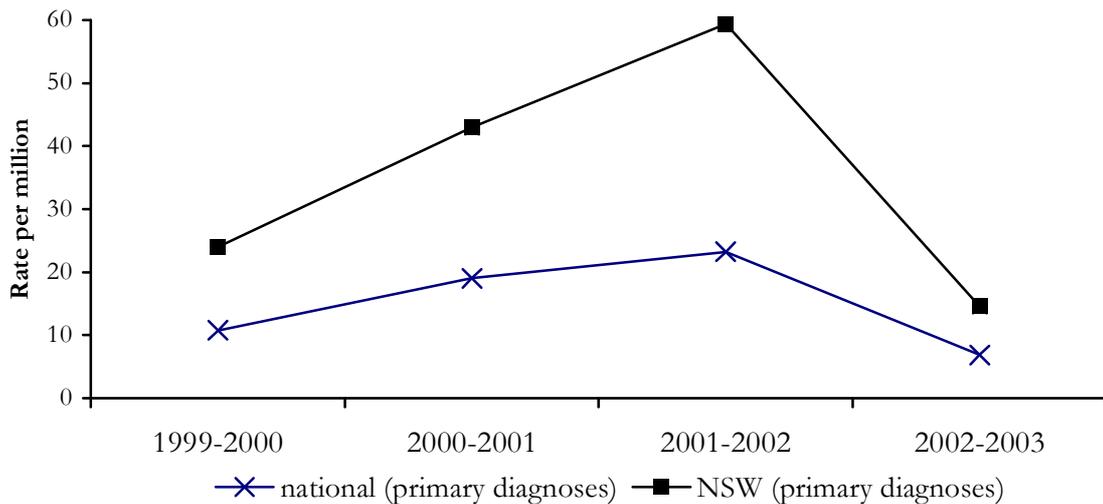
Figure 47: Total number of inpatient hospital admissions in persons aged 15-54 where cocaine was implicated, NSW 1999-2004



Source: Australian Institute of Health and Welfare

The rates of inpatient hospital admissions where cocaine was the primary 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 2001/2002 and 2002/2003. Nationally, NSW has accounted for between 70–85% of inpatient admissions where cocaine was the primary diagnosis since 1999/2000.

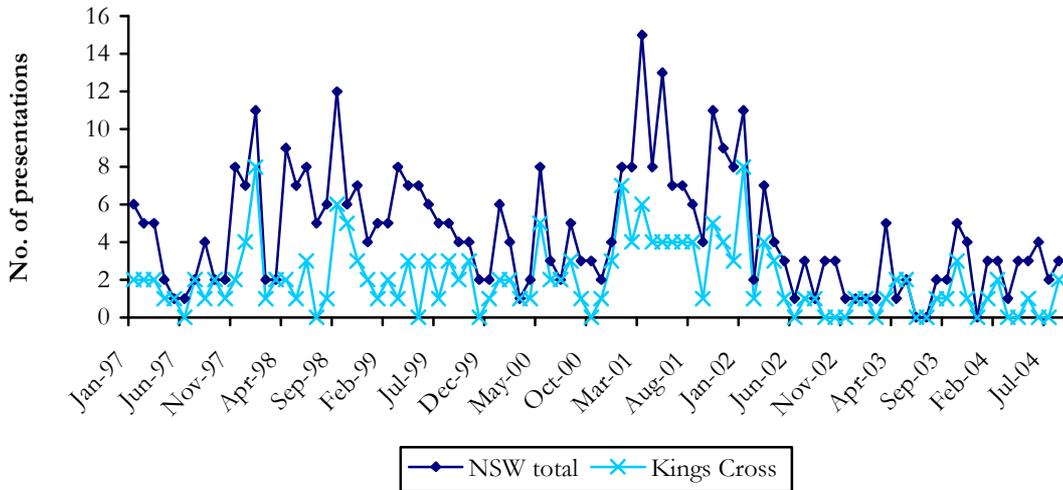
Figure 48: Rate of inpatient hospital admissions where cocaine was the primary diagnosis per million people aged 15-54 years, NSW and nationally, 1999/2000 to 2000-2003



Source: Australian Institute of Health and Welfare

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- August 2004

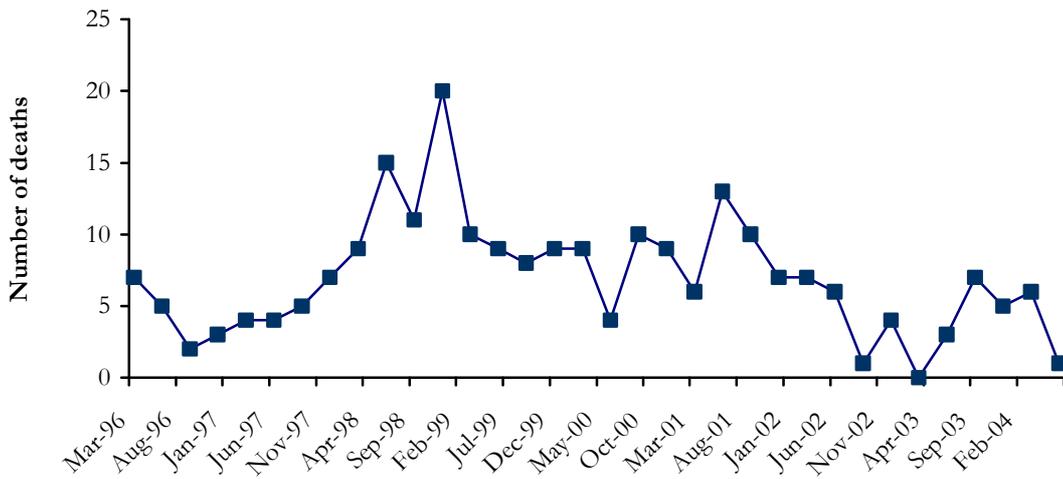


Source: Emergency Department Information System, NSW Department of Health

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).

Figure 50: Number of suspected drug related deaths where cocaine was detected post mortem, March 1996-June 2004



Source: Forensic Toxicology Laboratory database, Division of Analytical Laboratories

6.6 Summary of cocaine trends

- Prevalence of lifetime cocaine use remained stable across time, although the data suggest a reduction in reports of recent cocaine use since 2002.
- Frequency of cocaine use has fluctuated while quantities used have remained comparable between sampling years.
- KE reports of cocaine use were consistent with users' reports, with most KEs reporting the use of cocaine as infrequent among minorities of regular ecstasy users that use cocaine.
- Recent cocaine users reported usually using cocaine at private residences such as private parties or own home although nightclubs were also commonly reported. Most common location of last use was a home.
- The most commonly purchased amount of cocaine was a gram at a median price of \$200. Most reported the price of cocaine had increased.
- The majority of those commenting reported the purity of cocaine as 'low' or 'high'.
- 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%. The number of seizures analysed by the AFP has increased over recent years to 348 in 2003/04 while the number of NSW police seizures analysed has increased to 97 in 2003/04.
- Most reported that cocaine was 'very 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 with the most commonly purchased from friends' home.
- 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, number of inpatient hospital admissions, numbers of cocaine overdose and numbers of suspected drug related deaths where cocaine was detected all remaining 'stable' or 'decreasing' over the preceding 12 months.

7.0 KETAMINE

Over half (58%) the 2004 sample reported lifetime use of ketamine and a similar proportion (39%) reported recent use. Ketamine was first used at a median age of 24 years (range 16-41) and there was no significant difference in terms of gender. A small proportion (6%) of the 2004 sample reported injecting ketamine at some time and no participants had injected ketamine recently. Ketamine was first injected at a median age of 29 years (range 21-41).

7.1 Ketamine use among REU

Forty-one participants reported using ketamine in the preceding six months on a median of four days (range 1-30). Most (87%) used ketamine less than once a month; 7% used between monthly and fortnightly, 4% between fortnightly and weekly and 3% more than once a week. Three participants reported using ketamine more than once a week. No participants nominated ketamine as the drug of choice.

Recent ketamine users quantified their use in terms of bumps (n=23) and lines (n=6). Small numbers mentioned grams (n=5), pills (n=2), milligrams (n=1) and points (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 (range 0.5-15) and four bumps as the amount used for a heavy range (range 2-15) occasion of use in the preceding six months. Those who reported ketamine use in terms of grams and used a median of 0.30 grams in a typical episode of use (range 0.1-0.5) and half a gram (range 0.1-1) during a 'heavy' use period. Recent users reported snorting (93%) and less often swallowing (32%) ketamine.

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 13). Of those who reported bingeing in the preceding six months, 24% had binged on ketamine.

Table 13: Patterns of ketamine use of REUs, NSW

Ketamine variable	2000 (n=94)	2001 (n=163)	2002 (n=88)	2003 (n=102)	2004 (n=104)
Ever used (%)	25	31	59	59	58
Used last six months (%)	14	15	49	49	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)
Median quantities used (bumps)					
Typical (range)	5 (2-20)	5 (1-15)	2 (0.5-15)	3 (1-20)	3 (0.5-15)
Heavy (range)	5 (2-50)	4 (1-30)	4 (1-15)	3 (1-20)	4 (2-15)

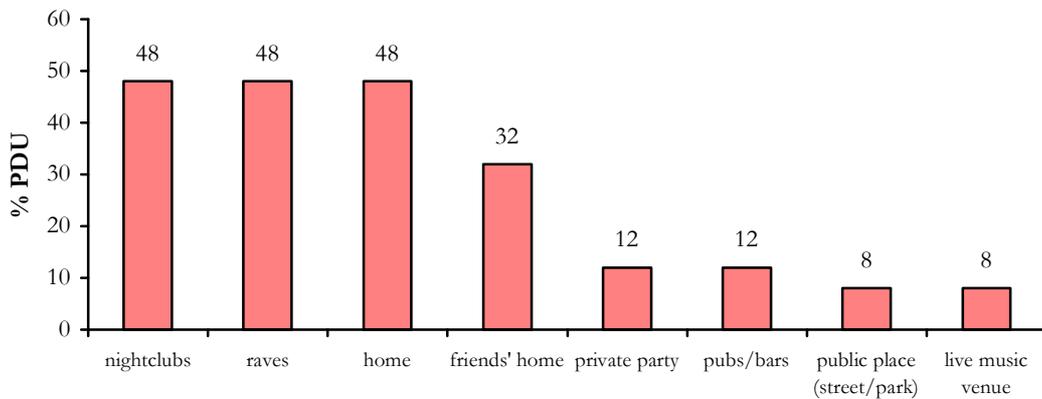
Source: PDI Regular ecstasy user interviews 2004

KE reports of ketamine use varied, although generally there appeared to be two groups: ecstasy users who used ketamine frequently, and smaller numbers who use on special occasions or sporadically. Seven KEs mentioned between 70-80% of the group of users they had contact with used ketamine, two of who estimated frequency of use to be one to two days per week and three KEs reported that 75%-80% of users typical route of administration is snorting. Three KEs specified that use appeared to be higher among the gay male population. Only one KE mentioned the “most” amount used by these groups; 6-7 bumps a night. Two KEs mentioned that ketamine use had decreased in the preceding six months.

Two KEs mentioned increasing use in young people, while another indicated they had ‘not seen it much around’. One KE mentioned the binge use of ketamine and seven indicated ketamine was commonly used when taking ecstasy and/or alcohol. One KE reported regular ecstasy users either use ketamine or GHB, never both.

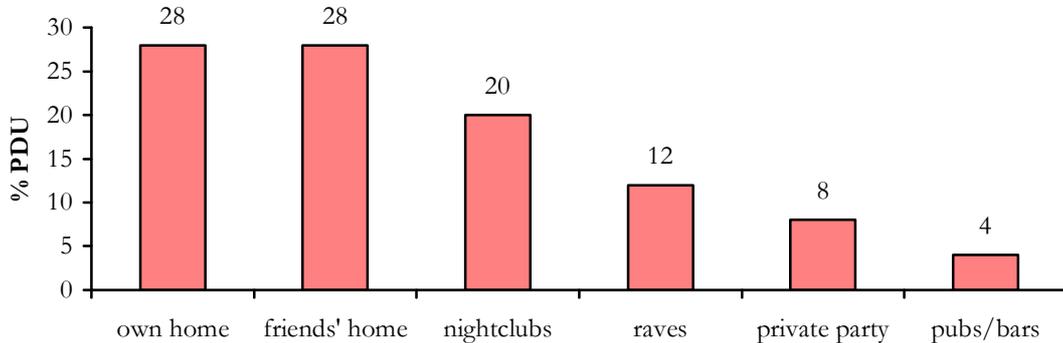
When asked to specify where ketamine was usually used, nightclubs (48%), raves (including “doofs” and dance parties; 48%), and own home (48%) were the most commonly nominated locations by recent users in 2004 (Figure 51). Reports of location of last ketamine use was similar to usual locations of use including at home (28%) or a friends’ home (28%) followed by a nightclub (20%) or a rave 12%; Figure 52).

