

**M. Dunn and L. Degenhardt**

**NSW TRENDS IN ECSTASY AND  
RELATED DRUG MARKETS 2006**  
Findings from the  
Ecstasy and Related Drugs Reporting System  
(EDRS)

**NDARC Technical Report No. 277**



**NEW SOUTH WALES  
TRENDS IN ECSTASY AND  
RELATED DRUG MARKETS  
2006**



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

**Matthew Dunn and Louisa Degenhardt**

National Drug and Alcohol Research Centre  
University of New South Wales

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## ABBREVIATIONS

|                   |                                                                                                                               |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------|
| <b>1,4-B</b>      | 1,4-butanediol                                                                                                                |
| <b>2-CB</b>       | 4-bromo-2,5-dimethoxyphenethylamine                                                                                           |
| <b>2-CI</b>       | 2,5-dimethoxy-4-iodophenethylamine                                                                                            |
| <b>5-HTP</b>      | 5-hydroxy-tryptophan                                                                                                          |
| <b>ABCI</b>       | Australian Bureau of Criminal Intelligence                                                                                    |
| <b>ABS</b>        | Australian Bureau of Statistics                                                                                               |
| <b>ACC</b>        | Australian Crime Commission                                                                                                   |
| <b>ACON</b>       | AIDS Council of NSW                                                                                                           |
| <b>ACPR</b>       | Australasian Centre for Policing Research                                                                                     |
| <b>ADIS</b>       | Alcohol and Drug Information Service                                                                                          |
| <b>AFP</b>        | Australian Federal Police                                                                                                     |
| <b>AGAL</b>       | Australian Government Analytical Laboratories                                                                                 |
| <b>AGDH&amp;A</b> | Australian Government Department of Health and Ageing                                                                         |
| <b>A&amp;TSI</b>  | Aboriginal and/or Torres Strait Islander                                                                                      |
| <b>AIHW</b>       | Australian Institute of Health and Welfare                                                                                    |
| <b>ATS</b>        | Amphetamine type stimulant                                                                                                    |
| <b>AUDIT</b>      | Alcohol Use Disorders Identification Test                                                                                     |
| <b>BBVI</b>       | Blood-borne viral infections                                                                                                  |
| <b>BOCSAR</b>     | Bureau of Crime Statistics and Research                                                                                       |
| <b>CNS</b>        | Central nervous system                                                                                                        |
| <b>DASSA</b>      | Drug and Alcohol Services South Australia                                                                                     |
| <b>DMS</b>        | Dimethyl sulfone                                                                                                              |
| <b>DMT</b>        | Dimethyl tryptamine                                                                                                           |
| <b>DOB</b>        | 2,5-dimethoxy-4-bromoamphetamine                                                                                              |
| <b>DOM</b>        | 2,5-dimethoxy-4-methylamphetamine                                                                                             |
| <b>DXM</b>        | Dextromethorphan                                                                                                              |
| <b>EDRS</b>       | Ecstasy and Related Drug Reporting System                                                                                     |
| <b>FDS</b>        | Family Drug Support                                                                                                           |
| <b>GHB</b>        | Gamma-hydroxy butyrate                                                                                                        |
| <b>GBL</b>        | Gamma butyrolactone                                                                                                           |
| <b>GLBTQ</b>      | Gay/lesbian/bisexual/transgender/queer                                                                                        |
| <b>GP</b>         | General Practitioner                                                                                                          |
| <b>HBV</b>        | Hepatitis B virus                                                                                                             |
| <b>HCV</b>        | Hepatitis C virus                                                                                                             |
| <b>HIV</b>        | Human immunodeficiency virus                                                                                                  |
| <b>ICD-9-CM</b>   | International Statistical Classification of Disease and Related Problems – 9 <sup>th</sup> revision, clinical modification    |
| <b>ICD-10-AM</b>  | International Statistical Classification of Disease and Related problems – 10 <sup>th</sup> revision, Australian Modification |
| <b>IDRS</b>       | Illicit Drug Reporting System                                                                                                 |

|                 |                                                          |
|-----------------|----------------------------------------------------------|
| <b>IDU</b>      | Injecting drug user(s)                                   |
| <b>K10</b>      | Kessler Psychological Distress Scale                     |
| <b>KE</b>       | Key expert(s)                                            |
| <b>LSD</b>      | <i>d</i> -lysergic acid diethylamide                     |
| <b>MDA</b>      | 3,4-methylenedioxyamphetamine                            |
| <b>MDEA</b>     | 3,4-methylenedioxyethylamphetamine                       |
| <b>MDMA</b>     | 3,4-methylenedioxymethamphetamine                        |
| <b>MDS DATS</b> | Minimum Data Set for Drug and Alcohol Treatment Services |
| <b>MSM</b>      | Methylsulfonylmethane                                    |
| <b>NDARC</b>    | National Drug and Alcohol Research Centre                |
| <b>NDLERF</b>   | National Drug Law Enforcement Research Fund              |
| <b>NDSHS</b>    | National Drug Strategy Household Survey                  |
| <b>NNDSS</b>    | National Notifiable Diseases Surveillance System         |
| <b>NSP</b>      | Needle and Syringe Programs                              |
| <b>NSW</b>      | New South Wales                                          |
| <b>P2P</b>      | Phenyl-2-Propanone                                       |
| <b>PDI</b>      | Party Drugs Initiative                                   |
| <b>PMA</b>      | Para-methoxyamphetamine                                  |
| <b>PNS</b>      | Peripheral nervous system                                |
| <b>RSA</b>      | Responsible service of alcohol                           |
| <b>REU</b>      | Regular ecstasy user(s)                                  |
| <b>SDS</b>      | Severity of Dependence Scale                             |
| <b>SPSS</b>     | Statistical Package for the Social Sciences              |
| <b>STI</b>      | Sexually Transmitted Infections                          |
| <b>TMA</b>      | 3,4,5-trimethoxyamphetamine                              |
| <b>UAIC</b>     | Unprotected anal intercourse with a casual partner       |
| <b>UAIR</b>     | Unprotected anal intercourse with a regular partner      |



## GLOSSARY

|                    |                                                                                                                                                                                                                                          |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1,4-B              | Acronym for 1,4-Butanediol. Is a GHB precursor and substitute, which metabolises into GHB in the stomach                                                                                                                                 |
| 2-CB               | Street term for 4-bromo-2,5-dimethoxyphenethylamine. It is a synthetic psychedelic of moderate duration                                                                                                                                  |
| 2-CI               | Street term for 2,5-dimethoxy-4-iodophenethylamine. It is a short acting synthetic psychedelic                                                                                                                                           |
| Cocaine            | A central nervous system stimulant, obtained from the cocoa plant. Cocaine hydrochloride, the salt, is the more common form used in Australia. The freebase form is called 'crack'; little or no crack is available or used in Australia |
| Daily use          | Use occurring on each day in the past six months, based on a maximum of 180 days                                                                                                                                                         |
| Ecstasy            | Street term for MDMA (3,4-methylenedioxyamphetamine), which may contain a range of other substances. It is an hallucinogenic amphetamine                                                                                                 |
| GBL                | Acronym for gamma butyrolactone. It is a GHB precursor and substitute, which metabolises into GHB in the stomach                                                                                                                         |
| GHB                | Acronym for gamma-hydroxy butyrate. It is a central nervous system depressant. Other known terms include 'GBH' and 'liquid ecstasy', however, the latter is misleading as GHB is a depressant, not a stimulant                           |
| Ketamine           | Is a dissociative psychedelic used as a veterinary and human anaesthetic                                                                                                                                                                 |
| Lifetime injection | Injection (typically intravenous) on at least one occasion in the participant's lifetime                                                                                                                                                 |
| Lifetime use       | Use on at least one occasion in the participant's lifetime via one or more of the following routes of administration: inject, smoke, snort, swallow and/or shaft/shelve                                                                  |
| LSD                | Acronym for <i>d</i> -lysergic acid diethylamide. It is a psychedelic                                                                                                                                                                    |
| MDA                | Acronym for 3,4-methylenedioxyamphetamine. It is classed as a stimulant hallucinogen. It is closely related to MDMA (and is sometimes found in ecstasy tablets), however, its effects are said to be slightly more psychedelic           |

|                  |                                                                                                                                                                                                                                                   |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Methamphetamine  | An analogue of amphetamine, it is a central nervous system stimulant. The three main forms of methamphetamine in Australia are methamphetamine powder ('speed'), methamphetamine base ('base') and crystalline methamphetamine ('crystal', 'ice') |
| PMA              | Acronym for para-methoxyamphetamine. It is an amphetamine-type drug with both stimulant and hallucinogenic properties                                                                                                                             |
| Point            | 0.1 gram                                                                                                                                                                                                                                          |
| Recent injection | Injection (typically intravenous) in the last six months                                                                                                                                                                                          |
| Recent use       | Use in the last six months via one or more of the following routes of administration: inject, smoke, snort and/or swallow                                                                                                                         |

## **EXECUTIVE SUMMARY**

The 2006 NSW Trends in Ecstasy and Related Drug Markets report represents the seventh year in which data has been collected in New South Wales on the markets for ecstasy and related drugs. The Ecstasy and Related Drugs Reporting System (EDRS; formerly the Party Drugs Initiative, or PDI) is the most comprehensive and detailed study of ecstasy and related drug markets in NSW. Using a similar methodology to the Illicit Drug Reporting System (IDRS), the EDRS monitors the price, purity and availability of 'ecstasy' (MDMA) and other related drugs such as methamphetamine, cocaine, GHB and ketamine. It also examines trends in the use and harms of these drugs. It utilizes data from three sources: a) surveys with regular ecstasy users (REU); b) surveys with key experts who have contact with regular ecstasy users through the nature of their work; and c) the analysis of existing data sources that contain information on ecstasy and other drugs. Regular ecstasy users are recruited as they are considered a sentinel group to detect illicit drug trends. The information from the REU is therefore not representative of ecstasy and other drug users in the general population, but is indicative of emerging trends that may warrant further monitoring.

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

### **Demographic characteristics of regular ecstasy users**

The 2006 results indicate that regular ecstasy users, a population defined in this study by at least monthly use of tablets sold as 'ecstasy', tended to be young, relatively well-educated, and likely to be employed or engaged in full-time study. Few participants were in treatment for drug-related problems, and only a small proportion had previously been incarcerated. The demographic characteristics of the sample have changed little since 2000, though a slight increase in age, and a decrease in the proportion identifying as heterosexual, has been observed.

### **Patterns of drug use among REU**

As in previous surveys, participants could be characterised as extensive polydrug users; however, participants were not necessarily regular users of these other drugs. Ecstasy was the drug of choice for more than two-fifths of the sample. Large proportions reported the very regular use of alcohol, cannabis and tobacco in the six months prior to interview.

### **Ecstasy**

Ecstasy was first used at a median of 18 years of age, and was first used regularly at a median age of 19 years. Ecstasy had been used for a median of 15 days in the six months preceding interview; 47% reported using ecstasy between monthly and fortnightly, 32%

reported using ecstasy between fortnightly and weekly, and 19% reported using ecstasy once per week or more.

Participants reported using a median of two ecstasy tablets in a 'typical' session of use and three and a half tablets in a 'heavy' session of use. In the six months preceding interview, all participants had swallowed ecstasy, 37% had snorted ecstasy, 3% had injected ecstasy and 2% had smoked ecstasy. Most (85%) participants reported typically using other drugs when they used ecstasy, and 68% reported that they typically used other drugs when coming down from ecstasy.

### **Price, purity and availability of ecstasy**

The median price paid for a single ecstasy tablet was \$30 in 2006, with large proportions of participants reporting that this price had remained stable in the six months preceding interview. Ecstasy was commonly obtained from people known to participants, such as friends, in private locations, such as friends' homes.

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

Tablets sold as ecstasy have remained readily available in Sydney since 2000. Consistent with previous years, the majority of participants reported that ecstasy was 'very easy' or 'easy' to obtain.

Imported tablets are more likely to contain MDMA than locally manufactured imitation tablets that contain methamphetamine. The number and weight of customs seizures of ecstasy seized at the border has increased in recent years, suggesting either changes in customs activity, improvements in detection, more ecstasy being imported into the country, or a combination of these factors. The supply of imported MDMA tablets is also supplemented by domestic production: NSW police reported that the ratio of methamphetamine tablets sold as 'ecstasy' to 'ecstasy' tablets containing MDMA decreased in 2001/02. This may indicate an increase in imported MDMA, some manufacture of local MDMA, or that tablets containing methamphetamine are being sold as such. Consistent with the possibility that local manufacture is occurring, there have been seizures of the precursors required to manufacture MDMA, and in 2005/06 NSW Police reported nine clandestine MDMA laboratories detected in NSW (Australian Crime Commission 2003). This suggests that there are local manufactures of ecstasy attempting to compete with importers of the drug.

Participants identified both benefits and risks associated with ecstasy use. Commonly identified benefits included enhanced feelings of closeness and bonding with others, while commonly identified risks included the unknown contaminants and cutting agents which can be found in ecstasy.

### **Methamphetamine**

A majority (88%) of participants reported having ever used methamphetamine powder ('speed'), with 55% reporting use in the six months prior to interview. Recent users had used on a median of five days of use in the six months prior to interview. Snorting (80%)

and swallowing (64%) were the more prevalent routes of administration, with only a small number (7%) injecting speed in the six months prior to interview.

Speed was commonly used in nightclubs (78%) and, to a lesser extent, participants' own homes (39%) and friends' homes (37%). It was most commonly purchased from friends in friends' homes.

Amongst those who commented, speed was purchased for a median of \$40 per point, or \$60 per gram; the price of speed was largely reported to have remained stable in the six months prior to interview. Current purity varied, with reports ranging from low to high, though purity was largely thought to have remained stable in the six months prior to interview. Speed was largely reported to be 'very easy' to 'easy' to obtain; availability was considered to have remained stable in the six months prior to interview.

Half (50%) of the sample reported having ever used methamphetamine base, with one-quarter (24%) reporting its use in the six months prior to interview. Base was used on a median of three and a half days in the six months preceding interview. Base was commonly swallowed (79%), though proportions did report snorting (38%) and smoking (21%) base in the six months prior to interview. Small proportions (8% of recent base users) had injected it in the six months prior to interview.

Base was used in a variety of both public and private locations, such as nightclubs (47%), participants' own homes (40%), private parties (33%) and friends' homes (33%). Base was mostly obtained from friends (67%) in a variety of locations, such as friends' homes (33%) and agreed public locations (33%).

Amongst those who commented, base was purchased for \$37.5 per point or \$100 per gram, with the price reported to have remained largely stable in the six months prior to interview. Current purity was reported to be high, though mixed reports were obtained regarding purity change in the six months prior to interview. Base was reported to be largely 'very easy' to 'easy' to obtain, and most reported that this had remained stable in the six months prior to interview.

Two-thirds (68%) of the sample had ever used crystal methamphetamine, and more than half (56%) reported using it in the six months prior to interview (on a median of six days). Smoking (88%) was the most frequently mentioned route of administration reported by recent users, though one-quarter (27%) of recent users had injected in the six months prior to interview.

Unlike speed and base, crystal was frequently used in more private locations, such as participants' own home (63%) and friends' homes (50%). Crystal was obtained from known dealers (46%) and friends (42%) in private locations (dealers' homes, 38%, and friends' homes, 31%).

Amongst those who commented, crystal was purchased for \$50 per point, or \$350 per gram; price was reported to have remained stable in the six months prior to interview. Current purity was reported to be 'high' to 'medium' and had remained stable. Crystal was reported to be 'very easy' to 'easy' to obtain, and this too had remained stable.

Varying proportions of the sample were able to report on price, purity and availability of all three methamphetamine forms. Where small numbers are reported, caution should be taken when interpreting results.

## **Cocaine**

The prevalence of lifetime cocaine use has remained stable across time, though in 2006 a decrease was observed in the proportion of participants reporting recent use (from 55% to 45%). This decrease was consistent not only with the majority of key experts who commented on cocaine use, but with other data sources such as the National Drug Strategy Household Survey and the Sydney Gay Community Periodic Survey, suggesting a decline in use amongst other groups.

Cocaine was most commonly used in nightclubs (52%, followed by friends' homes (35%), and was most frequently purchased from friends (75%) at friends' homes (75%).

Amongst those who commented, cocaine was purchased for \$300 per gram, and reports of price change varied from remaining stable (27%) to increasing (15%). Reports of current purity also varied, though one-third suggested purity had remained stable in the six months prior to interview. Regarding availability, one-third (35%) of those who commented suggested it was 'easy' to obtain while similar proportions (32%) reported it was 'difficult' to obtain; however, availability was reported to have remained stable in the six months prior to interview.

## **Ketamine**

The prevalence of lifetime ketamine use decreased in 2006, with 57% reporting having ever used ketamine. Reports of recent ketamine use also decreased, declining from 39% in 2005 to 27% in 2006. This represents the lowest proportion of the sample reporting recent use in the past five years. The majority of recent users used ketamine less than once per month. Snorting ketamine was the most common route of administration amongst recent users; no participants had injected ketamine in the six months prior to interview. Ketamine was commonly purchased from friends in friends' homes; use occurred in a range of locations, such as nightclubs (73%), raves (43%), participants' own homes (27%) and friends' homes (27%).

Amongst those who commented, ketamine was purchased for \$175 per gram, and more than half reported that the price had remained stable in the six months prior to interview (56%). Most (69%) reported that the current purity was high, with more than half (56%) reporting that purity had remained stable in the six months prior to interview. Reports concerning current availability varied, from 'very easy' (31%) and 'easy' (31%) to 'difficult' (38%), though half (50%) reported that availability had remained 'stable' in the six months prior to interview.

## **GHB**

Two-fifths (40%) of the sample reported lifetime GHB use, and one-fifth (21%) reported recent GHB use. There was an increase in recent use from 13% in 2005 to 21% in 2006. Despite low general population use of GHB, the increase observed in recent use was consistent with key expert reports. Three-quarters (71%) of recent users reported using less than monthly.

GHB was commonly purchased from friends and known dealers in private locations, and use tended to occur more in private locations such as participants' own homes (62%) and friends' homes (46%), though nightclubs (46%) were also reported as a location of usual use.

Small numbers were able to comment on price, purity and availability, and thus caution should be used when interpreting data. However, the median price of a 'vial' of GHB was \$25 and two-fifths (39%) of those who commented reported that price had remained stable in the six months prior to interview. Two-thirds (69% of those who commented) reported the current purity to be 'high', though varying reports were given regarding purity change in the six months prior to interview. Concerning availability, reports were mixed, though two-thirds (67% of those who commented) reported that availability had remained stable in the six months prior to interview.

## **LSD**

Two-thirds (65%) reported the lifetime use of LSD, though recent use was considerably lower, with only 17% reporting recent use. Two-thirds (65%) of recent users reported using LSD less than once per month in the six months prior to interview. LSD was commonly reported to be used at friends' homes (50%), in public places (50%) and outdoors (43%).

Of those who commented, LSD was purchased for \$20 per tab, and almost half (46%) of those who commented suggested that price had remained 'stable' in the six months prior to interview. Data collected since 2000 has shown a steady increase in the price of LSD, from \$10 per tab in 2000-01, \$15 in 2002-2003, and \$20 in 2004-2006. Reports concerning current purity were mixed, with reports (from those who commented) ranging from 'high' (36%), 'medium' (25%) to 'fluctuating' (11%). Reports concerning purity change were also mixed. Half (50%) of those who commented reported that LSD was 'difficult' to obtain and more than half of those who commented (54%) reported that availability had remained 'stable' in the six months prior to interview.

## **MDA**

Despite an increase in the lifetime use of MDA (42% in 2006 compared to 32% in 2005), the proportion reporting recent use did not increase (19% in 2005 to 14% in 2006). Of those who reported recent MDA use, all except one participant reported use on a less-than-monthly basis. Use occurred mostly in nightclubs (67%). Friends (50%) and known dealers (33%) were the most frequently nominated source of MDA, and half (50%) scored from friends' homes.

The price for a 'cap' of MDA in 2006 was \$40, with almost half (46%) of those who commented reporting that price had remained 'stable' in the six months prior to interview. Of those who commented on purity, 73% reported the current purity to be 'high' and the majority (73%) reported that purity had remained 'stable' in the six months prior to interview. Reports concerning current availability were mixed, though 46% of those who commented reported that availability in the six months prior to interview remained 'stable'.

## **Cannabis**

The lifetime prevalence of cannabis use has remained stable across sampling years, with the majority (95%) in 2006 reporting lifetime use. Recent use decreased in 2006, with 73% reporting cannabis use in the six months prior to interview, a decrease observed from 82% in 2005. Median days of use in the past six months also decreased, from 48 days in 2005 to 24 days in 2006; 18% of recent cannabis users were daily users.

For the first time in 2006, the EDRS reported on the price, purity and availability of cannabis, and, in line with the Illicit Drug Reporting System, participants were asked to distinguish between commercial 'hydroponic' cannabis and outdoor-grown 'bush' cannabis. Hydro and bush were mostly purchased from friends in friends' homes. Hydro was more expensive per ounce than bush (\$300 vs. \$210), and of those who commented, more participants reported the price of hydro remaining 'stable' (77%) in the six months prior to interview than for bush (43%).

Of those who commented, 55% reported the potency of bush to be 'high' compared to 40% who reported bush to be 'high'. There was greater variation in reports for bush potency than for hydro potency. Though for both cannabis types, the majority reported potency to have remained 'stable' in the six months prior to interview. Differences were observed in reports of current availability – 68% of those who commented reported that hydro was 'very easy' to obtain compared 33% of those who commented on bush; the majority who commented on both types reported availability to have remained 'stable' in the six months prior to interview.

## **Patterns of other drug use**

Almost all participants reported lifetime and recent use of alcohol. A large proportion of the sample usually consumed alcohol with ecstasy, and half of the sample consumed alcohol at levels considered hazardous and possibly indicating dependence. Large proportions of the sample reported lifetime and recent tobacco use, with two-thirds of recent tobacco users reporting daily use. One-quarter of the sample reported recent benzodiazepine use and one-fifth of the sample reported recent anti-depressant use. Regarding inhalant use, higher proportions reported recent amyl nitrate use compared to recent nitrous oxide use (37% vs. 6%). Small proportions of the sample reported recent heroin, methadone and other opiate use. Similarly, small proportions reported recent mushroom and recent pharmaceutical stimulant use.

## **Risk behaviour**

One in four (25%) respondents reported having injected a drug at some time in their lives and 18% reported injecting drug use in the six months preceding interview. Injecting drug use first occurred at a median age of 21 years. The most common drug ever injected was crystal (84% of lifetime injectors) followed by speed (80% of lifetime injectors). More than half (58%) of lifetime injectors had been under the influence of other drugs when they first injected, mostly commonly alcohol, ecstasy and cannabis.

Crystal was the drug most commonly injected in the past six months amongst recent injectors (83%), followed by cocaine (39%), heroin (39%) and speed (39%). Most (82%) recent injectors injected themselves 'every time'; 18% reported that they typically injected alone. Needles were mostly obtained from chemists (56%) or NSPs (44%).



Twenty percent of the sample had never been vaccinated against hepatitis B, with a further 13% reporting that they had not finished the vaccination schedule. Twenty-seven percent had never been tested for hepatitis C, and a further 32% reported that their last test had been more than one year ago. Twenty percent had never been tested for HIV, and a further 27% reported that their last test had been more than one year ago.

More than four-fifths (88%) had engaged in penetrative sex in the six months prior to interview. Of those, more than one-third (35%) reported having one partner during this time, and one-quarter (26%) reported having six or more partners in this time. The proportion reporting always using a condom or other form of protection was higher with a casual partner (64%) than with a regular partner (28%). Of those who had had penetrative sex in the past six months, 85% had had penetrative sex while under the influence of drugs. Ecstasy (80%), cannabis (33%) and crystal (32%) were the drugs most frequently mentioned.

Two-thirds (64%) had driven a car in the six months prior to interview, and of those, 64% had driven under the influence of alcohol and 69% had driven within one hour of taking an illicit drug. Of those who had driven within an hour of taking an illicit drug, ecstasy (71%), cannabis (43%), crystal (43%) and speed (39%) were commonly nominated.

### **Drug information-seeking behaviour**

One-quarter (24%) of the sample 'always' found out the content and purity of ecstasy, while 13% 'always' found out the content and purity for drugs other than ecstasy. Amongst those who did report finding out the content and purity of ecstasy, dealers (53%) and friends (45%) were common sources of information, though 39% did report using internet websites and 23% used pill testing kits.

### **Health-related issues**

For the first time in 2006, the EDRS included the Kessler Psychological Distress Scale, a questionnaire designed to measure the level of distress and severity associated with psychological symptoms. Forty-five percent scored in the 'low' range, 48% scored in the 'medium' range and 7% scored in the 'high' range. Key expert reports suggested that issues of concern amongst illicit drug users may be depression, anxiety and paranoia.

One-fifth (22%) of the sample had ever overdosed on ecstasy and other drugs, though only four participants had done so in the six months preceding interview. The main substances involved were GHB (n=2), ecstasy (n=1) and alcohol (n=1). No participants reported seeking medical assistance for an overdose in the six months preceding interview.

One-quarter (26%) of the sample had accessed medical or health services specifically in regards to their drug use in the six months prior to interview. The majority accessed their General Practitioner (GP) (n=12), with the main drug of concern being crystal (33%) and the main issue of concern being dependence.

Almost half (46%) had experienced social/relationship problems related to their drug use in the six months prior to interview; 46% reported financial problems related to their

drug use, 37% reported educational/occupational problems related to their drug use, and 4% reported legal/police problems related to their drug use.

### **Criminal activity, policing and market changes**

One-fifth (21%) reported dealing drugs in the six months prior to interview, though frequency of occurrence was relatively low. Property crime, fraud and violent crime was reported by a small proportion of the sample; 7% reported having been arrested in the six months prior to interview.

There was a decrease in the proportion of the sample reporting that police activity had 'increased' in the six months preceding interview, and similar to previous years, a large proportion (86%) reported that police activity had not made it difficult for them to personally obtain drugs in the six months prior to interview. Two-thirds (64%) reported that they had observed drug detection 'sniffer' dogs in the six months preceding interview on an average of four occasions. Of those, 89% reported that they took some form of precaution if they were aware that dogs would be at an event they intended to go to.

### **Conclusions**

There is increasing evidence that the ecstasy market has increased or stabilised in recent years. The cumulation of data from users, key expert reports, population surveys, and indicator data, suggests that use of ecstasy is increasing and that it is being used more heavily, possibly in ways that heighten users' risk of harm. The results from the EDRS show that regular ecstasy users use, and are able to obtain, a wide variety of other drugs; furthermore, these drugs can often be obtained from a wide range of people and are used in a variety of different locations. 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**

The regular ecstasy users in the current sample have been using ecstasy on average for six years. During this time, users may have formulated their own harm strategies to alleviate negative effects of ecstasy and other drug use, based perhaps not only on first hand experiences but experiences observed amongst social groups and other wider networks of other illicit drug users. The challenge is to present credible information to users.

In 2006, data from both the regular ecstasy users surveyed and reports from key experts indicated an increase in the proportion of drug users engaging in the use of GHB. What is unclear is whether this increase is due to new users partaking in the use of the drug, or whether the increases observed are due to users admitting to using the drug. Previous research has suggested a 'hidden' culture of GHB use that resulted from the growing intolerance many users and establishments had towards this drug. Such intolerance was reported to be, in part, due to the increased overdoses which were caused from GHB use. Users may therefore partake in private locations, such as their own homes, without disclosing use to non-using peers.

An increase in GHB use presents two important implications. Firstly, novice users of the drug need to be educated about the harms which can result from its use. (Degenhardt, Darke et al. 2002) found that despite having a limited experience with the drug, 99% of

recent GHB users reported at least one side effect from its use. (Degenhardt, Darke et al. 2003) also found that half of recent GHB users had experienced an overdose. Liechti (2006) found that approximately one-quarter of intoxications with illicit drugs presenting to an emergency department in the United States resulted from a GHB overdose. As such, it is important to disseminate credible harm reduction information to users about the drug in such a way that users will be receptive to the information.

The second important implication concerns GHB use in a polydrug context. Other depressant drugs, such as alcohol and opiates, may potentiate GHB toxicity (Miotto, Darakjian et al. 2001). Even closely spaced doses of GHB can have greater than additive effects. The difficulty in determine concentration of the drug may cause users to underestimate the dose-dependent effects of the drug (Gonzalez & Nutt, 2005). Given that ecstasy users in Australia have been found to have extensive polydrug using histories (Degenhardt, Barker et al. 2004), it is important that users are made aware of the negative effects which can occur from combining GHB with other drugs, especially other depressants like alcohol.

The challenge now is to present credible, reliable education and re-education initiatives concerning GHB use and related harms to users who may well have an extensive polydrug use history as well as an extensive drug using career. Users need to be given information which enables them to make informed decisions regarding their drug use without relying on anecdotal evidence and myths.

Results from the current study suggest that users are aware that what they purchase and consume as ‘ecstasy’ may not necessarily contain MDMA, however large proportions rely on anecdotal reports from friends and dealers to inform them of drug content and purity. This is despite many participants indicating that a major risk of consuming ecstasy is the unknown contaminants, and the proportions indicating that they would not consume pills if they contained other substances such as methamphetamine and ketamine.

Consuming a drug, which may contain a range of other substances, presents difficulties for users when attempting to anticipate not only drug effects, but also the effects of polydrug consumption. Given that users may not wish to use, or have access to, equipment to test drug content, users need to be presented with credible evidence of the adulterants which have been found in ecstasy rather than have them rely on anecdotal evidence. Results from analyses, such as those conducted by Victorian Police Forensic Services Department, may be used to inform users of substances detected in pills, providing them with credible evidence with which they can make informed decisions about their drug use.

The findings from the current study suggest that many users lack appropriate knowledge regarding drug possession and the law. The EDRS has consistently shown that regular ecstasy users are not only a polydrug using group, but also a polydrug purchasing group, able to purchase a wide range of drugs from their main source. Furthermore, the current findings suggest that users purchase drugs, not only for themselves, but for other as well, and that discount for bulk purchases are available. This places users at a heightened risk for more serious penalties if they were to be apprehended by police. Many may be underestimating the quantity needed to have a charge upgraded from possession to trafficking. Given that the vast majority of this group have little to no contact with law enforcement, dissemination of the law surrounding illicit substances may need to come from other sources with which users come into contact.

# 1 INTRODUCTION

The Ecstasy and Related Drugs Reporting System (EDRS) is an ongoing monitoring system funded in 2006 by the Australian Government Department of Health and Ageing, 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. The IDRS provides a coordinated approach to the monitoring of the markets of heroin, methamphetamine, cannabis and cocaine. It was identified that the IDRS did not capture the use of ecstasy and related drugs, as these were used infrequently among the target population of the IDRS – injecting drug users.

In June 2000, the National Drug Law Enforcement Research Fund (NDLERF), administered by the Australasian Centre for Policing Research (ACPR), funded a two-year, two state trial in NSW and QLD of the feasibility of monitoring emerging trends in the markets for ecstasy and other related drugs using the extant IDRS methodology. In addition, Drug and Alcohol Services South Australia (DASSA) (formerly known as the Drug and Alcohol Services Council) 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).

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

The 2006 New South Wales Trends in Ecstasy and Related Drug Markets report provides information regarding ecstasy and related drug trends in Sydney.

## 1.1 Aims

The aims of the 2006 NSW EDRS were:

1. to describe the demographic characteristics of a sample of current ecstasy users interviewed in Sydney in 2006;
2. to examine the patterns of ecstasy and related drug use of this sample, including lifetime and recent use of over twenty licit and illicit drugs;
3. to document the current price, purity and availability of ecstasy and related drugs in Sydney including locations and persons scored from and usual location of most recent use;

4. to investigate the benefit and risk perception of participants regarding their use of ecstasy and related drugs;
5. to examine participants' perceptions of the incidence and nature of ecstasy and other drug-related harms, including acute health-related harms, as well as financial, occupational, social and legal harms;
6. to identify emerging trends in the ecstasy and related drug market that may require further investigation; and
7. to compare key findings of this study with those reported in previous years (2000-2005).

## 2 METHODS

The 2006 Ecstasy and Related Drugs Reporting System (EDRS) used the methodology trialled in the feasibility study (Breen, Topp et al. 2002) to monitor trends in the markets for ecstasy and related drugs. The three main sources of information used to document trends were:

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

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

### 2.1 Survey of regular ecstasy users (REU)

The sentinel population chosen to monitor trends in ecstasy and related drug markets consisted of people who engaged in the regular use of tablets sold as ‘ecstasy’. Although a range of drugs fall into the category ‘ecstasy and related drugs’, ecstasy is a drug that can be considered one of the main illicit drugs used in Australia. It is the third most widely used illicit drug after cannabis and meth/amphetamines<sup>1</sup> with one in twelve (12%) of 20-29 year olds and 4.3% of 14-19 year olds reporting recent ecstasy use in the 2004 National Drug Strategy Household Survey (Australian Institute of Health and Welfare 2002).

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

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

provide the data that were sought. Therefore, REU have been used again in 2006 to provide information on ecstasy and related drug markets.

### **2.1.1 Recruitment**

A total of 100 REU residing in the Sydney Metropolitan region were interviewed for the 2006 NSW EDRS. Participants were recruited through a purposive sampling strategy (Kerlinger 1986), which included advertisements in entertainment street press, gay and lesbian newspapers, interviewer contacts, and 'snowball' procedures (Biernacki and Waldorf 1981). 'Snowballing' is a means of sampling 'hidden' populations which relies on peer referral, and is widely used to access illicit drug users both in Australian (Solowij, Hall et al. 1992; Owendon and Loxley 1996; Boys, Lenton et al. 1997) and international studies (Dalgarno and Shewan 1996; Forsyth 1996; Peters, Davies et al. 1997). Initial contact was established through newspaper advertisements or interviewers' personal contacts. On completion of the interview, participants were requested to mention the study to friends who might be willing and able to participate.

### **2.1.2 Procedure**

Participants contacted the researchers by telephone and were screened for eligibility. To meet entry criteria, they had to be at least 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 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 National Drug and Alcohol Research Centre (NDARC), 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, medians<sup>2</sup> are reported and the Mann-Whitney *U*-test, a non-parametric equivalent of the *t*-test (Siegel and Castellan 1988), was employed. Categorical variables were analysed using  $\chi^2$ . All analyses were conducted using SPSS for Windows, Version 12.0 (SPSS inc 2001).

The data collected in 2006 were compared with data collected from comparable samples of ecstasy users, including the sample interviewed for the 2002 ecstasy and related drugs module of the IDRS (n=88), and the trial of this methodology in 2001 (n=163) and 2000 (n=94;(Breen, Topp et al. 2002; White, Breen et al. 2003). Thus, comparisons drawn were based on samples recruited using the same methods.

### 2.2 Survey of key experts (KE)

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

A total of 20 KE were interviewed; these KE represented a wide range of industries and services from various metropolitan regions of Sydney and provided information on the REU with whom they had had recent contact. All but two interviews were conducted over the phone. KE were administered a qualitative interview schedule, the focus of which was dependent on the KE's area of expertise. In general, KE were interviewed on topics relating to patterns of illicit drug use among the REU they had had contact with in the past six months.

The 20 KE who were interviewed for the 2006 EDRS came from a wide range of occupations. These included nightclub and dance party medical officers, drug and alcohol counsellors, first aid officers, party promoters, law enforcement officers, health promotion workers, peer education workers, nightclub managers, forensic science, and drug dealers.