Figure 51: Location of usual ketamine use, NSW 2004



Source: PDI Regular ecstasy user interviews 2004

Figure 52: Location of most recent ketamine use, NSW 2004



Source: PDI Regular ecstasy user interviews 2004

7.2 Price

Close to a quarter (24%) of the sample reported on the price of ketamine. In 2004 ketamine was commonly purchased in grams (n=11) and half grams (n=6). The current median price for a gram of ketamine was reported as \$200 (range \$100-200) (Table 14). The majority of those who commented reported the price of ketamine had remained 'stable' (44%) in the preceding six months, while six participants (24%) thought ketamine increased in price and one participant (4%) thought it has 'decreased'. Twenty-eight percent were 'unable to comment' on changes in the price of ketamine.

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. Nevertheless these data suggest that the price of ketamine in 2004 was consistent with 2000 data. (Table 14).

Table 14: Price of ketamine purchased by REUs, NSW

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

Source: PDI Regular ecstasy user interviews 2004

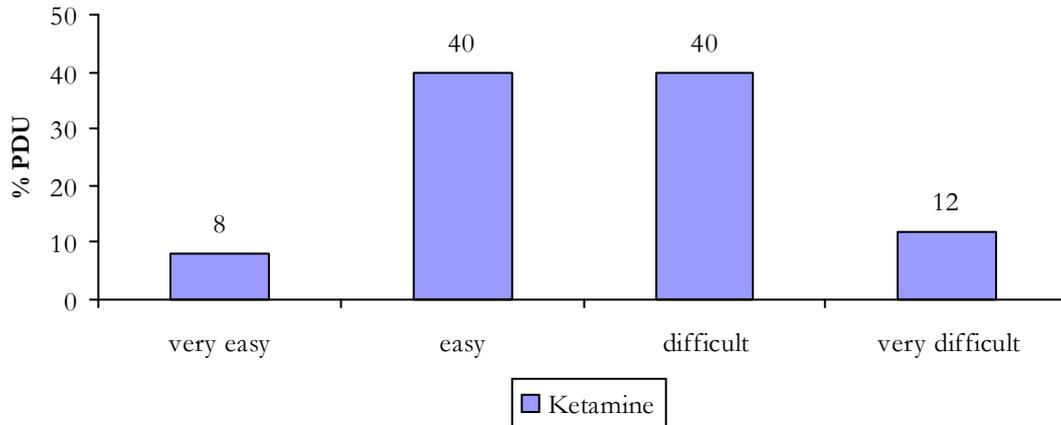
7.3 Purity

The majority of the twenty-five who commented reported the current purity of ketamine as 'medium' (24%) or 'high' (52%) and most thought the strength of ketamine had remained 'stable' (56%) or 'decreased' (24%) in the preceding six months.

7.4 Availability

Varying availability was reported by users, with the same proportions reporting that ketamine was 'easy' (40%) and 'difficult' (40%) to obtain (Figure 53). However, ten participants (12%) believed ketamine was 'very difficult' to obtain. Two KEs mentioned that availability of ketamine in the last six months was very difficult; however one KE noticed that currently availability was becoming easier.

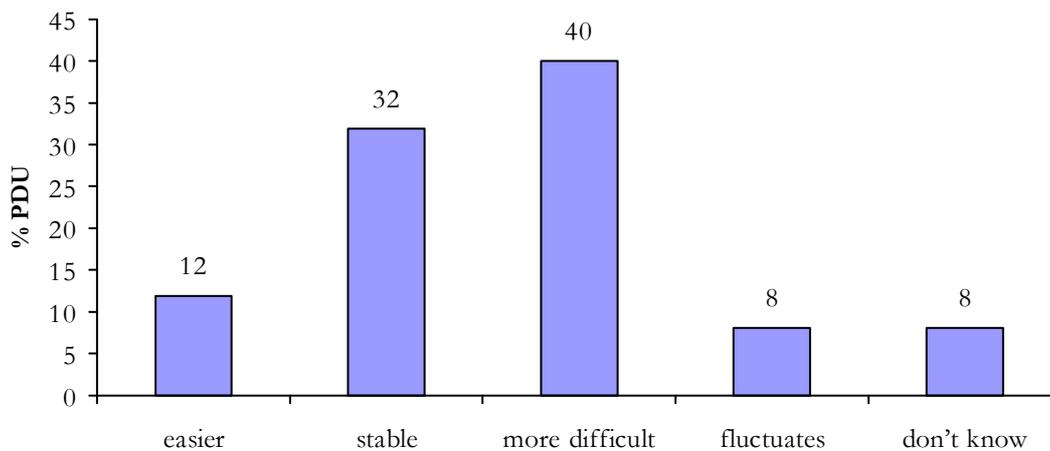
Figure 53: Current ketamine availability, NSW 2004



Source: PDI Regular ecstasy user interviews 2004

Most reported that the availability of ketamine had become ‘more difficult’ (40%). Only 12% believed ketamine had become ‘easier’ to obtain in the preceding six months, and 32% reported it had become ‘stable’ (Figure 54).

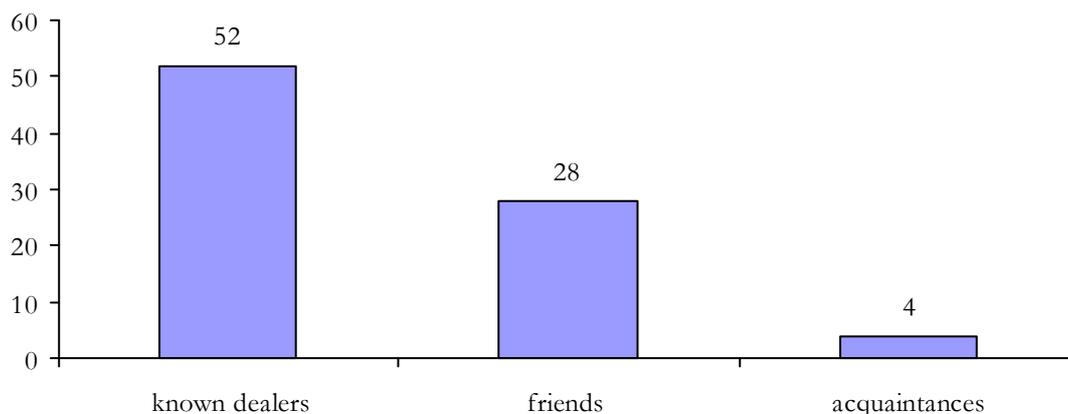
Figure 54: Changes in availability of ketamine over the past 6 months, NSW 2004



Source: PDI Regular ecstasy user interviews 2004

Similar to other drug types, ketamine had most commonly been purchased from known dealers (52%) and friends (28%; Figure 55).

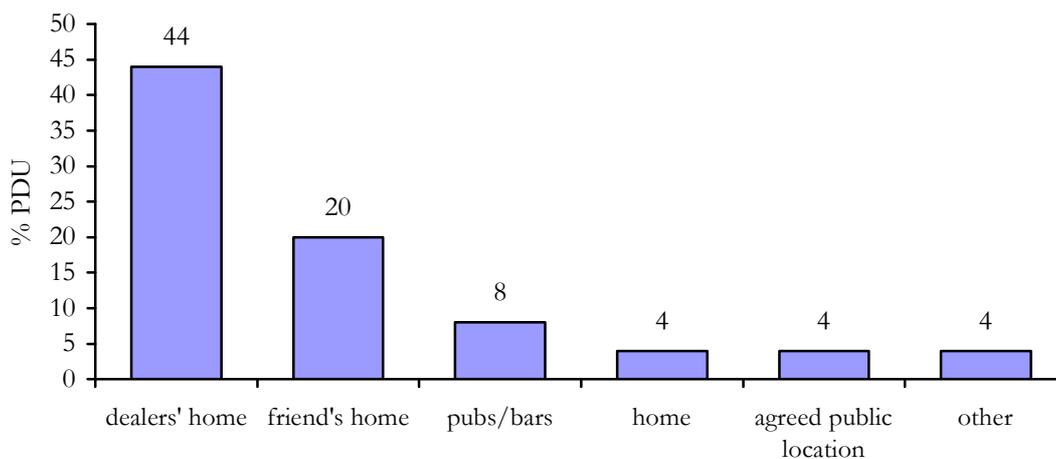
Figure 55: People from whom ketamine had been purchased from in the preceding six months, NSW 2004



Source: PDI Regular ecstasy user interviews 2004

When asked to specify the locations ketamine was normally purchased from, private residents such as dealers' homes (44%) and friends' homes (20%) were most often reported (Figure 56). Smaller proportions reported obtaining ketamine from pubs (8%), at own home (4%) and agreed public location (4%; Figure 56).

Figure 56: Locations ketamine had been purchased from in the preceding six months, NSW 2004



Source: PDI Regular ecstasy user interviews 2004

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 and Victoria 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. So far, none have been reported in 2004.

Treatment

Treatment seeking for problems with ketamine use is low compared to other drugs. Data from the National Minimum Dataset show there were five closed treatment episodes based on the date of commencement where the principal drug of concern was ketamine (NMDS-AODTS, NSW Department of Health). One of these was in 2002 and four people nominated ketamine as their principal drug of concern in 2003. All patients were male; three entered counselling treatment, one for assessment only, and one entered residential rehabilitation. The NMDS is based on closed treatment episodes and so some episodes may be excluded if they did not finish in the given period. 2004 data was not available at the time of printing of this report.

7.6 Summary of ketamine trends

- Although reports of lifetime and recent use of ketamine have remained stable since 2002, there has been an increase in proportions reporting use since 2000.
- The frequency and quantity of ketamine use has slightly increased comparable to 2002 levels.
- Nightclubs, raves (including “doofs” and dance parties) and own home were the most commonly nominated locations by recent users in 2004.
- KE described contact with regular ecstasy users who had a range of patterns of ketamine use.
- Although only small proportions in previous years were able to comment, the gram price of ketamine appears to have increased for the first time since 2000. Median price for a gram of ketamine in 2004 was \$200.
- Most respondents in 2004 reported the current purity of ketamine to be ‘medium’ or ‘high’ and that the purity had remained ‘stable’ or ‘decreased’ over the preceding six months.
- Ketamine was ‘easy’ or ‘difficult’ to obtain for the majority of respondents in 2004. Most agreed the availability of ketamine has remained ‘stable’ or ‘more difficult’.
- Similar to other drug types, known dealers and 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 dealers’ homes or friends’ 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.

More than one fourth (28%) of the 2004 sample reported lifetime GHB use and less than a fifth (18%) reported using GHB in the preceding six months. GHB was first used at a median age of 21 (range 16-38). There was no significant difference between males and females in age of initiation.

All recent GHB users administered the drug orally. There were no reports of recent or ever injecting of GHB.

Two respondents in 2002 reported lifetime and recent use of 1-4B and one in 2004. Given the small number, 1-4B 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

Nineteen recent GHB users reported using GHB on a median of two days in the preceding six months (range 1-26). Most (94%) had used less than once a month. Five participants used between monthly and fortnightly, one between fortnightly and weekly and one person reported using GHB more than once a week. One participant reported GHB as their favourite drug.

Recent GHB users quantified their use in terms of millilitres (n=13) 'vials' (n=2) or 'sip' (n=1). A 'vial' refers to small glass or plastic container in which GHB is sold. Those reporting millilitres used a median of 5mls during a 'typical' occasion of use (range 2-30) and 12mls (range 3-36) 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, 3% 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 15). 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 15: Patterns of GHB use of REUs, NSW

GHB variable	2000 (n=94)	2001 (n=163)	2002 (n=88)	2003 (n=102)	2004 (n=104)
Ever used (%)	5	23	35	33	28
Used last six months (%)	1	15	19	21	18
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)
Median quantities used (ml)					
Typical (range)	1 (no range)	5 (1-35)	10 (1-70)	8.25 (5-30)	5 (2-30)
Heavy (range)	1 (no range)	5 (1-50)	12 (1-120)	8.75 (5-40)	12 (3-36)

Source: PDI Regular ecstasy user interviews 2004

Of the twenty-three KEs, two were unable to comment on GHB use, one reported that there were ‘not many’ of the group of users they had contact with used GHB and another reported no use.

Eight of the nine remaining KEs estimated between five and ten percent of the group they had contact with used GHB, while one KE estimate all (100%) used GHB. Three KEs mentioned that it is difficult to estimate the frequency of GHB within some groups of users because it is considered “taboo” and that some users were reluctant to admit their GHB use to others, a phenomenon the KEs considered of great concern. Those who commented believed use to be occasional or sporadic (n=3), ranging from every three weeks (n=1) to two days per month (n=1), although one mentioned weekly use.

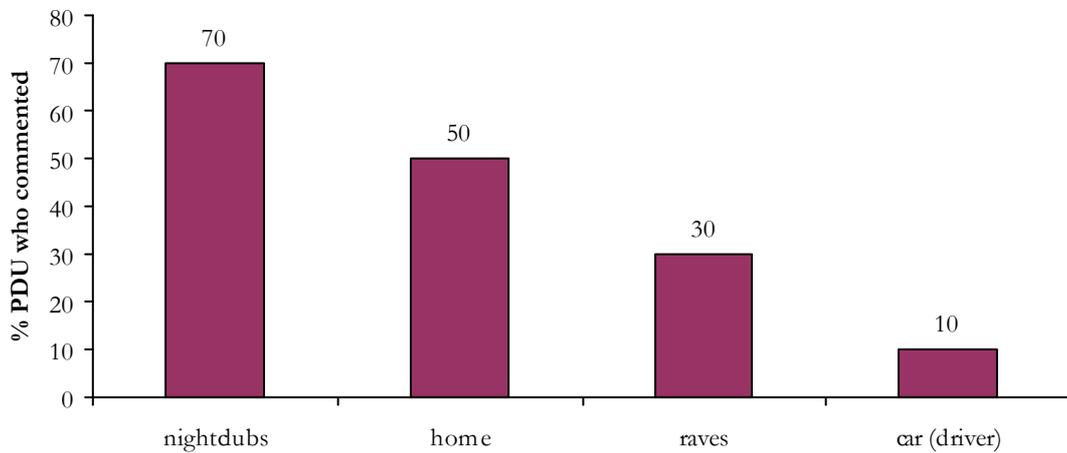
Despite concerns regarding frequency of use, six KEs thought that that this group of users was becoming better educated in terms of correct dosing and understanding the dose they are taking. Two estimated between one and two vials were used per occasion. Other KEs noticed that this group were using various measuring instruments to determine their doses. One mentioned the use of syringes, two mentioned the use of water or soy sauce caps and one other mention an eyedropper. One KE reported heaviest use was 2 vials three times in one night, while other one suggested overall this depends on the individual/users tolerance levels.

One KE mentioned GHB was the “drug of choice” in the gay community, however over the last six months use had fluctuated among this group ranging from 20-50% currently using. Other KE mentioned that GHB was becoming an “underground drug” among other groups.

Four KEs mentioned occasional binge use, usually on weekends (n=2). The majority of KEs found that 20%-50% used in conjunction with ecstasy (n=3), while the other half use GHB exclusively. One KE reported a new trend among younger age groups (17-25-30 year olds) who use GHB because it was less expensive and choose to use instead of ecstasy. Some KEs provided insight into the current changing attitudes towards GHB by users and informants. Five KEs expressed the concern about the number of GHB related deaths in the last six to twelve months and one KE believes the situation has peaked and is currently stable.

When asked to specify usual locations of GHB use, virtually all participants reported nightclubs (70%; Figure 57). Own homes (50%) and raves (including “doofs” and dance parties; 30%) were also commonly mentioned, follow by one (10%) participant responding to car (driver).

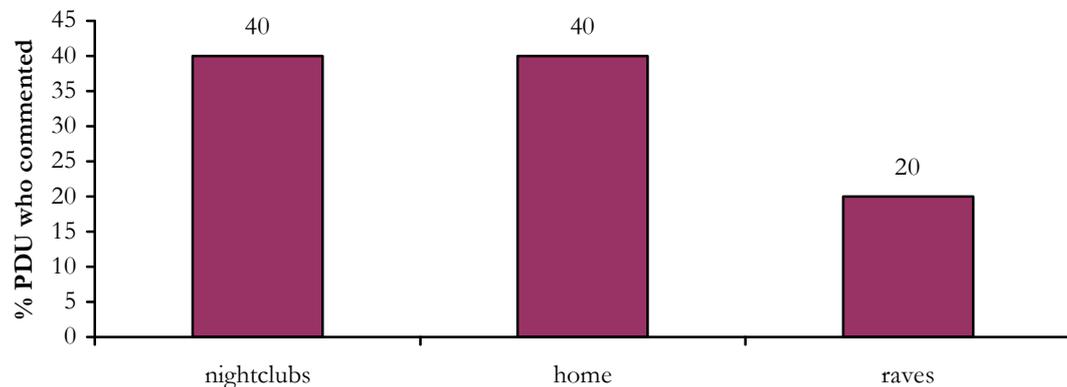
Figure 57: Usual location of GHB use, NSW 2004



Source: PDI Regular ecstasy user interviews 2004

Consistent with typical locations of use, the frequently mentioned location of last GHB use was a nightclub (40%; Figure 58), own home (40%), followed by raves (including “doofs” and dance parties; 20%).

Figure 58: Location of most recent GHB use, NSW 2004



Source: PDI Regular ecstasy user interviews 2004

8.2 Price

The most common amount of GHB purchased in 2002 was a 'vial' that cost \$30 (Table 16). Of the ten participants who commented on the price change of GHB, three (30%) reported the price was 'stable' and four (40%) believed it to be 'decreasing', while two (10%) thought it to be fluctuating. A further two (20%) were 'unable to comment' on recent changes in GHB price.

Given the confusion regarding the size of vials in which GHB is typically purchased and the uncertainty around what constitutes a typical dose, it is not surprising that there is wide variation and seemingly inconsistent reports of the price of GHB between years (Table 16). Again, the small proportion of respondents who commented on the price of GHB makes it difficult to draw any strong conclusions from these data.

Table 16: Price of GHB purchased by REUs, NSW

Median price (\$) GHB	2001 (n=6)	2002 (n=12)	2003 (n=12)	2004 (n=10)
ml (range)	50(10-80)	-	20*	1*
Lowest ml price	20*	-	-	-
Highest ml price	50*	-	-	-
Vial (range)	-	50 (50-60)	35 (25-50)	30**
6 Vials	-	-	60*	-
2mls	-	10 **	30*	12.50 (10-15)**
2mls (>2L)	-	-	3*	-
3mls pure	-	-	5*	-
4 ml vial	-	-	20-25*	-
15mls	-	10	-	-
30mls	-	10	80-100*	25 (20-30)**
300mls	-	-	300*	-
400mls	-	150	-	-
1litre	-	120	-	10000*
GHB based pill	-	25	-	-

Source: PDI Regular ecstasy user interviews 2004

*n=1, **n=2

8.3 Purity

Of the ten respondents who commented on current GHB purity, the majority reported it as 'high' (70%). One user reported the strength of GHB fluctuated, other suggested it as 'low' and the other was unable to comment. Most thought the strength of GHB remained 'stable' (40%) over the preceding six months, one thought it had 'decreased' (10%), one thought it had 'increased' (10%) and one thought it had 'fluctuated'. Some (30%) were 'unable to comment' on changes in GHB purity.

8.4 Availability

All ten respondents who commented on the current availability of GHB thought that GHB was ‘very easy’ (40%), while three report to be ‘easy’ and other three reported to be ‘difficult’ to obtain. The majority reported the availability of GHB in the preceding six months had remained ‘stable’ (50%) or had ‘become easier’ (20%) to obtain, although another three participants (30%) thought it had become ‘more difficult’.

When asked to specify whom they had obtained GHB from in the preceding six months, comparable to other drug types, friends (60%), known dealers (20%) and acquaintances (20%) were commonly identified. Also similar to other drugs, GHB was reportedly most often purchased from private residences including friends (40%), own home (30%) and nightclubs (20%), followed by dealers’ homes (10%), raves (including “doofs” and dance parties) (10%), agreed public location (10%) and acquaintances house (10%). Only one KE mentioned an increase in GHB availability in the preceding six months.

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.

Treatment

Data from the National Minimum Dataset show there was one closed treatment episode based on the date of commencement where the principal drug of concern was GHB (NMDS-AODTS, NSW Department of Health). The male patient entered counselling. The NMDS is based on closed treatment episodes and so some episodes may be excluded if they did not finish in the given period. 2004 data was not available at the time of printing of this report.

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.
- There is some confusion among respondents with regard to how many millilitres are held in a 'vial' of GHB and the size of a typical dose.
- The prevalence of GHB use has increased over time, with substantial increases in reports of both lifetime and recent use since 2000.
- Frequency of use is comparable between years while quantity of use appears to have fluctuated although again, given the small numbers who commented, cautious interpretation is required.
- KE reports 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. However, several KEs were familiar with groups who used more regularly.
- Similar to other drugs, GHB was most likely to have been used in nightclubs.
- In 2004, GHB was most commonly purchased in a 'vial' for which a median of \$30 was paid, a decrease from \$35 in 2003 and \$50 in 2002. 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'. A majority responded purity had either remained 'stable' or were 'unable to comment'.
- The availability of GHB was considered to be 'very easy' to obtain by a majority whom commented, and availability reportedly remained 'stable' or had become 'more difficult' during the preceding six months. Only one KE mentioned an increase in GHB availability in the preceding six months.
- Similar to other drugs, GHB was commonly obtained from friends, known dealers or acquaintances.

9.0 LSD

Lysergic acid is commonly known as LSD, trips or acid. It is a hallucinogen that became popular in the 1960s.

Almost two thirds (61%) of the 2004 sample reported lifetime use of LSD. One fifth (20%) reported using LSD in the preceding six months. LSD had first been used at a median age of 17 years (range 13-37) and there were no significant sex differences in age of initiation. One participant reported having injected LSD at some time, and there were no reports of recent injection of LSD. LSD injection occurred for the first time at a median age of 25 years.

9.1 LSD use among REU

Twenty-one recent LSD users reported a median of one day of use in the preceding six months (range 1-20; Table 17). The majority (96%) reported using less than once a month. Three participants had used LSD between monthly and fortnightly and one between fortnightly and weekly. Three respondents reported LSD as their drug of choice.

The median number of LSD tabs taken in a typical (range 0.25-4) and heavy (range 0.50-4) use episode was one. Six percent of those who had recently binged used LSD to do so. All recent LSD users reported swallowing the drug.

Table 17 suggests a reduction over time in the prevalence of lifetime and recent LSD use. Frequency of LSD used by recent users also appears to have reduced while quantity of use has remained relatively stable.

Table 17: Patterns of LSD use of REUs, NSW

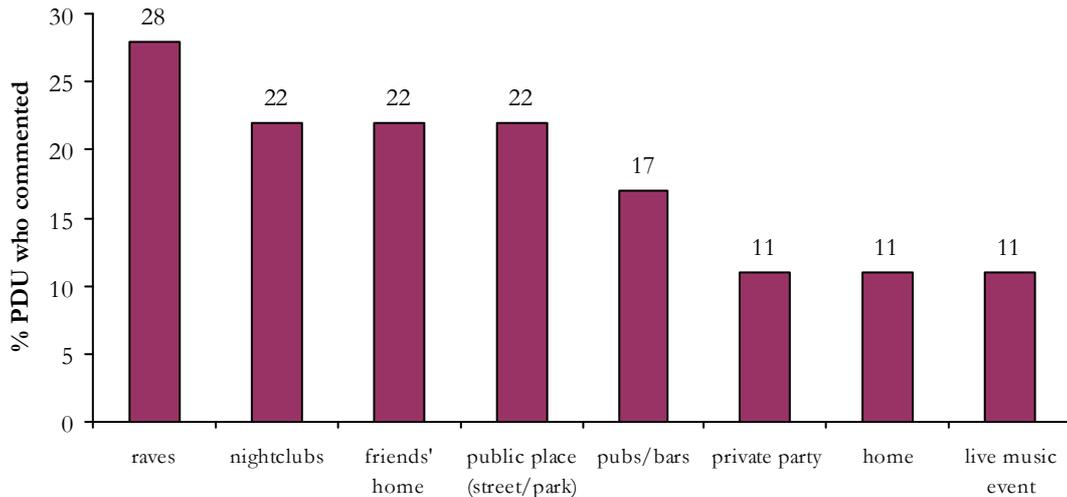
LSD variable	2000 (n=94)	2001 (n=163)	2002 (n=88)	2003 (n=102)	2004 (n=104)
Ever used (%)	80	74	73	66	61
Used last six months (%)	37	23	33	27	20
Of those who had used					
Median days used last 6 mths (range)	2 (1-74)	5 (1-70)	3 (1-24)	1 (1-20)	1 (1-20)
Median quantities used (tabs)					
Typical (range)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

Source: PDI Regular ecstasy user interviews

Consistent with user reports, seven KEs reported that LSD was used infrequently (once a month to not much at all) by relatively small proportions (5%-20%) of users. One KE knew of one regular user. Only two KEs mentioned quantity in terms of microdots as used by most (20%-100%). Four KEs reported no LSD use and another two mentioned they had not heard of any use among the group they had contact with.

When asked to specify usual locations of LSD use, virtually all participants reported raves (including “doofs” and dance parties; 28%; Figure 59). Nightclubs (22%), friends’ home (22%) and public places (22%) were also commonly mentioned, follow by pubs (17%).