Most KE were able to comment on regular ecstasy users known to them both professionally and socially; five KE were able to comment only on REU known to them through their work.

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<sup>2</sup> The median value lies in the middle of a series of data points arranged in order of size, i.e. it provides a more representative view of skewed data than the mean value.



## 2.3 Other indicators

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

Data sources that have been included in this report are:

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

### 3 OVERVIEW OF REGULAR ECSTASY USERS

#### 3.1 Demographic characteristics of the REU sample

One hundred regular ecstasy users were interviewed in 2006. Over two-thirds (68%) of the sample were male (Table 1). The mean age of the sample was 28 years (SD 8.5; range 18-55); males were significantly older than females (29 vs. 25,  $t=-2.5$ ,  $df = 83$ ,  $p < 0.05$ ). The majority (97%) of the sample spoke English as their main language at home. A minority (2%) were of Aboriginal and/or Torres Strait Islander (A&TSI) descent. Participants resided in a wide range of metropolitan regions of Sydney, including the inner west (41%), inner city (23%), eastern suburbs (13%), southern suburbs (10%), northern suburbs (6%) and western suburbs (3%). The majority lived in either rented premises (76%), in their parents' or family's house (17%). More than half nominated their sexual identity as heterosexual (57%).

The mean number of years of school education completed by the sample was 11 years (SD 1.1; range 7-12), and the overwhelming majority (72%) of participants had completed high school education. More than half (58%) had completed courses after school, with 31% possessing a trade or technical qualification, and 27% having completed a university degree or college course. More than one-third (36%) of the sample was currently employed full-time, and 24% were employed on a part-time or casual basis. One-fifth (21%) were full-time students and 16% were not employed. Six participants had previous convictions (Table 1).

The majority of the demographic characteristics of regular ecstasy users recruited for the EDRS have varied little across years. Table 1 presents key demographic data for the current sample of REU ( $n=100$ ), and the sample of REU from previous years. The mean age of participants was similar across samples, with a slight increase in 2006. In all samples, the majority of participants were from English speaking backgrounds; most identified as heterosexual, however, this percentage has decreased steadily. Only small proportions of each sample were A&TSI or had a previous criminal conviction. The proportion of participants reporting full-time employment fluctuated over time. Five participants were currently in drug treatment; this remained stable from 2005.

##### 3.1.1 Key expert comments

KE had contact with a broad age range (14-40), though generally KE described REU as being aged between mid to late teens and early twenties. KE often made mention of specific age groups, such as 16-24 or 18-25. One KE mentioned that drug use in the REU they had contact with was not restricted by age or any other demographic features.

KE mostly identified REU as male, though some KE reported that there was an equal gender split. Almost all KE described REU as Anglo-Saxon/Caucasian of English speaking backgrounds, though some KE identified smaller groups of users from other ethnicities, particularly Middle Eastern groups. This may be more of a reflection of existing user groups being identified rather than an emergence of a new group of users. One KE mentioned that people are starting to travel greater distances to attend events, and this may explain the diverse groups that some KE, who work at these events, come into contact with.

Overall, REU were said to be well-educated, with most having completed high school and some having obtained tertiary qualifications. Most were identified as either being in

full-time employment or full-time tertiary education; no KE mentioned that the group they were in contact with were unemployed. Reports regarding sexual orientation were dependent on the REU with whom the KE worked.

One KE mentioned that a small minority of the group they had contact with had a prison history; one KE mentioned that the group of REU they had contact with were a minority group who were sometimes victims of crime rather than perpetrators of crime. KE who were able to discuss drug manufacture and distribution made note that those involved in this often had prior criminal histories. REU in treatment were only mentioned by those KE working in treatment services.

**Table 1: Demographic characteristics of REU sample, NSW 2000-2006**

| Variable                        | 2000<br>(n=94) | 2001<br>(n=163) | 2002<br>(n=88) | 2003<br>(n=102) | 2004<br>(n=104) | 2005<br>(n=101) | <b>2006<br/>(n=100)</b> |
|---------------------------------|----------------|-----------------|----------------|-----------------|-----------------|-----------------|-------------------------|
| Mean age (years)                | 25             | 25              | 25             | 26              | 26              | 26              | <b>28</b>               |
| Male (%)                        | 69             | 58              | 67             | 63              | 60              | 67              | <b>68</b>               |
| English speaking background (%) | 95             | 93              | 98             | 96              | 95              | 95              | <b>97</b>               |
| A&TSI (%)                       | 6              | 6               | 2              | 7               | 7               | 3               | <b>2</b>                |
| Heterosexual (%)                | 78             | 68              | 63             | 69              | 69              | 61              | <b>57</b>               |
| Mean number school years*       | 13             | 13              | 13             | 12              | 12*             | 12              | <b>11</b>               |
| Tertiary qualifications (%)     | 55             | 54              | 58             | 49              | 60              | 54              | <b>58</b>               |
| Employed full-time (%)          | 33             | 48              | 47             | 35              | 44              | 35              | <b>36</b>               |
| Full-time students (%)          | 12             | 20              | 26             | 26              | 23              | 29              | <b>21</b>               |
| Unemployed (%)                  | 21             | 9               | 11             | 22              | 8               | 15              | <b>16</b>               |
| Previous conviction (%)         | 6              | 3               | 2              | 3               | 3               | 6               | <b>6</b>                |
| Current drug treatment (%)      | -              | -               | -              | -               | 2               | 5               | <b>5</b>                |

**Source: EDRS Regular ecstasy user interviews 2000-2006**

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

### 3.2 Drug use history and current drug use

Participants were asked about lifetime and recent use of 20 different drug types. Polydrug use was the norm among this sample, with a mean of 10 drug types (range 4-19) having been tried, and a mean of 7 drug types (range 2-12) having been used in the preceding six months (Table 2).

The similarities in levels of polydrug use among the samples interviewed over time are noteworthy; both in terms of number of drug types ever tried and drug types used recently (Table 2). These figures may appear slightly higher than those reported in 2004; however, this is predominantly due to an increase in the number of drug categories from 14 in 2004 to 20 in 2005 and 2006. In 2005, mushrooms were considered as a separate drug from 'other drugs' under which it had previously been included.

Data across time are able to display patterns of increased or decrease prevalence of use for a variety of drug types. For example, the recent use of speed has declined in recent sampling years and 2006 saw not only a decrease in the recent use of base but a corresponding increase in the recent use of crystal. Other patterns of note observed in the 2006 data were the decreases in recent LSD and ketamine use; an increase in the recent use of GHB; and an increase in the lifetime use of MDA (Table 2).

Alcohol (98%), cannabis (95%) and speed (88%) were the most commonly reported drugs ever used by the sample. The main drugs most commonly used in the six months prior to interview were alcohol (94%), cannabis (73%) and tobacco (68%) (Table 2).

Small proportions of the sample reported the use of drugs other than those listed in Table 2. In 2006 the range of 'other drugs' ever used was reported by 16% of the sample; 'other drugs' reported by respondents in the 2006 sample included 2CB (n=3), mescaline (n=3) and Viagra (n=1).

**Table 2: Lifetime and recent polydrug use of REU, NSW 2000-2006**

| Variable                        | 2000<br>(n=94) | 2001<br>(n=163) | 2002<br>(n=88) | 2003<br>(n=102) | 2004<br>(n=104) | 2005<br>(n=101) | <b>2006<br/>(n=100)</b> |
|---------------------------------|----------------|-----------------|----------------|-----------------|-----------------|-----------------|-------------------------|
| Mean drug type ever used        | 10             | 10              | 12             | 10              | 10              | 11              | <b>10</b>               |
| Mean drug type used last 6 mths | 7              | 7               | 7              | 7               | 7               | 7               | <b>7</b>                |
| Ever inject any drug (%)        | 28             | 20              | 27             | 22              | 23              | 27              | <b>25</b>               |
| Alcohol ever used (%)           | 100            | 99              | 99             | 100             | 100             | 99              | <b>98</b>               |
| used last 6 months (%)          | 95             | 98              | 94             | 96              | 99              | 96              | <b>94</b>               |
| Cannabis ever used (%)          | 99             | 95              | 98             | 96              | 99              | 92              | <b>95</b>               |
| used last 6 months (%)          | 90             | 82              | 90             | 82              | 85              | 82              | <b>73</b>               |
| Tobacco ever used (%)           | 84             | 82              | 90             | 92              | 92              | 82              | <b>86</b>               |
| used last 6 months (%)          | 72             | 77              | 81             | 72              | 73              | 72              | <b>68</b>               |

Source: EDRS Regular ecstasy user interviews 2000-2006

**Table 2: Lifetime and recent polydrug use of REU (continued), NSW 2000-2006**

| Variable                       | 2000<br>(n=94) | 2001<br>(n=163) | 2002<br>(n=88) | 2003<br>(n=102) | 2004<br>(n=104) | 2005<br>(n=101) | 2006<br>(n=100) |
|--------------------------------|----------------|-----------------|----------------|-----------------|-----------------|-----------------|-----------------|
| Methamphetamine powder (speed) |                |                 |                |                 |                 |                 |                 |
| ever used (%)                  | 92             | 99              | 100            | 97              | 98              | 94              | <b>88</b>       |
| used last 6 months (%)         | 75             | 87              | 85             | 79              | 81              | 76              | <b>55</b>       |
| Methamphetamine base (base)    |                |                 |                |                 |                 |                 |                 |
| ever used (%)                  | 36             | 34              | 59             | 63              | 64              | 63              | <b>50</b>       |
| used last 6 months (%)         | 22             | 20              | 44             | 42              | 39              | 43              | <b>24</b>       |
| Crystal meth (crystal)         |                |                 |                |                 |                 |                 |                 |
| ever used (%)                  | 12             | 43              | 43             | 56              | 68              | 62              | <b>68</b>       |
| used last 6 months (%)         | 6              | 26              | 19             | 48              | 46              | 40              | <b>56</b>       |
| Cocaine                        |                |                 |                |                 |                 |                 |                 |
| ever used (%)                  | 78             | 77              | 80             | 78              | 79              | 76              | <b>80</b>       |
| used last 6 months (%)         | 53             | 57              | 64             | 46              | 46              | 55              | <b>45</b>       |
| LSD                            |                |                 |                |                 |                 |                 |                 |
| ever used %                    | 80             | 74              | 73             | 66              | 61              | 71              | <b>65</b>       |
| used last 6 months %           | 37             | 23              | 33             | 24              | 20              | 33              | <b>17</b>       |
| MDA                            |                |                 |                |                 |                 |                 |                 |
| ever used (%)                  | 36             | 43              | 56             | 56              | 54              | 32              | <b>42</b>       |
| used last 6 months (%)         | 16             | 14              | 35             | 35              | 30              | 19              | <b>14</b>       |
| Ketamine                       |                |                 |                |                 |                 |                 |                 |
| ever used %                    | 25             | 31              | 59             | 59              | 58              | 65              | <b>57</b>       |
| used last 6 months %           | 14             | 15              | 49             | 49              | 39              | 39              | <b>27</b>       |
| GHB                            |                |                 |                |                 |                 |                 |                 |
| ever used (%)                  | 5              | 23              | 35             | 33              | 28              | 32              | <b>40</b>       |
| used last 6 months (%)         | <1             | 15              | 19             | 21              | 18              | 13              | <b>21</b>       |
| Amyl nitrate                   |                |                 |                |                 |                 |                 |                 |
| ever used (%)                  | 66             | 62              | 68             | 66              | 66              | 65              | <b>66</b>       |
| used last 6 months (%)         | 29             | 36              | 40             | 28              | 27              | 37              | <b>37</b>       |
| Nitrous oxide                  |                |                 |                |                 |                 |                 |                 |
| ever used (%)                  | 54             | 48              | 50             | 44              | 40              | 44              | <b>38</b>       |
| used last 6 months (%)         | 22             | 11              | 14             | 8               | 14              | 13              | <b>6</b>        |
| Benzodiazepines                |                |                 |                |                 |                 |                 |                 |
| ever used (%)                  | 60             | 45              | 52             | 48              | 53              | 51              | <b>47</b>       |
| used last 6 months (%)         | 35             | 31              | 34             | 32              | 30              | 39              | <b>25</b>       |
| Anti-depressants               |                |                 |                |                 |                 |                 |                 |
| ever used (%)                  | 31             | 22              | 31             | 27              | 21              | 19              | <b>40</b>       |
| used last 6 months (%)         | 14             | 9               | 15             | 11              | 3               | 6               | <b>20</b>       |
| Heroin                         |                |                 |                |                 |                 |                 |                 |
| ever used (%)                  | 32             | 19              | 22             | 24              | 17              | 22              | <b>19</b>       |
| used last 6 months (%)         | 17             | 6               | 6              | 9               | 4               | 4               | <b>7</b>        |
| Mushrooms                      |                |                 |                |                 |                 |                 |                 |
| ever used (%)                  | -              | -               | -              | 11              | 7               | 43              | <b>44</b>       |
| used last 6 months (%)         | -              | -               | -              | 6               | 4               | 6               | <b>7</b>        |

Source: EDRS Regular ecstasy user interviews 2000-2006

**Table 2: Lifetime and recent polydrug use of REU (continued), NSW 2000-2006**

| Variable                       | 2000<br>(n=94) | 2001<br>(n=163) | 2002<br>(n=88) | 2003<br>(n=102) | 2004<br>(n=104) | 2005<br>(n=101) | 2006<br>(n=100) |
|--------------------------------|----------------|-----------------|----------------|-----------------|-----------------|-----------------|-----------------|
| Methadone<br>ever used (%)     | 6              | 3               | 10             | 6               | 4               | 6               | <b>10</b>       |
| used last 6 months (%)         | 0              | 1               | 3              | 4               | 1               | 4               | <b>5</b>        |
| Other opiates<br>ever used (%) | 22             | 12              | 27             | 12              | 20              | 30              | <b>17</b>       |
| used last 6 months (%)         | 6              | 3               | 13             | 3               | 5               | 20              | <b>6</b>        |

Source: EDRS Regular ecstasy user interviews 2000-2006

In 2006, ecstasy was the drug of choice for more than two-fifths (44%) of respondents. The next most commonly preferred drug was cannabis (20%). Alcohol (6%), speed (4%) and cocaine (4%) were nominated as drug of choice by small proportions of the sample. Three respondents each nominated GHB and heroin as their drug of choice.

Compared to 2005, a slightly larger proportion of the 2006 sample reported bingeing on one or more stimulant/ecstasy and related drugs in the preceding six months (48% in 2006 compared to 43% in 2005). 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 2-7 days). Ecstasy was the most commonly reported drug in a binge session (by 41% of the sample). Crystal (28%), alcohol (22%), speed (18%), cannabis (18%), cocaine (12%), ketamine (8%), GHB (8%) and LSD (4%) were other drugs mentioned by those who had recently binged.

One-quarter (25%) of the 2006 sample reported they had injected a drug in their lifetime (Table 2). Of those who had ever injected, 52% had first injected speed, 20% had first injected heroin and 12% had first injected crystal. Other drugs that were first injected included cocaine (n=1), other opiates (n=1) and MDA (n=1). Eighteen participants reported recently (i.e. in the last six months) injecting. Amongst this group, the drugs last injected were crystal (65%), heroin (24%) and speed (12%).

Two respondents were currently in methadone treatment. Three participants nominated heroin as their favourite drug and 7% of the sample had injected heroin in the preceding six months, on a median of four days (range 2-80). Thus, a very 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.

### 3.2.1 Key expert comments

Polydrug use was the norm amongst the REU that KE had contact with. Many KE commented that ecstasy was often used in combination with alcohol, crystal methamphetamine, ketamine or GHB. Polydrug use was often mentioned by KE in the context of harm causation. In particular, several KE who work at dance parties mentioned that new groups of users who were novice drug users often took drugs in harmful combinations, such as ecstasy with large amounts of alcohol, or combining GHB with alcohol, and often these groups were not aware of the potential harms.

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

### 3.3 Summary of polydrug use trends in REU

- Although both males and females of all ages use ecstasy, as with all illicit drugs, ecstasy use is more common among males.
- Ecstasy users tend to be young, most being aged in their early- to mid- 20s. Data across time shows that the age of the sample has aged slightly; in 2006 the median age was 28 years.
- The ecstasy users interviewed were relatively well-educated, with most having completed high school and more than half having obtained tertiary qualifications.
- While the proportion of respondents who are unemployed has fluctuated since 2000, a substantial proportion of regular ecstasy users interviewed were either employed or engaged in studies.
- Regular ecstasy users have little contact with the criminal justice system or with drug treatment agencies.
- Demographic characteristics of REU in Sydney appear to have changed little since 2000. Data cross time has shown a slight increase in the median age of the sample and a decrease in the proportion identifying as heterosexual.
- Key expert reports demonstrate that those who use ecstasy come from a wide background, with large variations in age, sexual identity, and social backgrounds.
- Polydrug use appears to be the norm among regular ecstasy users. However, despite polydrug use being common amongst this group, two-fifths still report ecstasy to be their drug of choice.
- Large proportions reported recent use of alcohol, cannabis and tobacco.
- In 2006 there were decreases in the proportion reporting recent speed and base use, though an increase in the proportion reporting recent crystal use.
- There was an increase in the lifetime use of MDA but a slight decrease in recent MDA use was observed.
- Increases in both the lifetime and recent use of GHB were observed in 2006. A slight decrease was seen in the proportion reporting recent cannabis use; more marked decreases were observed in recent cocaine and LSD use.
- Over one-quarter of the sample (25%) reported having injected a drug at some time.
- Half (48%) of respondents reported bingeing on one or more stimulant/ecstasy and related drug in the preceding six months. The most common drugs involved were ecstasy, crystal and alcohol.

## 4 ECSTASY

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

The median age at which participants in the 2006 sample first used ecstasy was 18 years (range 14-51). Participants reported using ecstasy regularly (at least monthly) at a median age of 19 years (range 16-52). No gender difference was found regarding the age that ecstasy was first used, however, females were more likely to have started using ecstasy regularly at a younger age than males (19.7 years vs. 22.7 years;  $t_{98} = -2.3$ ;  $p < 0.05$ ).

### 4.1 Ecstasy use among REU

Participants had used ecstasy on a median of 14.5 days in the preceding six months (range 6-100). Forty-seven percent reported using between monthly and fortnightly, 32% reported using between fortnightly and weekly, and 19% reported using on a greater-than-weekly basis.

The median number of ecstasy tablets taken in a 'typical' or 'average' use episode in the preceding six months was two (range 0.50-20). More than two-thirds (69%) of the sample reported that they typically used more than one tablet. During their 'heaviest' use episode in the preceding six months, participants reported a median of 3.5 tablets (range 1-35).

In the six months preceding the interview, 100% of participants swallowed ecstasy, 37% had snorted ecstasy, 10% had shafted or shelved<sup>3</sup>, 3% had injected it and 2% had smoked it. All (100%) participants nominated oral ingestion as their main route of ecstasy administration (Table 3). Eleven percent had ever injected ecstasy pills.

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<sup>3</sup> Inserting a tablet into the anus is known as 'shafting'; inserting a tablet into the vagina is known as 'shelving'.



**Table 3: Patterns of ecstasy use among REU, NSW 2000-2006**

| Variable                                                  | 2000<br>(n=94) | 2001<br>(n=163) | 2002<br>(n=88) | 2003<br>(n=102) | 2004<br>(n=104) | 2005<br>(n=101) | <b>2006<br/>(n=100)</b> |
|-----------------------------------------------------------|----------------|-----------------|----------------|-----------------|-----------------|-----------------|-------------------------|
| Mean age first used ecstasy (years)                       | 18             | 19              | 18             | 19              | 20              | 20              | <b>18</b>               |
| Median days used ecstasy last 6 months                    | 12             | 20              | 20             | 12              | 20              | 15              | <b>15</b>               |
| Ecstasy 'favourite' drug (%)                              | 53             | 63              | 51             | 55              | 59              | 38              | <b>44</b>               |
| Use ecstasy weekly or more (%)                            | 34             | 29              | 42             | 22              | 42              | 40              | <b>19</b>               |
| Median ecstasy tablets in 'typical' session               | 1.5            | 1.5             | 2              | 2               | 2               | 2               | <b>2</b>                |
| Typically use >1 tablet (%)                               | 53             | 62              | 74             | 74              | 84              | 77              | <b>69</b>               |
| Recently binged on ecstasy (%)                            | 44             | 58              | 55             | 35              | 28              | 41              | <b>41</b>               |
| Ever injected ecstasy (%)                                 | 12             | 10              | 15             | 13              | 10              | 13              | <b>11</b>               |
| Mainly swallowed ecstasy last 6 mths (%)                  | 89             | 98              | 92             | 100             | 98              | 92              | <b>100</b>              |
| Mainly snorted ecstasy last 6 mths (%)                    | 6              | 1               | 6              | -               | 1               | 6               | -                       |
| Mainly injected ecstasy last 6 mths (%)                   | 3              | <1              | 0              | -               | 1               | 2               | -                       |
| Typically use other drugs in conjunction with ecstasy (%) | 84             | 92              | 97             | 89              | 94              | 97              | <b>85</b>               |
| Typically use other drugs to 'come down' from ecstasy (%) | 82             | 82              | 91             | 77              | 68              | 80              | <b>68</b>               |

Source: EDRS Regular ecstasy user interviews 2000-2006

More than four-fifths (85%) 'typically' (defined as on two-thirds or more occasions of ecstasy use in the preceding six months) used other drugs in combination with ecstasy and two-thirds (68%) 'typically' used other drugs in the 'come down' (i.e. acute recovery period) following ecstasy use. Other drugs were reported to be used with ecstasy, most frequently alcohol (64%), tobacco (58%), cannabis (29%), crystal (27%) and speed (21%). Smaller proportions reported typically using GHB (6%), LSD (5%), ketamine (4%) and base (4%). Of those who typically drank alcohol while using ecstasy, 52% usually consumed more than five standard drinks.

Other drugs were reported to be used during the 'come down' period following ecstasy use, including cannabis (57%), tobacco (54%), and alcohol (22%). Smaller proportions reported typically using benzodiazepines (10%), crystal (10%), speed (3%), anti-

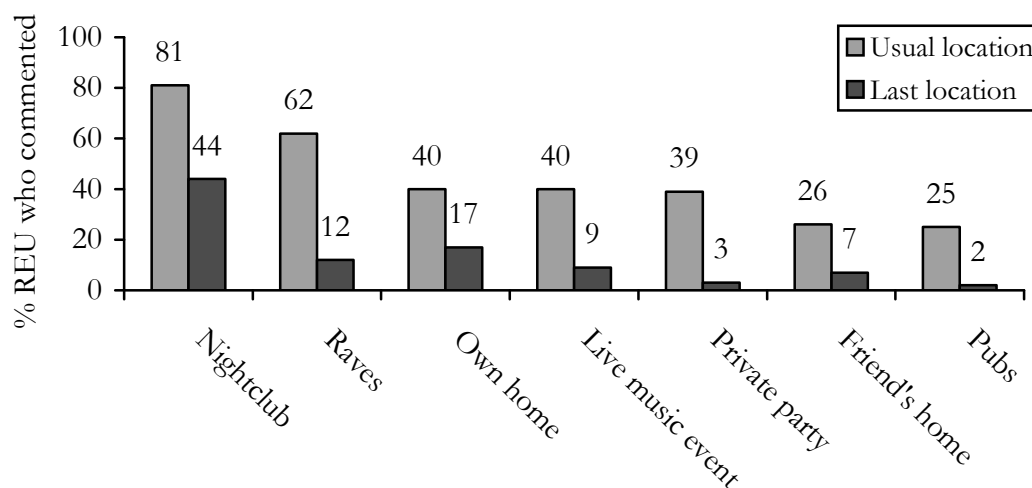
depressants (2%) and GHB (2%). Of those who typically drank alcohol to come down from ecstasy, 43% usually consumed more than five standard drinks.

A smaller proportion of the 2006 sample reported typically using other drugs in conjunction with ecstasy when compared to the 2005 sample (85% in 2006 vs. 97% in 2005). Furthermore, a small proportion reported typically using other drugs to comedown from ecstasy in 2006 (68%) compared to the 2005 sample (80%). The proportion reporting recently bingeing on ecstasy remained constant in 2006 from 2005 (41% in both years), and was higher than that reported in 2004 (28%).

## 4.2 Locations of ecstasy use

Four-fifths (81%) respondents reported using ecstasy at nightclubs, while three-fifths (62%) reported using ecstasy at raves (including ‘doofs’ and dance parties) and two-fifths reported using at their own homes (40%) and at live music events (40%) in the previous six months (Figure 1). Other reported locations included friends’ homes (26%), pubs (25%), day clubs (16%), and in a public place (12%). Smaller proportions reported that ecstasy was usually used outdoors (7%), at a dealer’s home (3%), at work (3%) and at a restaurant or café (2%).

**Figure 1: Usual location and last location of ecstasy use, NSW 2006**



**Source: EDRS Regular ecstasy user interviews 2006**

NB: Users could nominate more than one location

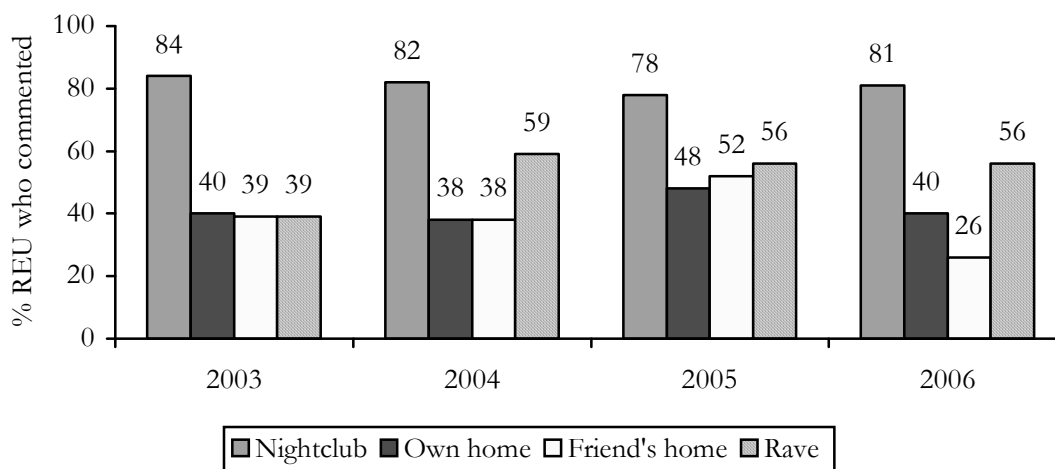
The location of last ecstasy use was similar to the locations of usual ecstasy use in the preceding six months, with the most common being a nightclub (44%; Figure 1). Other recent locations of ecstasy use included respondent’s own home (17%), at raves (including ‘doofs’ and dance parties, 12%), a live music event (9%), friends’ homes (7%), pubs (3%), a day club (2%) and a private party (2%).

Participants were asked what proportion of their friends use ecstasy. Forty-eight percent of the NSW sample reported that ‘most’ of their friends use ecstasy and 25% reported that ‘a few’ of their friends use ecstasy. Sixteen percent reported that ‘about half’ of their friends use ecstasy and 10% reported that ‘all’ their friends use ecstasy (10%).

Figure 2 presents data showing location of usual ecstasy use over time. Across the four sampling years, nightclubs and raves have frequently been nominated as locations of usual ecstasy use. Despite the traditional association of ecstasy with these entertainment venues, more than one-third of REU have usually used ecstasy in their own homes with a

significant proportion of the sample in each year nominating their friends' homes as a location of usual ecstasy use.

**Figure 2: Usual location of ecstasy use across time, NSW 2003-2006**



Source: EDRS Regular ecstasy user interviews 2003-2006

NB: Data first collected in 2003

#### 4.2.1 Key expert comments

There were conflicting reports regarding the frequency of ecstasy use and the quantity of ecstasy being used, with reports being based largely on the populations that KE had contact with. Most KE agreed that there is still a minority of 'hardcore' users who use ecstasy each week, though most appear to have contact with casual users who use fortnightly. Older REU tended to use less often, perhaps a reflection of their changing lifestyles.

There was some agreement amongst KE reports that REU rarely just use one ecstasy pill, that the minimum amount used is often two pills with a maximum of ten being reported. Novice users were reported to use one pill, perhaps due to tolerance. One KE mentioned that use had started to taper off amongst peer groups after a period of heavy use; however, this KE also conceded that lower ecstasy use may also be a result of polydrug use and not a decrease in drug use per se.

One KE mentioned that the REU they had contact with are commenting that they no longer feel the effects of ecstasy, even after using a large quantity. This raises the issue of whether the pills are of lower strength, or whether users themselves are becoming more tolerant to the drug. One KE mentioned that multiple ecstasy use is related to price – users are able to obtain discounts when they purchase more quantities. This raised the concern that the ability to purchase large quantities of ecstasy may lead users to use more ecstasy, though it must be noted that the KE did not disclose whether this was indeed a practice that was occurring.

All KE mentioned that REU take ecstasy in pill form, with small numbers using ecstasy in caps. One KE mentioned REU periodically using ecstasy powder. One KE also noted a small group of REU smoking ecstasy. KE made note that REU are generally aware that what they are taking as 'ecstasy' is not MDMA. KE believed that the majority of REU no longer pay attention to logos, because when a particular logo is said to be of higher purity, manufacturers simply begin to use that logo. Ecstasy was reported to be consumed orally.

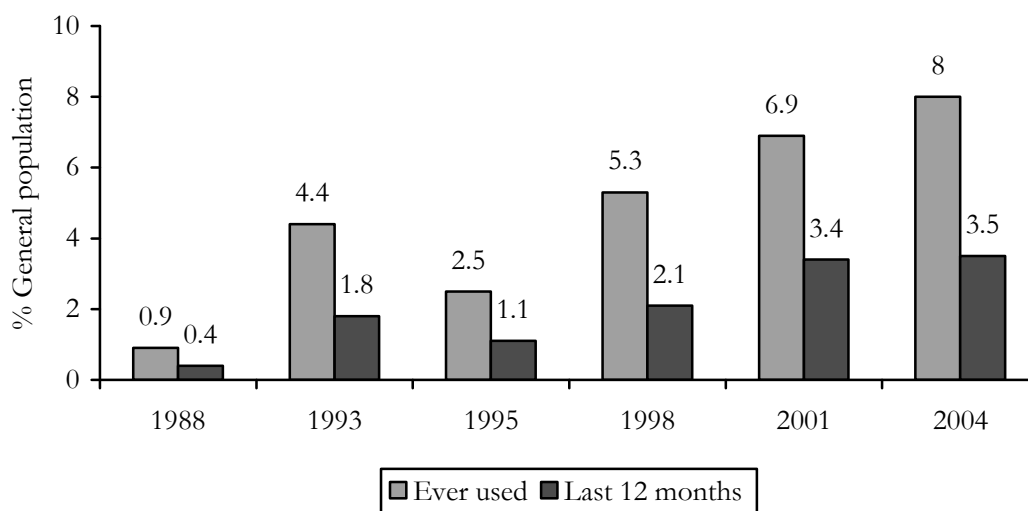
### 4.3 Use of ecstasy in other populations

#### 4.3.1 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 0.9% in 1988 to 7.5% in 2004 (Australian Institute of Health and Welfare 2002). Similarly, as shown in Figure 3, the proportion of the general population who reported using ecstasy in the preceding 12 months increased from 0.4% in 1988 to 3.4% in 2004 (Australian Institute of Health and Welfare 2002).

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

**Figure 3: Lifetime and recent ecstasy use in the NSW general population, 1988-2004.**



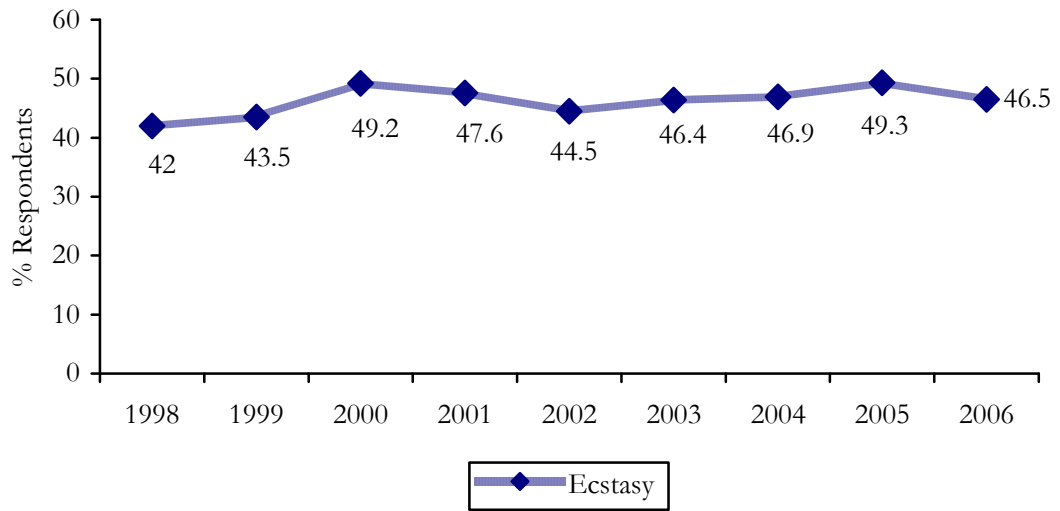
Source: National Drug Strategy Household Survey 1988-2004

#### 4.3.2 Sydney Gay Community Periodic Survey

The Sydney Gay Community Periodic Survey is a biannual cross-sectional survey of gay and homosexually active men. The first survey was conducted in February 1996 and the most recently published survey was completed in February 2006. The major aim of the survey is to provide data on levels of sexual, STI and HIV related practices, though the survey also asks about drug use in the past six months.

Figure 4 shows the proportion of men surveyed that had used ecstasy in the past six months. The proportion of men reporting ecstasy use in the past six months appears to have remained stable.

**Figure 4: Proportion of gay men in Sydney reporting recent ecstasy use, 1998-2006.**



Source: Sydney Gay Community Periodic Survey, 1998-2006.

#### 4.4 Summary of patterns of ecstasy use

- Regular ecstasy users start using ecstasy in their late teens. There is similarity in the age REU first use ecstasy and the age at which they first use ecstasy regularly.
- All participants typically consume ecstasy orally although more than one-third reported recently snorting the drug.
- A wide range of patterns of ecstasy use were reported; however, half reported using the drug between monthly and fortnightly.
- More than two-thirds of regular ecstasy users typically use more than one tablet per use episode.
- Two-fifths of the sample recently used ecstasy on a continuous basis for 48 hours or more without sleep.
- More than three-quarters of users report typically using other drugs in combination with ecstasy and more than two-thirds report typically using other drug to 'come down' from its acute effects. These proportions are lower than that reported in 2005.
- Nightclubs and raves (including 'doofs' and dance parties) were locations where participants reported usually using ecstasy. The nightclub and own home were the most commonly reported last location of use.
- Key expert concerns centred on the quantity of ecstasy being used, with the suggestion that price decreases for the purchase of larger quantities may lead to increased ecstasy consumption.
- In the NSW general population, ecstasy use in the past year has increased steadily over time. Use appears to have remained stable in other groups of drug users where data has been collected across time.

## 4.5 Price

Ninety-eight users were able to comment on the price of ecstasy in Sydney. Respondents reported the price of ecstasy in regards to ‘tablets’; 2 respondents were able to comment on the price of ecstasy in regards to ecstasy powder, however due to the small number reporting on ecstasy powder this data will not be presented.