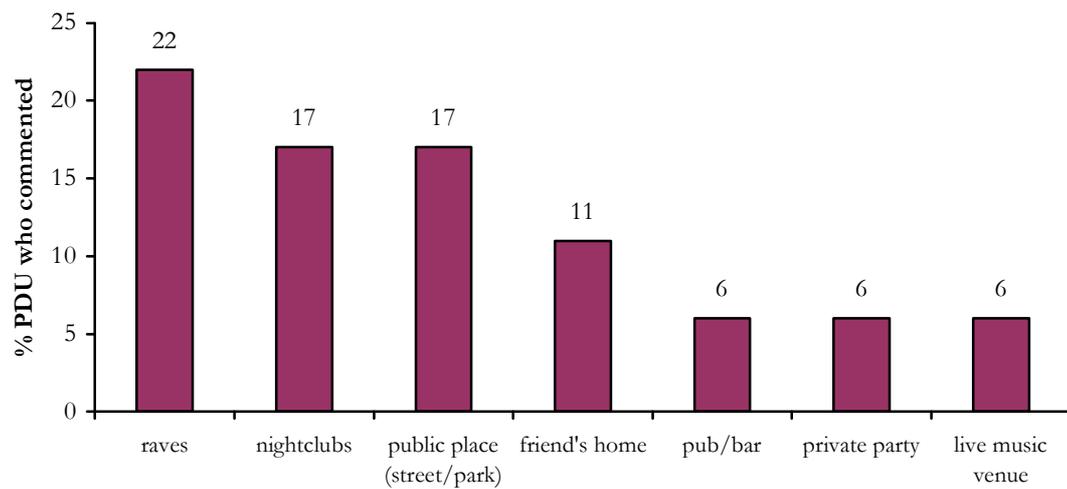
Figure 59: Usual location of LSD use, NSW 2004



Source: PDI Regular ecstasy user interviews 2004

Consistent with typical locations of use, the frequently mentioned location of last LSD use was at raves (including “doofs” and dance parties; 22%) or nightclubs (17%) or public place (17%) followed by a friends’ home (11%; Figure 60).

Figure 60: Location of most recent LSD use, NSW 2004



Source: PDI Regular ecstasy user interviews 2004

9.2 Price

The median price paid for a tab of LSD in 2004 was \$20. Of the eighteen respondents who commented, the majority (28%) reported that the price of LSD had either increased or stabilised in the preceding six months although three (17%) reported that the price had decreased. Five (28%) were unable to comment on recent price changes. As indicated in Table 18, the price of LSD tabs has increased slightly across sampling years. Only one KE mention price of LSD as 15 dollars.

Table 18: 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)
Tab (range)	10 (3-25)	10 (5-45)	15 (8-25)	15 (4-30)	20 (10-35)
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 2004

9.3 Purity

Eighteen respondents were able to comment on the current purity of LSD. The majority reported purity as 'medium' (33%) or 'high' (33%), although three (17%) thought it to be 'low' and other three (17%) were 'unable to comment'. Most (50%) were unable to report on the purity of LSD in the last 6 months although five (28%) reported as 'stable' and two (11%) believed it was 'decreasing' and two (11%) said it had 'fluctuated'. None of the participants reported the purity of LSD to be 'increasing' in the last six months.

9.4 Availability

Reports on the current availability of LSD were inconstant. While most (56%) thought LSD 'difficult' to obtain, a further five participants (28%) believed it to be 'easy' and two 'very easy' (11%) and one (6%) were unable to comment. Reports of changes in availability of LSD in the preceding six months were similarly inconsistent; while most (39%) considered the availability of LSD had remained 'stable', five (28%) thought it had become 'more difficult' to obtain, two (11%) thought it 'easier', and four (22%) were unable to comment on the availability of LSD. One KE mentioned that purity of LSD in the last 6 months was 'high' currently it is 'decreasing'.

9.5 Summary of LSD Trends

- Prevalence of both lifetime and recent LSD use has decreased over time and frequency also appears to have reduced while quantity of use has remained relatively stable.
- Seven KEs reported infrequent use of LSD among the groups of ecstasy users with whom they were familiar.
- The price of LSD has increased from \$10 to \$20 since 2000 and most who commented believed the price to have either remained 'stable' or 'increased' over the preceding six months.
- The majority of participants' thought the current purity of LSD was 'medium' or 'high' although few were unable to comment on changes in purity.
- Reports regarding the availability of LSD were varied although most thought it had been 'difficult' (56%) or 'easy' (28%) to obtain and that the availability of LSD had remained 'stable' (39%) over the preceding six months.

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 as ecstasy. It generally comes in powder or tablet form and may be in pills sold as ecstasy.

Over half (54%) the 2004 sample reported lifetime use of MDA and about one third (30%) reported using MDA in the preceding six months. Median age at initiation was 22 years (range 14-55) and there were no significant sex differences at age of initiation. A small proportion (6%) reported injecting MDA at some time, and two participants reported doing so recently; median age of first MDA injection was 25 years (22-37).

10.1 MDA use among REU

Thirty-one recent MDA users reported using MDA on a median of two days (range 1-23) in the preceding six months. The majority (94%) used MDA monthly or less; five participants used between monthly and fortnightly and only one participant recorded close to once a week use.

The majority of recent MDA users quantified their use in terms of caps (n=27) although small numbers referred to points (n=2) and grams (n=1). Those who reported MDA use in terms of caps used a median of one cap during both a 'typical' and heavy (range 0.25-4) occasion of use. One participant reported MDA as their drug of choice.

The most common route of administration reported by recent MDA users was swallowing (90%). One third (45%) reported snorting MDA, two participants had injected and smoked (7%) MDA and one (3%) had shafted/shelved. Of those who reported bingeing in the last six months, 9% had used MDA to do so.

Table 19 shows the prevalence of lifetime and recent MDA use has increased over time however in 2004 we have seen a slight reduction. Reports of frequency of use have increased somewhat while quantity of use has remained relatively stable.

Table 19: Patterns of MDA use of REUs, NSW

MDA variable	2000 (n=94)	2001 (n=163)	2002 (n=88)	2003 (n=102)	2004 (n=104)
Ever used (%)	36	43	56	56	54
Used last six months (%)	16	14	35	35	30
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)
Median quantities used (capsules)					
Typical (range)	1 (1-2)	1 (1-2)	1 (1-3)	1 (0.25-4)	1 (0.25-4)
Heavy (range)	1 (1-2)	1 (1-2)	1.5 (1-6)	1 (0.25-6)	1 (0.25-4)

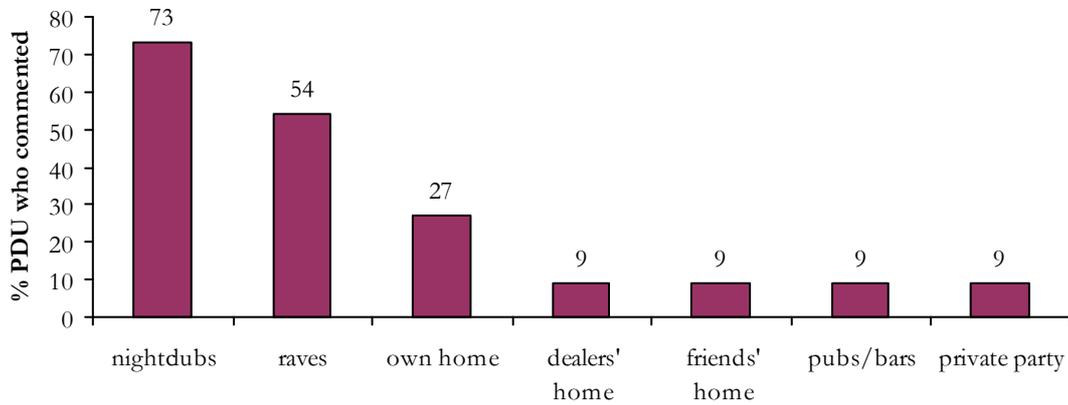
Source: PDI Regular ecstasy user interviews 2004

Seven KEs reported ‘occasional’ or ‘sporadic’ use of MDA. Three KEs mentioned the majority (50%-100%) of MDA users usually swallowed, while one KE reported that MDA users both swallowed and snorted. Three KEs mentioned MDA use within the group was determined by availability, suggesting that if MDA were more easily obtained it would be used more frequently.

Two KEs mentioned that MDA was used in combination with ecstasy, usually used over long weekends, big parties or binges. One KE discussed that MDA is not many users drug of choice, while other specify that users are a ecstasy users or a MDA user. One KE thought that there was some confusion of MDA with MDMA among the heterosexual community. Ten KEs reported that they do not know of any MDA use.

When asked to specify usual locations of MDA use, virtually all participants reported nightclubs (73%), followed by raves (including “doofs” and dance parties; 54%) and own home (27%; Figure 61).

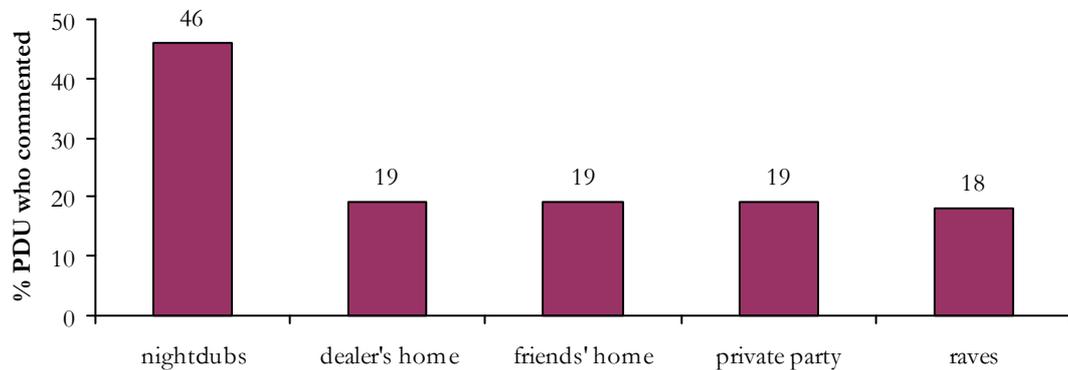
Figure 61: Usual locations of MDA use, NSW 2004



Source: PDI Regular ecstasy user interviews 2004

Consistent with typical locations of use, the frequently mentioned location of last MDA use was at nightclubs (46%), followed by dealers’ home (19%) and friends’ home (19%; Figure 62).

Figure 62: Location of most recent MDA use, NSW 2004



Source: PDI Regular ecstasy user interviews 2004

10.2 Price

The median price for an MDA cap reported by REU in 2004 was \$47.50. A gram of MDA was reported by one participant to be \$250. Of the eleven participants who commented, the majority (82%) reported the price of MDA had remained 'stable' during the preceding six months; one reported the price had recently 'increased' and one could not comment on change in price.

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 slightly increased from \$45 to \$47.50 in 2004 (Table 20).

Table 20: Price of MDA purchased by REUs, NSW

Median Price MDA (\$)	2000 (n=8)	2001 (n=24)	2002 (n=26)	2003 (n=21)	2004 (n=10)
Capsule price (range)	50 (40-60)	50 (20-80)	50 (25-60)	45 (30-60)	47.50 (35-60)
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 2004

10.3 Purity

Eleven respondents commented on the purity of MDA, and the majority reported the purity to be 'medium' (27%) or 'high' (46%). One respondent (9%) reported the MDA purity as 'low'. Close to three quarters (73%) of those commenting reported that MDA purity remained 'stable' during the preceding six months, one respondent (9%) believed it had 'decreased' and one reported it had 'increased' (9%). Only one was 'unable to comment' on changes in MDA purity in the preceding six months.

10.4 Availability

Reports of MDA availability varied. Among the eleven participants who commented, most thought it to be 'easy' (18%) or 'very easy' (27%) to obtain although five respondents (46%) reported it 'difficult' to obtain and one (9%) thought it 'very difficult'. Most (91%) thought availability had remained 'stable' in the preceding six months, although one responded (9%) thought it 'more difficult' to obtain. Again, the small number of respondents commenting makes it difficult to interpret these data.

10.5 Summary of MDA Trends

- Prevalence of lifetime and recent MDA use has increased over time however in 2004 we have seen a slight reduction.
- Frequency of use has increased slightly while quantity of MDA use has remained stable.
- KE reported that relatively small numbers of regular ecstasy users also used MDA infrequently, with some mentioning that use was determined by availability.
- The price of an MDA cap increased from \$45 to \$47.50 in 2004.
- The majority of respondents reported the purity of MDA was 'medium' or 'high' and that the purity had remained 'stable' in the preceding six months.
- User reports of current availability were less consistent although most thought 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

Lifetime (100%) and recent (99%) alcohol use was reported by almost all 2004 respondents. Median age at initiation was 14 years (range 8-20) 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 on a median of two days per week (48 days; range 1-180) in the preceding six months. One quarter (25%) of recent alcohol users reported using at least four days a week.

The proportion of participants who reported typically drinking alcohol while using ecstasy appeared to be higher in 2004 than in previous years (52% in 2000, 56% in 2001, 63% in 2002 and 56% in 2003 and 69% in 2004). 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). 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 2004 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 and 23% in 2003 and 42% in 2004).

All eighteen KEs reported that the majority of ecstasy users drink alcohol regularly (60%-95%), although reports of alcohol use patterns varied. Estimates of frequency of use ranged from weekly or more. Further, the amounts of alcohol consumed ranged from one to six standard drinks per session.

Many KEs reported that regular ecstasy users are not drinking as much and take precautions when mixing alcohol with ice, GHB and ketamine (n=6), or that they tend to have a designated driver who does not drink that night (n=1). Three mentioned that many who use ecstasy in conjunction with alcohol tend to drink more and that this behaviour has become more apparent in the last 6 – 12 months, while another mentioned that once someone is drunk they stop taking ecstasy (n = 1), while those who take ecstasy between once a week to twice a month tend to get drunk before taking pills and monthly users are less likely to get drunk.