The median price of ecstasy was reported by users to be \$30 per tablet (range \$20-50; Table 4). Most participants reported that the price had remained ‘stable’ (69%) in the preceding six months; 16% reported that the price had ‘decreased’ in the preceding six months (Table 4).

The median price of a tablet of ecstasy decreased from \$40 since 2000 and remained at \$35 from 2002 to 2004; the price reported in 2006 remains at that reported in 2005 (Table 4).

**Table 4: Price of ecstasy purchased by REU and price variations, NSW 2000-2006**

|                                    | 2000          | 2001          | 2002          | 2003          | 2004          | 2005          | 2006                        |
|------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|-----------------------------|
| Median price per tablet<br>(range) | 40<br>(30-50) | 35<br>(10-70) | 35<br>(18-50) | 35<br>(20-55) | 35<br>(13-50) | 30<br>(15-50) | <b>30</b><br><b>(20-50)</b> |
| <b>Price change:</b>               |               |               |               |               |               |               |                             |
| Increased (%)                      | 3             | 4             | 6             | 12            | 3             | 11            | <b>3</b>                    |
| Stable (%)                         | 53            | 55            | 64            | 59            | 58            | 54            | <b>69</b>                   |
| Decreased (%)                      | 38            | 29            | 26            | 25            | 30            | 26            | <b>16</b>                   |
| Fluctuated (%)                     | 5             | 10            | 15            | 3             | 6             | 7             | <b>7</b>                    |
| Don't know (%)                     | -             | -             | 1             | 2             | 4             | 3             | <b>5</b>                    |

Source: EDRS Regular ecstasy user interviews 2000-2006

Participants were asked the number of people they had purchased ecstasy from in the preceding six months. Participants had bought ecstasy from a median of three people, ranging from one to twenty-five different people. Participants were asked whom they purchased the tablets for: 74% reported that they purchased for themselves and others, and 24% reported for themselves only. Half of the sample reported purchasing ecstasy between one and six times in the last six months and 27% reported between thirteen and twenty-four. The median number of tablets purchased was four tablets (range 1-40 tablets).

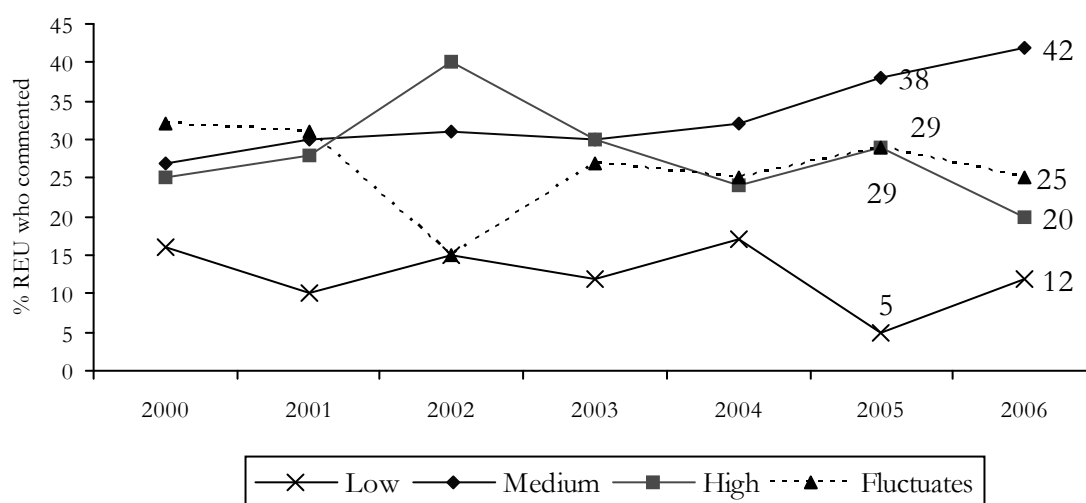
Participants were also asked what other drugs they could purchase from their dealer: 75% reported that they could buy other drugs from their main ecstasy dealer. The most common drugs that they could have purchased were cannabis (62%), speed powder (55%), crystal methamphetamine (51%), cocaine (32%), ketamine (31%), GHB (27%) and methamphetamine base (20%). Other drugs included LSD (15%), MDA (10%), heroin (10%) and pharmaceutical stimulants (3%). One participant specifically mentioned Valium and one participant mentioned benzodiazepines in general.

## 4.6 Purity

### 4.6.1 Current purity

The reports of current ecstasy purity were varied and differed from those collected in 2005 (Figure 5). In 2006, two-fifths (42%) of the sample reported the current purity of ecstasy as 'medium', with more than one-quarter (25%) reporting the current purity as 'fluctuating' and one-fifth (20%) reporting that it was 'high'. 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 5: User reports of current ecstasy purity, NSW 2000-2006**



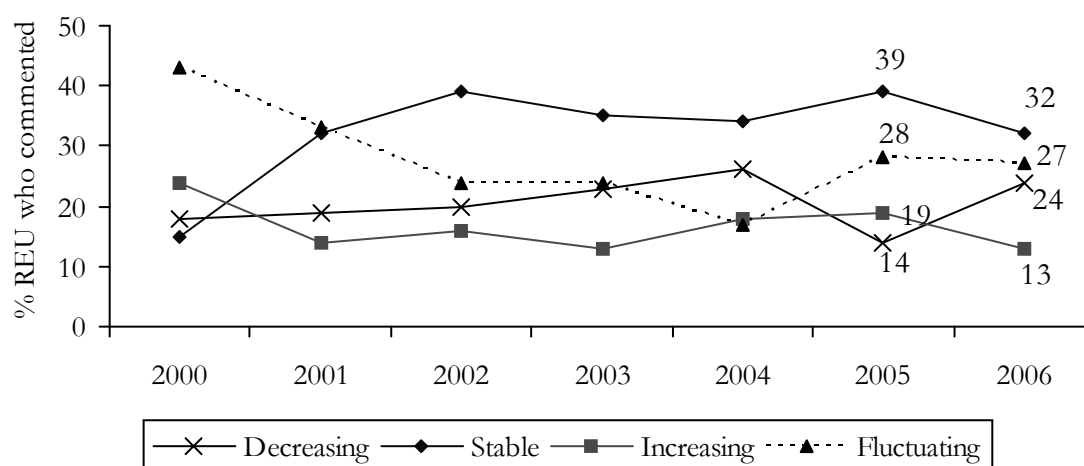
Source: EDRS Regular ecstasy user interviews 2000-2006

### 4.6.2 Purity change

One-third of respondents (32%) reported that the purity of ecstasy had remained 'stable' in the preceding six months, while 27% reported that purity had 'fluctuated' and 24% reported that it had 'decreased'; 13% reported that the purity of ecstasy had 'increased'. Compared with the participant reports in 2005, in 2006 there was an increase in the proportion of participants who reported that ecstasy purity had 'decreased' in the six months prior to interview, while there was a decrease in the proportion who reported that the purity of ecstasy had remained 'stable' (Figure 6).



**Figure 6: REU reports of change in ecstasy purity in the preceding six months, NSW 2000-2006**



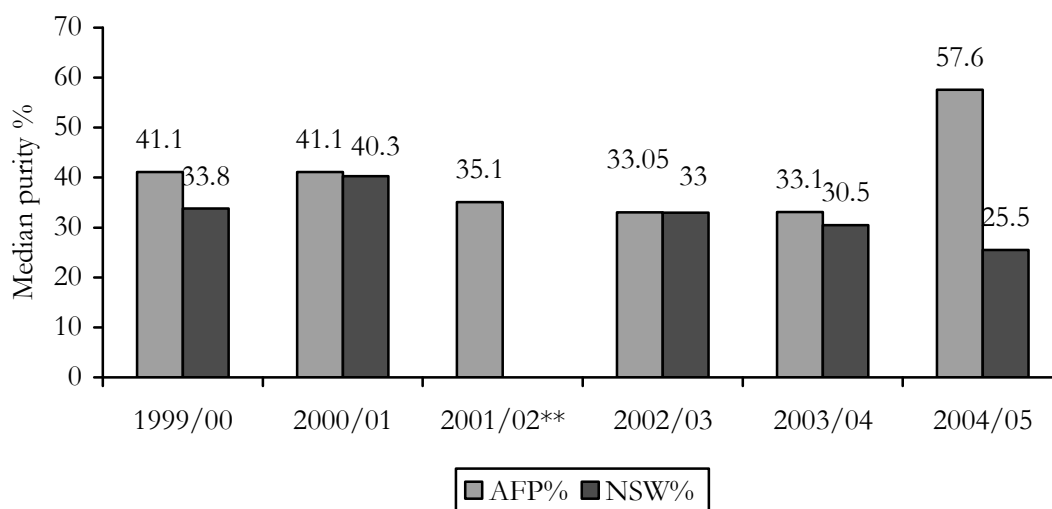
Source: EDRS Regular ecstasy user interviews 2000-2006

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

The purity data presented in this report is provided by the Australian Crime Commission (ACC), formerly the Australian Bureau of Criminal Intelligence (ABCI). The ACC reports both federal and state police seizure data including number and weight of seizures. In 1999/00 the purity was reported as 'ecstasy' seizures. Since 2000/01 ecstasy seizures have been reported under phenethylamines. Ecstasy belongs to the phenethylamine family of drugs. Other drugs such as DOB, DOM, MDA, MDEA, mescaline, PMA, and TMA also belong to the phenethylamine family (Australian Crime Commission 2003) and seizures of these drugs are included in the seizure data from 2000/01.

Figure 7 indicates that the median purity of phenethylamines seized by both the Australian Federal Police (AFP) and NSW police have remained relatively stable across time. Purity of seizures analysed by the AFP decreased slightly from 35% in 2001/02 to 33% in 2002/03 and remained stable in 2003/04. Purity data was not available from NSW Police in 2001/02 but in 2002/03 AFP seizure purity was at 33%, 30% in 2003/04, and decreased slightly to a median purity of 25.5% in 2004/05, the lowest purity recorded. It should be noted that figures do not represent the purity levels of all seizures – only those that have been analysed at a forensic laboratory. In addition, the period between the date of seizure by police and the date of receipt at the laboratory can vary greatly, and no adjustment has been made to account for double counting joint operations between the AFP and NSW Police. Further, patterns of arrest and police operations change over time; for example, targeting of higher level suppliers versus street dealers, and this, in turn, can influence the purity of the drug seized.

**Figure 7: Median purity of phenethylamines\* seizures 1999/00-2004/05.**



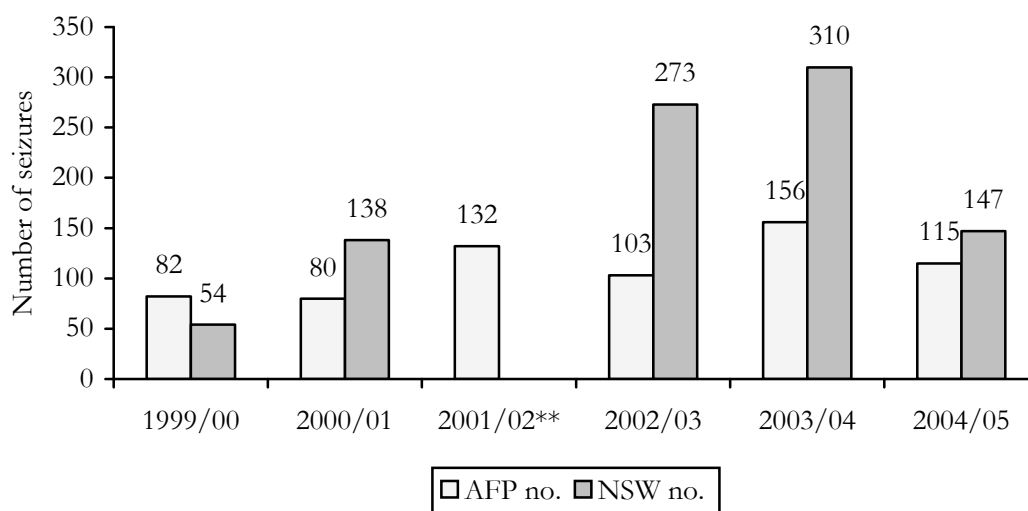
Source: Australian Bureau of Criminal Intelligence (2001, 2002), Australian Crime Commission (2003, 2004)

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

\*\*NSW Police data for 2001/02 was not available. Data for 2005/06 were unavailable at time of publication

Figure 8 shows that the number of AFP seizures in NSW of phenethylamines increased up until the financial year 2001/02 and then stabilised in 2002/03; 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 8: Number of phenethylamines\* seizures 1999/00-2004/05**



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

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

\*\*NSW Police data for 2001/02 was not available. Data for 2005/06 were unavailable at time of publication

## 4.7 Availability

Three-fifths (60%) reported that ecstasy was ‘very easy’ to obtain while one-third (34%) reported that ecstasy was ‘easy’ to obtain. Five percent reported it was ‘difficult’ to obtain and no respondents reported that it was ‘very difficult’ to obtain (Table 5). Four-fifths (80%) believed that the availability of ecstasy had remained ‘stable’ in the preceding six months, while 10% believed it had become ‘more difficult’ to obtain and 5% believed it had become ‘easier’ to obtain. Four percent believed it had ‘fluctuated’.

### 4.7.1 Source person and source location

The majority of participants reported that in the six months preceding the interview they had obtained ecstasy from friends (79%) or known dealers (44%; Table 5). Other people from whom ecstasy had recently been obtained included acquaintances (18%), people unknown to participants (10%) and workmates (7%). Four percent of the sample reported that they had not obtained ecstasy, only used it.

Ecstasy was most often obtained at friends’ homes (55%), dealers’ homes (37%), nightclubs (31%) and agreed public locations (23%). Other purchase locations included participant’s own home (21%), raves (including ‘doofs’ and dance parties; 12%), pubs (11%), private parties (8%), and acquaintances’ homes (5%). Seven percent reported that they bought ecstasy on the street; six percent reported they obtained ecstasy at work and four percent at a day club.

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

**Table 5: REU reports of availability of ecstasy in the preceding six months, NSW 2000-2006**

| Ecstasy variable             | 2000<br>(n=94) | 2001<br>(n=163) | 2002<br>(n=88) | 2003<br>(n=102) | 2004<br>(n=104) | 2005<br>(n=100) | 2006<br>(n=100) |
|------------------------------|----------------|-----------------|----------------|-----------------|-----------------|-----------------|-----------------|
| <b>Current availability:</b> |                |                 |                |                 |                 |                 |                 |
| Very easy (%)                | 70             | 72              | 71             | 63              | 67              | 73              | <b>60</b>       |
| Easy (%)                     | 27             | 23              | 15             | 23              | 28              | 25              | <b>34</b>       |
| <b>Availability:</b>         |                |                 |                |                 |                 |                 |                 |
| Stable (%)                   | 69             | 68              | 72             | 73              | 72              | 75              | <b>80</b>       |
| Easier (%)                   | 21             | 28              | 18             | 11              | 14              | 13              | <b>5</b>        |

Source: EDRS Regular ecstasy user interviews 2000-2006

**Table 5: REU reports of availability of ecstasy in the preceding six months, NSW 2000-2006 (continued)**

| Ecstasy variable              | 2000<br>(n=94) | 2001<br>(n=163) | 2002<br>(n=88) | 2003<br>(n=102) | 2004<br>(n=104) | 2005<br>(n=100) | 2006<br>(n=100) |
|-------------------------------|----------------|-----------------|----------------|-----------------|-----------------|-----------------|-----------------|
| <b>Persons score from:</b>    |                |                 |                |                 |                 |                 |                 |
| Friends (%)                   | 83             | 90              | 86             | 80              | 76              | 80              | <b>79</b>       |
| Known dealers (%)             | 63             | 50              | 76             | 60              | 55*             | 61              | <b>44</b>       |
| Acquaintances (%)             | 30             | 28              | 38             | 27              | 15              | 28              | <b>18</b>       |
| Workmates (%)                 | 12             | 12              | 11             | 15              | 11              | 15              | <b>7</b>        |
| Unknown people (%)            | 27             | 22              | 14             | 15              | 10              | 27              | <b>10</b>       |
| <b>Locations scored from:</b> |                |                 |                |                 |                 |                 |                 |
| Friend's home (%)             | 59             | 69              | 74             | 64              | 51              | 67              | <b>55</b>       |
| Dealer's home (%)             | 35             | 33              | 51             | 34              | 40              | 51              | <b>37</b>       |
| Nightclub (%)                 | 37             | 35              | 40             | 42              | 23              | 38              | <b>31</b>       |
| Agreed public location (%)    | -              | -               | -              | -               | 27**            | 32              | <b>23</b>       |
| At own home (%)               | 45             | 30              | 32             | 29              | 20              | 29              | <b>21</b>       |
| Other (%)                     | 20             | 20              | 11             | 8               | 5               | 1               | <b>2</b>        |

Source: EDRS Regular ecstasy user interviews 2000-2006

\*Changed from dealers to known dealers in 2004

\*\*Question asked for the first time in 2004

#### 4.7.2 Key expert comments

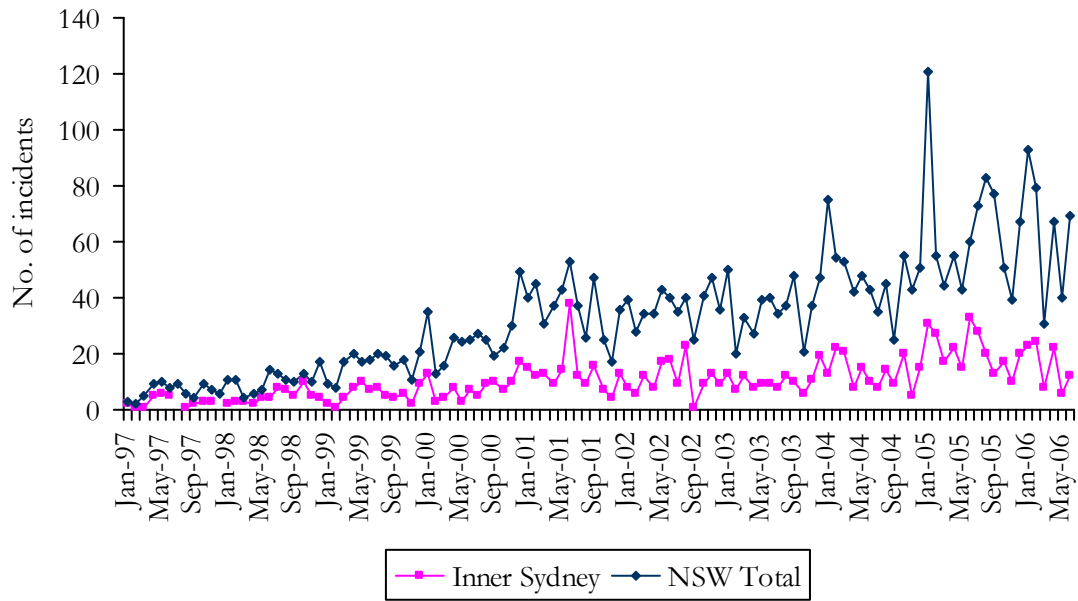
KE reports suggested that ecstasy has remained relatively easy to obtain in the past six months. While KE reported that the price of ecstasy has generally remained stable, prices can vary in so much that dealers often have a cheaper price for people they know or regular customers, and that ecstasy becomes cheaper the more people buy. Roughly, the price can range from \$15-\$40. There were mixed reports regarding ecstasy purity, with several KE mentioning that purity could fluctuate; again, this was often mentioned in the same context as user tolerance. KE mentioned that REU often obtain ecstasy from people they know, and from private locations.

### 4.8 Ecstasy-related harms

#### 4.8.1 Law enforcement

Figure 9 presents the number of police recorded criminal incidents for ecstasy possession and use in Inner Sydney and NSW. The greatest number of ecstasy use/possession incidents was recorded in Inner Sydney. Numbers appear to be higher in the earlier part of the year, perhaps coinciding with the 'party season'. The number of recorded incidents has gradually increased over time.

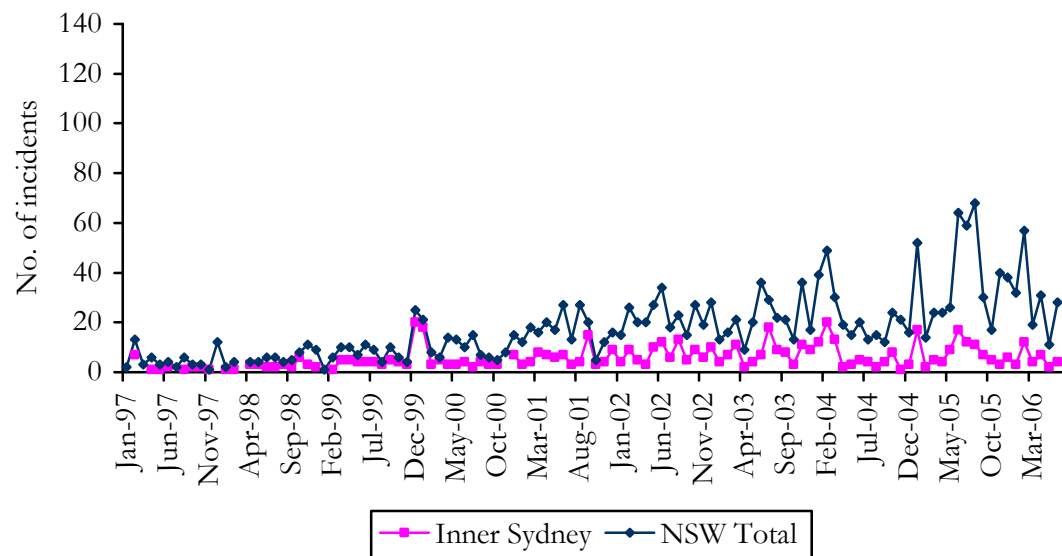
**Figure 9: Number of police incidents recorded for ecstasy possession/use, January 1997-June 2006**



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

Figure 10 presents the number of police-recorded incidents for ecstasy dealing and trafficking for Inner Sydney and NSW. Overall, the number of ecstasy deal/traffic incidents recorded since January 1997 has increased over time, with Inner Sydney recording higher numbers than other areas. The number of these incidents recorded in the Inner Sydney area, and in NSW as a whole, fluctuated in the preceding 12 months.

**Figure 10: Number of police incidents recorded for ecstasy deal/traffic, January 1997-June 2006**

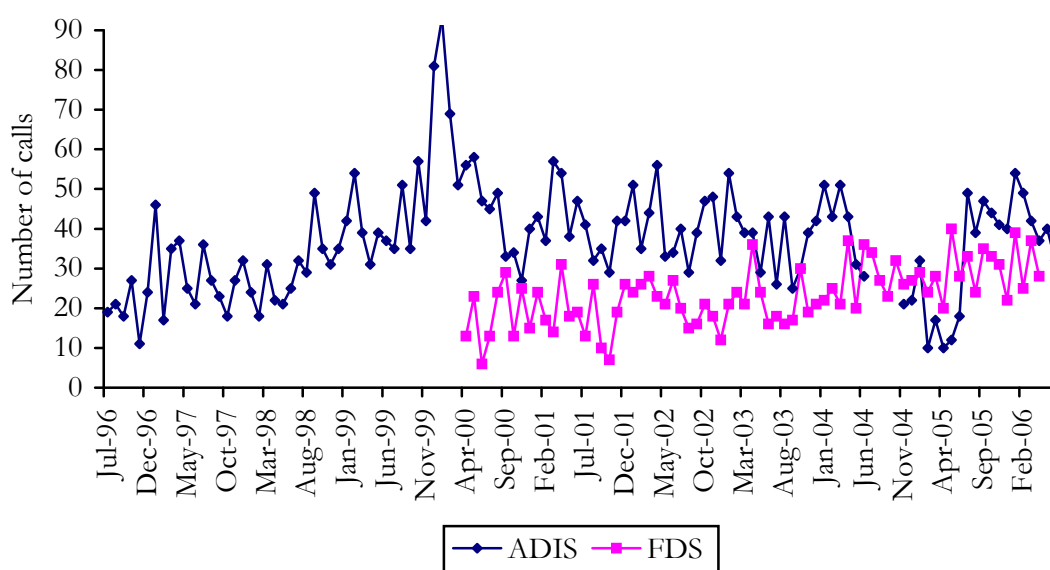


Source: NSW Bureau of Crime Statistics and Research (BOCSAR)

## 4.8.2 Health

The NSW Alcohol and Drug Information Service (ADIS) provides a telephone information and referral service in NSW. ADIS data reflect calls in which ecstasy was the primary drug of concern. Similarly, the NSW Family Drug Support (FDS) provides over-the-phone support and referral. FDS data represent all calls in which ecstasy was mentioned. Figure 11 shows that the number of calls received by ADIS regarding ecstasy had remained relatively stable over time aside from a spike of calls around the new millennium. There appeared to be a decline in the number of calls received by ADIS relating to ecstasy beginning in early 2005, however since mid-2005 there has been an increase. Calls received by FDS since April 2000 regarding ecstasy have shown a fluctuating pattern, though a trend suggests that the number of calls are higher in the beginning of the year, possibly coinciding with the ‘party’ season

**Figure 11: Number of inquiries regarding ecstasy received by ADIS and FDS, 1996-2006**

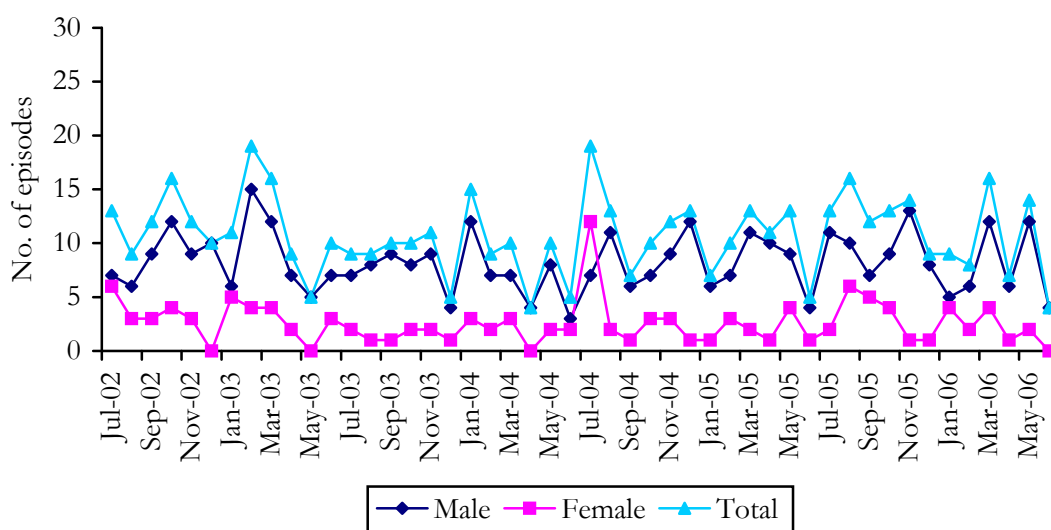


**Source: NSW Alcohol and Drug Information Service, NSW Family Drug Support**

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

The number of closed treatment episodes, based on the date of commencement, where the principal drug of concern was ecstasy, has fluctuated over the preceding 4 years; since January 2005, a minimum of 4 closed treatment episodes was observed in June 2006 and a maximum of 16 was observed in March 2006 (Figure 12). In line with the gender distribution of the 2006 NSW REU sample, males accounted for a most treatment episodes.

**Figure 12: Number of ecstasy treatment episodes by gender, NSW July 2002-June 2006**

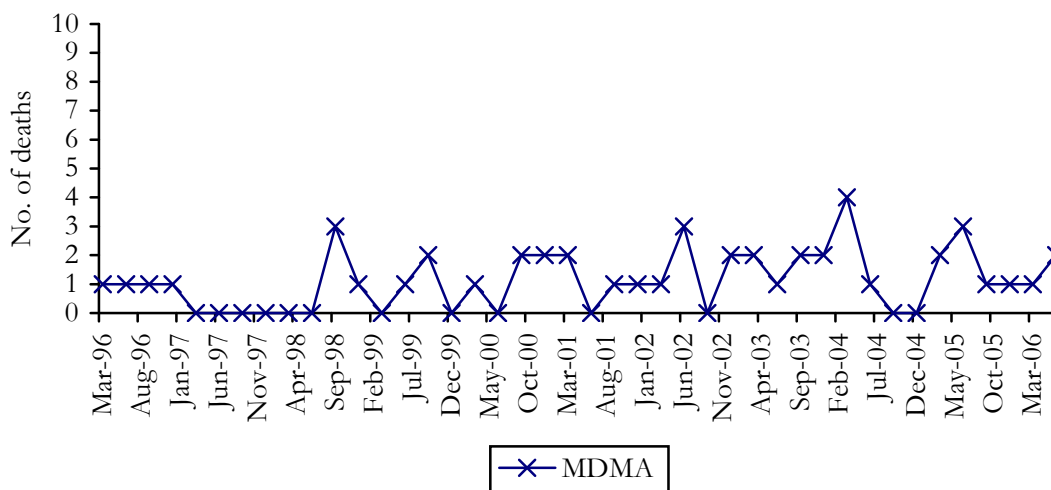


Source: NSW MDS DATS, NSW Department of Health.

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

The number of suspected drug-related deaths where ecstasy was detected is low and appears to have remained relatively stable over time, generally fluctuating between one or two each quarter; MDMA was detected in only 1.2% of all suspected drug-related deaths since 1996 (Figure 13). It needs to be remembered that detection of MDMA does not imply that MDMA was causally related to the death.

**Figure 13: Number of suspected drug-related deaths in which MDMA was detected post-mortem, March 1996-June 2006**



Source: Forensic Toxicology Laboratory database, Division of Analytical Laboratories

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

## 4.9 Benefit and risk perception

Participants were asked to describe the risks and benefits they perceived to be associated with taking ecstasy and related drugs. If they thought there were risks or benefits associated with taking ecstasy, they specified them.

### 4.9.1 Perceived benefits

Respondents were asked to identify any benefits they perceived to be related to their ecstasy use. A wide range of benefits were reported and are summarised in Table 6. Eighty-seven percent of the sample identified at least one benefit with taking ecstasy. Participants were asked to select up to three benefits from 15 categories that they might perceive to be associated with their ecstasy use.

Thirty-five participants reported the enhanced feelings of closeness, bonding and empathy was a benefit stemming from ecstasy use. Many participants reported fun (having an enjoyable night or a good time; n=28) and enhanced mood (n=24) as benefits related to ecstasy use. Other participants mentioned the effects of the drug (n=23), increased confidence and decreased inhibitions (n=20) and enhanced communication and sociability (n=20).

**Table 6: Perceived benefits of ecstasy use among those who commented, NSW 2006**

| Benefit variable                                 | 2006<br>n=86 |
|--------------------------------------------------|--------------|
| Enhance closeness/bonding/empathy                | 35           |
| Fun                                              | 28           |
| Enhanced mood                                    | 24           |
| Drug effects                                     | 23           |
| Increased confidence/decreased inhibitions       | 20           |
| Enhanced communication/talkativeness/more social | 20           |
| Enhanced appreciation of music                   | 15           |
| Enhanced sexual experience                       | 13           |
| Increased energy/able to stay awake              | 11           |
| Relax/escape/release                             | 10           |
| The high/rush/buzz                               | 6            |
| Cheap                                            | 3            |

Source: EDRS Regular ecstasy user interviews 2006

### 4.9.2 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 (98%) identified a range of potential health and other risks, a summary of which appears in Table 7. One participant reported they perceived no risks, and one participant indicated that they did not know. In the survey we ran main themes with a number of close-ended responses. These included: physical harms, psychological harms, harms related to illicit status, impaired decision making, neuropsychological harms,



overdose, addiction/dependence, other harms which comprised legal/police problems, financial problems, social/relationship problems and unknown long-term harm.

The most common risk that participants perceived to be associated with the use of ecstasy was potential physical harms. Of those who mentioned risks associated with physical harms, non-fatal overdose was the most frequently identified risk (n=17). Fatal overdose (n=16), long-term physical problems (n=12) and dehydration (n=10) were the next most commonly identified risks.

The second most common risk that participants perceived to be associated with the use of ecstasy was the potential for neurological harms. Of the neurological harms, damage to brain function (n=19) and memory impairment (n=17) were the two most frequently identified risks.

Other risks that participants identified as being associated with ecstasy use were unknown drug contaminants and cutting agents (n=26), depression (n=21), impaired decision making (n=14), legal and police problems (n=13) and the comedown from ecstasy (n=10).

**Table 7: Perceived risks of ecstasy use among those who commented, NSW 2006**

| Risk variable                                           | 2006<br>n=98 |
|---------------------------------------------------------|--------------|
| Unknown drug contaminants/cutting agents                | 26           |
| Depression                                              | 21           |
| Damage to brain function                                | 19           |
| Nonfatal overdose                                       | 17           |
| Memory impairment                                       | 17           |
| Fatal overdose                                          | 16           |
| Impaired decision making                                | 14           |
| Legal/police problems                                   | 13           |
| Long-term physical problems                             | 12           |
| Comedown                                                | 10           |
| Dehydration                                             | 10           |
| Using ecstasy with alcohol/polydrug use and its effects | 7            |

Source: EDRS Regular ecstasy user interviews 2006

#### 4.10 Participant beliefs surrounding ecstasy and the law

For the first time in 2006 participants were asked a series of questions concerning the possession and supply of ecstasy.

Participants were firstly asked if they knew the quantity of ecstasy that, if caught in possession of, qualified as supply. Forty-seven percent of the NSW sample reported that they did not know the quantity. Of those who reported that they did know the quantity, 8% believed that the quantity was measured in 'grams' while 93% believed that the quantity was measured in 'tabs', or ecstasy tablets.

Of those who reported that the quantity was measured in 'tabs', participants reported a median of 5 tablets (range 1-100 tablets). Of those who reported the quantity was measured in grams, participants reported a median of 1.25 grams (range 0.25-20 grams).

In NSW, possession of five or more tablets can qualify a person for the charge of trafficking. Half (49%) of the NSW sample reported that they usually purchased five or more ecstasy tablets when they purchased ecstasy.

The majority (74%) believed that, to be charged with supply, the product could be tablets sold as 'ecstasy' regardless of the amount of MDMA in the product; 4% believed that the product had to be pure MDMA; and 23% responded that they did not know.

More than half (58%) of the sample reported that they knew the outcomes of being convicted for supplying ecstasy, while 42% reported that they did not know. Of those who reported that they knew the outcomes of being convicted for supplying ecstasy, 85% reported that the outcome would be a prison sentence, 28% reported a fine, 5% reported community service and 5% reported that the outcome would result in a caution. Participants often reported that they believed the outcome was dependent on such factors as age, prior convictions, discretion of the police and the courts. (Note: participants could choose more than one outcome).

Participants were asked if they believed there was a difference between being caught in possession of ecstasy that was for their personal use and being caught with ecstasy that was intended to be used by others. The majority (64%) of the NSW sample believed there was no difference.

#### 4.11 Summary of ecstasy trends

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

## 5 METHAMPHETAMINE

Throughout the 1990s, the proportion of amphetamine-type substance seizures that were methamphetamine (rather than amphetamine sulphate, the form most commonly available throughout the 1980s) steadily increased, until methamphetamine dominated the market (Australian Bureau of Criminal Intelligence 2001). In the financial year 2000/01, the vast majority (91%) of all seizures of amphetamine were methamphetamine hydrochloride (Australian Bureau of Criminal Intelligence 2002).

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 (approximately 10%; (McKetin, McLaren et al. 2005)). ‘Base’ (also called paste, wax, point or pure), is thought to be an oily or gummy, 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; its purity has been found to be approximately twice that of speed (21% (McKetin, McLaren et al. 2005)). The crystal form (also called ice, shabu, or crystal meth) is large crystals that range from translucent to white but may also have a green, blue or pink tinge due to either impurities or the addition of food dye. Crystal is predominantly manufactured in Asia and imported into Australia (Topp and Churchill 2002), although the first crystalline methamphetamine laboratory was detected in Queensland in February 2002 (Australian Crime Commission 2003). Pure crystal methamphetamine has an estimated purity of 80%. A form of methamphetamine with a crystalline appearance has been detected which has a lower purity (19%); this lower purity crystalline methamphetamine may reflect either methamphetamine base with a crystalline appearance or crystal methamphetamine cut with crystalline adulterants (McKetin, McLaren et al. 2005).

## 5.1 Methamphetamine use among REU

### 5.1.1 Methamphetamine powder (speed)

More than four-fifths (88%) of participants reported lifetime use of speed and more than half (55%) reported the use of speed in the six months preceding interview. Speed was first used at a median age of 18 years (range 14-51 years). Twenty percent of the sample reported having ever injected speed, and seven participants reported injecting speed in the past six months.

Speed was the drug of choice for four participants. Almost two-fifths (38%) of those who had binged on ecstasy and related drugs in the preceding six months had used speed in a binge session. Two-fifths (21%) of those who typically used other drugs with ecstasy typically used speed.

Speed was used on a median of five days in the preceding six months, ranging from once in the past six months to every day. More than half (55%) of recent speed users had used speed less than monthly; 29% had used speed between monthly and fortnightly; 7% had used between fortnightly and weekly; and 9% (n=5) reported using speed on a greater than weekly basis.

The median amount of speed used in a 'typical' or 'average' use episode in the preceding six months was one gram (range 0.50-3), and during their 'heaviest' use episode in the preceding six months, recent speed users reported the use of a median of one and one-quarter grams (range 0.50-6).

Recent speed use was also quantified in lines (n=18) and points (n=7). Two lines of speed were used during a 'typical' occasion of use (range 1-8) as well as during a 'heavy' occasion of use (range 1-8). One point of speed was used during a 'typical' occasion of use (range 0.50-1) as well as a 'heavy' occasion of use (range 0.50-2.50).

Most recent speed users reported snorting (80%) or swallowing (64%). Smoking (15%) and injecting (13%) were other routes of speed administration reported by small proportions of participants.

Reports of lifetime use of speed, despite remaining stable from 2000 to 2004, have slightly declined between 2004 and 2006. Furthermore, after relative stability in the recent use of speed across sampling years there was a marked decline in reports of recent speed use in 2006 (Table 8).

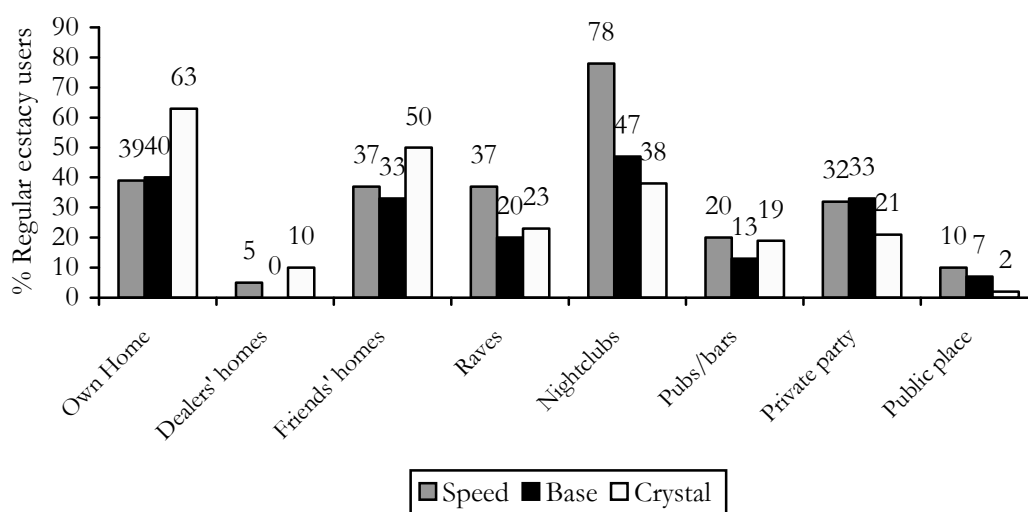
**Table 8: Patterns of methamphetamine powder (speed) use of REU, NSW 2000-2006**

| Speed variable                        | 2000<br>(n=94)  | 2001<br>(n=163) | 2002<br>(n=88)   | 2003<br>(n=102) | 2004<br>(n=104)   | 2005<br>(n=101) | 2006<br>(n=100)          |
|---------------------------------------|-----------------|-----------------|------------------|-----------------|-------------------|-----------------|--------------------------|
| Ever used (%)                         | 92              | 99              | 100              | 97              | 98                | 94              | <b>88</b>                |
| Used preceding six months (%)         | 75              | 87              | 85               | 79              | 81                | 76              | <b>55</b>                |
| <b>Of those who had used:</b>         |                 |                 |                  |                 |                   |                 |                          |
| Median days used last 6 mths (range)  | 12<br>(1-180)   | 10<br>(1-180)   | 7<br>(1-72)      | 5<br>(1-60)     | 6<br>(1-96)       | 6<br>(1-96)     | <b>5<br/>(1-180)</b>     |
| <b>Median quantities used (grams)</b> |                 |                 |                  |                 |                   |                 |                          |
| Typical (range)                       | 0.5<br>(0.25-7) | 1<br>(0.1-6)    | 0.5<br>(0.1-3.4) | 0.5<br>(0.05-7) | 0.75<br>(0.1-3.5) | 1<br>(0.2-6)    | <b>1<br/>(0.5-3)</b>     |
| Heavy (range)                         | 1<br>(0.5-28)   | 1<br>(0.1-6)    | 1<br>(0.1-10.5)  | 1<br>(0.1-12)   | 1.5<br>(0.15-7)   | 2<br>(0.3-12)   | <b>1.75<br/>(0.50-6)</b> |

Source: EDRS Regular ecstasy user interviews 2000-2006

Speed was commonly used at nightclubs (78%), participant's own home (39%), friends' homes (37%), raves (32%) and private parties (32%) (Figure 14). Other usual locations of speed use included pubs (20%), in a public place (10%) and at dealers' homes (5%).

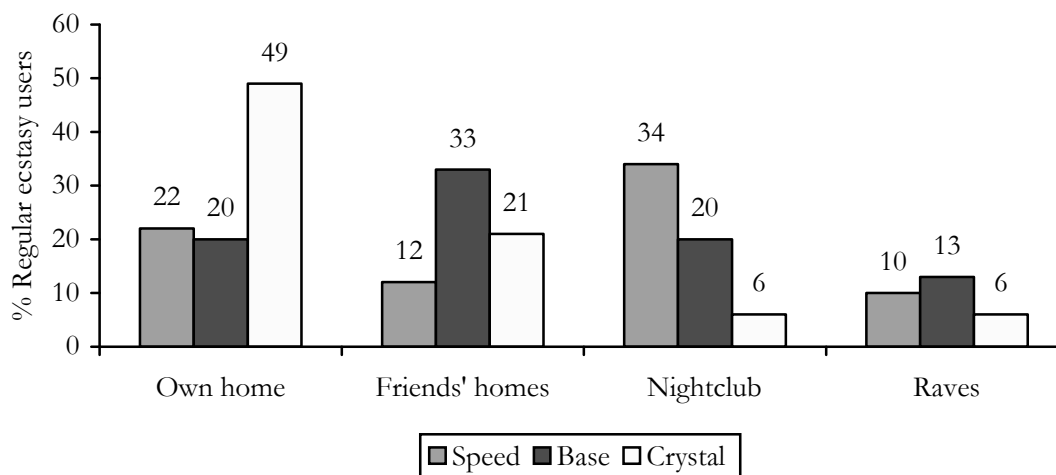
**Figure 14: Usual location of methamphetamine use by form, NSW 2006**



Source: EDRS Regular ecstasy user interviews 2006

Locations of last use were commonly at nightclubs (34%), participant's own home (22%), friends' homes (12%) and raves (10%) (Figure 15). Less common last locations of speed use included private parties (5%), pubs (5%), work (5%) and live music events (5%).

**Figure 15: Last location methamphetamine use by form, NSW 2006**



Source: EDRS Regular ecstasy user interviews 2006

### 5.1.2 Methamphetamine base

Half (50%) of the sample reported lifetime methamphetamine base use and 24% had used base in the preceding six months. Base was first used at a median age of 20 years (range 15-41 years). Thirteen participants had injected base at some time and two reported injecting base in the previous six months.

No participant from the sample reported base as their drug of choice. Of those who reported typically using other drugs with ecstasy, 4% reported that they typically used base with ecstasy. Of those who reported bingeing on ecstasy and other drugs in the preceding six months, 17% reported using base in a binge session.

Twenty-four participants had used base in the six months preceding interview on a median of three and a half days (range 1-180 days). More than half (54%) reported using base on a less-than-monthly basis; 21% reported using base between monthly and fortnightly; 17% between fortnightly and weekly; and 8% more than once per week.

Of those who reported typical base use during the preceding six months, 19 quantified their use in terms of 'points' and three referred to 'grams'. Although it is likely that the actual weight of 'points' varies slightly, it is commonly understood that one 'point' is equal to approximately 0.1 of a gram. Those referring to points used a median of one point during an episode of normal use (range 0.50-3) as well as a median of one point during a heavy occasion of use (range 0.50-7).

Most participants had swallowed (79%) base in the preceding six months. Two-fifths (38%) had snorted base in the preceding six months and one-fifth (21%) had recently smoked base. Eight percent of recent base users had injected base in the preceding six months.

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, however in 2006 a decrease was observed in the prevalence of lifetime use. Similarly, despite the prevalence of recent use remaining stable between 2002 and 2005, a marked decrease was observed in 2006. Frequency of use remained stable in 2006 following a decline from 2004 to 2005. Quantity of use also appears to have decreased in 2006.

**Table 9: Patterns of base methamphetamine use of REU, NSW 2000-2006**

| Base variable                           | 2000<br>(n=94) | 2001<br>(n=163) | 2002<br>(n=88) | 2003<br>(n=102) | 2004<br>(n=104) | 2005<br>(n=101)   | <b>2006<br/>(n=100)</b> |
|-----------------------------------------|----------------|-----------------|----------------|-----------------|-----------------|-------------------|-------------------------|
| Ever used (%)                           | 36             | 34              | 59             | 63              | 64              | 63                | <b>50</b>               |
| Used last six months (%)                | 22             | 20              | 44             | 42              | 39              | 43                | <b>24</b>               |
| <b>Of those who had used:</b>           |                |                 |                |                 |                 |                   |                         |
| Median days used last 6 mths (range)    | 4<br>(1-48)    | 7<br>(1-70)     | 3<br>(1-30)    | 4<br>(1-96)     | 5<br>(1-36)     | 3<br>(1-96)       | <b>3.5<br/>1 (180)</b>  |
| <b>Median quantities used (points):</b> |                |                 |                |                 |                 |                   |                         |
| Typical (range)                         | 1<br>(1-10)    | 1<br>(0.5-10)   | 1<br>(0.1-10)  | 1<br>(0.1-5)    | 2<br>(0.5-4)    | 1.5<br>(0.25-9)   | <b>1<br/>(0.50-3)</b>   |
| Heavy (range)                           | 1.5<br>(1-10)  | 1.5<br>(1-10)   | 1<br>(0.1-10)  | 2.5<br>(0.1-10) | 2<br>(0.5-10)   | 2.25<br>(0.25-25) | <b>1<br/>(0.50-7)</b>   |

Source: EDRS Regular ecstasy user interviews 2000-2006

Base was commonly used in nightclubs (47%) and respondent's own home (40%) followed by friends' homes (33%), private parties (33%) and raves (including 'doofs' and dance parties; 20%). Smaller proportions reported using base at pubs (13%), in public places (7%), and at live music events (7%) (refer to Figure 14).

Location of last occasion of base use was commonly at friends' homes (33%), nightclubs (20%) and participant's own home (20%). Less frequently cited locations included raves (13%), day clubs (7%) and live music events (7%) (refer to Figure 15).

### 5.1.3 Crystal methamphetamine

Sixty-eight percent of the 2006 sample reported having ever used crystal methamphetamine and more than half (56%) reported using crystal in the preceding six months. The median age of first crystal use was 22 years (16-44 years). One-fifth (21%) reported lifetime crystal injection while 15% had injected crystal in the preceding six months.

Nine respondents nominated crystal as their drug of choice. Of those who reported using other drugs with ecstasy, 27% used crystal with ecstasy. Of those who reported bingeing in the preceding six months, 60% had used crystal while doing so. The proportion of REU reporting the use of crystal during a binge session has fluctuated across sampling years (37% in 2003; 53% in 2004; 44% in 2005), though an increase was observed between 2005 and 2006.

Crystal was used on a median of six days in the past six months, ranging from once to every day in the past six months (Table 10). The majority (70%) of recent crystal users reported using less than once per month. Eleven percent reported using between



monthly and fortnightly; 7% reported using between fortnightly and weekly; and 12% reported using crystal on a greater than weekly basis.

Most recent crystal users (n=55) described their use in terms of ‘points’ (typically thought of as 0.1g) while one user quantified their use in terms of bags. Those who quantified their crystal use in terms of points reported using a median of one point (range 0.50-4) in a ‘typical’ session of use and a median of two points (range 0.50-7) in a ‘heavy’ session of use.

The most common route of crystal administration was smoking (88%). Injecting was the second most frequently nominated route of crystal administration (27%); significant proportions also reported swallowing crystal (20%) in the past six months, while snorting crystal (9%) was reported by a minority of recent crystal users.

The prevalence of lifetime crystal use in 2006 returned to levels seen in 2004, while prevalence of recent use in 2006 has reached the highest levels seen since the EDRS began in NSW in 2000 (Table 10). However, the quantity of crystal used in both an average and heavy session appears to have remained stable. While median days of use has increased from 4 in 2005 to 6 in 2006, it is of note that the majority (70%) of recent users in 2006 used crystal less than once per month in the six months preceding interview.

**Table 10: Patterns of crystal methamphetamine use of REU, NSW 2000-2006**

| Crystal variable                        | 2000<br>(n=94) | 2001<br>(n=163)  | 2002<br>(n=88) | 2003<br>(n=102) | 2004<br>(n=104) | 2005<br>(n=101) | <b>2006<br/>(n=100)</b> |
|-----------------------------------------|----------------|------------------|----------------|-----------------|-----------------|-----------------|-------------------------|
| Ever used (%)                           | 12             | 43               | 43             | 56              | 68              | 62              | <b>68</b>               |
| Used last six months (%)                | 6              | 26               | 19             | 48              | 46              | 40              | <b>56</b>               |
| <b>Of those who had used:</b>           |                |                  |                |                 |                 |                 |                         |
| Median days used last 6 mths (range)    | 1<br>(1-20)    | 1<br>(1-50)      | 2<br>(1-15)    | 3<br>(1-96)     | 6<br>(1-120)    | 4<br>(1-72)     | <b>6<br/>(1-180)</b>    |
| <b>Median quantities used (points):</b> |                |                  |                |                 |                 |                 |                         |
| Typical (range)                         | 2<br>(1-3)     | .25<br>(0.1-0.5) | 1.5<br>(1-5)   | 1<br>(0.1-10)   | 1<br>(0.25-8)   | 1<br>(0.30-6)   | <b>1<br/>(0.50-4)</b>   |
| Heavy (range)                           | 2<br>(1-3)     | 1<br>(0.5-7)     | 2.5<br>(1-10)  | 1<br>(0.1-10)   | 2<br>(0.5-12)   | 2<br>(0.33-10)  | <b>2<br/>(0.50-7)</b>   |

Source: EDRS Regular ecstasy user interviews 2000-2006

Crystal was most commonly used at participant’s own home (60%) and friends’ homes (50%), followed by nightclubs (38%), raves (23%), private parties (21%) and pubs (19%). Smaller proportions reported using crystal at work (15%), dealers’ homes (10%), in a vehicle as a passenger (8%), day clubs (6%), acquaintances’ homes (6%), live music events (6%), in a vehicle as a driver (6%), in a public place (2%), outdoors (2%), and in educational institutions (2%) (refer to Figure 14).

Location of last occasion included respondents’ own homes (49%) and friends’ homes (21%; Figure 14). Small proportions reported last using crystal in nightclubs (6%), raves (6%), pubs (4%), dealers’ homes (4%), and at private parties (2%) (refer to Figure 15).

#### **5.1.4 Summary of locations of methamphetamine use**

Speed was most often usually used at nightclubs, base was most often usually used at nightclubs and own homes; and crystal was most often usually used at participant's own home and friends' homes (refer to Figure 14). Speed was last used most often at nightclubs, base was last used most often at friends' homes, while crystal was most commonly last used at respondent's own home and friends' homes (refer to Figure 15).

#### **5.1.5 Key expert comments**

Several KE mentioned that users of ecstasy tended to progress from the use of ecstasy to the use of methamphetamine. However, KE generally concluded that methamphetamine was used in conjunction with ecstasy, and did not exclude ecstasy use.

KE were able to distinguish between the three forms of methamphetamine – speed, base and crystal. Base was relatively uncommon amongst KE reports. Several KE noted that there was a strong demographic link to methamphetamine form, with one KE noting that base use was more prevalent in the Western Suburbs. Speed was nominated as the second most popular drug after ecstasy, with most KE noting that speed is always 'just there'.

Most KE noted a rise in the use of crystal. Users of the drug were noted to mainly smoke it, though one KE noted that a small group did inject it, though injecting was still seen as a stigmatised practice. Crystal did not appear to be popular at dance parties and nightclubs, mainly because smoking crystal is more difficult at these events; as such, users would use speed. One KE noted that new smoking laws in nightclubs meant that smoking crystal would be detected quite easily.

One KE in law enforcement made note of the problems associated with crystal use, such as psychosis and violence. However, this KE mentioned that most violence was still probably due to alcohol rather than methamphetamine. One KE who worked in treatment services suggested that there is a belief in the wider community that crystal use causes harm, but more research is necessary to find the true extent of this relationship. This KE said that much anecdotal evidence was being confused with hard evidence; the problem with this is that users who experience pleasure from using this drug with no side effects will start to ignore messages which state that harm will stem from this drug's use.

## 5.2 Price

### 5.2.1 Speed

Speed was commonly purchased in grams and points. Twenty-three participants reported that the median price paid for a gram of speed was \$60 (range \$30-\$350) (Table 11). Twelve participants reported that the median price paid for a point of speed was \$40 (range \$30-\$50). Three participants reported that the median price for half a gram of speed was \$50 (range \$45-\$70).

Half of the sample commented on the changes in speed price. Of those, more than half (54%; 27% of the entire sample) reported that the price had remained 'stable'; 8% (4% of the entire sample) reported that the price had 'decreased'; and 6% (3% of the entire sample) respectively reported that the price had 'increased' or 'fluctuated' (Figure 16). One-quarter (26%; 13% of the entire sample) did not know about the price change.

### 5.2.2 Base

Base was most commonly purchased in points. Twelve participants reported that the median price paid for a point of base was \$37.5 (range \$20-\$50). Three participants reported that the median price paid for a gram of base was \$100 (range \$12-\$120) (Table 11).

One-quarter (24%) of the sample reported on the changes in base price. Of those who commented, 46% (11% of the entire sample) reported that the price had remained 'stable'; 8% (2% of the entire sample) reported that the price had 'decreased' and 4% (1% of the entire sample) respectively reported that the price had either 'decreased' or 'fluctuated' (Figure 16). Two-fifths (38%; 9% of the entire sample) did not know about the price change.

### 5.2.3 Crystal

Crystal was most commonly purchased in points. Forty-two participants reported that the median price paid for a point of crystal was \$50 (\$30-\$80; Table 11). Six participants reported that the median price for a gram of crystal was \$350 (\$50-\$400; Table 11).

More than half (54%) of the sample were able to comment on the price change of crystal. Two-fifths (41%; 22% of the entire sample) reported that the price had remained 'stable' in the preceding six months; 19% (10% of the entire sample) reported that the price had 'increased'; 17% (9% of the entire sample) reported that the price had 'decreased'; and 7% (4% of the entire sample) reported that the price had 'fluctuated' (Figure 16). Seventeen percent (9% of the entire sample) did not know about the price change.

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 suggests that the price for a gram of speed has remained stable across the sampling years. The price for a point of base has fluctuated in the past four sampling years, while the price for a gram of base has decreased. The price for a point of crystal has remained stable, while the price for a gram of crystal has fluctuated.

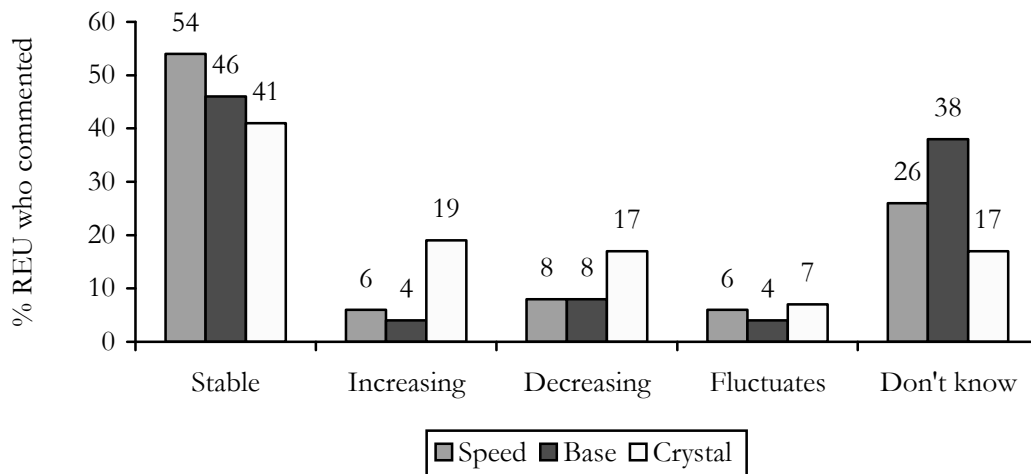
**Table 11: Price of various methamphetamine forms purchased by REU, NSW 2000-2006**

| Median price (\$) (range) | 2001            | 2002             | 2003             | 2004             | 2005             | 2006                    |
|---------------------------|-----------------|------------------|------------------|------------------|------------------|-------------------------|
| <b>Speed</b>              |                 | n=59             | n=46             | n=60             | n=78             | <b>n=50</b>             |
| Half gram                 | N/A             | 40<br>(30-50)    | 35<br>(25-50)    | 30<br>(20-50)    | 37.5<br>(15-50)  | <b>50<br/>(45-70)</b>   |
| Gram                      | N/A             | 60<br>(40-100)   | 55<br>(40-190)   | 60<br>(60-90)    | 60<br>(30-200)   | <b>60<br/>(30-350)</b>  |
| Point                     | N/A             | 50<br>(30-80)    | 30               | 30<br>(20-40)    | 40               | <b>40<br/>(30-50)</b>   |
| <b>Base</b>               | n=22            | n=23             | n=24             | n=30             | n=51             | <b>n=24</b>             |
| Point                     | 50<br>(10-80)   | 40<br>(20-50)    | 40<br>(20-50)    | 37.50<br>(20-70) | 30<br>(10-200)   | <b>37.5<br/>(20-50)</b> |
| Gram                      | 80<br>(60-80)   | 175<br>(100-325) | 175<br>(150-300) | 150<br>(100-200) | 150<br>(100-260) | <b>100<br/>(12-120)</b> |
| Half gram                 | 100<br>(80-180) | 62.5<br>(50-150) | 50               | 100              | 50               | -                       |
| <b>Crystal</b>            | n=31            | n=11             | n= 21            | n=34             | n=51             | <b>n=54</b>             |
| Point                     | 50<br>(20-70)   | 50<br>(40-70)    | 50<br>(30-70)    | 40<br>(25-100)   | 50<br>(20-80)    | <b>50<br/>(30-80)</b>   |
| Gram                      | 250<br>(80-400) | 160<br>(100-500) | 250<br>(250-350) | 200<br>(150-400) | 400<br>(100-500) | <b>350<br/>(50-400)</b> |
| Half gram                 | 80<br>(80-250)  | -                | 70<br>(40-150)   | 150              | -                | -                       |

Source: EDRS Regular ecstasy user interviews 2001-2006

Figure 16 shows participants' reports on the recent changes in price of various methamphetamine forms purchased by regular ecstasy users. Large proportions reported the price as remaining 'stable' (speed 54%, base 46% and crystal 41%)

**Figure 16: Recent changes in price of various methamphetamine forms purchased by REU\*, NSW 2006**



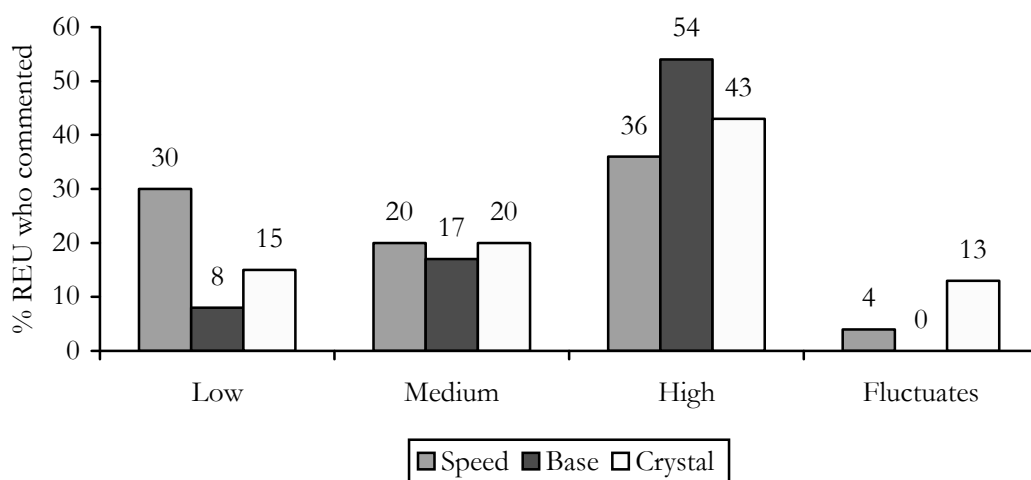
Source: EDRS Regular ecstasy user interviews 2006

\* Of those who commented (speed n=50; base n=24; crystal n=54)

### 5.3 Purity

There appears to be slight variation between regular ecstasy users' estimates of the purity of all forms of methamphetamine. The majority of participants who commented on the current purity of base reported it to be either 'medium' (17%) or 'high' (54%); this was also the case for crystal, with 20% reporting current crystal purity to be 'medium' and 43% reporting it to be 'high' (Figure 17). There was, however, variation in reports of current speed purity, with 36% reporting it to be 'high', 30% reporting it to be 'low' and 20% reporting it to be 'medium'.

**Figure 17: User reports\* of current methamphetamine purity, NSW 2006**

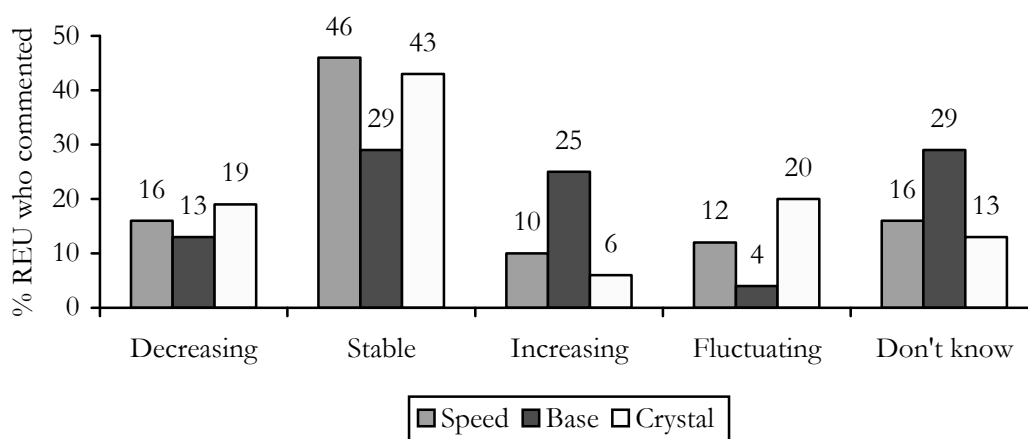


Source: EDRS Regular ecstasy user interviews 2006

\* Of those who commented (speed n=50; base n=24; crystal n=54)

The majority of those who commented reported the purity of speed and crystal had remained 'stable' during the past six months (46% and 43% respectively), however, there were varying reports on the change of base purity (Figure 18).

**Figure 18: User reports\* of changes in methamphetamine purity in the past six months, NSW 2006**

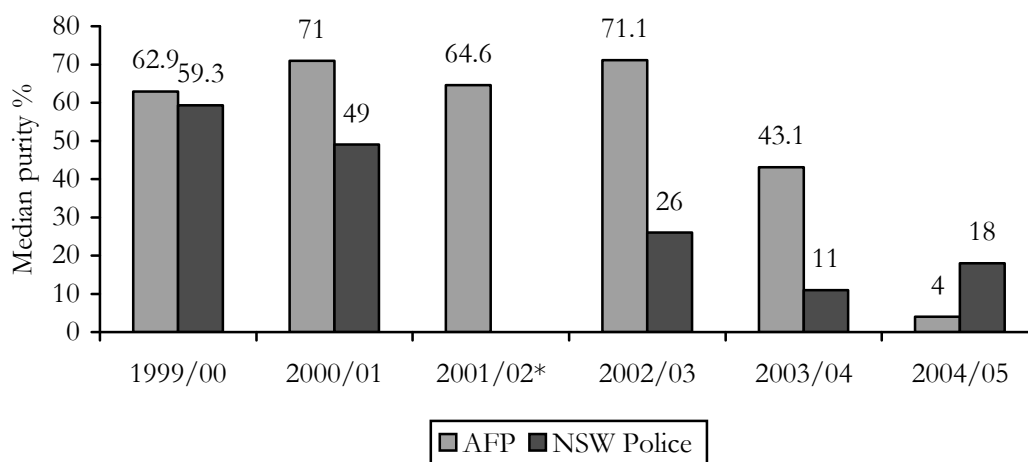


Source: EDRS Regular ecstasy user interviews 2006

\* Of those who commented (speed n=50; base n=24; crystal n=54)

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

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



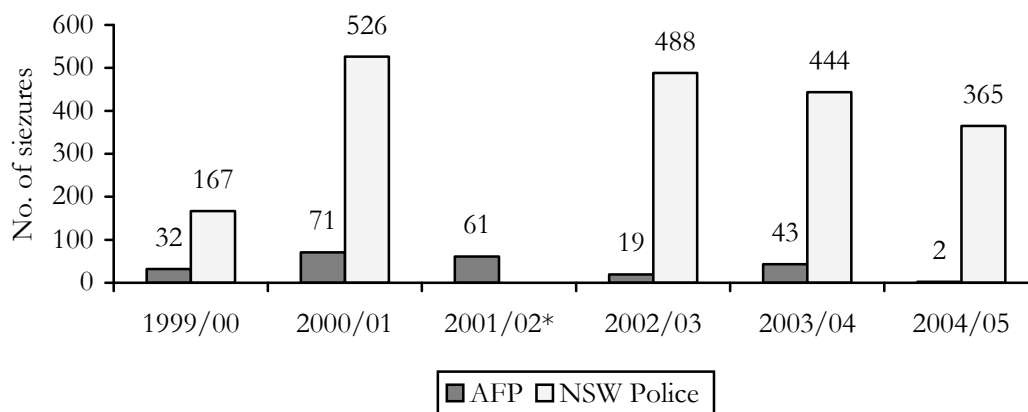
Source: Australian Bureau of Criminal Intelligence (2001, 2002), Australian Crime Commission (2003, 2004)

\*NSW Police data for 2001/02 was not available. Data for 2005/06 were unavailable at time of publication  
 NB: Since 2000/01, procedures to determine which seizures are analysed have changed, with those seized without an 'owner' and seizures of < 3g no longer being analysed

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

that have been analysed at a forensic laboratory. In addition, the period between the date of seizure by police and the date of receipt at the laboratory can vary greatly, and no adjustment has been made to account for double counting joint operations between the AFP and NSW Police. Further, patterns of arrest and police operations change over time; for example, targeting of higher level suppliers versus street dealers, and this in turn can influence the purity of the drug seized.

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



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

\*NSW Police data for 2001/02 was not available. Data for 2005/06 were unavailable at time of publication

### 5.3.1 Key expert comments

Three KE were able to discuss the purity of methamphetamine. In the last three years, research has suggested that the methamphetamine in Australia has not been ‘cut’ with other additives. This may be in part due to an increased demand in the more pure forms, such as base and crystal. It was suggested that the purity of speed is usually 11% and crystal is usually 80%, which is close to being analytically pure.

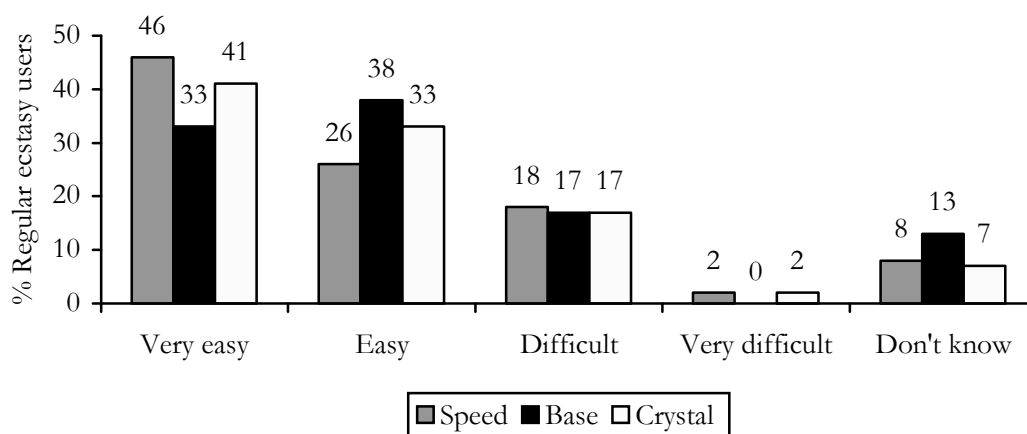
Price and purity were reported to be dependent on each other – increased purity attracts a higher price. The three KE who commented on methamphetamine purity disclosed that additives are used to give methamphetamine, in particular crystal methamphetamine, a fine white colour, which is meant to indicate greater purity. One KE in law enforcement noted that they had seen “*dimethyl sulfone, also known as DMS or MSM [Methylsulfonylmethane], as a cutting agent for crystal. This substance is an animal nutritional supplement which has crystals similar in appearance to crystal. It is sold in health food stores, as a treatment for arthritis, and does not have harmful effects on humans. Used as a cutting agent, users can be purchasing a product which has the appearance of crystal but be of a lower purity. Those users who are smoking such ice will not be aware of the presence of MSM as it volatilizes completely, leaving no tell tale residue.*” (Data provider, NSW Police, personal communication, 8 February 2007).