11.2 Cannabis

Nearly all (99%) of the 2004 respondents reported lifetime cannabis use and the majority (85%) had used cannabis in the preceding six months. Median age at initiation was 15 years (range 11-30) and there were no significant sex differences at age of initiation. The prevalence of lifetime and recent use of cannabis have remained stable across sampling years (see Table 2). Eighty-eight respondents used cannabis on a median day of two days

per week (48 days; 1-180) in the preceding six months. A substantial proportion (45%) used cannabis three times a week or more. Considerable proportions of respondents report typically using cannabis in conjunction with ecstasy (50% in 2000, 34% in 2001, 57% in 2002, 32% in 2003 and 34% in 2004) and to come down from ecstasy (66% in 2000, 54% in 2001, 67% in 2002, 55% in 2003 and, 70% in 2004), and these proportions are roughly comparable across years.

Most KEs (n=17) reported the use of cannabis among ecstasy users. The majority (n=8) described substantial proportions (20-50%) of the users they had contact with typically used between weekly (n=2) and daily (n=1), although three KEs also mentioned occasional use by some. Four KEs considered smaller proportions (10-40%) used; two who also considered frequency of use to range between weekly and daily. Only two KEs mentioned the use of cannabis while recovering from acute ecstasy intoxication. They also mentioned that 75% of regular ecstasy users tended to use marijuana in conjunction with ecstasy whether it was before they went out (n = 2) or while coming down (n = 9), and was usually smoked in a form of a bong or a joint (n = 2), the younger age group and tend to use it more than older users. Furthermore one KE mentioned the increase in hydro instead of bushes. One KE thought there have been no changes in the last six months.

11.3 Tobacco

The majority (92%) of the 2004 sample reported lifetime use of tobacco and most (73%) had used tobacco in the six months preceding the interview with just over half (63%) of the recent tobacco users being daily smokers. Median age at initiation was 15 years (range 11-30) and there were no significant sex differences at age of initiation. There were no significant gender differences between those who had ever or recently smoked. The proportion of users reporting smoking in 2004 is comparable to previous sampling years (see Table 2).

Sixteen KEs described tobacco use among the groups of ecstasy users with whom they were familiar. Estimates varied, ranging from 5%-90% of the users KEs had contact with. Frequency of use also varied, with six KEs described daily smoking and five socially. Two KEs mentioned higher rates of smoking in females.

11.4 Benzodiazepines

Half (53%) the 2004 sample reported having ever tried benzodiazepines and approximately one third (30%) had used benzodiazepines in the six months preceding the interview. These rates are similar to those of previous years (see Table 2). Median age at initiation was 21 years (range 14-34) and there were no significant sex differences at age of initiation. Benzodiazepines had been used on a median of five days (1-180) in the preceding six months. Most (65%) recent users had use benzodiazepines once a month or less.

Small proportions (14%) of the 2004 sample reported the use of benzodiazepines during the acute recovery phase or 'come down' period after ecstasy and related drug use. While this was higher than 2003 (7%), it was comparable to the proportion of the 2002 (13%)

and 2001 (15%) reports that reported using benzodiazepines following the use of ecstasy and other ecstasy and related drugs.

Most KEs reported the use of benzodiazepine use by minorities (10-25%) of ecstasy users although one reported 100% of the group used. The majority believed most use was 'illicit' (i.e. not on a prescription in the user's name), although four KEs mentioned use of benzodiazepines that had been prescribed. Five KEs mentioned the use of benzodiazepines to ease comedown and aid with sleep after ecstasy and other drug use, two of whom mentioned users taking benzodiazepines after crystal use specifically.

11.5 Antidepressants

Approximately one quarter (21%) of respondents reported lifetime antidepressant use. A much smaller proportion (3%) reported using antidepressants in the preceding six months and used them more than weekly. Median age at initiation was 20 years (range 14-55). Of the three recent users, only one respondent reported using antidepressants for other reasons other than depression: while on ecstasy.

Seven KEs mentioned a "small percentage" of ecstasy users taking antidepressants as prescribed. One described the use of antidepressant not as prescribed; used recreationally, two referred to antidepressant users tend to be older and one described a one-off occasion before using ecstasy. Only one KE mention that there have not seen any changes in the last 6 months but noticed increase in use over last few years.

11.6 Inhalants

Prevalence of amyl nitrate use appears to have remained stable since 2000 (see Table 2). In 2004, 66% reported having ever used amyl and 27% had used it in the six months preceding the interview. Median age at initiation was 19 years (range 13-35). Amyl was used on a median of one day (range 1-40) in the last six months. The majority (79%) had used amyl less than once a month. Median age of initiation was 19 years (range 13-38).

Six KEs reported the infrequent use of amyl by very small proportions of ecstasy users (small % - 30%), one of whom mentioned amyl was used during sex. In contrast to these reports, a total of ten KEs either mentioned that there is hardly any amyl around in recent years (n=5) or none (n=5). One KE did mention it is not an offence to possess it, there is not much data on it.

Another inhalant commonly associated with ecstasy and related drug use, nitrous oxide, had been used by less than half (40%) of the 2004 sample at some time although a much smaller proportion (14%) reported using nitrous oxide in the preceding six months. Prevalence of lifetime has decreased and recent nitrous use has increased in 2004. (see Table 2). Frequency of nitrous oxide was low; all recent users reported using nitrous once a month in the preceding six months (median 6 days, range; 1-24). Median age of initiation was 18 years (14-34).

11.7 Other opiates

A small minority (20%) of the 2004 sample reported lifetime 'other opiate' use while 5% had used 'other opiates' in the preceding six months. Median age at initiation was 21 years (range 15-35). Prevalence of 'other opiate' use increased from 2003 (12%) although was comparable to previous years.

Four KEs reported the infrequent use of other opiates which included mushrooms (n=2), DXM (n=1), one mentioned that 2CL is next thing and that may be introduced in ecstasy pills thus changing expectation of users.

11.8 Other drugs

From the REU interviews we found two participants indicated their first age of ethyl chloride use was 25 and 30. Both had indicated they have not used it in the last 6 months. Other two participants indicated they had first used mescaline at the age of 18 and 25, with one indicating used it in the last 6 months by smoking and swallowing. One participant indicated they had used cactus and kava at the age of 24 and other participant first used mushrooms at the age of 20 and has swallowed them in the last 6 months.

Four KEs reported the infrequent use of other opiates which included mushrooms (n=2), DXM (n=1), one mentioned that 2CL is next thing and that may be introduced in ecstasy pills thus changing expectation of users.

11.9 Summary of other drug use

- Almost all party dug users consume alcohol on a median of two days a week with a substantial minority using at least four days a week.
- Reports of alcohol used in conjunction with ecstasy have fluctuated over time, with more than half the sample reporting drinking more than five standard drinks in a session each year.
- Cannabis use was common on a median of two days a week, while more than two fifths of the sample reported using cannabis more than three days a week.
- A large proportion (73%) of the 2004 sample reported recent tobacco use and over half (63%) were daily smokers.
- Close to one third (30%) of the 2004 sample reported recently using benzodiazepines although the majority reported using less than once a month.
- Small numbers (3%) reported the recent use of antidepressants; one participant reported using anti depressants for reasons other than depression.
- Approximately half of the 2004 sample reported having used inhalants amyl nitrate (66%) and nitrous oxide (40%) at some time. Smaller proportions reported recently using them less than monthly in the preceding six months.
- Small numbers had used other opiates across sampling years.

12.0 RISK BEHAVIOUR

12.1 Injecting risk behaviour

One in five (23%) of the sample reported having injected at some time in their lives and 11% reported injecting in the six months preceding interview. A median of 1.5 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 1-4) drugs (Table 21).

Table 21: Injecting risk behaviour among REUs, NSW 2004

Variable	2004 (n=104)
Ever injected (%)	23
Median number of drugs ever injected* (range)	1.5 (1-11)
Injected last 6 months*	11
Median number of drugs injected last 6 months* (range)	2 (1-4)

Source: PDI Regular ecstasy user interviews 2004

*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 23.4 (SD 5.8, range 19-42) and had been injecting for a mean of 5.9 years (SD 4.0, range 0-13). A median of 1.5 drugs (range 1–11) had ever been injected. Most of the injectors commenced injecting with speed (46%) or heroin (17%) and three reported (13%) reported steroids as the first drug they injected. Speed was also the most common drug ever injected (58%), followed by crystal (46%), heroin (45%), ecstasy (42%) and cocaine (42%; Table 22).

Table 22: Injecting drug use history among REU injectors, NSW 2004

Variable	Ever injected (%) n=24	Mean age first injected (SD) n=24	First drug injected (%) n=24
Speed	58	22.8 (4.5)	46 (n=11)
Crystal	46	27.6 (7.2)	4 (n=1)
Heroin	45	22.4 (5.5)	17 (n=4)
Ecstasy	42	24.0 (5.0)	-
Cocaine	42	24.3 (5.4)	-
Base	38	25.7 (7.7)	4 (n=1)
Ketamine	25	29.7 (7.4)	4 (n=1)
MDA	25	26.2 (5.6)	-
Other opiates*	13	25.7 (10.1)	8 (n=2)
Any drug	-	23.4 (5.8)	-

Source: PDI Regular ecstasy user interviews 2004

* Includes codeine, physeptone tablets, morphine, and pethidine.

There were no gender differences between those who reported having injected a drug at some time and those who did not, however, lifetime injectors were older (28.7 vs. 24.6 years, $t_{102}=-2.3$, $p<.05$). There were no differences between the two groups in terms of school years completed and no difference in likelihood of aboriginality, being employed fulltime or previous imprisonment. However, lifetime injectors were less likely to identify as heterosexual (46% vs. 76%; OR, 0.3; 95% CI 0.1-0.7).

While those who injected a drug at some time had used more drugs both ever (14.0 vs. 10.4, $t_{102}=-5.6$, $p<.001$) and in the preceding six months (8.8 vs. 7.2, $t_{102}=-3.0$, $p<.01$), they were no more likely to report having binged on stimulant drugs in the preceding six months. Further, there was no difference in likelihood of ecstasy being nominated drug of choice, having used ecstasy weekly or more or typically using more than one ecstasy tablet per episode of use.

Context of initiation to injecting

One third (33%) of lifetime injectors reported injecting for the first time while under the influence of drugs. Speed (n=3) and ecstasy (n=3) were most often reported as the drugs used preceding first injection followed by alcohol (n=2) and cannabis (n=2). Three participants had used more than one drug prior to first injection.

When lifetime injectors were asked to specify how they learned to inject, over half (62%) reported that a friend or partner showed them how. Five lifetime injectors (21%) reported that they did not inject themselves and another 4% reported another user taught them. One respondent each reported learning from a needle exchange, an information pamphlet, a health professional, a dealer and from a sibling. One person reported they taught themselves.

12.1.2 Recent injectors

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 almost two thirds reporting recently injecting crystal (64%; Table 23). Approximately half reported recent speed (54%) and base (46%) injection as well as ecstasy (46%) while one third (27%) had recently injected heroin (Table 23). Although small numbers necessitate cautious interpretation of these data, crystal was the most frequently injected drug followed by speed and base. Of the three participants reported injecting heroin, two had injected only once in the preceding six months. No one reported the daily injection of any drug.

Crystal was most often reported as last drug injected (27%), while two participants each reported last injecting speed (18%) and base (18%) and one person reporting heroin (9%; Table 23). Two participants reported their last drug injected as steroids.

Table 23: Recent injecting drug use patterns (recent injectors) among REUs, NSW 2004

Variable	% injected past 6 months n=11	Median days injected last 6 months*	Last drug injected n=11
Crystal	64 (n=7)	22 (2-72)	27
Speed	54 (n=6)	10 (2-72)	18
Base	46 (n=5)	6 (2-36)	18
Ecstasy	46 (n=5)	1 (1-24)	-
Heroin	27 (n=3)	1 (1-96)	9
Cocaine	18 (n=2)	1-2	-

Source: PDI Regular ecstasy user interviews 2004

* Of those who had injected in the preceding six months

Injecting risk behaviour

No one reported reusing a needle and syringe in the month preceding interview however, two recent injectors reporting using a needle after someone else in the preceding six months. One participant reported this had occurred once and the other had reportedly done this between three and five times. People reportedly shared with included close friends or an acquaintance. Further, three participants reported that someone had used a needle after them in the preceding six months; two participants reported this had occurred once and one participant reported this had occurred two times. The majority (73%, n=8) reported using other injecting equipment after someone else with water (64%, n=7) being most often common. Spoons (55%, n=6) were also commonly reused paraphernalia followed by tourniquets (46%, n=5) and filters (46%).

Context of injecting

Most (73%) recent injectors reported they injected themselves 'every time' While half (56%) of recent injectors reported usually injecting with close friends, one third (27%) reported usually injecting with a regular sex partner and one third (27%) injected by themselves (Table 24).

The majority of recent injectors reported typically injecting at home (82%) or friends' home (82% in the previous six months). Half reported injecting in a car (46%) and one third each reported injecting at dealers' home (36%), on the street (36%), in a venue toilet (such as night clubs and pubs; 36%) or a public toilet (18%). A potentially risky behaviour engaged in by the majority (82%) of recent injectors in the preceding six months was injecting while under the influence or coming down from the effects of drugs (Table 24).