One KE also mentioned that colouring can also be used for reasons other than indicating perceived purity. Colouring, such as phosphorus or iodine, may be used as a marketing tool – different distributors can colour their methamphetamine so they know how widely it is being used and whether other groups are cutting the methamphetamine further. However, this KE admitted that this practice does not appear to occur often.

## 5.4 Availability

The majority of those who commented on the availability of speed reported it 'easy' (26%) or 'very easy' (46%) to obtain (Figure 21); most (70%) agreed speed availability had remained 'stable' over the preceding six month. Base was also considered to be 'easy' (38%) or 'very easy' (33%) to obtain (Figure 21); most (46%) reported that base availability had remained 'stable' in the six months preceding interview. The majority of those who commented on the current availability of crystal reported it to be either 'easy' (33%) or 'very easy' (41%) to obtain (Figure 21). More than half who commented (57%) reported that the availability of crystal had remained 'stable' in the six months prior to interview.

**Figure 21: User reports\* of current availability of methamphetamine forms, NSW 2006**



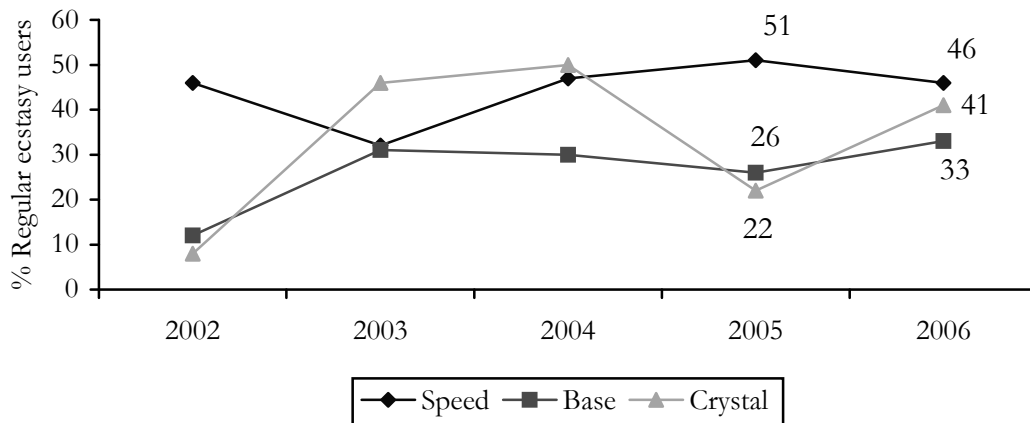
Source: EDRS Regular ecstasy user interviews 2006

\* Of those who commented (speed n=50; base n=24; crystal n=54)

Figure 22 shows the proportion of REU over time reporting the availability of the three forms of methamphetamine as 'very easy'. The proportion reporting that speed and base were 'very easy' to obtain has remained relatively consistent across time, however, the proportion that nominated crystal as 'very easy' to obtain has fluctuated. In 2006 almost double the number of REU nominated crystal as 'very easy' to obtain, with this figure almost returning to that seen in 2004.



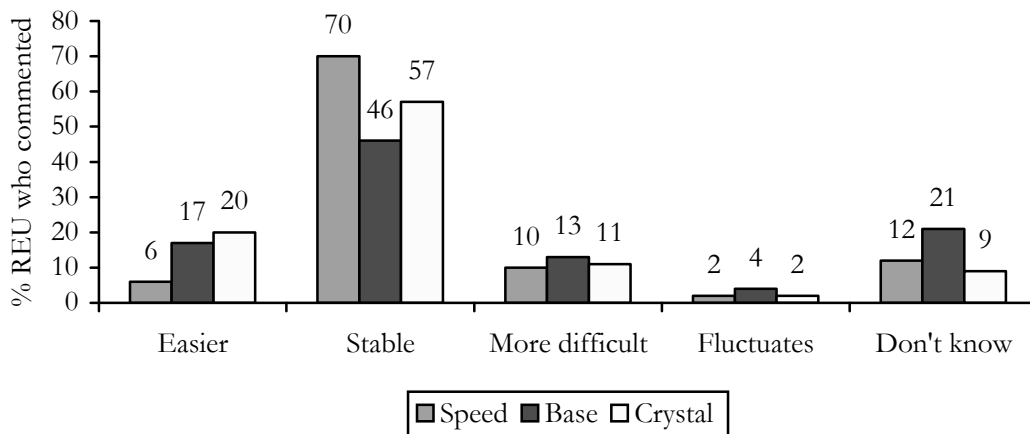
**Figure 22: Proportion of REU reporting methamphetamine as ‘very easy’ to obtain across time, NSW 2002-2006**



Source: EDRS Regular ecstasy user interviews 2002-2006

Figure 23 shows the majority of the 2006 sample reported that the availability of speed, base and crystal had remained ‘stable’ in the six months prior to interview.

**Figure 23: Change in the availability of various forms of methamphetamine in the preceding six months, NSW 2006**



Source: EDRS Regular ecstasy user interviews 2006

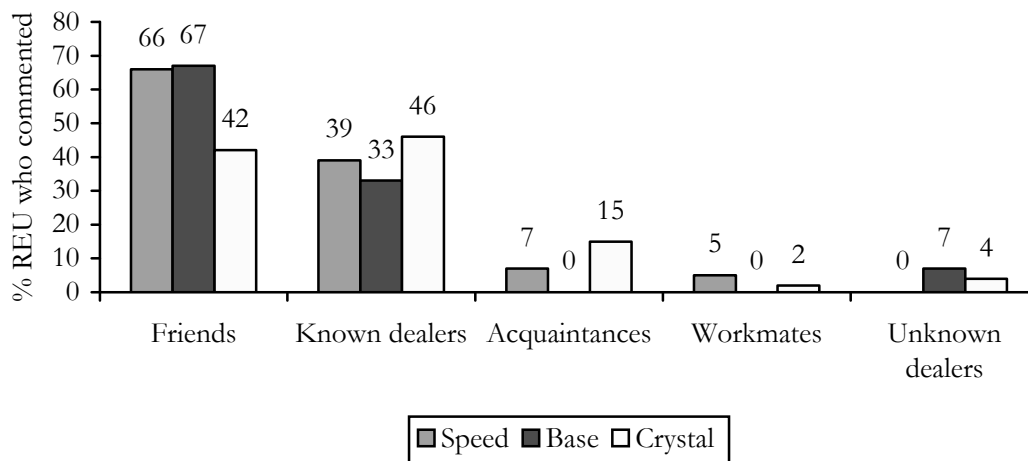
#### 5.4.1 Source person and source location

Participants predominantly reported obtaining speed from friends (66%), and two-fifths (39%) reported obtaining speed from known dealers (Figure 24). Other sources included acquaintances (7%) and workmates (5%). Locations at which speed was most often obtained were friends’ homes (49%), dealers’ homes (27%), agreed public locations (20%) and participants’ own homes (17%; Figure 25).

Base was commonly obtained from known dealers (67%) and friends (33%; Figure 24). A small number mentioned unknown dealers (7%). The most common locations where base was purchased included friends’ homes (33%) and agreed public locations (33%), followed by dealers’ homes (20%) and participants’ own homes (13%; Figure 25).

Crystal was commonly purchased from known dealers (46%) and friends (42%), with a smaller proportion also nominating acquaintances (15%) (Figure 24). Crystal was commonly obtained from dealers' homes (38%), friends' homes (31%) and agreed public locations (17%) (Figure 25).

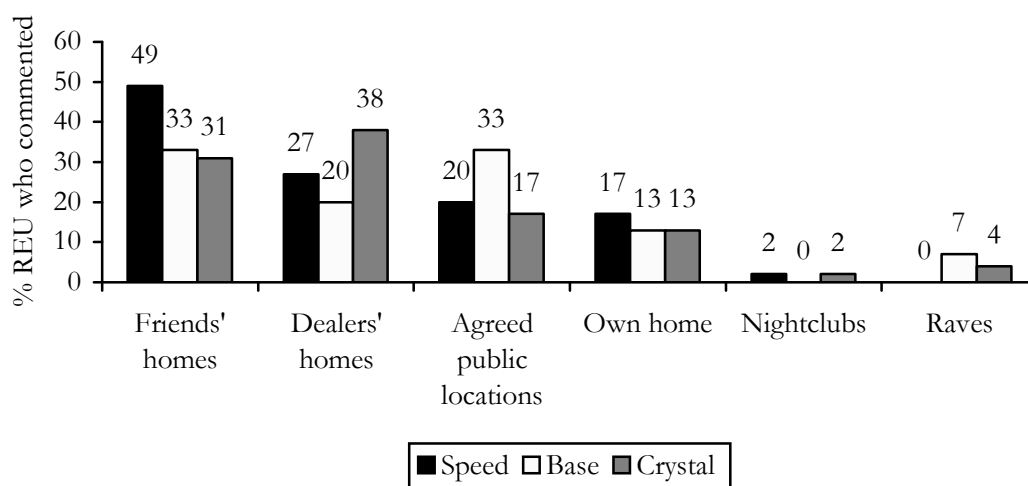
**Figure 24: People from whom methamphetamine powder, base and crystal were purchased in the preceding six months, NSW 2006**



Source: EDRS Regular ecstasy user interviews 2006

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

**Figure 25: Locations where methamphetamine purchased in the preceding six months, NSW 2006**



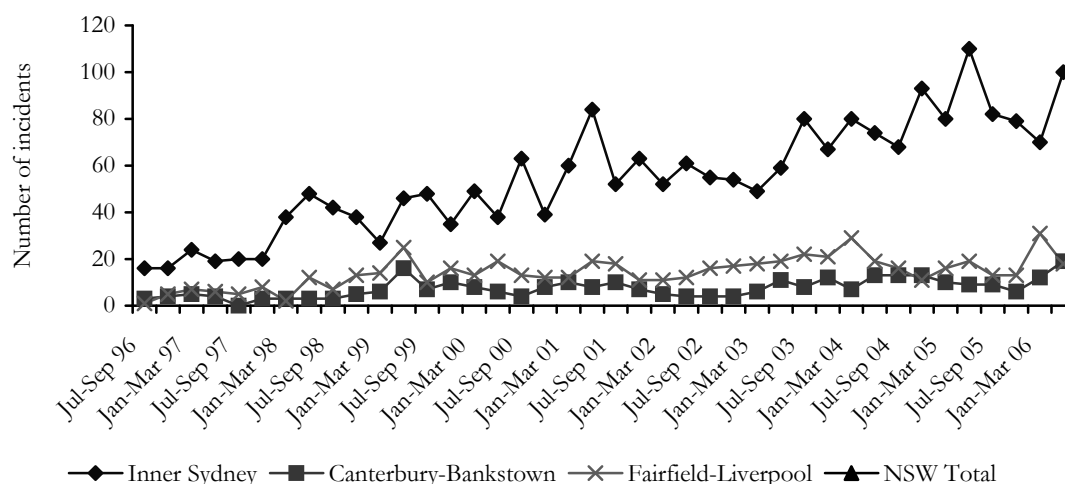
Source: EDRS Regular ecstasy user interviews 2006

## 5.5 Methamphetamine-related harms

### 5.5.1 Law enforcement

Figure 26 shows that the number of police-recorded criminal incidents per quarter for amphetamine possession/use is higher in the Inner Sydney area than it is in Fairfield-Liverpool and Canterbury-Bankstown<sup>4</sup>. Recorded incidents in the Inner Sydney area have fluctuated over the last two years, while they have remained fairly stable in Canterbury-Bankstown and Fairfield-Liverpool.

**Figure 26: Recorded incidents of amphetamine possession/use by geographic area per quarter, January-March 1997 to April-June 2006**



Source: NSW Bureau of Crime Statistics and Research

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

Figure 27 shows the number of police-recorded criminal incidents for amphetamine deal/trafficking in the Inner Sydney area and NSW. Recorded incidents in the Inner Sydney area have remained stable over time, while recorded incidents in NSW have fluctuated over the past two years.

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

**Figure 27: Recorded incidents of amphetamine deal/traffic, Inner Sydney and NSW, January 1997-June 2006**

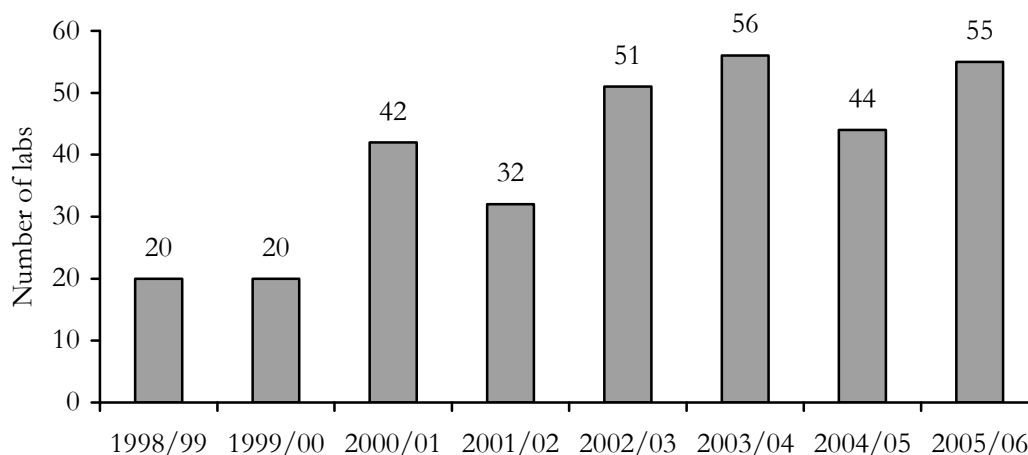


**Source: NSW Bureau of Crime Statistics and Research**

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

The number of clandestine laboratories detected in NSW has steadily increased over time from 20 in the 1998/99 financial year to 55 in 2005/06 (Figure 28). In 2005/06, these were typically producing methamphetamine using the hyperphosphorus method (rather than the Nazi, red phosphorous or phenyl-2-propanone (P2P) methods), and/or were generally using illicitly obtained pseudoephedrine. Nine laboratories were producing MDMA (ecstasy) and none were producing homebake heroin. Pseudoephedrine was rescheduled on the 1<sup>st</sup> January 2006 from S2 (pharmacy medicines) to S3 (pharmacist only medicines) and from 1<sup>st</sup> April 2006 liquid pseudoephedrine preparations containing more than 800mg per pack and other preparations with 720mg or more being rescheduled to S4 (prescription-only medicines). The data provider reported that in response to these changes, “reports of ‘pseudo running’ have decreased in recent months which in turn has caused a reduction in the historically common smaller home premises meth labs” (data provider, NSW Police, personal communication, 18 December 2006). Most labs were detected in residential locations, and no children were detected on site.

**Figure 28: Number of clandestine methamphetamine and MDMA laboratories detected by NSW police 1998/99-2005/06**

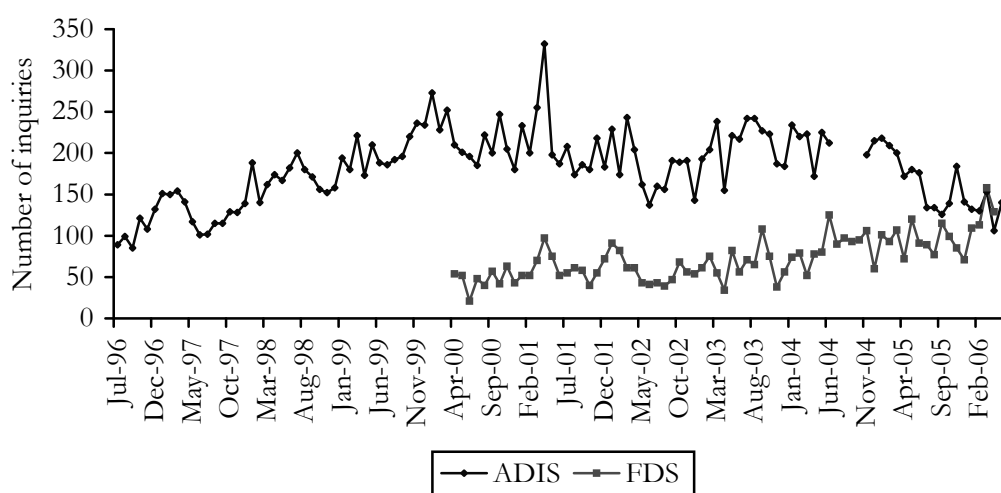


Source: NSW Police Service

### 5.5.2 Health

Figure 29 shows the number of calls to the ADIS and FDS lines regarding amphetamines. The number of enquiries to FDS regarding amphetamines was much lower than numbers received at ADIS during the period 2000 to 2003. Figures for ADIS remained lower over the past eighteen months while in contrast, calls to FDS have increased slightly over the past two years, reaching over 100 per month since January 2006. Calls to both services regarding amphetamines increased in early 2001. It is also worth noting that this may also reflect an increase in public awareness and concern following a large number of recent controversial media reports on the subject.

**Figure 29: Number of inquiries to ADIS and FDS regarding amphetamines, including 'crystal/ice', July 1996- June 2006**

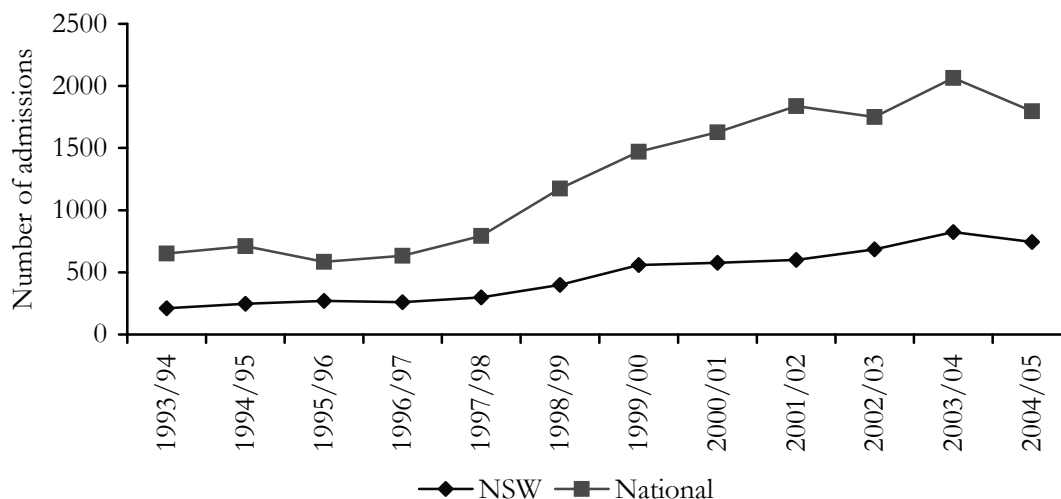


Source: NSW Alcohol and Drug Information Service and Family Drug Support

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

The number of inpatient hospital admissions among persons aged 15-54 years in which amphetamines were the principal diagnosis is shown in Figure 30 below. As outlined previously, diagnoses for the period 1998 to 2004 were recorded using ICD-10-AM codes, and, prior to this, ICD-9-CM was used to code hospital separations. A principal diagnosis is defined as having been chiefly responsible for occasioning the patient's episode of care in hospital. Figures have steadily increased over the study period in both NSW (from 211 in 1993/94 to 743 in 2004/05) and nationally (from 652 in 1993/94 to 1,797 in 2004/05).

**Figure 30: Total number of inpatient hospital admissions for persons aged 15-54 where amphetamines were the principal diagnosis, NSW and nationally, 1993/94-2004/05**

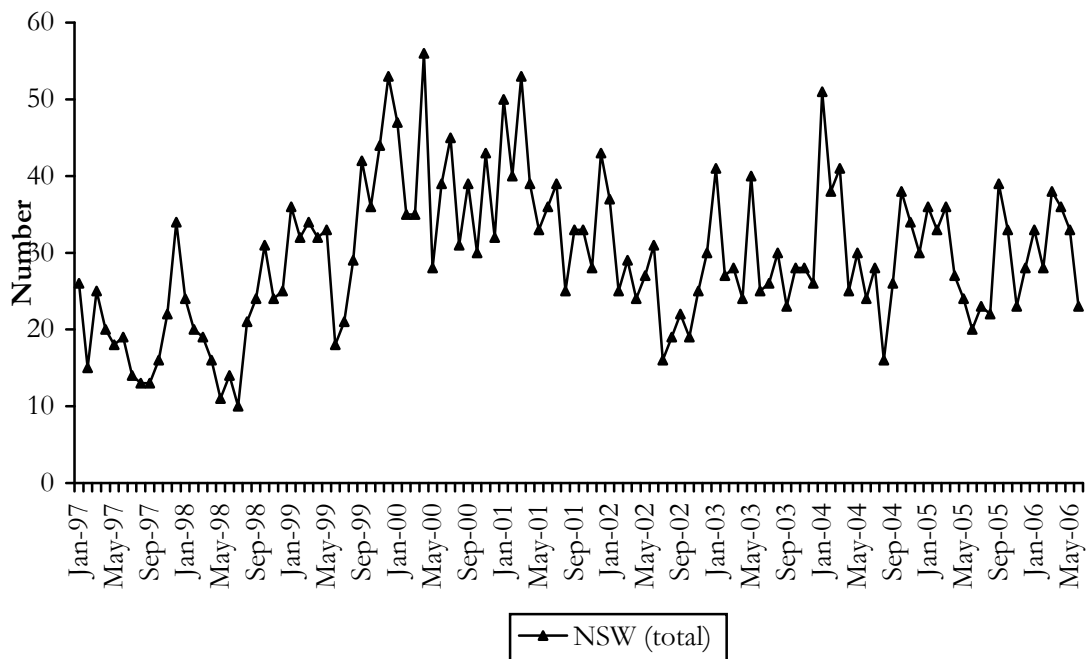


Source: National Hospital Morbidity Database; Roxburgh & Degenhardt (2006)

### *Overdose*

The total number of amphetamine overdose presentations to NSW emergency departments has fluctuated in the past two years, accounting for between 20 and 40 visits per month state-wide since September 2004 (Figure 31).

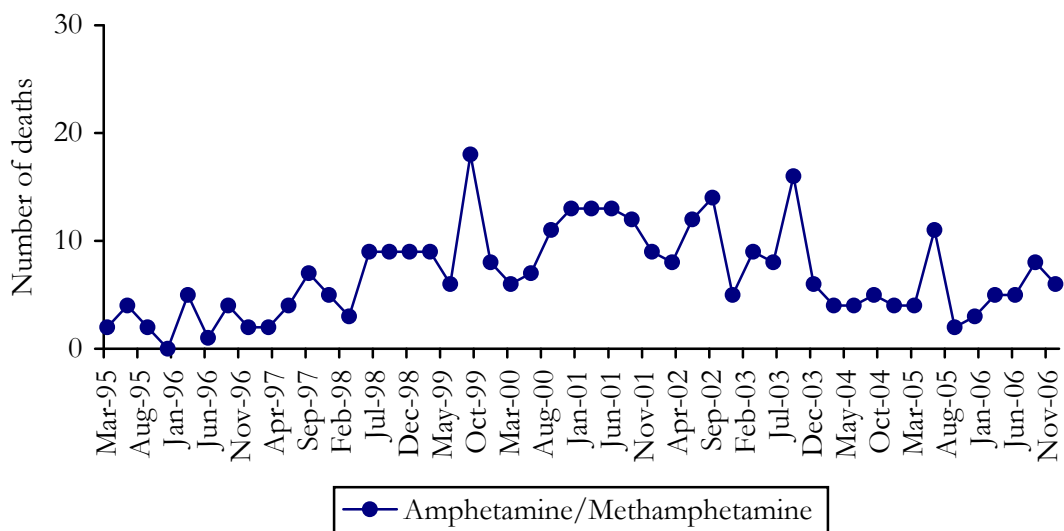
**Figure 31: Amphetamine overdose presentations to NSW emergency departments, January 1997-June 2006**



**Source: Emergency Department Information System, NSW Department of Health**  
 NB: Does not include emergency department presentations for use disorders

The number of drug-related deaths in which methamphetamine has been detected has remained low and appears to have fluctuated over time (Figure 32).

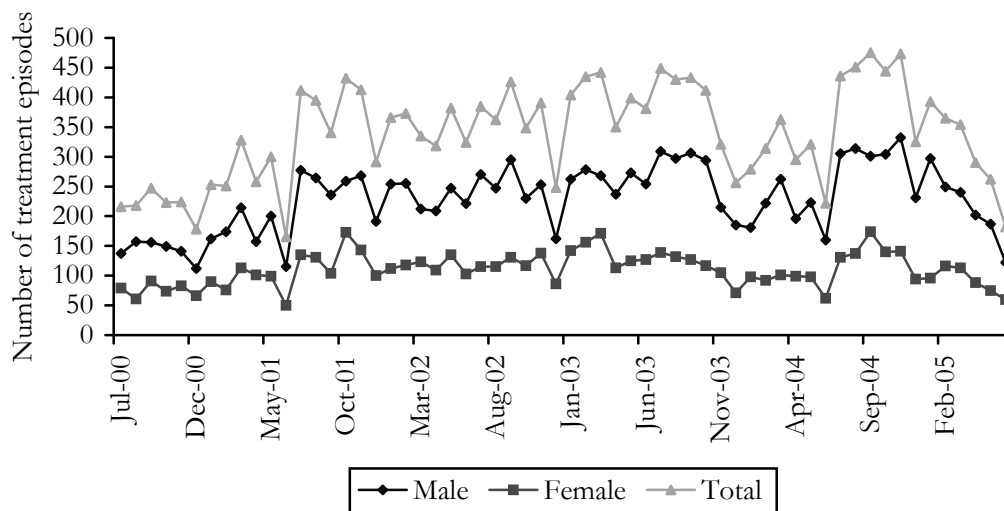
**Figure 32: Number of suspected drug-related deaths in which methamphetamine was detected in post-mortem, by quarter, March 1995-December 2006**



**Source: Forensic Toxicology Laboratory database, Division of Analytical Laboratories**  
 NB: These numbers relate to deaths in which methamphetamine was detected; however, there may have also been other drugs present. These figures do not include Methylendioxyamphetamine, Methylendioxyamphetamine, or p-methoxyamphetamine as these are reported separately. Also excluded are pseudoephedrine and ephedrine as we are only presenting deaths related to illicit amphetamines

The number of closed treatment episodes based on date of commencement where amphetamine was the principal drug of concern have increased over time, although they have decreased in the preceding 12 months (Figure 33). Males account for a greater proportion of this total compared to females.

**Figure 33: Number of ATS treatment episodes by gender, NSW July 2000-June 2005**



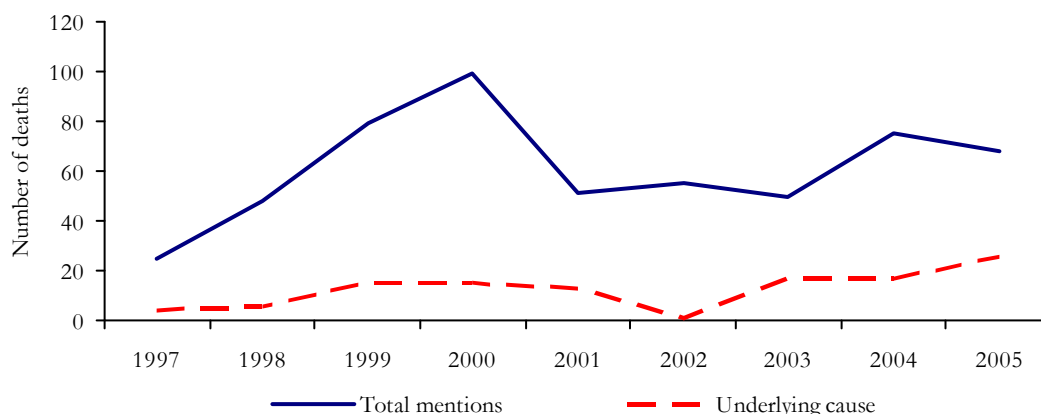
**Source: NSW MDS DATS, NSW Department of Health**

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

Figure 34 shows Australian Bureau of Statistics (ABS) data on accidental drug-induced deaths in which methamphetamine was mentioned among those aged 15-54 in Australia for the period 1997-2005 (Degenhardt and Roxburgh 2007). This includes deaths where it was determined to be the underlying cause of death, as well as those where methamphetamine was detected but where another drug was believed to be primarily responsible. Deaths in which methamphetamine was mentioned have decreased slightly since 2004 (68 in 2005 vs. 75 in 2004) and remain lower than in 2000 (99 deaths). However, the number of deaths in which methamphetamine was determined to be the underlying cause remained have increased slightly, with 26 recorded in 2005 (this figure was 17 in 2004).



**Figure 34: Number of accidental drug-induced deaths mentioning methamphetamine (total and underlying) among those aged 15-54 years in Australia, 1997-2005**



Source: Australian Bureau of Statistics Causes of Death database; (Degenhardt and Roxburgh 2007)

### 5.5.3 Prohibition of smoking paraphernalia

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

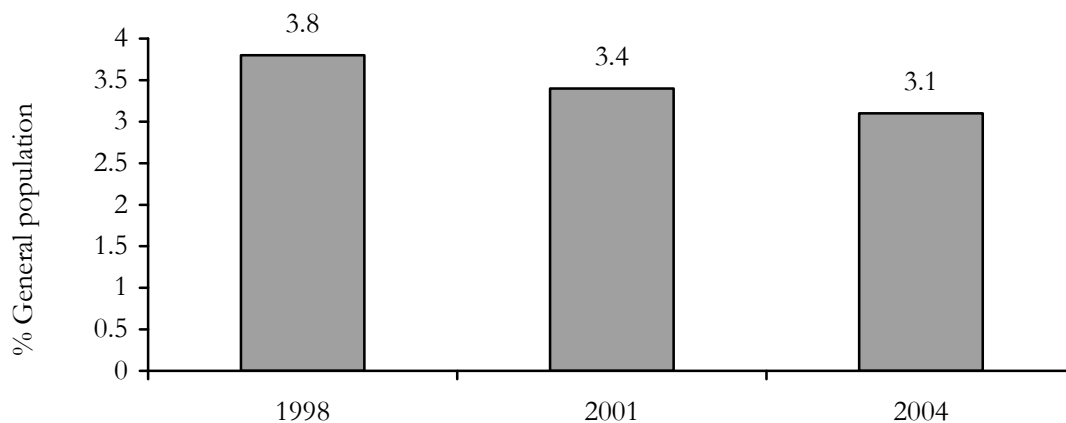
The prohibition of the sale of these pipes raises the issue of safe administration of illicit substances. Amongst recent crystal users, 88% had smoked crystal in the preceding six months compared with 27% who had injected crystal in the preceding six months. Thus, smoking appears to be the favoured route of administration amongst crystal users, and the prohibition of the sale and use of pipes may lead to some crystal users changing their route of administration. Given that one-quarter (25%) of the 2006 EDRS sample had injected any drug, there may be some cause for concern regarding non-injectors experimenting with this route of administration. Future surveys will monitor the trends in routes of administration.

## 5.6 Meth/amphetamine use in other populations

### 5.6.1 General population

The recent use of meth/amphetamine in the NSW general population has remained relatively stable in the past three surveys, with approximately 3-4% of those aged 14 years and above having used meth/amphetamine in the preceding twelve months (Figure 35).

**Figure 35: Recent meth/amphetamine use in the NSW general population, 1998-2004**

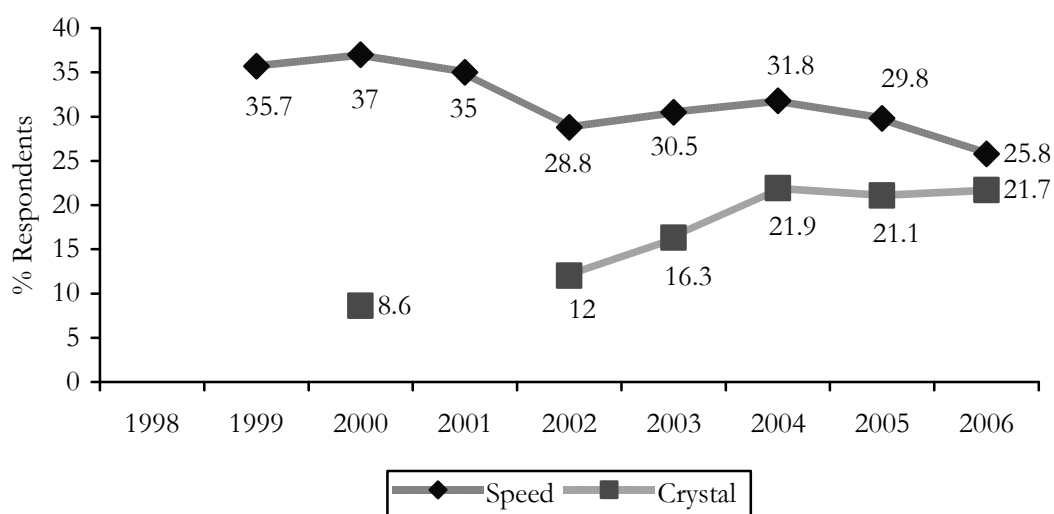


Source: Fitzsimmons & Cooper-Stanbury, 2000; Australian Institute of Health and Welfare, 2002, 2005.

### 5.6.2 Sydney Gay Community Periodic Survey

Figure 36 shows the proportion of men surveyed that had used speed and crystal in the past six months. Data across time suggests a significant downward trend in the use of speed since 2001 (Zablotska 2006). The proportion using crystal meth has increased across the years in which it was included in the survey, with the increase observed between 2000 and 2004 being significant, though a significant decrease was observed between 2004 and 2005 (Hull 2006). In February 2006 the use of crystal increased to levels similar to those reported in 2004 (Zablotska 2006). Of note is the fact that the proportion reporting the use of speed has remained higher than that reporting the use of crystal.

**Figure 36: Proportion of gay men in Sydney reporting recent speed\* and crystal\* use, 1998-2006**



Source: Sydney Gay Community Periodic Survey, 1998-2006.

\*Not asked in all surveys

### 5.6.3 Illicit Drug Reporting System

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

## 5.7 Dependence

In 2006 participants were asked questions from the severity of dependence scale (SDS) for methamphetamine; previous research has suggested that a cut-off of four is indicative of dependence for methamphetamine users (Topp and Mattick 1997).

Of those that had used methamphetamine, the median SDS score was one (range 0-14), with 22% 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 was no significant difference between gender and median methamphetamine SDS score or those who scored four or above. Of those who scored four or above, 65% reported that they specifically attributed their responses to crystal methamphetamine, while 35% reported attributing their responses to no particular form of methamphetamine.