Table 24: Context and patterns of recent injection among REUs, NSW 2004

Variable	Recent injectors (n=11)
Frequency of self injection	
Every time (%)	73 (n=8)
Sometimes (%)	18 (n=2)
Rarely (%)	9 (n=1)
People usually inject with*	
Close friends (%)	56 (n=6)
Regular sex partner (%)	27 (n=3)
No one (%)	27 (n=3)
Locales injected*	
Own home (%)	82 (n=9)
Friend's home (%)	82 (n=9)
Car (%)	46 (n=5)
Dealer's home (%)	36 (n=4)
Street (%)	36 (n=4)
Public toilet (%)	18 (n=2)
Venue toilet (%)	36 (n=2)
Median times injected any drug last 6 mths	32.5 (2-264)
Injected under the influence (%)	82 (n=9)
Median times injected any drug under the influence last 6 mths	5 (2-72)

Source: PDI Regular ecstasy user interviews 2004

*could nominate more than one response

Obtaining needles

The majority of recent injectors obtained needles from Needle and Syringe Programs (NSPs) (64%) or chemists (46%) in the preceding six months. Other sources included from a friend (27%, n=3), from vending machines (27%, n=3) and from a dealer (27%) with two people reporting they obtained needles from a partner (18%). Three participants (27%) reported difficulty obtaining needles in the preceding six months, all of whom reported opening hours of services to be the reason they were unable to obtain sterile injecting equipment.

12.1.3 Blood borne virus infection (BBVI) vaccination, testing and self reported status

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 HIV testing.

Thirty-five percent of the sample reported that they have never been vaccinated for Hepatitis B. A further 39% reported that they have completed the vaccination schedule,

13% did not finish the vaccination schedule and 14% did not know if they have been vaccinated. Participants who had injected in the preceding six months were no more likely than never injectors to report having been vaccinated against HBV (63% vs. 50%, OR, 1.8; 95% CI 0.4-6.5). Further, there was no difference in likelihood of having completed the three dose schedule (46% vs. 41%, OR, 1.2; 95% CI 0.3-4.2). Of the seven recent injectors who reported having commenced HVB vaccination, three reported the reason as being related to the risk associated with injecting drug use (Table 25).

Participants were asked if they have been tested for HCV. Of the sample 52% reported that they had not been tested for HCV ever, while 23% had been tested in the last year, 19% were tested more than a year ago and 6% either did not know or didn't get their result. Of those that had ever injected, 50% had been tested for HCV in the last year compared to 64% of those who had injected recently. Five percent (n=2) of the sample were positive for HCV.

However, recent injectors were more likely to report having ever been tested for HCV compared to those who had never injected (82% vs. 31%, OR, 9.9; 95% CI 1.9-49.2) and a larger proportion reported being tested in the previous year (64% vs. 15%, OR, 9.9; 95% CI 2.5-39.1). Two participants reported an HCV positive test result, both of whom were recent injectors (Table 25).

Forty-nine percent of the sample reported that they have never been tested for HIV. Thirty two percent of the sample had been tested for HIV in the last year and a further 19% had been tested more than a year ago. Of those that had ever injected, 44% had been tested for HIV in the last year compared to 47% of those who had injected recently. Five percent (n=2) of the sample were positive for HIV.

Further, recent injectors were more likely to report recent (64% vs. 25%, OR=5.2; 95% CI 1.4-19.8) HIV testing compared to those who had never injected. Of the three participants who reported being HIV positive, two reported injecting in the preceding six months.
(Table 25).

Table 25: BBVI vaccination, testing and self reported status, NSW 2004

Variable	Never injectors (n=80)	Recent injectors (n=11)
HBV vaccination (%)	63	50
HCV test last year (%)	82	31
If yes		
Positive	0	2
HIV test last year (%)	64	25
If yes		
Positive	1	2

Source: PDI Regular ecstasy user interviews 2004

12.2 Sexual risk behaviour

As expected among a sample of young adults, the majority (92%) of participants 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

Most (48%) reported one sex partner during the preceding six months although one fifth (21%) of participants had penetrative sex with two people and almost over a quarter (24%) reported sex with between three and five people. Of those who reported penetrative sex in the preceding six months, the majority (85%) reported having sex with a regular partner and half (52%) reported sex with a casual partner. Participants were asked about the use “protective barriers” which were defined as “condoms, dams or gloves” with each partner type. Consistent with population-based surveys, the prevalence of any barrier use was higher with casual (88%) compared to regular (63%) partners. Nearly a quarter (33%) of those who reported penetrative sex in the preceding six months had had anal sex. The frequency of anal sex was relatively low with the majority (78%) reporting having had anal sex less than monthly (Table 26).

Table 26: Prevalence of sexual activity and number of sexual partners in the preceding six months, NSW 2004

Variable	2004 n=104
Penetrative sex (%)	92 n=96
No. of sexual partners (%)*	
One person	48
Two people	21
3-5 people	24
6-10 people	3
10+ people	4
Sex with a regular partner (%)*	85 n=82
Always use protection (%)	32
Never used a protective barrier (%)	37
Any protective barrier use (%)	63
Sex with a casual partner (%)*	52 n=50
Always use a protective barrier (%)	68
Never used a protective barrier (%)	12
Any protective barrier use (%)	88
Anal sex (%)*	33 n=32
No. of times has anal sex	
≤ Mthly	78
≤ Fortnightly	16
≤ Weekly	6

Source: PDI Regular ecstasy user interviews 2004

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

Drug use during sex

The majority (90%) 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 (28%) in the preceding six months and ten or more times (28%) followed by six to ten times (21%). The most commonly used drugs used during were ecstasy (77%), alcohol (59%) and cannabis (34%). Similar to protective barrier use generally, any barrier use during sex combined with drug use was more common with casual (90%) compared to regular (35%) partners. Further, compared to barrier use generally with regular partners (63%), reports of barrier use during sex with drugs almost halved (35%). In contrast, barrier use with casual partners during sex with drugs (90%) was comparable to general use with partners (88%; Table 26 & 27).

Table 27: Drug use during sex in the preceding six months, NSW 2004

Variable	2004 N=104
Penetrative sex while on drugs* (%)	90
<i>Of those who had penetrative sex under the influence of drugs</i>	
Number of times	
Once	11
Twice	13
3 -5 times	28
6 - 10 times	21
Ten +	28
Drug used (%)	
Ecstasy	77
Cannabis	34
Alcohol	59
Speed	19
Base	8
Ice	20
Cocaine	12
Ketamine	11
GHB	6
Sex with a regular partner (%)*	86
	n=74
Always used a protective barrier (%)	27
Never used a protective barrier (%)	51
Any protective barrier use (%)	35
Sex with a casual partner (%)*	48
	n=41
Always used a protective barrier %	63
Never used a protective barrier %	10
Any protective barrier use %	90

Source: PDI Regular ecstasy user interviews 2004

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

12.3 Driving risk behaviour

For the first time in 2004, the PDI asked participants about driving soon after taking a drug. Of this sample 48% had driven within one hour of taking a drug. The most commonly reported drugs used prior to driving were ecstasy (56%) followed by cannabis (46%), alcohol (42%) and speed (40%; Table 28).

Table 28: Drug driving in the last six months among REUs, NSW 2004

Variable	2004 n=104
Driven soon after* taking a drug (%)	48
<i>Of those who'd driven soon after,</i>	
Drug (%)	n=50
Ecstasy	56
Cannabis	46
Alcohol	42
Methamphetamine powder (speed)	40
Cocaine	20
Crystal methamphetamine (ice)	16
Methamphetamine base (base)	14
Ketamine	6
LSD	4
GHB	4
Other opiates	4
Benzodiazepines	4
MDA	2
Methadone	2
1,4B	-
GBL	-
Amyl nitrate	-
Nitrate oxide	-
Heroin	-

Source: PDI Regular ecstasy user interviews 2004

*within one hour of taking

12.4 Tattooing and piercing

In 2004 for the first time participants were asked about tattooing and body piercing (excluding ears). Of those that were asked about tattooing and body piercing (n=104), 26% had received a tattoo and a 37% reported body piercing (Table 29).

Participants reported receiving their last tattooing a median of 36 months (3 years). Of those who had tattoos the majority were females (59%) compared to males (41%). There was no difference between age and sex among this group. The majority (89%) reported receiving their tattoo through a parlour/professional and 11% from a friend. None of the participants reported that another person before them had used the needle used for tattooing, however one participant mentioned that they did not know.

Of those who had body piercing, 26 months (2 years & 2 months) was the median time reported for receiving their last body piercing. Of those who had body piercing the majority were females (71%) compared to males (29%). The majority (87%) reported receiving their last body piercing through a parlour/ professional, 8 % reported a doctor and 3% reported through a friend. Two participants did report body piercing themselves. None of the participants reported that somebody else before them used the needle used for body piercing.

Table 29: Tattooing and Body Piercing among REUs, NSW 2004

Variable	2004 n=104
% who reported having tattoos	26
% parlour/professional ¹	89
% friend	11
% self	1
% prison	0
% reporting someone else used needle before them	0
% who reported having body piercings	37
% Parlour/Professional ¹	87
% Doctor	8
% Friend	3
% Self	2
% Prison	0
% reporting someone else used needle before them	0

Source: PDI Regular ecstasy user interviews 2004

¹ Note that persons could have tattoos/piercings from more than one source

12.5 Summary of risk behaviour

- One in five (23%) of the sample reported having injected at some time in their lives and 11% reported injecting in the six months preceding interview.
- A median of 1.5 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 1-4) drugs.
- One third (33%) of lifetime injectors reported injecting for the first time while under the influence of drugs (mainly speed and ecstasy).
- Of those that were lifetime injectors and had first injected while under the influence of drugs, the first drug injected was speed (46%) followed by heroin (17%).
- When lifetime injectors were asked to specify how they learned to inject, over a half (62%) reported that a friend or partner showed them how.
- Of those that injected in the preceding six months two participants reported using a needle after someone else in the month preceding interview.
- Thirty-five percent of the PDI sample reported that they have never been vaccinated for Hepatitis B. A further 39% reported that they have completed the vaccination schedule, 13% did not finish the vaccination schedule and 14% did not know if they have been vaccinated.
- Of the sample 52% reported that they had not been tested for HCV ever, while 23% had been tested in the last year, 19% were tested more than a year ago and 6% either did not know or didn't get their result.
- Thirty-two percent of the sample had been tested for HIV in the last year and a further 19% had been tested more than a year ago.
- As expected among a sample of young adults, the majority (92%) of participants reported penetrative sex in the six months preceding interview.
- Most (48%) reported one sex partner during the preceding six months although one fifth (21%) of participants had penetrative sex with two people and almost over a quarter (24%) reported sex with between three and five people.
- The majority (90%) of those reporting recent penetrative sex reported using drugs during sex in the previous six months.
- Over a quarter (33%) 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 take was ecstasy (56%) followed by cannabis (46%), alcohol (42%) and speed (40%).
- Of those that were asked about tattooing and body piercing (n=104), 26% had received a tattoo and a 37% reported body piercing.

13.0 HEALTH RELATED ISSUES

13.1 Overdose

In 2004, participants were asked if they had overdose on ecstasy or related drugs. Overdose was defined as 'passed out or fallen into a coma'. Of the sample 12% of the participants had overdose on either ecstasy or other related drugs in the last six months. Of those that had overdoses the main drug used was ecstasy (58%) followed by GHB (17%; Table 30).

Of those who had overdosed ten had used more than one ecstasy and related drug. The most common drug used in conjunction reported by this sample was alcohol (80%) and ecstasy (20%), followed by methamphetamine powder (8%), crystal (10%), MDA (10%), ketamine (10%) and tobacco (8%).

Table 30: Overdose in the last six months among REUs, NSW 2004

Variable	2004 n=104
Overdosed on ecstasy or related drugs (%)	12
Which drug (%)*	
Ecstasy	58
Cannabis	8
Alcohol	-
Speed	8
Ice	-
Ketamine	8
GHB	17

Source: PDI Regular ecstasy user interviews 2004

* Percentage of those reporting overdose

13.2 Self reported symptoms of dependence

First for the first time in 2004 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 4 is indicative of dependence for methamphetamine users (Topp and Mattick 1997).

13.2.1 Ecstasy

The median SDS score for ecstasy was 2 (range 0-8). There were no significant differences between genders for the SDS ecstasy score. Most (32%) participants had obtained an SDS score of 0, 23% obtained a score of 2 and 14% a score of 1. Twenty-one percent of participants who had used ecstasy in the last 6 months obtain a SDS score of 4 or more.

A majority of participants reported that they use of ecstasy was ‘never or almost never’ out of control (63%), while close to a third report ‘sometimes’ (29%), followed by small percentage recording ‘often’ (7%). Only two participants indicated that they felt their ecstasy use was ‘always or nearly’ out of control.

The majority of the sample reported whether the prospects of missing a dose makes them anxious or worried, responded with never or almost never (76%), sometimes (21%), followed by a small percentage responding to often (2%) and always or nearly (1%). The same pattern occurred when the survey asked participants if they are worried about their ecstasy use with none reporting to variables always or nearly. A majority responded to never or almost never (47%) and sometimes (48%) with a small proportion indicating that they worry about their ecstasy use often (5%).