## 5.8 Summary of methamphetamine trends

- Lifetime use of speed decreased slightly, while the recent use of speed decreased markedly between 2005 and 2006. Both lifetime and recent use of base decreased. Lifetime use of crystal increased slightly whilst a large increase was observed in recent crystal use.
- KE reports suggest that speed is a drug which is constantly available and used by this group. Reports also suggest that crystal use may be more centralised at user's own home rather than in more public locations. KE also called for a better understanding of the relationship between crystal use and violence.
- Speed and base were most commonly used in nightclubs, followed by participant's own home. Crystal was most commonly used in participant's own home's and friends' homes.
- Speed was purchased for \$60 per gram or \$40 per point. Base was purchased for \$37.5 per point. Crystal was purchased for \$50 per point. Prices for all forms of methamphetamine were reported to have remained stable in the six months preceding interview.
- The purity of all forms of methamphetamine were reported by most respondents to be of 'high' or 'medium' purity and the majority reported that the purity had remained 'stable' over the preceding six months. AFP seizure data also shows methamphetamine purity has dropped dramatically from 43% in 2003/04 to 4% in 2004/05; however, numbers were small.
- All three forms of methamphetamine were reported as 'very easy' or 'easy' to obtain, while base was reported to be 'easy' or 'difficult' to obtain. The majority reported that the availability of three forms of methamphetamine had remained 'stable' during the preceding six months.
- All forms of methamphetamine were most commonly purchased from friends and known dealers and most likely to have been purchased from private residences including friends' and known dealers' homes.
- As in previous years, indicator data showed a somewhat mixed picture with regard to amphetamine use. An increase occurred in recorded incidents of possession/use that occurred in the inner city, whilst figures remained stable in Canterbury-Bankstown, Fairfield-Liverpool and state-wide. Increases were also reported in the number of methamphetamine labs detected and the number of calls to telephone helplines related to ice/crystal use. Other health indicators remained stable (e.g. emergency department admissions and numbers of hospital admissions).
- A large proportion of those indicating dependence to methamphetamine attributed responses on the SDS to crystal methamphetamine; however, more than one-third did not attribute their responses to any particular form of methamphetamine.
- In the NSW general population, the use of meth/amphetamine in the past year has remained stable across time. The use of speed has decreased, while the use of crystal has increased in other groups of drug users where data has been collected across time. However, the proportion reporting speed use has consistently been higher than the proportion reporting crystal use.

## 6 COCAINE

Cocaine is a stimulant, like methamphetamine. Cocaine is a colourless or white crystalline alkaloid. Cocaine hydrochloride, a salt derived from the cocoa plant, is the most common form of cocaine available in Australia (little or no 'crack' cocaine is available or used in this country) (Australian Crime Commission, 2003). 'Crack' is a form of freebase cocaine (hydrochloride removed) which is particularly pure.

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

Four-fifths (80%) of the 2006 sample reported lifetime cocaine use, with more than two-fifths (45%) reporting cocaine use in the six months prior to interview. Cocaine was first used at a median age of 21 years (range 15-54 years). There was a significant difference between males and females regarding age of initiation, with females using cocaine at a significantly younger age than males (20 vs. 23;  $t_{76.796} = -2.385$ ;  $p < 0.05$ ). A small number reported having ever injected cocaine ( $n=11$ ).

Cocaine was the drug of choice for four participants. Of those who reported bingeing on drugs in the past six months, one-quarter (26%) reported using cocaine in a binge. Two participants reported that they usually used cocaine with ecstasy.

### 6.1 Cocaine use among REU

Forty-five recent cocaine users reported a median of two days (range 1-14) of use in the preceding six months. The majority (93%) had used cocaine less than once a month; no respondents reported using cocaine weekly or more.

The majority of recent cocaine users quantified amounts used in terms of grams; 19 respondents reported using a median of one gram (range 0.25-2) during a 'typical' occasion of use and one gram (range 0.25-3) during a 'heavy' use period. Nineteen respondents referred to lines; a median of two lines of cocaine were used during a 'typical' occasion of use in the preceding six months (range 1-10) while 3 lines were used in a 'heavy' occasion of use (range 1-10).

Most (84%) respondents reporting recent cocaine had used cocaine intranasally. Cocaine had been swallowed by two-fifths (18%) of those who had used cocaine in the preceding six months. Sixteen percent ( $n=7$ ) had injected cocaine in the last six months, while 2% had recently smoked cocaine.

The prevalence of lifetime cocaine use has remained stable across time (Table 12). Reports of recent cocaine use have fluctuated, with a decrease in 2006 (45%) compared to that reported in 2005 (55%). Frequency of use has also fluctuated across the sampling years, however the narrow range of days that cocaine had been used (1-14) does suggest less frequent use. Quantity of use in 'typical' and 'heavy' sessions of use have remained stable across sampling years, although again, the narrow range of quantities used in both a 'typical' and 'heavy' session may suggest less heavy use.

**Table 12: Patterns of cocaine use of REU, NSW**

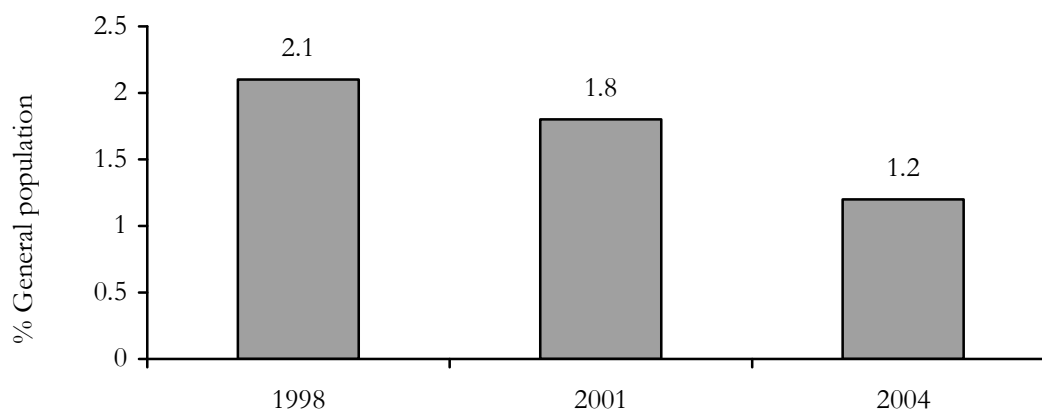
| Cocaine variable                       | 2000<br>(n=94)  | 2001<br>(n=163) | 2002<br>(n=88)   | 2003<br>(n=102) | 2004<br>(n=104)   | 2005<br>(n=101) | 2006<br>(n=100)       |
|----------------------------------------|-----------------|-----------------|------------------|-----------------|-------------------|-----------------|-----------------------|
| Ever used %                            | 78              | 77              | 80               | 78              | 79                | 76              | <b>80</b>             |
| Used last six months%                  | 53              | 57              | 64               | 46              | 46                | 55              | <b>45</b>             |
| <b>Of those who had used:</b>          |                 |                 |                  |                 |                   |                 |                       |
| Median days used last 6 mths (range)   | 4 (1-90)        | 3 (1-96)        | 4 (1-48)         | 2 (1-24)        | 3 (1-48)          | 2.5 (1-84)      | <b>2 (1-14)</b>       |
| <b>Median quantities used: (grams)</b> |                 |                 |                  |                 |                   |                 |                       |
| Typical (range)                        | 0.25<br>(0.1-7) | 0.5<br>(0.1-3)  | 0.5<br>(0.1-3.5) | 0.5<br>(.25-2)  | 0.5<br>(0.13-2.5) | 1<br>(0.25-10)  | <b>1<br/>(0.25-2)</b> |
| Heavy (range)                          | 0.5<br>(0.1-26) | 1<br>(0.1-7)    | 0.5<br>(0.1-10)  | 1<br>(0.3-5)    | 1<br>(0.13-4)     | 1<br>(0.25-12)  | <b>1<br/>(0.25-3)</b> |

Source: EDRS Regular ecstasy user interviews 2000-2006

## 6.2 Cocaine use in other populations

### 6.2.1 General population

The recent use of cocaine in the NSW general population has decreased in the past three surveys, with the largest decrease observed from 2001 (1.8%) to 2004 (1.2%) (Figure 37).

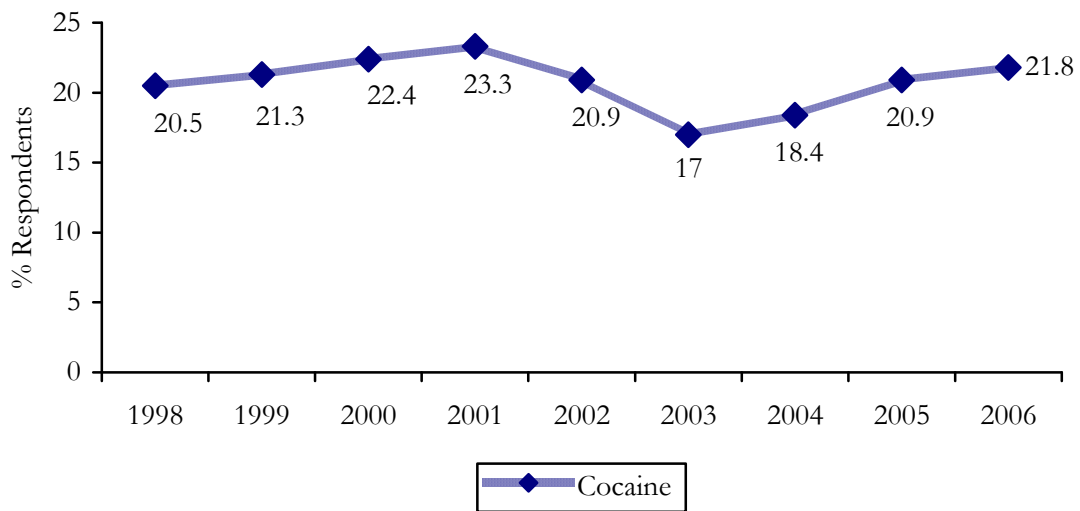
**Figure 37: Recent cocaine use in the NSW general population, 1998-2004**

Source: Fitzsimmons & Cooper-Stanbury, 2000; AIHW, 2002, 2005.

### 6.2.2 Sydney Gay Community Periodic Survey

Figure 38 shows the proportion of men surveyed that had used cocaine in the past six months. While there was a decrease in the use of cocaine from 2001 to 2003, an increase has since been observed between 2004 and 2006, though the authors note that this trend is not significant (Zablotska 2006).

**Figure 38: Proportion of gay men in Sydney reporting recent cocaine use, 1998-2006**



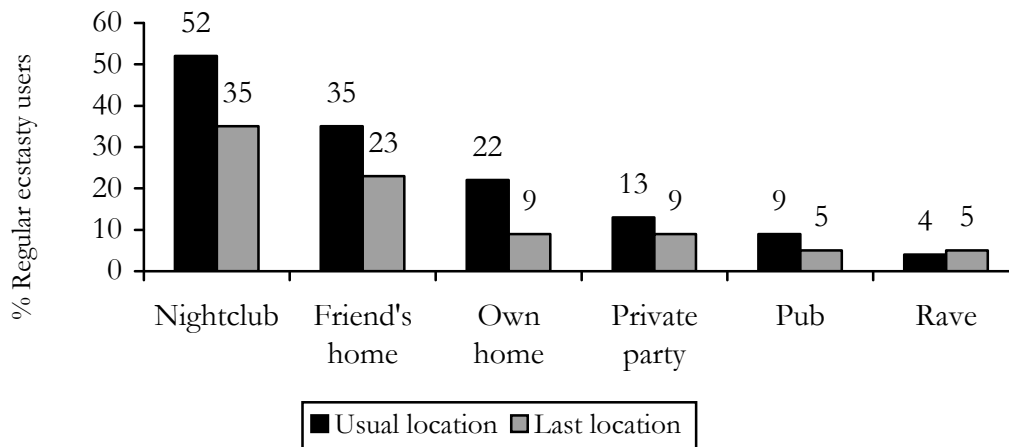
Source: Sydney Gay Community Periodic Survey, 1998-2006.

### 6.2.3 Illicit Drug Reporting System

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

Cocaine was most frequently used in nightclubs (52%; Figure 39), followed by friends' homes (35%) and user's own home (23%). Other areas also included private parties (13%), pubs (9%) and at raves (including 'doofs' and dance parties, 4%). Consistent with the usual location of use, common locations of last cocaine use were nightclubs (36%), friends' homes (23%), respondent's own home (9%), private parties (9%), raves (5%) and pubs (5%) (Figure 39).

**Figure 39: Usual location and last location of cocaine use, NSW 2006**



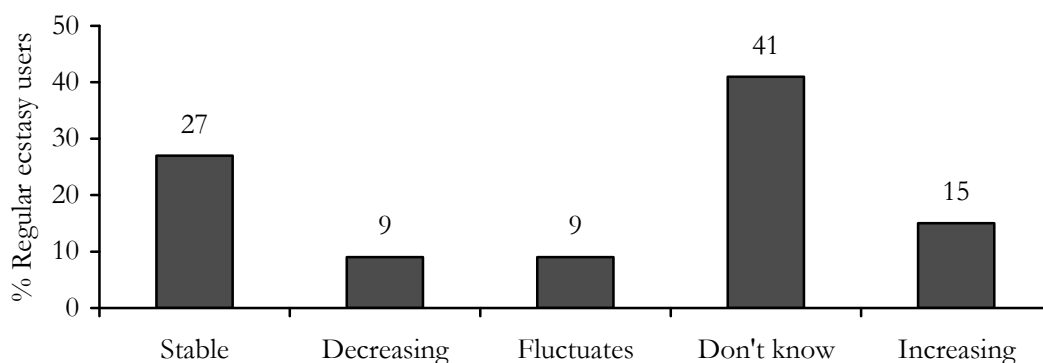
Source: EDRS Regular ecstasy user interviews 2006

### 6.3 Price

Twenty-three participants reported that the median price paid for a gram of cocaine was \$300 (range \$100-\$300). Three participants reported that the median price paid for a point of cocaine was \$50 (range \$50-\$80). Two participants reported that the price of a cap of cocaine was \$50 and \$60 respectively.

Of those who commented, 27% (9% of the entire sample) reported that the price of cocaine had remained 'stable' in the preceding six months while 15% (5% of the entire sample) reported that the price had 'increased' (Figure 40). Nine percent (3% of the entire sample) reported that the price had 'fluctuated' while 9% (3% of the entire sample) reported that the price had 'decreased'. Two-fifths (41%; 14% of the entire sample) were unable to comment.

**Figure 40: Recent changes in price of cocaine purchased by REU, NSW 2006**



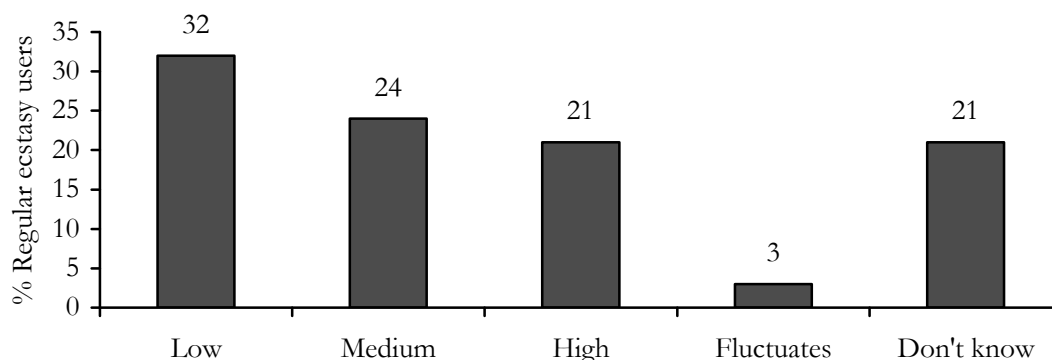
Source: EDRS Regular ecstasy user interviews 2006



## 6.4 Purity

There was variability on the reports of the current purity of cocaine by those who commented. While 32% (11% of the entire sample) reported that the current purity was 'low', 24% (8% of the entire sample) reported it as 'medium' and 21% (7% of the entire sample) reported it as 'high'; 3% (1% of the entire sample) reported the current purity to be fluctuating and 21% (7% of the entire sample) were unable to comment (Figure 41).

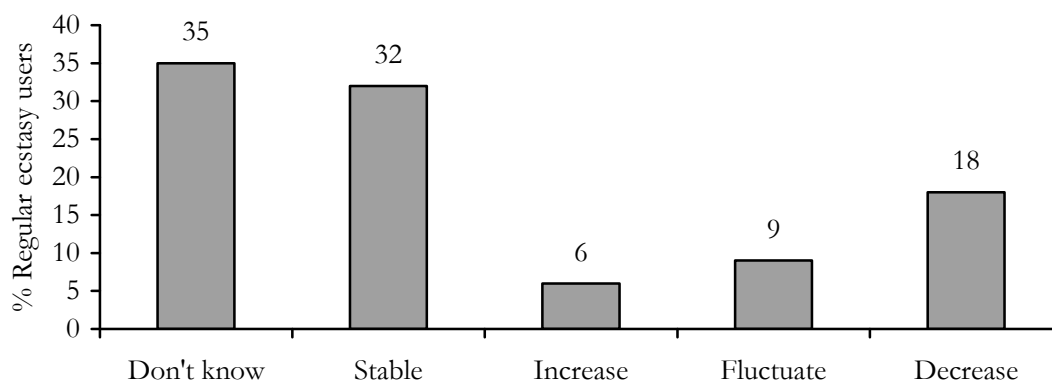
**Figure 41: User reports of current purity of cocaine, NSW 2006**



Source: EDRS Regular ecstasy user interviews 2006

Of those who commented in the purity change in the preceding six months, 32% (11% of the entire sample) reported that purity had remained 'stable', 18% (6% of the entire sample) reported it had 'decreased', 9% (3% of the entire sample) reported that purity had 'fluctuated' and 6% (2% of the entire sample) reported it had 'increased' (Figure 42). One-third (35%; 12% of the entire sample) did not know about the purity change of cocaine in the six months preceding interview.

**Figure 42: User reports of changes in cocaine purity in the past six months, NSW 2006**

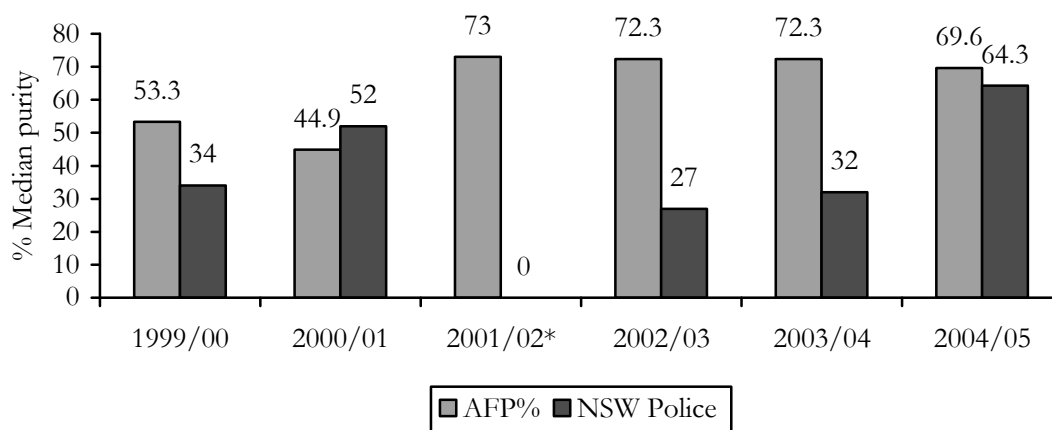


Source: EDRS Regular ecstasy user interviews 2006

Figure 43 presents the median purity of cocaine seizures made by the AFP and NSW Police between the financial years 1999/00 to 2004/05. The purity of the cocaine seized and analysed by the AFP during this time increased from 1999/00 and remained stable (approximately 70%) from 2001/02 to 2004/05. Purity of seizures made by NSW Police (which are analysed by the Division of Analytical Laboratories) have varied during this period, increasing from 32% in 2003/04 to 64.3% in 2004/05, the highest level ever recorded. It should be noted that figures do not represent the purity levels of all seizures

– only those that have been analysed at a forensic laboratory. In addition, the period between the date of seizure by police and the date of receipt at the laboratory can vary greatly, and no adjustment has been made to account for double counting joint operations between the AFP and NSW Police. Further, patterns of arrest and police operations change over time; for example, targeting of higher level suppliers versus street dealers, and this, in turn, can influence the purity of the drug seized.

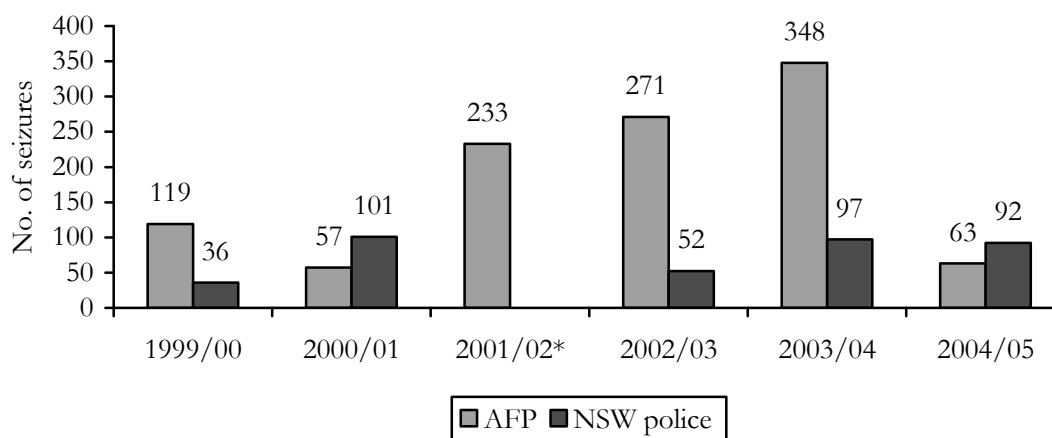
**Figure 43: Median purity of cocaine seizures analysed in NSW 1999/00-2004/05**



Source: Australian Bureau of Criminal Intelligence (2001, 2002), Australian Crime Commission (2004) \*NSW Police data for 2001/02 not available. Data for the period 2005/06 were unavailable at time of publication

The number of cocaine seizures analysed by the AFP has increased over time, reaching a peak of 348 seizures analysed in 2003/04. This number reduced dramatically to 63 in 2004/05 (Figure 44). In contrast, the number of seizures analysed by NSW police has been relatively lower, remaining stable at 92 analysed seizures in 2004/05 (97 in 2003/04).

**Figure 44: Number of cocaine seizures analysed in NSW, 1999/00-2004/05**



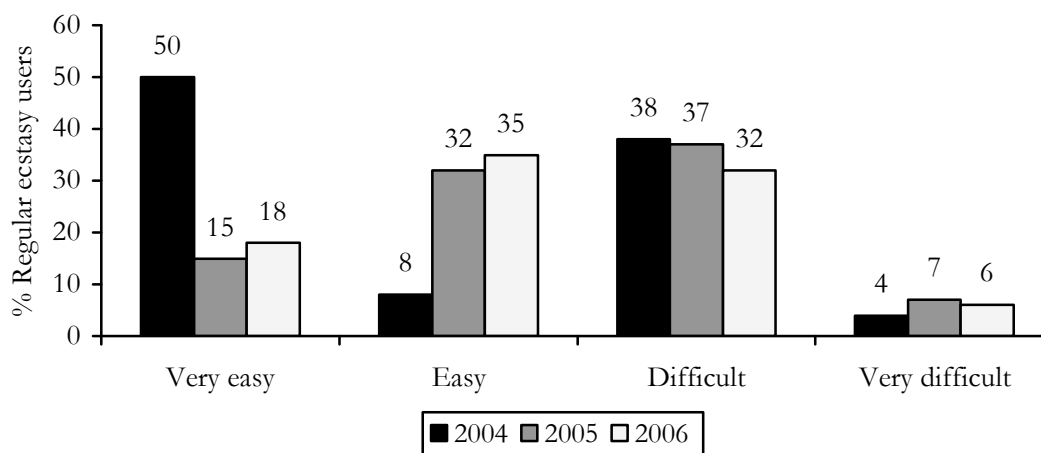
Source: Australian Bureau of Criminal Intelligence (2001, 2002), Australian Crime Commission (2004)

\*NSW Police data for 2001/02 was not available. Data for 2005/06 were unavailable at time of publication

## 6.5 Availability

There were conflicting reports about the current availability of cocaine from the respondents who commented (Figure 45). Over one-third (35%; 12% of the entire sample) reported that cocaine was 'easy' to obtain while one-third (32%; 11% of the entire sample) reported that cocaine was 'difficult' to obtain. Eighteen percent (6% of the entire sample) reported cocaine as 'very easy' to obtain, 6% (2% of the entire sample) reported it as 'very difficult' to obtain, and 9% (3% of the entire sample) were unable to comment. Reports in 2006 were similar to those given in 2005.

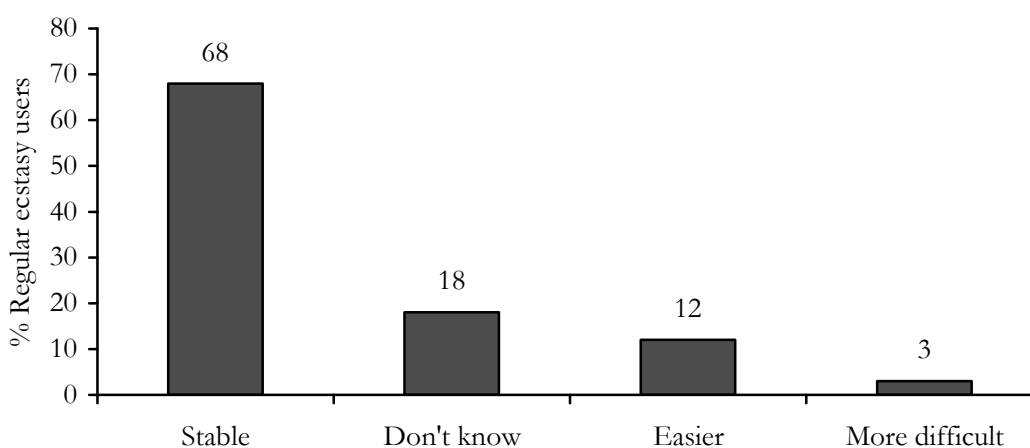
**Figure 45: Current availability of cocaine, NSW 2006**



Source: EDRS Regular ecstasy user interviews 2006

A large proportion of those who commented (68%; 23% of the entire sample) reported that the availability of cocaine had remained 'stable' in the preceding six months, while 12% (4% of the entire sample) reported it had become 'easier' in the preceding six months (Figure 46).

**Figure 46: Changes in cocaine availability in the preceding six months, NSW 2006**

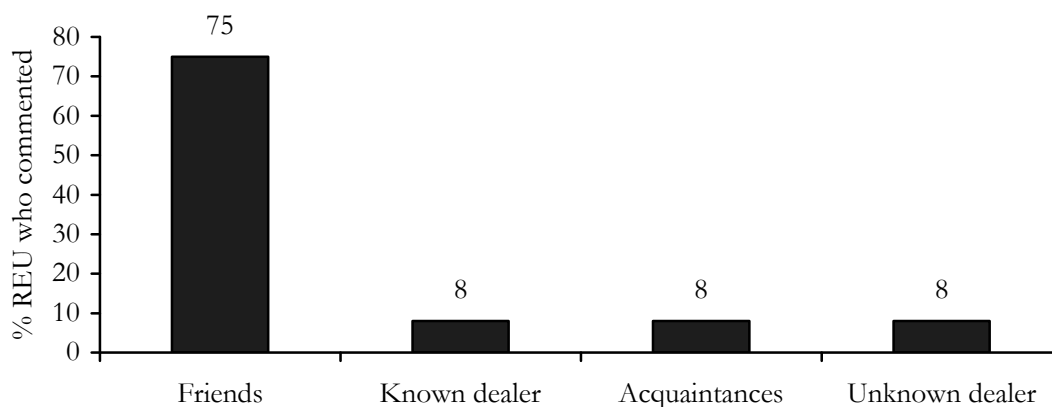


Source: EDRS Regular ecstasy user interviews 2006

### 6.5.1 Source person and source location

When asked to specify whom cocaine had been obtained from in the preceding six months, three-quarters (75%) reported friends; smaller proportions reported known dealers (8%), acquaintances (8%) and unknown dealers (8%) (Figure 47).

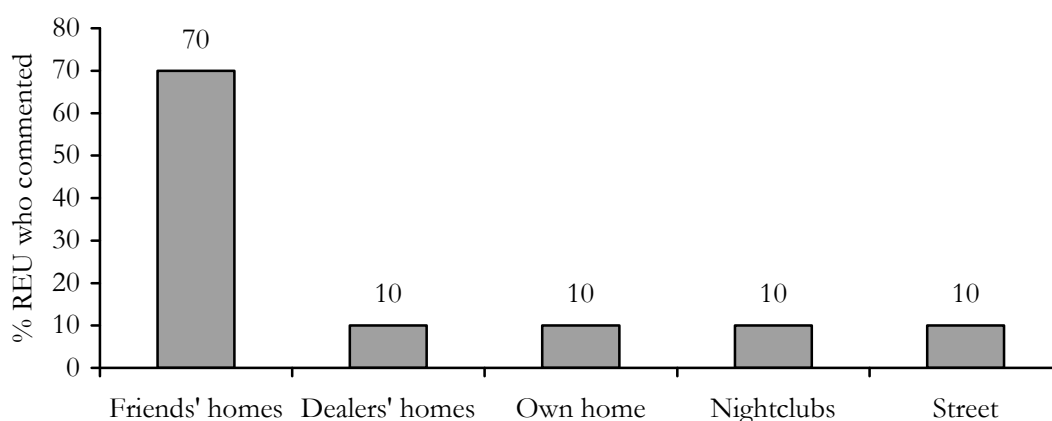
**Figure 47: People from whom cocaine had been purchased the preceding six months, NSW 2006**



Source: EDRS Regular ecstasy user interviews 2006

When asked to specify the locations cocaine had been purchased in the preceding six months, the most common location reported were friends' homes (70%) (Figure 48). User's own home (10%), dealers' homes (10%), nightclubs (10%) and on the street (10%) were less commonly reported.

**Figure 48: Locations where cocaine had been purchased in the preceding six months, NSW 2006**



Source: EDRS Regular ecstasy user interviews 2006

## 6.5.2 Key expert comments

All of the KE who were able to discuss cocaine made mention that its high price tended to discourage many people from using it. One KE commented that cocaine still remained a 'special occasion drug' which people purchased to celebrate occasions such as birthdays. One KE mentioned that its 'designer drug' status made it attractive to younger users; however, again, the price precluded many from engaging in its use. Several KE noted that despite the price, cocaine was making a small comeback into the drug scene. Younger users have also been noted to 'pool' their money to be able to afford cocaine. Cocaine was said to be used in a polydrug context, often with ecstasy and alcohol.

Four KE were able to comment on the importation and manufacturing of cocaine. Cocaine was reported to almost always be imported from South America in its final powdered form. One KE noted that there were attempts at importing the final product as liquid and then extracting it to powder; this was also mentioned by another KE. One KE noted an increase in cocaine availability in the last 6-12 months, probably due to successful importation. Whilst there did appear to be a scarcity of cocaine within the past 12 months, this has now increased.

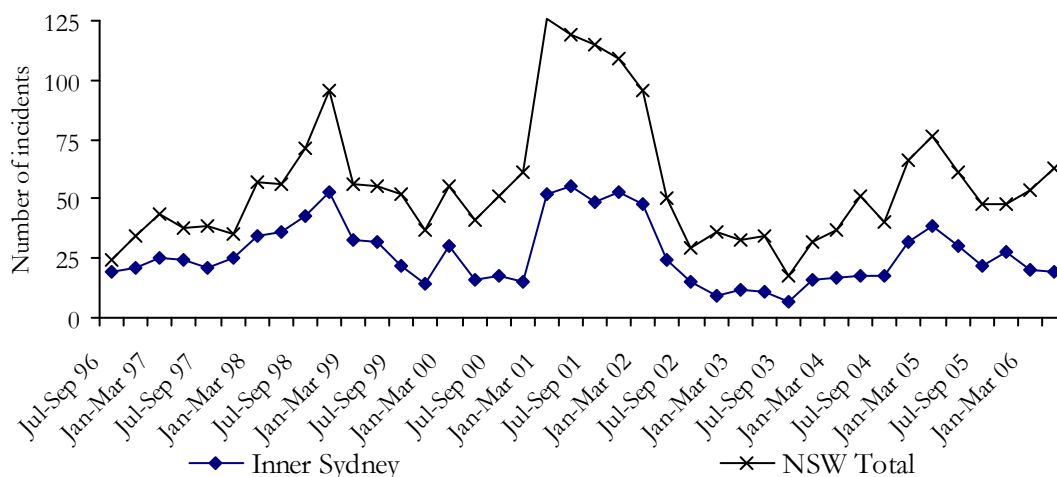
KE noted that users will notice if the purity is low and will change dealers if they purchase low-grade cocaine. As such, KE mentioned that cocaine tended to be sold without additives because dealers wish to keep a steady clientele. However, one KE noted that while purity of the imported product will not often change, demand will dictate whether the final product is cut to sell more. Those who imported cocaine were reported to concentrate only on cocaine.

## 6.6 Cocaine-related harms

### 6.6.1 Law enforcement

Figure 49 shows the number of police recorded criminal incidents for cocaine possession/use in Inner Sydney and NSW total. The number of cocaine-related possession/use incidents recorded by NSW Police largely occurred in the Inner Sydney area. Incidents of cocaine possession and/or use in the Inner Sydney area peaked between 1998 and 2001, and while figures have fluctuated, a significant increase of 23.9% per year occurred between July 2003 and June 2006 (NSW Bureau of Crime Statistics and Research, unpublished data accessed through the Crime Trends Tool at <http://boecd.lawlink.nsw.gov.au/boecd/cmd/crimetrends/Init>, February 2007). The state-wide increase in recorded incidents over the most recent year available (2005/06; 213 incidents) reflect law enforcement KE reports suggesting an increase in availability generally across NSW; however, the total figure remains lower than 2004/05 (243 incidents).

**Figure 49: Recorded incidents of cocaine possession/use in Inner Sydney and NSW per quarter, July-September 1996 to April-June 2006**

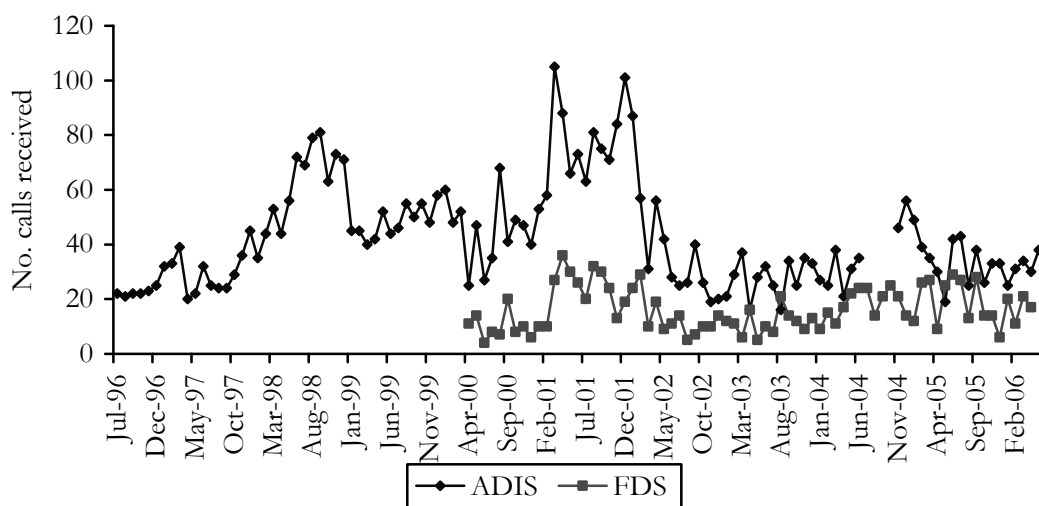


Source: NSW Bureau of Crime Statistics and Research (BOCSAR)

### 6.6.2 Health

Figure 50 shows the number of calls to the ADIS and FDS lines regarding cocaine. Figures for both services appear to have remained relatively stable over the past four years, although a slight peak in calls to ADIS can be seen during early 2005, with another increase mid-year. Figures have not returned to levels reported during 2001. Calls to FDS regarding cocaine also increased throughout 2001.