When asked the sample if they wish to stop most of the sample reported that they never or almost never wished to stop (78%) and sometimes (20%). However, a small proportion of the sample reported either wanting to stop often (1%) or always or almost always (1%) wished could stop.

When asked if they thought it would be difficult to stop or go without ecstasy a majority of the sample responded not difficult (70%), followed by quite difficult (25%) and five participants indicating that it would be very difficult.

13.2.2 Methamphetamine

Of those that had used methamphetamine, the median SDS score was zero (range 0-13), 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). There were no significant gender differences in median methamphetamine SDS scores, on in the proportions who scored four or above.

Of those that scored above four on the SDS, 30% reported specifically that crystal methamphetamine was the form about which they were reporting their concern, 46% speed, base 10% and 23% reported no specific methamphetamine.

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, 28% were ‘sometimes’ worried about their methamphetamine use, 16% ‘sometimes’ wished that they could stop and 14% found it quite difficult to stop using methamphetamine.

Of the 87 participants who had used any methamphetamine in the last six months, one in four reported that they felt that their methamphetamine used was at least “sometimes” out of control (20%). When asked if the prospect of missing a dose made them anxious or worried, 14% reported “sometimes”, followed by a small percentage responding “often” (5%) or “always or nearly always” (3%). When asked if they were worried about their methamphetamine use, 20% responded “sometimes”, with a small proportion indicating that they worried about their methamphetamine use often (7%).

When asked if they wished to stop using methamphetamine, one in five reported that they sometimes did (20%); a small proportion of the sample reported either wanting to stop “often” (5%), or “always or almost always” (1%) wished they could stop.

When asked if they thought it would be difficult to stop or go without methamphetamine, a majority of the sample responded not difficult (85%), followed by quite difficult (11%) and three participants indicating 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, 16% 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 counsellor (38%), followed by a drug and alcohol worker (27%), emergency department (19%), ambulance (19%), hospital (19%), first aid (19%), general practitioner (13%), psychologist (7%) or psychiatrist (7%) and none reported accessing a social welfare officer. Of other services one participant each responded to seeing an alternative therapist (6%), sexual health worker (6%) and a neurosurgeon (6%).

Table 31 below presents the proportion of participants who accessed health help by main drug used. For those who saw a counsellor (n =16) two reported that the main drug involved was ecstasy, followed by crystal methamphetamine (1), poly drug use (1) and all forms of methamphetamine use (1). Six of the sixteen respondents reported the main issue of concern, with each responding to dependence and addiction (n=1), anxiety (n=1), depression (n=1), advice and/or information on drug effects (n=1), financial issues (n=1) and assignment extensions (n=1). A drug and alcohol worker (n=4) was the next most assessed service, where the main drug of concern was ecstasy (50%) followed by methadone n=1) and all forms of methamphetamines (n=1). All four respondents each reporting the main issue was cutting down or decreasing dose (n=2) followed by information and/or advice on drug effects (n=1) and issues surrounding work and university studies (n=1).

Table 31: Proportion of REUs who accessed health help by main drug type and main reason, NSW 2004

Variable	Ecstasy (%)	Base (%)	Crystal (%)	Cannabis (%)	Alcohol (%)	Main reason
GP	2	0	0	0	0	Acute physical & prescription
Counsellor	2	0	1	0	0	Dependence, depression & anxiety
D&A worker	2	0	0	0	0	Information
Emergency	1	0	1	0	0	Anxiety, prescription & drug effect
Psychologist	0	0	1	0	0	Anxiety
First aid	3	0	0	0	0	Physical problem
Ambulance	1	0	1	0	0	Anxiety, pre-existing med. & drug effect
Psychiatrist Hospital	1	0	0	0	0	Other

Source: PDI Regular ecstasy user interviews 2004

13.4 Other problems

Participants in 2004 reported a range of other problems associated with their drug use. Participants were 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. Proportions reporting these harms predominantly attributed them to their use of ecstasy rather than other drugs. 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 used ecstasy, and varying proportions of the sample used the other drugs, so these results also reflect the lower prevalence of use of different drugs.

Approximately two fifths of the sample had experienced financial problems (39%), occupational/study problems (38%) and relationship/social problems (31%) in the preceding six months attributable to the use of ecstasy and related drugs (Table 32). Only a small number of participants reported legal problems; of the nine people who did, three attributed these problems at least in part to ecstasy and two reported having been cautioned by the police and one arrested.

Sixty-seven percent of recent ecstasy users attributed occupational or study problems to their recent use of these drugs. Eleven percent of recent speed and base users attributed legal or police problems. Recent crystal users were most likely to nominate relationship or social problems (9%). Both recent cannabis and alcohol users were also most likely to report legal or police problems (22%) related to their use.

Table 32: Self reported drug-related problems, NSW 2004

Variable	Any drug (n=104)	Ecstasy (n=104)	Speed (n=84)	Base (n=40)	Crystal (n=48)	Cannabis (n=88)	Alcohol (n=103)
Occupational /study (%)	38	67	3*	3*	0	21	0
Financial (%)	39	55	5*	3*	8*	10*	0
R'ship/social (%)	31	50	9*	3*	9*	22	0
Legal/police (%)	9	33*	11*	11*	0	22*	22*

Source: PDI Regular ecstasy user interviews 2004

*n=5 or less

In contrast to user reports, the majority of KEs who mentioned that occupational, financial and relationship problems had been experienced by the ecstasy users with whom they had contact believed these problems to be related to crystal meth rather than ecstasy use. Two of the three KEs attributed financial problems to crystal rather than ecstasy use. Relationship or social problems were mentioned by two KEs, and both attributed problems of this nature to crystal use.

13.5 Summary of health related issues

- 12% of the participants had overdose on either ecstasy or related drugs.
- Of those who had overdosed the main drug used was ecstasy (58%) followed by GHB (17%).
- For the first time in 2004 the severity of dependence scale (SDS) was used for ecstasy and methamphetamine. The median SDS score for ecstasy was 2 (range 0-8).
- Participants were asked if their ecstasy use was out of control with 63% reporting 'never or almost never', 76% reported that missing a dose did not make them feel anxious, almost half of the participants were not worried about their ecstasy use and 20% percent wished that sometimes they could stop using ecstasy.
- Of those that had used methamphetamine the median SDS score was zero (range 0-13), with 15% scoring four or above, which has previously been validated as an acceptable cut-off to indicate dependence.
- Of those that scored above four on the SDS, 30% reported specifically using crystal methamphetamine, 46% speed, 10% base and 23% reported no specific methamphetamine.
- 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, 28% were 'sometimes' worried about their methamphetamine use, 16% 'sometimes' wished that they could stop and 14% found it quite difficult to stop using methamphetamine.
- Of the sample 16% 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 counsellor (38%), followed by a drug and alcohol worker (27%).
- Financial problems (39%) and occupational or study problems (38%) were most commonly reported by regular ecstasy users.
- Relationship or social problems attributed to ecstasy and related drug use were reported by 31% of the sample. A small proportion (9%) also reported legal/police problems.

14.0 CRIMINAL ACTIVITY, POLICING AND MARKET CHANGES

14.1 Reports of criminal activity among REU

Less than one fifth (18%) of the 2004 sample had committed a crime in the month preceding the interview (Table 33). 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 less once a week. Drug dealing was the most likely criminal activity to be reported, with 12% of the sample having sold drugs to someone at least once in the preceding month. The majority of those that reported drug dealing (7%) reported that they had sold drugs less than once a week, 1% had sold drugs once a week and 3% had sold drugs between weekly and daily. One participant had sold drugs daily during the preceding month.

It should be noted that anecdotally many of these 'known dealers' may not identify themselves as such, buying drugs to distribute among their friends only, and making little if any profit in the process. Consistent with this, two of the eleven KEs who commented on dealing within the known group of ecstasy users considered dealing to be 'small time', due to the increase in patrolling and security guards. Two KEs that it is no longer so easy to deal with ecstasy and now many are dealing with GHB and ketamine however six of the eleven have suggested no changes in dealing.

Five participants had committed a property crime in the preceding month, three of who had done so less than once per week. One participant reported committing property crime about once a week in the preceding month and one committing property crime on a daily basis. Four participants had committed violent crime in the preceding month, all of who did so less than once a week. In 2004, three KEs reported an increase in violent crime with two suggesting this is related to an increase in crystal and GHB use and how these ecstasy and related drugs have become mainstream. Two participants reported they had committed fraud less than once a week in the month preceding the interview, while one committed to fraud more than once a week and one committed fraud on a daily basis.

Eleven percent of the sample (n=11) had been arrested in the preceding 12 months. Four had been arrested for driving under the influence of alcohol; three had been arrested for possession and use of illicit drugs, one for dealing and trafficking, two for property crime and two for violent crime.

Since 2000, smaller proportions of regular ecstasy users have reported involvement in any criminal activity (Table 33). An apparent decrease in reports of property crime and dealing appears to account for most of the reduction. Across all four samples, low rates of fraud and violent crime were reported. There was a reduction between 2000 and 2004 in the proportion of the samples that reported dealing drugs to finance ecstasy use (from 35% in 2000 to 19% in 2004) (Table 33). Further, the proportions of all samples that reported that they had obtained ecstasy on credit from dealers (from 36% in 2000 to 28% in 2004) or through pawning goods (12% in 2000 to 6% in 2004) by has decreased while bartering drugs or goods (21% in 2000 to 29% in 2004) has increased this year. It is difficult to specify the reasons for these apparent increases.

Table 33: Criminal activity reported by REUs, NSW

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

Source: PDI Regular ecstasy user interviews 2004

* Not recorded prior to 2004

14.2 Perceptions of police activity towards REU

Compared to earlier samples, a smaller proportion of the 2004 sample reported they had recently perceived more police activity towards ecstasy users and the ecstasy and related drug market in general (Table 34). While over two fifths (45%) of participants perceived an increase in police activity, a similar proportion (41%) reported police activity had remained stable. Close to one fifth (13%) were unable to comment on police activity.

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 (85%; n=88) of the 2004 sample reported that police activity had not made it more difficult for them personally to obtain illicit drugs recently⁵. However, whilst participants stated that police

⁵ Participants were asked ‘Has police activity made it more difficult *for you* to score drugs in the last six months?’ (yes/no).

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 four 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.

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)
Recent police activity:					
Decreased	5	5	2	7	1
Stable	52	34	16	36	41
Increased	32	49	78	37	45
Don't know	11	12	3	20	13
Did not make scoring more difficult	87	94	88	80	85

Source: PDI Regular ecstasy user interviews 2004

KEs reports of recent police activity varied although they were consistent with user reports; five KEs thought police activity had increased, one reported a decrease and six reported no change. Of those who reported increased police activity, four reported increased visibility of police including increases in beat police or police presence on the streets, two mentioned sniffer dogs, in clubs and on the street, and two mentioned both uniformed clothed officers in clubs.

14.3 Perceptions of changes in ecstasy and related drug markets

Close to half (47%) of the 2004 sample had perceived changes in the ecstasy and related drug market in Sydney. A wide range of changes were noted, the most frequent being increases in crystal use and availability, mentioned by one third (32%) of participants. Smaller numbers mentioned increased GHB (n=7) and ketamine (n=5) use and availability.

Other reports of changes were less consistent and given small numbers commenting, careful interpretation is required. Nevertheless, while some participants perceived recent decrease in ecstasy use, specifically with regard to number of pills used per occasion of use (n=1) due to increase in quality. One person mentioned the increase use of combining alcohol and ecstasy. Three people mentioned younger users and one mentioned more users in terms of ecstasy and related drug use becoming more safer and better quality. Further, two people mentioned the increases use of ecstasy in pubs, streets and parks (“less suitable venues”) instead of nightclubs.

14.4 Summary of criminal and police activity

- Relatively few of the ecstasy users sampled were involved in criminal activity apart from dealing drugs.
- Relatively few were arrested and very few report a history of incarceration.
- The prevalence of property crime among sentinel groups of ecstasy users across time has remained low.
- Reports of criminal activity to fund the purchase of ecstasy have decreased over time.
- There was a marked decrease in the proportion of ecstasy users sampled who perceive 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). KE reports were consistent with this.
- The majority of ecstasy users reported that police activity had not made it more difficult for them to obtain drugs.
- Most frequent perceived change in the ecstasy and related drug market in Sydney was the increase of crystal use and availability.

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 (Breen, Topp et al. 2002; White, Breen et al. 2003), the participants interviewed 2004 were extensive polydrug users, half of whom had a preference for ecstasy. Participants had used an average of ten drugs in their lifetime, and an average of seven in the six months preceding the interview.

Although overall rates of polydrug use remained stable between 2000 and 2004, results suggest that over this period, the use of some drugs decreased, such as LSD. Over the same period, the use of other drugs has steadily increased, including ketamine, GHB, MDA and base.

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

One fifth of the sample (23%) of the sample reported having injected a drug at some time and a small proportion (11%) recently injecting. The most commonly reported drugs recently injected were crystal and methamphetamine powder followed by ecstasy.

15.3 Ecstasy

The ecstasy users interviewed started using the drug in their late teens, although reports from some KEs suggest that the age of initiation is decreasing. All participants typically consume ecstasy orally although half reported recently snorting the drug.