**Figure 50: Number of inquiries to ADIS and FDS regarding cocaine, July 1996-June 2006**

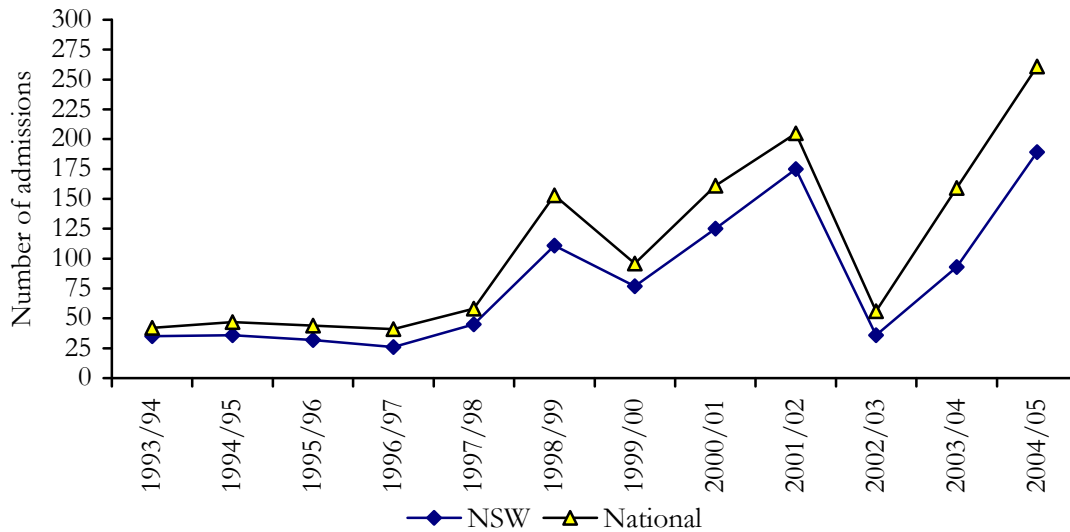


Source: Alcohol and Drug Information Service and Family Drug Support

NB: Family Drug Support data was only available from April 2000; data for May and June 2006 were not available. Due to database changes, ADIS data from July 2004-October 2004 has not been presented

The number of inpatient hospital separations in which cocaine was the principal diagnosis per million people aged 15-54 years are shown in Figure 51. As outlined previously, diagnoses are based on ICD-10-AM (Second Edition) codes. A principal diagnosis is defined as having been chiefly responsible for occasioning the patient's episode of care in hospital. Following a peak and subsequent decline in admission during 2001/02 and 2002/03, an increase in admissions has been observed during 2003/04 and 2004/05.

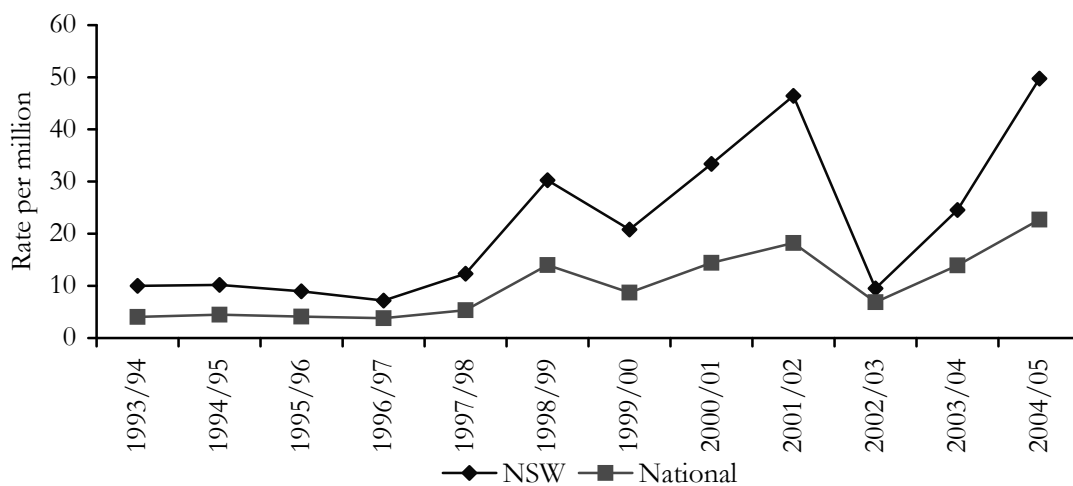
**Figure 51: Total number of inpatient hospital admissions in persons aged 15-54 where cocaine was the principal diagnosis, NSW and nationally, 1993/94-2004/05**



Source: National Hospital Morbidity Database; Roxburgh & Degenhardt (2006)

The rates of inpatient hospital admissions where cocaine was the principal diagnosis per million people aged 15-54 years are shown in Figure 52. In accordance with EDRS and other indicators, rates in NSW peaked in 2001, and decreased quite markedly between 2001/02 and 2002/03. There has been an increased observed since 2002/03, with levels in 2004/05 reaching those observed in 2001/02.

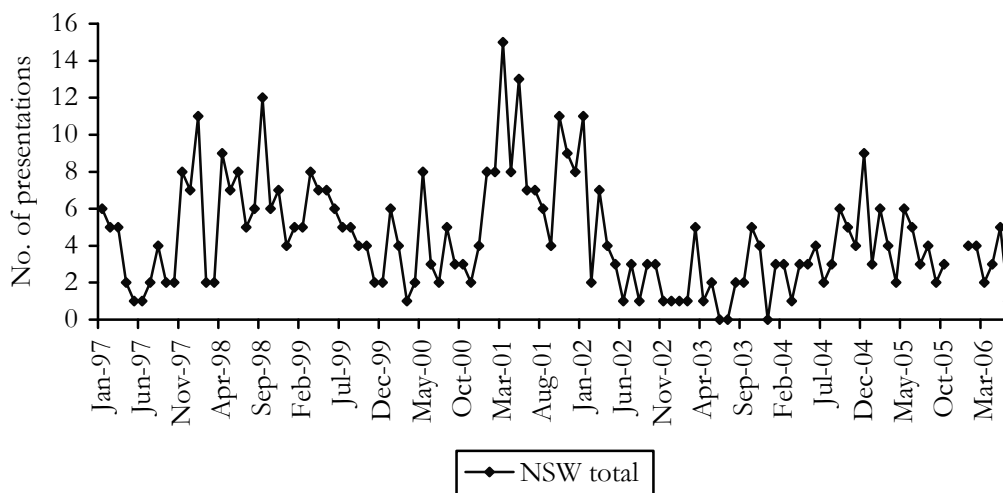
**Figure 52: Rate of inpatient hospital admissions where cocaine was the principal diagnosis per million people aged 15-54 years, NSW and nationally, 1993/94 to 2004/05**



Source: National Hospital Morbidity Database; Roxburgh & Degenhardt (2006)

The number of cocaine overdose presentations to NSW emergency departments has remained extremely low at less than ten per month since February 2002 (Figure 53).

**Figure 53: Cocaine overdose presentations to NSW emergency departments, January 1997-June 2006**



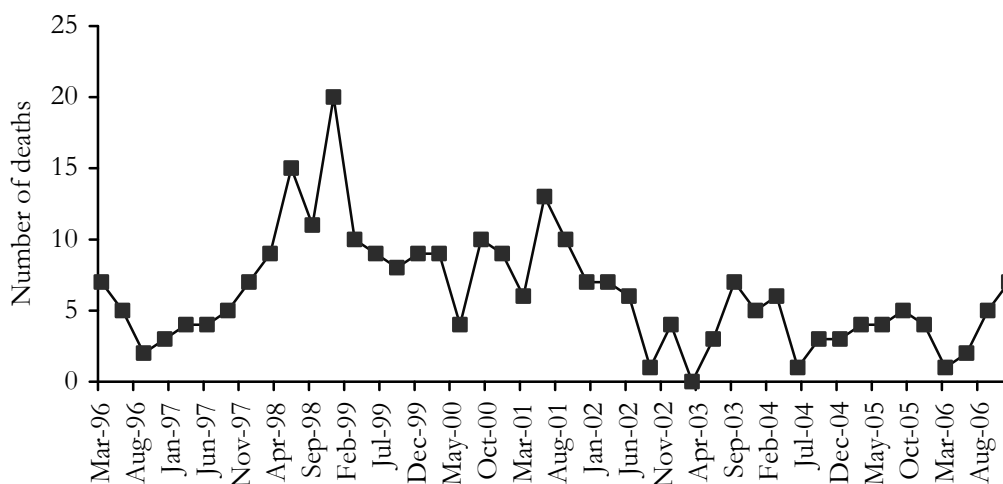
Source: Emergency Department Information System, NSW Department of Health

NB: Figures do not include emergency department presentations for use disorders

### Mortality

The number of drug-related deaths in which cocaine was detected post-mortem has remained low over the last twelve months. Over the past five years, figures have remained at less than ten per quarter (Figure 54).

**Figure 54: Number of suspected drug-related deaths where cocaine was detected post-mortem, by quarter, 1996-2006**



Source: Forensic Toxicology Laboratory database, Division of Analytical Laboratories

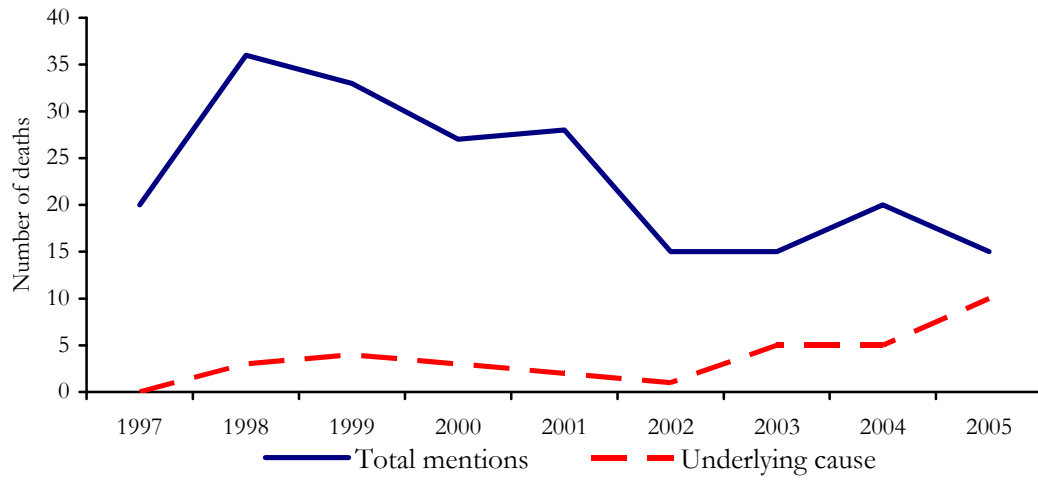
NB: These numbers relate to deaths in which cocaine was detected; however, there may have also been other drugs present

Figure 55 shows ABS data on accidental drug-induced deaths in which cocaine was mentioned among those aged 15-54 in Australia for the period 1997-2005 (Degenhardt and Roxburgh 2007). This includes deaths where cocaine was determined to be the underlying cause of death, as well as those where it was mentioned but where another drug was believed to be primarily responsible (usually opioids). Deaths have remained relatively stable since 2003, decreasing from 20 to 15 deaths (total mentions). The



number of deaths in which cocaine was determined to be the underlying cause has remained at ten or less since 1997, with the greatest number (10) recorded in 2005.

**Figure 55: Number of accidental drug-induced deaths mentioning cocaine (total and underlying) among those aged 15-54 years in Australia, 1997-2005**



Source: ABS mortality data; (Degenhardt and Roxburgh 2007)

## 6.7 Summary of cocaine trends

- Prevalence of lifetime cocaine use remained stable across time, however, recent cocaine use decreased in 2006.
- Past year cocaine use in the NSW general population remains low, and data from other groups also suggests a decline in cocaine use.
- KE reports of cocaine use suggested that cocaine was used as a 'special occasion' drug.
- Recent cocaine users reported usually using cocaine in both public and private locations.
- The most commonly purchased amount of cocaine was a gram at a median price of \$300. Most reported that the price of cocaine had remained 'stable'.
- Participant-reported purity of cocaine varied, with reports suggesting cocaine purity was either 'low', 'medium' or 'high'.
- The median purity of cocaine seized and analysed by the AFP remained stable at around 70% over the preceding 12 months while NSW Police cocaine seizure purity increased to around 64% in 2004/05. The number of seizures analysed by the AFP has increased over time, reaching a peak of 348 in 2003/04; however, this number reduced dramatically to 63 in 2004/05. The number of NSW Police seizures analysed remained stable at 92 in 2004/05.
- Conflicting reports were obtained regarding cocaine availability. Most reported that cocaine was 'difficult' or 'easy' to obtain and that availability had remained 'stable'.
- The overall cocaine market for REU suggests that its high purchase price, and varying availability, precluded many from using it; this is consistent with KE reports.
- Cocaine was overwhelmingly purchased from friends in friends' homes.
- Indicator data on cocaine supported REU and KE reports of greater cocaine use in central Sydney than other areas. Health and law enforcement indicators of harms related to cocaine use were mixed. Some had increased (e.g. recorded incidents of possession/use in the inner city and over NSW generally, total mentions of cocaine in accidental drug-induced deaths), while some had remained stable (e.g. calls to telephone helplines, inpatient hospital admissions, overdose).

## 7 KETAMINE

Ketamine is a rapid acting, dissociative anaesthetic that is used in veterinary surgery and less commonly in human surgery. Ketamine is a liquid that can be injected for legitimate use. It is typically converted into a fine powder through evaporation, which is typically snorted. Ketamine can also be made into tablets that are swallowed.

Ketamine produces a dissociative state in the user, commonly eliciting an out-of-body experience. Too much ketamine can result in the user having a 'near death experience' or falling into a 'k-hole'.

As ketamine is complicated to manufacture, and precursor chemicals are difficult to obtain, it is unlikely that it is produced in clandestine laboratories. The majority of ketamine used by REU is probably diverted from veterinary sources (Australian Crime Commission, 2003).

Ketamine is also known as K, Special K or Vitamin K.

Almost three-fifths (57%) of the 2006 sample reported lifetime use of ketamine while one-quarter (27%) reported recent use. Ketamine was first used at a median age of 22 years (range 16-51 years) and there was a significant difference between males and females regarding age of initiation, with females reporting first use at a significantly younger age than males (22 vs. 26,  $t=-2.532$ ,  $p<0.05$ ). A small proportion (6%) of the 2006 sample reported injecting ketamine at some time; however, no respondents reported injecting ketamine in the preceding six months.

Eight participants, of those who reported bingeing on drugs, reported using ketamine in a binge episode. Amongst those who reported typically using other drugs with ecstasy, three reported typically using ketamine with ecstasy. One participant nominated ketamine as their drug of choice.

### 7.1 Ketamine use among REU

Twenty-seven respondents reported using ketamine in the preceding six months on a median of two days (range 1-48). Most (82%) used ketamine less than monthly; 15% used between monthly and fortnightly; and one respondent reported using ketamine on a greater than weekly basis.

Recent ketamine users quantified their use in terms of 'bumps' (n=18); four participants referred to 'lines' and four referred to 'grams'. 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 two bumps as the amount used for a 'typical' occasion of use (range 0.5-7) and two and a half bumps as the amount used for a 'heavy' occasion of use (range 0.5-7) in the preceding six months. Recent users reported snorting (89%) and, less often, swallowing (26%) ketamine; no respondents reported injecting, smoking or shafting ketamine in the preceding six months.

Despite an increase of lifetime use of ketamine amongst this group, the proportion reporting having ever used ketamine decreased in 2006 (Table 13). The proportion

reporting recent use of ketamine has declined in recent sampling years. While the frequency of ketamine use has remained relatively stable, the quantity of ketamine used appears to have decreased in 2006 (Table 13).

**Table 13: Patterns of ketamine use of REU, NSW 2000-2006**

| Ketamine variable                      | 2000<br>(n=94) | 2001<br>(n=163) | 2002<br>(n=88) | 2003<br>(n=102) | 2004<br>(n=104) | 2005<br>(n=101) | <b>2006<br/>(n=100)</b> |
|----------------------------------------|----------------|-----------------|----------------|-----------------|-----------------|-----------------|-------------------------|
| Ever used (%)                          | 25             | 31              | 59             | 59              | 58              | 65              | <b>57</b>               |
| Used last six months (%)               | 14             | 15              | 49             | 49              | 39              | 39              | <b>27</b>               |
| <b>Of those who had used:</b>          |                |                 |                |                 |                 |                 |                         |
| Median days used last 6 mths (range)   | 2<br>(1-30)    | 5<br>(1-24)     | 4<br>(1-30)    | 3<br>(1-100)    | 4<br>(1-30)     | 2<br>(1-72)     | <b>2<br/>(1-48)</b>     |
| <b>Median quantities used (bumps):</b> |                |                 |                |                 |                 |                 |                         |
| Typical (range)                        | 5<br>(2-20)    | 5<br>(1-15)     | 2<br>(0.5-15)  | 3<br>(1-20)     | 3<br>(0.5-15)   | 3<br>(0.5-10)   | <b>2<br/>(0.5-7)</b>    |
| Heavy (range)                          | 5<br>(2-50)    | 4<br>(1-30)     | 4<br>(1-15)    | 3<br>(1-20)     | 4<br>(2-15)     | 4<br>(1-20)     | <b>2.5<br/>(0.5-7)</b>  |

Source: EDRS Regular ecstasy user interviews 2000-2006

## 7.2 Ketamine use in other populations

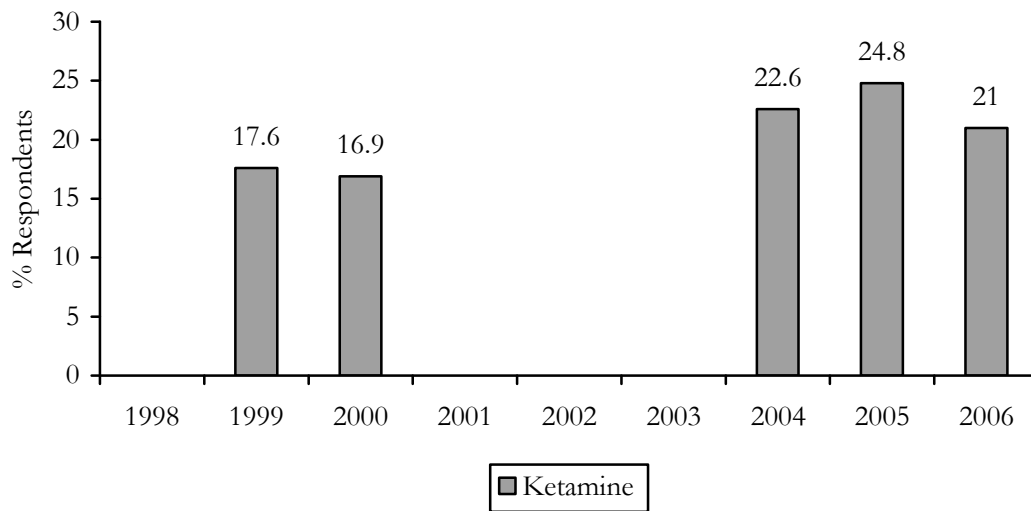
### 7.2.1 General population

The 2004 National Drug Strategy Household Survey was the first to include ketamine as a separate drug class. In 2004, 0.3% of the general population in NSW aged 14 years and above had used ketamine in the previous twelve months (Australian Institute of Health and Welfare 2005).

### 7.2.2 Sydney Gay Community Periodic Survey

Figure 56 shows the proportion of men surveyed that had used ketamine in the past six months. Despite ketamine not being included in all surveys, data shows that approximately one-fifth of men had used ketamine in the past six months. The use of ketamine has remained fairly consistent across time (Zablotska 2006).

**Figure 56: Proportion of gay men in Sydney reporting recent ketamine\* use, 1998-2006.**

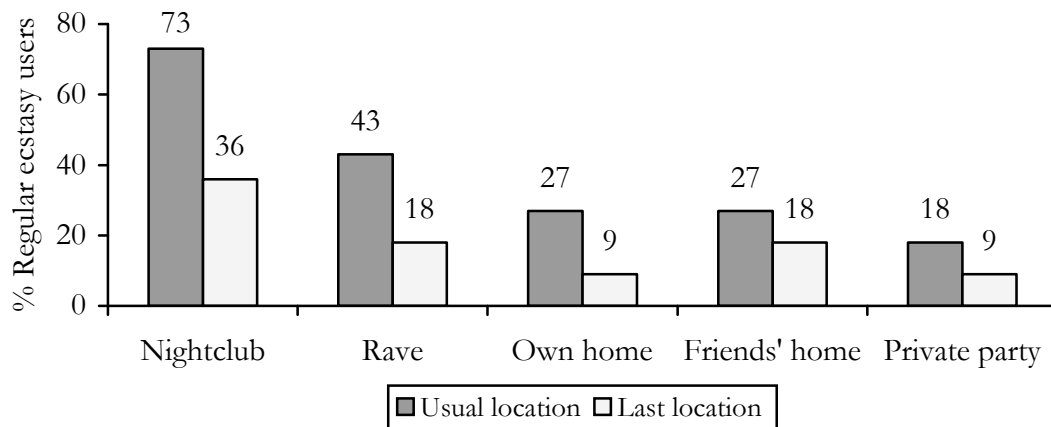


Source: Sydney Gay Community Periodic Survey, 1998-2006.

\*Not asked in all surveys

Ketamine was most frequently used in nightclubs (73%), followed by raves (including ‘doofs’ and dance parties; 43%). Participant’s own home (27%) and friends’ homes (27%) were other commonly nominated locations of usual use (Figure 57). The location of last use of ketamine was consistent with the location of usual use; more than one-third (36%) had last used ketamine at a nightclub. Other locations of last ketamine use included a friend’s home (18%) and a rave (18%, Figure 57).

**Figure 57: Usual location and last location of use, NSW 2006**



Source: EDRS Regular ecstasy user interviews 2006

### 7.3 Price

Seven participants were able to report on the price of ketamine. Ketamine was commonly purchased in grams (n=7), though one participant each reported purchasing ketamine in pills and points. Three participants reported purchasing ketamine in measures of grams (e.g. half a gram, a quarter of a gram). The current median price for a gram of ketamine was reported as \$175 (range \$80-\$200; Table 14). The majority of those who commented reported that the price of ketamine had remained ‘stable’ (56%; 9% of the entire sample) in the preceding six months; 13% (2% of the entire sample) reported that the price of ketamine had increased; and one participant (6%; 1% of the entire sample) reported that the price had decreased. Four respondents were ‘unable to comment’ on changes in the price of ketamine.

The proportion of users who were able to comment has declined considerably compared with recent sampling years. The median price of ketamine appears to have fluctuated since 2000 (Table 14). The proportion of users who were able to comment on the price of ketamine across sampling years is very small and, accordingly, these data must be interpreted with caution.

**Table 14: Price of ketamine purchased by REU, NSW 2000-2006**

| Median Price (range) | 2000 (n=3)     | 2001 (n=3)    | 2002 (n=32)  | 2003 (n=24)   | 2004 (n=24)   | 2005 (n=44)  | 2006 (n=7)          |
|----------------------|----------------|---------------|--------------|---------------|---------------|--------------|---------------------|
| Gram                 | 200 (no range) | 150 (50-200)  | 160 (20-200) | 150 (80-200)  | 200 (100-200) | 100 (20-300) | <b>175 (80-200)</b> |
| Lowest gm \$         | 170 (140-200)  | 170 (50-180)  | 155 (20-200) | 90 (84-175)   | -             | -            | -                   |
| Highest gm \$        | 200 (no range) | 200 (150-200) | 200 (25-250) | 140 (100-200) | -             | -            | -                   |
| Half gm \$           | -              | -             | -            | 85 (50-100)   | 75 (30-100)   | -            | <b>70</b>           |

Source: EDRS Regular ecstasy user interviews 2000-2006

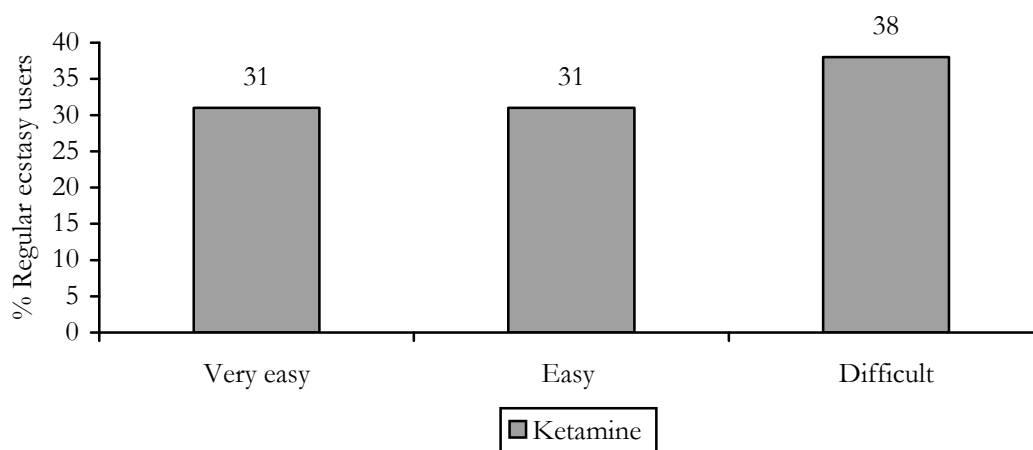
### 7.4 Purity

The majority of those who commented on the purity of ketamine reported that the current purity was ‘high’ (69%; 11% of the entire sample) while 13% (2% of the entire sample) reported the current purity as ‘medium’; most thought the purity of ketamine had remained ‘stable’ (56%; 9% of the entire sample).

## 7.5 Availability

Varying availability was reported by users, with one-third (31%; 5% of the entire sample) reporting that ketamine was 'very easy' to obtain, one-third reporting that ketamine was 'easy' to obtain (31%; 5% of the entire sample) and almost two-fifths reporting that ketamine was 'difficult' (38%; 6% of the entire sample) to obtain (Figure 58).

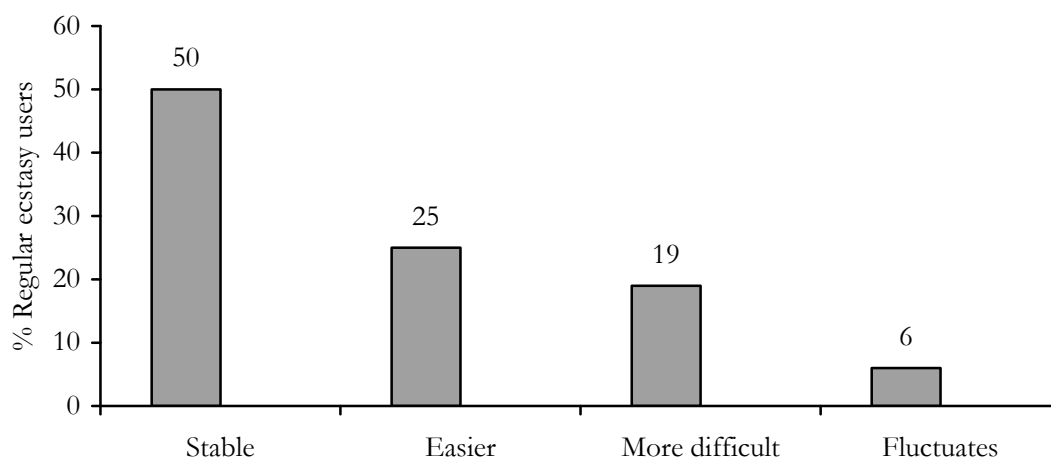
**Figure 58: Current ketamine availability, NSW 2006**



Source: EDRS Regular ecstasy user interviews 2006

Half reported that the availability of ketamine had remained 'stable' in the past six months' (50%; 8% of the entire sample). One-quarter (25%; 4% of the entire sample) believed ketamine had become 'easier' to obtain in the preceding six months, and 19% (3% of the entire sample) reported it had become 'more difficult' to obtain ketamine in the past six months; 6% (1% of the entire sample) reported that ketamine availability had fluctuated in the past six months (Figure 59).

**Figure 59: Changes in availability of ketamine over the past 6 months, NSW 2006**

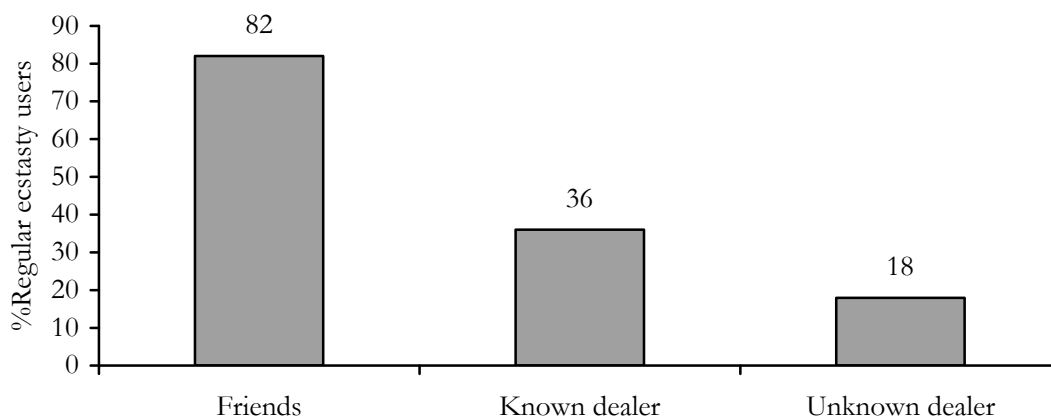


Source: EDRS Regular ecstasy user interviews 2006

### 7.5.1 Source person and source location

Ketamine was most commonly purchased from friends (82%) and known dealers (36%) (Figure 60).

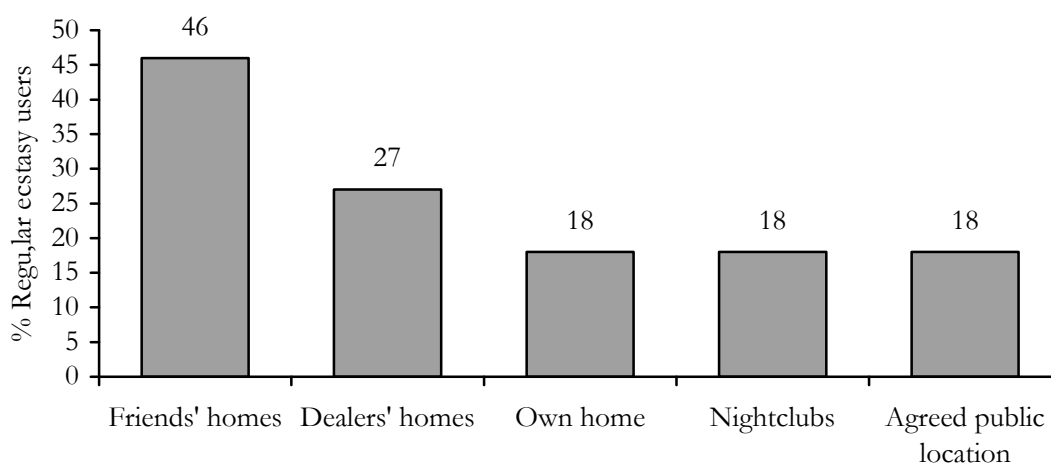
**Figure 60: People from whom ketamine had been purchased in the preceding six months, NSW 2006**



Source: EDRS Regular ecstasy user interviews 2006

When asked to specify the locations ketamine was normally purchased from, private residences such as friends' homes (46%), dealers' homes (27%) and own home (18%) were most often reported (Figure 61). Other locations included agreed public locations (18%) and nightclubs (18%) (Figure 61).

**Figure 61: Locations ketamine had been purchased in the preceding six months, NSW 2006**



Source: EDRS Regular ecstasy user interviews 2006

### 7.5.2 Key expert comments

Few KE were able to comment on ketamine. Some KE mentioned that it was more predominant in the gay/lesbian/bisexual/transgender/queer (GLBTQ) community. Snorting ketamine was reported to be more prevalence amongst those who use the drug, though it was also combined in pills with ecstasy. One KE noted that users were 'savvy'



to the types of pills that contained ketamine and would ask for those specifically. These were preferred due to their ‘trippy’ effects. This was often mentioned during the REU interviews – some pills were reported to produce a ‘trippy’ effect that users often equated to the presence of LSD. However, one KE stated that these effects were probably due to the addition of ketamine to a pill, and users unfamiliar with ketamine’s effects would probably attribute these to LSD.

Those KE who worked in entertainment venues noted a decline in the use of ketamine in venues such as nightclubs and dance parties, and that ketamine use may now occur predominantly in private locations.

One KE in law enforcement noted that between January and June 2006 there were two identified imports by customs of ketamine. Pharmacies are also often targeted to source ketamine.

## **7.6 Ketamine-related harms**

### **7.6.1 Law enforcement**

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

Although it is an offence in jurisdictions such as NSW to be in the possession of ketamine for personal use or in amounts suggesting an individual is supplying others, ketamine is not separately recorded in police databases. Therefore, no data are available on the number of police apprehensions for possession or supply of this controlled substance.

### **7.6.2 Health**

#### *Mortality*

Drug-related deaths where ketamine has been detected are low. Data from the Forensic Toxicology Laboratory Database at the Division of Analytical Laboratories show there was one drug-related death in which ketamine was detected in 2000 and one in 2001. There were no deaths where ketamine was detected in 2002 and two in 2003. There were no deaths where ketamine was detected in 2004; however, there was one death in 2005 where ketamine was detected. No deaths where ketamine was detected occurred in 2006.

#### *Treatment*

Treatment-seeking for problems with ketamine use is low compared to other drugs. Data from the NSW Minimum Dataset show there were six closed treatment episodes based on the date of commencement where the principal drug of concern was ketamine (NSW MDS DATS, NSW Department of Health). One of these was in 2002 and four people nominated ketamine as their principal drug of concern in 2003. There was one treatment episode in 2005. All patients were male except in 2005; three entered counselling treatment, one for assessment only, and one entered residential rehabilitation. There were no closed treatment episodes for ketamine in 2006. The NSW MDS is based on closed

treatment episodes and so some episodes may be excluded if they did not finish in the given period.

*Calls to telephone helplines*

From the period covering July 2005 to June 2006, there were 21 calls to ADIS where ketamine was the primary drug of concern.

## 7.7 Summary of ketamine trends

- Prevalence of lifetime ketamine use decreased in 2006, returning to levels observed between 2002 and 2004. The prevalence of recent ketamine use decreased to the lowest levels observed in five years.
- The median days of ketamine use in the previous 6 months was two, remaining stable since 2005, though still lower than that reported in 2004 (four days of use).
- Use of ketamine in the general population is low, though an increasing trend has been reported amongst other groups where data on ketamine use has been reported over time.
- Ketamine was used in a variety of both public and private locations.
- Few KE were able to comment on ketamine use, though reports indicate use is still predominantly concentrated in those identifying as GLBTQ. KE also suggested that novice users may be confusing the effects of ketamine with LSD.
- Although only small proportions in previous years were able to comment, the gram price of ketamine was purchased for a median price of \$175. The median price for a gram of ketamine has fluctuated in the past three years (\$200 in 2004; \$100 in 2005; \$175 in 2006).
- Participant-reported purity of ketamine indicated that it was of high purity and that this had remained stable in the past six months.
- Ketamine availability varied, with approximately equal proportions indicating ketamine was 'easy', 'very easy' or 'difficult' to obtain. Half of those who commented reported that availability had remained 'stable' in the past six months.
- Ketamine was overwhelmingly purchased from friends in private locations such as friends' homes, dealers' homes or participant's own home.
- Indicator data suggests low rates of health-related harms, reflecting low rates of use.