A wide range of patterns of ecstasy use were reported, however, most reported using the drug between monthly and three times a week. The proportion reporting they typically use more than one tablet per use episode has increased since 2000, with more than three quarters reporting this in 2004. A substantial minority of regular ecstasy users have typically used four or more tablets in a single use episode. More than one quarter of the sample recently binged on ecstasy, i.e. used ecstasy on a continuous basis for 48 hours or more without sleep, although prevalence of this pattern of binge use decreased compared to previous years. Most users report typically using other drugs in combination with ecstasy and to 'comedown' 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 was the most commonly reported most recent location of use.

The median price of ecstasy was reported to be \$35, which has remained stable since 2001; with most participants across sampling years report the price as stable. The user and KE reports of ecstasy purity are inconsistent; and purity of seizures made by AFP were 33% and NSW police were 31% in 2003/04

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

The most commonly identified benefits perceived to be related to ecstasy use was interaction with others and to have fun. The most commonly identified risks of ecstasy use were related to the potential physical and psychological harms.

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.

Lifetime and recent use of speed has remained stable across sampling years. Prevalence of base use has increased over time although it has remained stable since 2002. Reports of crystal use have increased over time with a notable increase since 2002. KE reports of speed and crystal use were consistent with those of the users while KE reports of base use were less consistent which may reflect specific patterns of use among different groups.

Similar to ecstasy, speed and base were most commonly used in nightclubs although crystal was most often used at home. Raves (including "doofs" and dance parties), private parties and friends' homes were other common locations in which all three forms of methamphetamine were usually used by the 2004 sample.

Speed was most commonly purchased in gram amounts for a median of \$60, an increase from \$55 in 2003. A 'point' of base was purchased for \$37.50, a slight reduction in price, while the price of crystal reduced to \$40 a 'point' for the first time since 2001. Many were unable to comment on price changes in base reflecting the relatively limited experience this group has with these forms of methamphetamine.

The purity of all forms of methamphetamine was reported by most respondents to be of 'medium' or 'high' 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 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.

Most respondents reported that all forms of methamphetamine were 'very easy' or 'easy' to obtain. The proportion of REU who reported speed and crystal as 'very easy' to obtain increased substantially in 2004. 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 dealers' homes, as well as agreed public locations.

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 the data suggest a reduction in reports of recent cocaine use since 2002. Frequency of cocaine use has fluctuated while quantities used have remained comparable between sampling years. KE reports of cocaine use were consistent with those of users with most reporting the use of cocaine as infrequent among minorities of ecstasy users that use cocaine.

As with other ecstasy and related drugs, cocaine is used in a variety of locations. Recent cocaine users reported usually using cocaine at private residences such as private parties or own home although nightclubs were also commonly reported. Most common location of last use was of last use was a home.

The most commonly purchased amount of cocaine was a gram at a median price of \$200. Most reported the price of cocaine had increased. The majority of those commenting reported the purity of cocaine as 'low' or 'high'.

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.

Most reported that cocaine was 'very 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 with the most commonly purchased from friends' home.

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 'decreasing' over the preceding 12 months.

15.6 Ketamine

Although reports of lifetime and recent use of ketamine have remained stable since 2002, there has been an increase in proportions reporting use since 2000. The frequency and quantity of ketamine use has slightly increased comparable to 2002 levels. KE described contact with regular ecstasy users who had a range of patterns of ketamine use. Similar to other drug types, the most commonly nominated locations ketamine had been used by recent users were nightclubs, raves (including "doofs" and dance parties) and users' own home.

Although only small proportions in previous years were able to comment, the gram price of ketamine appears to have increased for the first time since 2000. Median price for a gram of ketamine in 2004 was \$200.

Most respondents in 2004 reported the current purity of ketamine to be 'medium' or 'high' and that the purity had remained 'stable' or 'decreased' over the preceding six months. Ketamine was 'easy' or 'difficult' to obtain for the majority of respondents in 2004. Most agreed the availability of ketamine has remained 'stable' or more 'difficult'.

Similar to other drug types, known dealers and friends were the people participants most commonly reported purchasing ketamine from in the preceding six months. Ketamine was most often purchased in dealers' homes or friends' 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. The frequency of use is comparable between years while quantity of use appears to have fluctuated although again, given the small numbers who commented, cautious interpretation is required. 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).

Small numbers of users provided information on the price, purity and availability of GHB therefore results should be interpreted with caution. The inability comment in changes to price, purity and availability is consistent with relative inexperience with this drug. Further, confusion remains among respondents with regard to how many millilitres are held in a 'vial' of GHB and the size of a typical dose.

KE reports were generally consistent with results from the user surveys; of those who were able to comment, most KEs considered GHB to be used by small numbers of users infrequently. However, several KEs were familiar with regular ecstasy users who used more regularly.

In 2004, GHB was most commonly purchased in a 'vial' for which a median of \$30 was paid, a decrease from \$35 in 2003 and \$50 in 2002. Prices reportedly paid for other amounts by small numbers of respondents were inconsistent as were comments regarding changes in price. Most participants reported GHB purity as 'high' and a majority responded purity had either remained 'stable' or were 'unable to comment'.

Comparable to other drugs, GHB was commonly obtained from friends and known dealers or acquaintances and was most likely to have been used in nightclubs. The availability of GHB was considered to be 'very easy' to obtain by all those who commented, and availability was reported to have remained 'stable' or had become 'more difficult' during the preceding six months. Only one KE mentioned increased GHB availability in the preceding six months

15.8 LSD

Prevalence of both lifetime and recent LSD use has decreased over time and frequency also appears to have reduced while quantity of use has remained relatively stable. Seven KEs reported infrequent use of LSD among the groups of ecstasy users with whom they were familiar.

Reflecting the infrequent use of LSD, small numbers (n=18) were able to comment on price, purity and availability. The price of LSD has increased from \$10 to \$20 since 2000 and most who commented believed the price to have remained 'stable' or 'increased' over the preceding six months. The majority of participants were 'unable to comment' on the purity of LSD in the last 6 months although five (28%) reported as 'stable' and two (11%) believed it was 'decreasing' and two (11%) said it had 'fluctuated'. Reports regarding the availability of LSD were varied although most thought it had been 'difficult' (56%) or 'easy' (28%) to obtain and that the availability of LSD had remained 'stable' (39%) over the preceding six months.

15.9 MDA

The prevalence of lifetime and recent MDA use has increased over time however in 2004 we have seen a slight reduction. Reports of frequency of use have slightly increased somewhat while quantity of use has remained relatively stable. KE reflected user reports, with KE reporting that relatively small numbers of regular ecstasy users used MDA infrequently, with some mentioning that use was determined by availability.

Less than a fifth of REU were able to comment on the price, purity and availability of MDA. The price of an MDA cap decreased from \$45 to \$45.70 in 2004. The majority of respondents reported the purity of MDA was 'medium' to 'high' and that the purity had remained 'stable' in the preceding six months. User reports of current availability were less consistent although most thought availability had remained 'stable' over the preceding six months.

15.10 Other drugs

Almost all the party drug users interviewed consumed alcohol in the six months preceding interview, on a median of two days a week with substantial minority using at least four days a week. Reports of alcohol used in conjunction with ecstasy have fluctuated over time, with at least half the sample reporting drinking more than five standard drinks in a session each year.

Cannabis use was common on a median of two days a week, while more than two fifths of the sample reported using cannabis more than three days a week. A large proportion (73%) of the 2004 sample reported recent tobacco use and just over half (63%) were daily smokers.

Pharmaceutical drugs such as benzodiazepines and antidepressants were also used. Close to a third (30%) of the 2004 sample reported recently using benzodiazepines although the majority reported using less than once a month. Small numbers (3%) reported the recent use of antidepressants; one participant reported using antidepressants for reasons other than depression.

Approximately half of the 2004 sample reported having used inhalants amyl nitrate (66%) and nitrous oxide (40%) at some time. Smaller proportions reported recently using them less than monthly in the preceding six months.

Small numbers had used other opiates across sampling years.

15.11 Risk behaviour

One in five (23%) of the sample reported having injected at some time in their lives and 11% reported injecting in the six months preceding interview. A median of 1.5 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 1-4) drugs.

One third (33%) of lifetime injectors reported injecting for the first time while under the influence of drugs mainly speed and ecstasy). Of those that were lifetime injectors and had first injected while under the influence of drugs, the first drug injected was speed (46%) followed by heroin (17%).

When lifetime injectors were asked to specify how they learned to inject, over a half (62%) reported that a friend or partner showed them how. Of those that injected in the preceding six months two participants reported using a needle after someone else in the month preceding interview.

Thirty-five percent of the PDI sample reported that they had never been vaccinated for Hepatitis B. A further 39% reported that they had completed the vaccination schedule, 13% did not finish the vaccination schedule and 14% did not know if they had been vaccinated.

Of the sample 52% reported that they had not been tested for HCV ever, while 23% had been tested in the last year, 19% were tested more than a year ago and 6% either did not know or didn't get their result. Thirty-two percent of the sample had been tested for HIV in the last year and a further 19% had been tested more than a year ago.

As expected among a sample of young adults, the majority (92%) of participants reported penetrative sex in the six months preceding interview. Most (48%) reported one sex partner during the preceding six months although one fifth (21%) of participants had penetrative sex with two people and almost over a quarter (24%) reported sex with between three and five people. The majority (90%) of those reporting recent penetrative sex reported using drugs during sex in the previous six months. Over a quarter (33%) 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 take was ecstasy (56%) followed by cannabis (46%), alcohol (42%) and speed (40%).

Of those that were asked about tattooing and body piercing (n=104), 26% had received a tattoo and a 37% reported body piercing.

15.12 Health related issues

Of the REU sample 12% of the participants had overdose on either ecstasy or other related drugs. Of those that had overdosed the main drug used was used was ecstasy (58%) followed by GHB (17%).

For the first time in 2004 the severity of dependence scale (SDS) was used for ecstasy and methamphetamine. The median SDS score for ecstasy was 2 (range 0-8). Participants were asked if their ecstasy use was out of control with sixty three percent reporting 'never or almost never', 76% reported that missing a dose did not make them feel anxious, almost half of the participants were not worried about their ecstasy use and 20% percent wished that sometimes they could stop using ecstasy.

Of those that had used methamphetamines the median SDS score was zero (range 0-13), with 15% scoring four or above, the level of dependence. Of those that scored above four on the SDS, 30% reported specifically using crystal methamphetamine, 46% speed, 10% base and 23% reported no specific methamphetamine. Twenty percent of those that had used methamphetamine believed that their methamphetamine use was 'sometimes' out of control, 15% reported that missing a dose 'sometimes' made them feel anxious, 28% were 'sometimes' worried about their methamphetamine use, 16% 'sometimes' wished that they could stop and 14% found it quite difficult to stop using methamphetamine.

Of the REU sample 16% 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 counsellor (38%), followed by a drug and alcohol worker (27%). For those who saw a counsellor (n =16) two reported that the main drug involved was ecstasy, followed by crystal (n=1) and the main issue of concern was drug effects.

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. Financial problems were reported by the highest proportion of regular ecstasy users in the sample (39%), followed by occupational or study problems (38%). Relationship or social problems attributed to ecstasy and related drug use were reported by 31% of the sample. A small proportion (9%) also reported legal/police problems

15.13 Criminal and police activity

Less than one fifth (18%) of the 2004 sample had committed a crime in the month preceding the interview. Relatively few of the ecstasy users sampled were involved in criminal activity apart from dealing drugs.

Drug dealing was the most common crime reported criminal activity. 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 less once a week. Eleven percent of the REU sample had been arrested in the past year.

While over two fifths (45%) of participants perceived an increase in police activity, a similar proportion (41%) reported police activity had remained stable. The majority (85%) 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 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 other 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 reported the benefit of these drugs was the ability to enhance effects or decrease the side effects of other drugs. Some KEs 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 ecstasy and 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 factor related to REUs' use of these other drugs is the risks associated with the combinations of drugs used, i.e. the polydrug use itself. In addition, although use of ketamine, GHB and MDA has increased, while base and crystal still high has stabilised in 2004, there have been increases since 2000 and continued monitoring is required to ascertain if the markets will continue to grow.

The 2004 NSW PDI results highlight the use of crystal methamphetamine among regular ecstasy users has stabilised this year, however, anecdotal evidence by KEs have suggested an increase among this group of users. The increases in the proportions that recently used crystal, used crystal in a binge, reported they typically used crystal with ecstasy, 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 (indicating dependent use in previous validation studies; Topp and Mattick 1997) on the Severity of Dependence Scale for methamphetamine. (most commonly the powder and crystal forms). 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, the routes of administration considered. In particular the harms associated with smoking need to be addressed. Further, small numbers of KEs 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, substantial proportions report dealing drugs infrequently. We found in 2004 that the majority of regular ecstasy users who do deal, deal to pay for their ecstasy use (ecstasy profit) and a small minority tend to deal drugs for money (cash 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), 16% 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 2004 reported on a range of risk behaviours, and one in ten reported recent injection. 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. Recent discussions have suggested that NSW may be considering the introduction of random roadside drug testing, as has recently been introduced in Victoria.

Continued monitoring of the ecstasy and other 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.

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