## 8 GHB

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

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

Two-fifths (40%) of the 2006 sample reported lifetime GHB use, while 21% reported using GHB in the preceding six months. GHB was first used at a median age of 23 years (range 18-42 years). Females reported first using GHB at a significantly younger age than males (22 years vs. 27 years;  $t=-2.96$ ,  $p<0.05$ ). All recent GHB users administered the drug orally. There were no reports of lifetime or recent injecting of GHB. GHB was the drug of choice for three participants.

Three respondents reported lifetime use of GBL, with the median age of first use being 22 years (range 18-25 years). Two reported having used GBL in the preceding six months. Both participants consumed GBL orally. One participant reported using GBL on five days in the past six months, while the other participant reported using GBL on twenty days in the past six months. Given the small number of participants reporting GBL use, data concerning price, purity and availability are not reported.

No respondents in the 2006 sample reported lifetime or recent use of 1,4-B.

### 8.1 GHB use among REU

Twenty-one participants reported using GHB in the preceding six months on a median of three days (range 1-40). Almost three-quarters (71%) reported using GHB less than monthly, while 14% reported using GHB between monthly and fortnightly; one respondent reported using GHB on a greater than weekly basis. Of those who usually use other drugs with ecstasy, five respondents reported usually using GHB with ecstasy. Among those who reported usually using other drugs to comedown from ecstasy, one respondent reported usually using GHB to come down from ecstasy. Sixteen percent of those who had binged in the preceding six months had used GHB in a binge episode.

Recent GHB users quantified their use in terms of millilitres ( $n=9$ ) while eleven participants also referred to 'vials'. A 'vial' refers to a small glass or plastic container in which GHB is sold. Those reporting millilitres used a median of 3.5mls during a 'typical' occasion of use (range 0.25-20) and 6mls (range 0.25-40) during a 'heavy' occasion of use in the preceding six months. Those referring to vials used a median of one vial during both a 'typical' (range 0.25-4) and 'heavy' (range 0.50-4) occasion of use.

The majority (71%) of those who had recently used GHB had done so on a less-than-monthly basis; 14% reported using between monthly and fortnightly; 10% reported using between fortnightly and weekly; and one participant reported using GHB on a greater than weekly basis in the preceding six months.

The prevalence of GHB use has increased over time. A substantial increase in reports of lifetime use has been observed since 2000, and while recent use has fluctuated over sampling years, there was an increase in the proportion reporting recent use in 2006 (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 REU, NSW 2000-2006**

| GHB variable                         | 2000<br>(n=94)  | 2001<br>(n=163) | 2002<br>(n=88) | 2003<br>(n=102) | 2004<br>(n=104) | 2005<br>(n=101) | <b>2006<br/>(n=100)</b> |
|--------------------------------------|-----------------|-----------------|----------------|-----------------|-----------------|-----------------|-------------------------|
| Ever used (%)                        | 5               | 23              | 35             | 33              | 28              | 32              | <b>40</b>               |
| Used last six months (%)             | 1               | 15              | 19             | 21              | 18              | 13              | <b>21</b>               |
| <b>Of those who had used:</b>        |                 |                 |                |                 |                 |                 |                         |
| Median days used last 6 mths (range) | 1<br>(no range) | 2<br>(1-10)     | 3<br>(1-30)    | 2<br>(1-30)     | 2<br>(1-26)     | 2<br>(1-72)     | <b>3<br/>(1-40)</b>     |
| <b>Median quantities used (ml):</b>  |                 |                 |                |                 |                 |                 |                         |
| Typical (range)                      | 1<br>(no range) | 5<br>(1-35)     | 10<br>(1-70)   | 8.25<br>(5-30)  | 5<br>(2-30)     | 4<br>(1.8-20)   | <b>3.5<br/>(.25-20)</b> |
| Heavy (range)                        | 1<br>(no range) | 5<br>(1-50)     | 12<br>(1-120)  | 8.75<br>(5-40)  | 12<br>(3-36)    | 15<br>(3-43.20) | <b>6<br/>(.25-40)</b>   |

Source: EDRS Regular ecstasy user interviews 2000-2006

## 8.2 GHB use in other populations

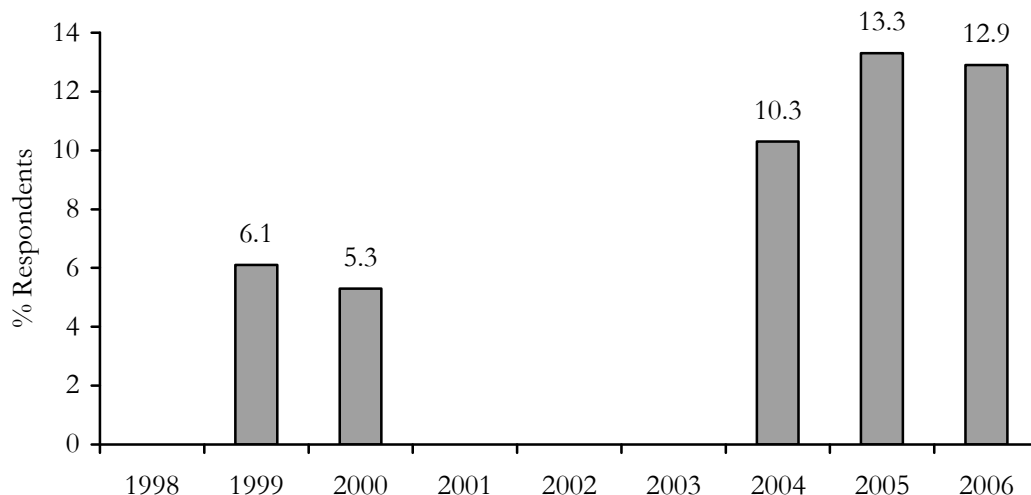
### 8.2.1 General population

The 2004 National Drug Strategy Household Survey was the first to include GHB as a separate drug class. In 2004, 0.1% of the NSW general population aged 14 years and above had used GHB in the past twelve months (Australian Institute of Health and Welfare 2005).

### 8.2.2 Sydney Gay Community Periodic Survey

Figure 62 shows the proportion of gay men surveyed that had used GHB in the past six months. Despite GHB not being included in all surveys, data shows that approximately one-tenth of men surveyed had used GHB in the past six months.

**Figure 62: Proportion of gay men in Sydney reporting recent GHB\* use, 1998-2006.**



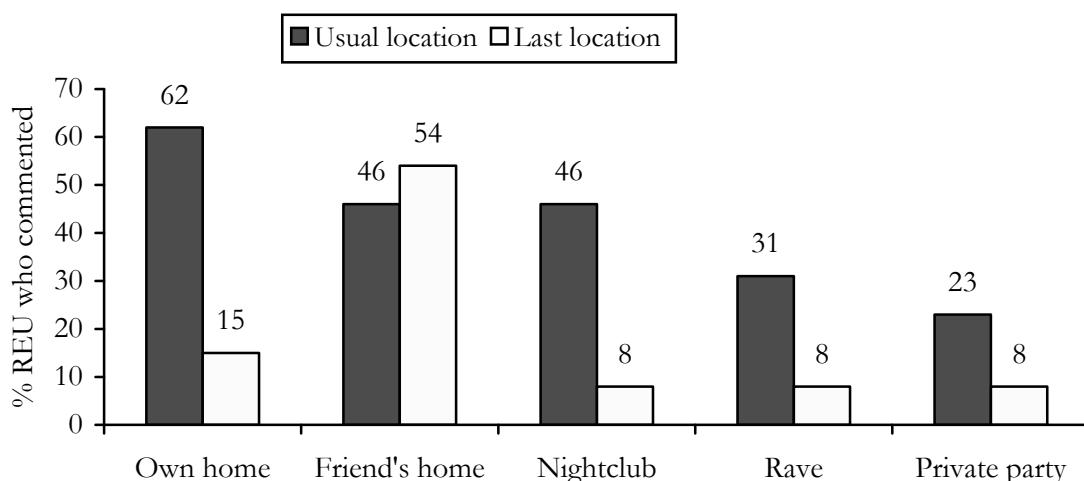
Source: Sydney Gay Community Periodic Survey, 1996-2006.

\*Not asked in all surveys

### 8.3 Locations of GHB use

When asked to specify usual locations of GHB use, participant's own home (62%) were a common usual use location, followed by friends' homes (46%) and nightclubs (46%) (Figure 63). Raves (including 'doofs' and dance parties; 31%) and private parties (23%) were other reported usual locations of GHB use. The most frequently mentioned locations of last GHB use was at friends' homes (54%; Figure 63). Other responses included and participant's own home (15%), nightclubs (8%), private parties (8%) and raves (including 'doofs' and dance parties; 8%).

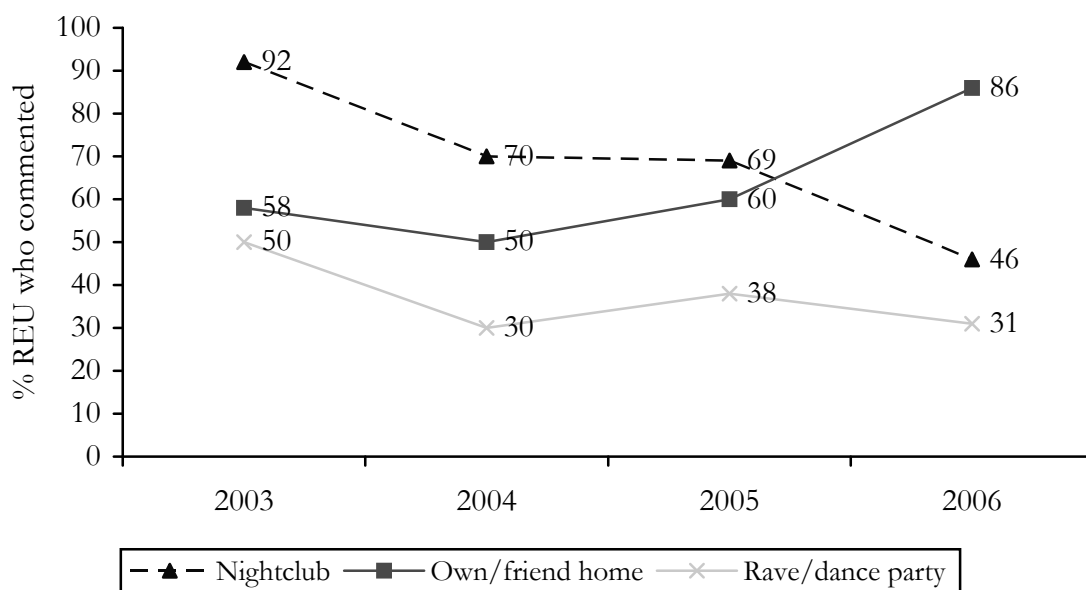
**Figure 63: Usual location and last location of GHB use, NSW 2006**



Source: EDRS Regular ecstasy user interviews 2006

Figure 64 presents data showing location of usual GHB use over time. Across the four sampling years, there has been a decline in the proportion of users reporting nightclubs as a location of usual use and an increase in the proportion nominating private locations (such as friend's or respondent's home) as a location of usual use.

**Figure 64: Usual locations of GHB use across time, NSW 2003-2006**



Source: EDRS Regular ecstasy user interviews 2003-2006

NB: Data first collected in 2003

## 8.4 Price

Of the eighteen participants who commented on the price change of GHB, 39% (7% of the entire sample) believed it had remained ‘stable’, 11% (2% of the entire sample) believed it had ‘decreased’, 11% (2% of the entire sample) believed it had ‘fluctuated’ while one respondent believed it had ‘increased’. Thirty-three percent (6% of the entire sample) were unable to comment.

Given the confusion regarding the size of vials in which GHB is typically purchased and the uncertainty around what constitutes a typical dose, it is not surprising that there is wide variation and seemingly inconsistent reports of the price of GHB between years. Again, the small proportion of respondents who commented on the price of GHB makes it difficult to draw any strong conclusions from these data. In 2004, ten participants were able to comment on the price of GHB; prices ranged from \$1 for 1ml, \$30 for a vial, \$12.50 for 2mls (range \$10-\$15), \$25 for 30mls (range \$20-\$30), and \$10,000 for 1L. In 2005, five participants were able to comment on prices for GHB; these ranged from \$5 for 1ml (range \$4-\$15), \$25 for a vial (range \$15-\$40), \$2 for 2mls and \$40 for 15mls.

In 2006, nine participants reported that a ‘vial’ of GHB cost \$25 (range \$20-\$40). Two participants reported that GHB cost \$5 for 1mL.

## 8.5 Purity

Of the eighteen participants who commented on current GHB purity, 67% (12% of the entire sample) believed the current purity to be ‘high’, while 11% (2% of the entire sample) believed it to be ‘medium’ and 11% (2% of the entire sample) believed it to be ‘low’. One respondent believed the current purity ‘fluctuated’ and one participant ‘did not know’ the current purity of GHB.

When asked to comment on purity change in the preceding six months there were conflicting responses: nine respondents believed the purity had remained ‘stable’, four believed it had ‘decreased’, one each believed the purity had either ‘increased’ or ‘fluctuated’ and four were unable to comment.

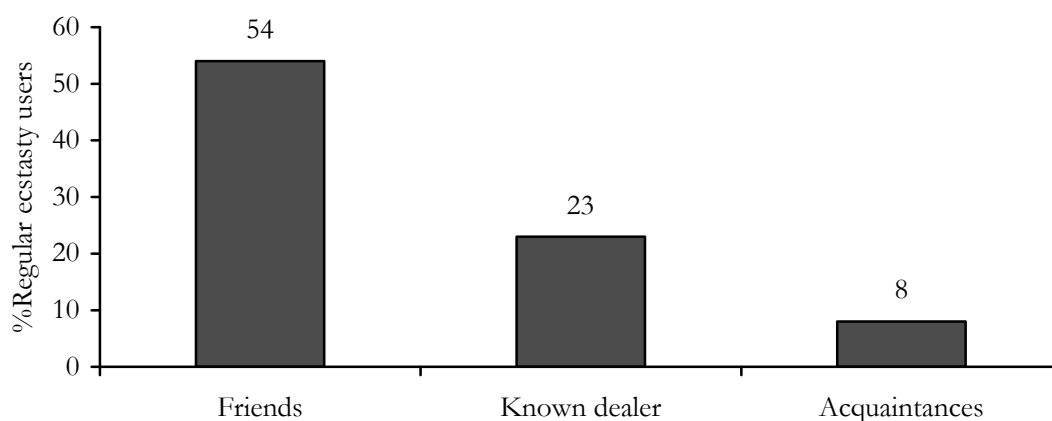
## 8.6 Availability

Of the eighteen respondents who commented on the current availability of GHB, there were again conflicting responses, with seven participants believing it to be ‘very easy’, five believing it to be ‘easy’ while five believed it to be ‘difficult’ and one unable to comment. Regarding the changes of availability, the majority who commented (67%, 12% of the entire sample) believed that the availability of GHB had remained ‘stable’ in the preceding six months, while two participants each believed it had become ‘easier’, ‘more difficult’, or were unable to comment.

### 8.6.1 Source person and source location

GHB was most commonly purchased from friends (54%) and known dealers (23%) (Figure 65); a small proportion nominated acquaintances (8%).

**Figure 65: People from whom GHB had been purchased in the preceding six months, NSW 2006**

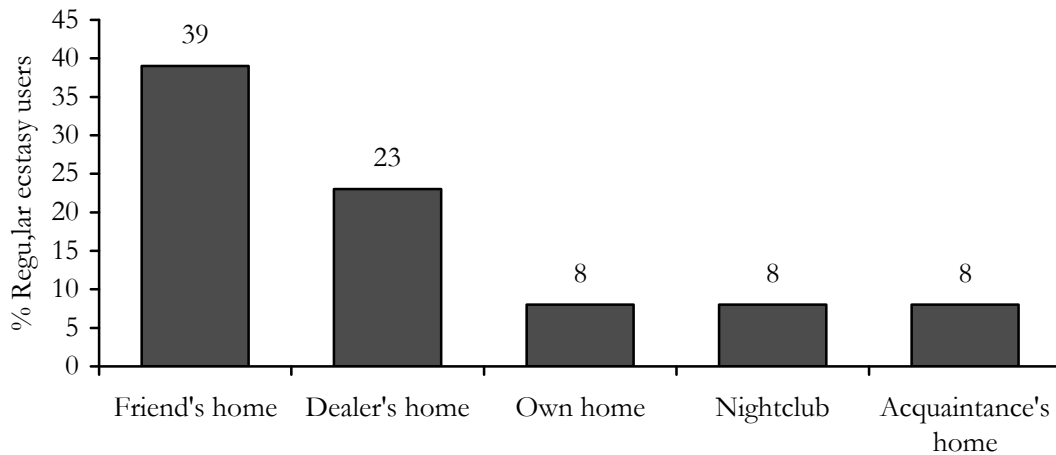


Source: EDRS Regular ecstasy user interviews 2006

GHB was more commonly purchased from private locations, such as friends’ homes (39%), dealers’ homes (23%), and participant’s own home (8%). Less commonly nominated locations of purchase included nightclubs (8%) and acquaintances’ homes (8%) (Figure 66).



**Figure 66: Locations GHB had been purchased in the preceding six months, NSW 2006**



Source: EDRS Regular ecstasy user interviews 2006

### 8.6.2 Key expert comments

A large proportion of KE were able to comment on GHB use in 2006. Most were concerned with the increased usage they had witnessed amongst the groups they were in contact with. Whilst some maintained that GHB was still mostly concentrated in the GLBTQ community (where it is reported to be used to enhance sexual experiences), other KE reported that use was now occurring in a diverse range of drug using groups. While KE mentioned that there was still stigma associated with GHB use, there was a sense that this stigma was starting to fade. This was discussed in the context that while previously most GHB use appeared to occur in private locations, there was a perceived increase in the use of GHB in public locations such as nightclubs and dance parties.

Several issues of concern were raised about GHB. Firstly, there were reports of a growing practice of using GHB in combination with an amphetamine-type stimulant; the rationale behind this was that using these in combination would decrease the likelihood of a GHB overdose. GHB was reported to also be used after the use of stimulants, to aid in the recovery or 'comedown' phase. Secondly, there was reported to be an increase in consumption of the drug by novice users who lacked the approximate knowledge about the drug, e.g. its steep dose-response curve.

Thirdly, many KE noted with concern the relaxed attitude many GHB users had towards overdose. Users describe 'G-naps', which KE said were most probably overdoses. These occurred in entertainment venues, and those working in these venues mentioned that staff now try and identify those who are on the verge of passing out so as to provide assistance. There was reportedly reluctance for people to seek help for their friends who had overdosed on GHB.

KE mentioned that there needs to be a 're-education' campaign regarding the use of GHB as many users are starting to rely on myth and anecdotal evidence to guide their use. Also, newer users tend to have beliefs such as "*I know the purity of my dose*", when in reality this is often not the case.

## 8.7 GHB-related harms

### 8.7.1 Law enforcement

GHB, GBL and 1,4-B are controlled substances in Australia, and possession of them is an offence. However, it is not currently possible to obtain data on any police apprehensions of persons caught supplying, manufacturing or in the possession of these substances as they are not separately recorded in police databases.

### 8.7.2 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 user 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-CM or ICD-10-AM (the classification system used in these settings), and no alternative mechanism for routinely documenting GHB overdoses has yet been developed around the country.

Given that anecdotal reports suggest continued occurrence of GHB overdoses, and reports from hospitals in increasing locations and jurisdictions around the country, 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 have been three suspected drug-related deaths in which GHB was detected. These deaths occurred in March and September of 2003 and in April 2006.

#### *Calls to telephone helplines*

Between the period covering July 2005 and June 2006, there were 38 calls to ADIS where GHB was the primary drug of concern.

#### *Treatment*

Data from the NSW Minimum Dataset show there have been seven treatment episodes since 2002, with one each in 2002/03 and 2003/04, three in 2004/05 and two in 2005/06 (NSW MDS DATS, NSW Department of Health). The NSW MDS is based on closed treatment episodes and so some episodes may be excluded if they did not finish in the given period.

## 8.8 Summary of GHB trends

- In 2006 there was an increase in the proportion reporting lifetime GHB use, and there was a marked increase in the proportion reporting recent GHB use.
- GHB was used on a median of three days in the past six months; almost three-quarters of recent users had used GHB less than once per month.
- Prevalence amongst the general population is low, however, amongst other groups where data has been collected on GHB over time, there has been an increase in the proportion surveyed that had used GHB in the past six months.
- Increases in GHB use are consistent with KE reports. KE displayed concerns regarding the amount of education GHB users have regarding safer use of the drug and discuss the need for a 're-education' campaign regarding the evidence and myths that surround GHB and its use.
- Though quantities may vary, data collected in 2006 indicates a decrease in the amount of GHB used in both 'typical' and 'heavy' episodes of use.
- GHB use occurred more commonly in private locations such as friends' homes and participant's own home, though nightclubs and raves were also nominated as locations of usual use. GHB was commonly purchased from friends in private locations.
- Participant-reports indicated that GHB purity was 'high', though the reports about purity change varied. On the other hand, participant-reports varied regarding availability, though most regarded availability as remaining stable in the preceding six months.

## 9 LSD

Lysergic acid diethylamide is commonly known as LSD, 'trips' or 'acid', which became popular in the 1960s. It is a powerful hallucinogen which can produce significant changes in perception, mood and thought. Only a small amount is needed to cause visual hallucinations and distortions. These experiences are known as 'trips'.

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

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

Two-thirds (65%) of the 2006 sample reported lifetime use of LSD, though only 17% reported using LSD in the preceding six months. LSD had first been used at a median age of 18 years (range 13-35 years) and there was no significant difference between males and females regarding age of initiation. Five participants reported ever injecting LSD.

Of those who reported using other drugs with ecstasy, four participants reported usually using LSD with ecstasy. Furthermore, of those who reported having binged on ecstasy and related drugs in the preceding six months, four participants reported using LSD in a binge. LSD was the drug of choice for one respondent.

### 9.1 LSD use among REU

Seventeen participants reported a median of two days of use in the preceding six months (range 1-25; Table 16). Sixty-five percent reported using LSD less than once per month in the preceding six months, while 18% reported using LSD between monthly and fortnightly in the preceding six months.

The median number of LSD tabs taken in both a 'typical' episode (range 0.50-2) of use and in a 'heavy' episode of use was one (range 0.50-16). All recent LSD users reported swallowing the drug; one respondent reported snorting LSD in the preceding six months.

As can be seen in Table 16, the prevalence of lifetime use of LSD has shown a fluctuating pattern, with a decrease observed in 2006 when compared to 2005; however, across the sampling years, three-fifths or more of participants have reported lifetime use. Recent use of LSD has also shown a fluctuating pattern in recent years, though a marked decrease was observed in 2006 as compared with 2005. Frequency of LSD used by recent users appears to have remained stable.

**Table 16: Patterns of LSD use of REU, NSW 2000-2006**

| LSD variable                          | 2000<br>(n=94) | 2001<br>(n=163) | 2002<br>(n=88) | 2003<br>(n=102) | 2004<br>(n=104) | 2005<br>(n=101) | <b>2006<br/>(n=100)</b> |
|---------------------------------------|----------------|-----------------|----------------|-----------------|-----------------|-----------------|-------------------------|
| Ever used (%)                         | 80             | 74              | 73             | 66              | 61              | 71              | <b>65</b>               |
| Used last six months (%)              | 37             | 23              | 33             | 27              | 20              | 33              | <b>17</b>               |
| <b>Of those who had used:</b>         |                |                 |                |                 |                 |                 |                         |
| Median days used last 6 mths (range)  | 2 (1-74)       | 5 (1-70)        | 3 (1-24)       | 1 (1-20)        | 1 (1-20)        | 2 (1-72)        | <b>2 (1-25)</b>         |
| <b>Median quantities used (tabs):</b> |                |                 |                |                 |                 |                 |                         |
| Typical (range)                       | 1<br>(0.25-1)  | 1<br>(0.25-1)   | 1<br>(0.3-3)   | 1<br>(0.5-3)    | 1<br>(0.25-4)   | 1<br>(0.50-3)   | <b>1<br/>(0.50-2)</b>   |
| Heavy (range)                         | 1<br>(0.25-4)  | 1<br>(0.25-4)   | 2<br>(0.3-6)   | 1<br>(0.5-12)   | 1<br>(0.5-4)    | 1<br>(0.5-15)   | <b>2<br/>(0.50-6)</b>   |

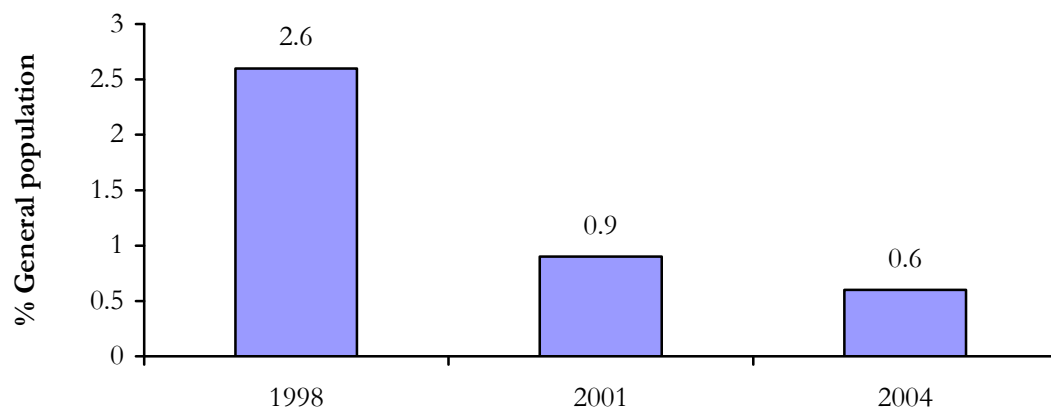
Source: EDRS Regular ecstasy user interviews 2000-2006

## 9.2 Hallucinogen use in other populations

### 9.2.1 General population

The recent use of hallucinogens in the NSW general population decreased markedly from 1998 (2.6%) to 2001 (0.9%), before remaining stable in 2004 (0.6%) (Figure 67).

**Figure 67: Hallucinogen use in the NSW general population, 1998-2004.**

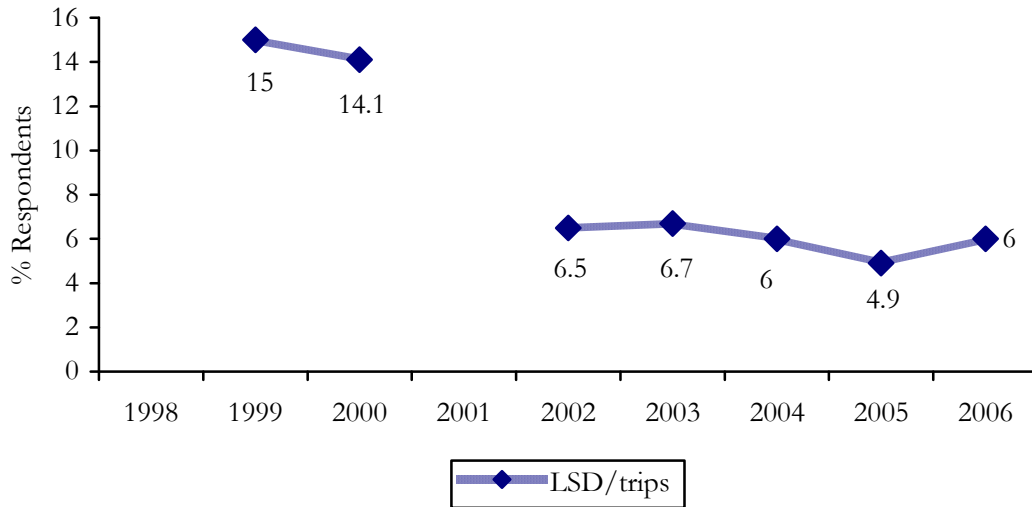


Source: Fitzsimmons & Cooper-Stanbury, 2000; Australian Institute of Health and Welfare, 2002, 2005

### 9.2.2 Sydney Gay Community Periodic Survey

Figure 68 shows the proportion of men surveyed that had used LSD/trips in the past six months. The authors note that the use of LSD/trips declined from 2001 to 2005, however an increase has been observed between 2005 and 2006 (Zablotska 2006).

**Figure 68: Proportion of gay men in Sydney reporting the recent use of LSD/trips\*, 1998-2006.**

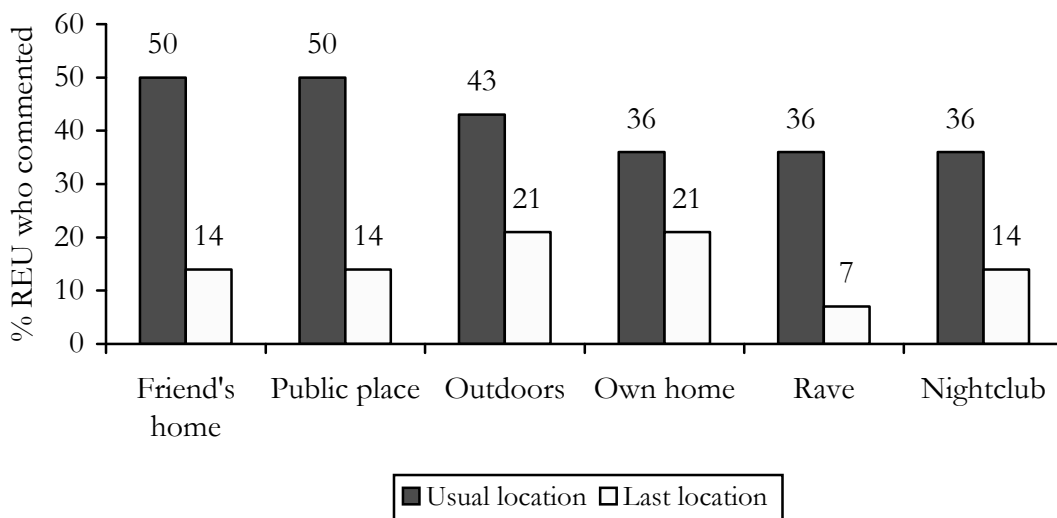


Source: Sydney Gay Community Periodic Survey, 1998-2006.

\*Not asked in all surveys

When asked to specify usual locations of LSD use, friends' homes (50%) and public places (street or park; 50%) were the most frequently cited locations (Figure 69). Other locations mentioned included outdoors (43%), respondent's own home (36%), raves (including 'doofs' and dance parties; 36%), nightclubs (36%), pubs (21%) and private parties (21%). Less frequently mentioned locations included dealers' homes (7%) and day clubs (7%). Frequently mentioned locations of last LSD use were respondent's own home (21%) and outdoors (21%), followed by a public place (14%), friends' homes (14%) and nightclubs (14%), and also at raves (including 'doofs' and dance parties; 7%) (Figure 69).

**Figure 69: Usual location and last location of LSD use, NSW 2006**



Source: EDRS Regular ecstasy user interviews 2006

### 9.3 Price

The median price paid for a tab of LSD in 2006 was \$20. Of the twenty-eight respondents who commented, the majority (46%; 13% of the entire sample) reported that the price of LSD in the preceding six months had remained 'stable'; 11% (3% of the entire sample) reported that the price had increased; 7% (2% of the entire sample) reported that it had decreased and the same proportion (7%) believed that the price had 'fluctuated'; 29% (8% of the entire sample) were unable to comment on the price changes in the preceding six months. As indicated in Table 17, the price of LSD tabs has remained stable from 2004 to 2006 at \$20, though the price has increased steadily since data was first collected in 2000.

**Table 17: Prices of LSD purchased by REU, NSW 2000-2006**

| Median price (\$) LSD     | 2000<br>(n=16) | 2001<br>(n=46) | 2002<br>(n=39) | 2003<br>(n=23) | 2004<br>(n=18) | 2005<br>(n=38) | <b>2006<br/>(n=27)</b> |
|---------------------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------------|
| Tab (range)               | 10<br>(3-25)   | 10<br>(5-45)   | 15<br>(8-25)   | 15<br>(4-30)   | 20<br>(10-35)  | 20<br>(5-40)   | <b>20<br/>(10-70)</b>  |
| Lowest tab price (range)  | 10<br>(1-15)   | 10<br>(1-30)   | 10<br>(2-15)   | 10<br>(5-20)   | -              | -              | -                      |
| Highest tab price (range) | 20<br>(10-25)  | 15<br>(10-45)  | 20<br>(10-30)  | 15<br>(15-40)  | -              | -              | -                      |

Source: EDRS Regular ecstasy user interviews 2000-2006

### 9.4 Purity

Twenty-eight respondents were able to comment on the current purity of LSD. One-third of those who commented (36%; 10% of the entire sample) reported purity as 'high' (45%; 19% of the entire sample); 25% (7% of the entire sample) reported the current purity as 'medium'; while 11% (3% of the entire sample) reported the current purity as 'fluctuating'. Two respondents reported the current purity as 'low'; 21% (6% of the entire sample) were unable to comment on current purity.

One-third (32%; 9% of the entire sample) of those who commented believed that the purity of LSD had remained 'stable' in the six months preceding interview; 21% (6% of the entire sample) reported that it had 'decreased'; 11% (3% of the entire sample) reported that it had 'fluctuated' and 7% (2% of the entire sample) reported that it had 'increased'. Twenty-nine percent (8% of the entire sample) did not know about the change in purity in the six months preceding interview.

### 9.5 Availability

Half of those who commented (50%; 14% of the entire sample) reported that LSD was currently 'difficult' to obtain, while 14% each (4% of the entire sample respectively) reported that LSD was currently either 'very difficult', 'easy' or 'very easy' to obtain. Seven percent (2% of the entire sample) were unable to comment on current availability.

More than half of those who commented (54%; 15% of the entire sample) reported that LSD availability had remained 'stable' in the six months preceding interview, while 14% each (4% of the sample respectively) reported that availability had either become 'easier'

or 'more difficult' in the preceding six months; 18% (5% if the entire sample) were unable to comment on availability change in the preceding six months.

### **9.5.1 Key expert comments**

Few KE were able to discuss LSD, with most reporting that LSD was not being used. One KE mentioned that they believed LSD use was slowly increasing, while two KE reported that use was centralised amongst different user groups as well as in certain geographical regions, such as on the North Coast of NSW.

A popular myth that KE mentioned was that users tend to believe that ecstasy is being cut with LSD. One KE with knowledge regarding the manufacturing of drugs mentioned that this would be highly unlikely – ecstasy pills cut with LSD would have bits of paper in them, as LSD oil is not common in Australia. As such, users are probably confusing the effects they believe are caused by LSD in a pill with ketamine.

One KE reported that LSD is imported into Australia, this being because LSD is difficult to manufacture. It is a fragile, powerful compound and the conditions needed to manufacture LSD need to be very tightly controlled.

## **9.6 LSD and other hallucinogen-related harms**

### **9.6.1 Health**

#### *Calls to telephone helplines*

From the period covering July 2005 to June 2006, there were 56 calls to ADIS where hallucinogens were the primary drug of concern.



## 9.7 Summary of LSD trends

- More than two-fifths of the sample reported lifetime use of LSD however recent use decreased markedly. Few KE were able to comment on LSD. Perhaps this reflected that its use may be localised in specific user groups.
- Hallucinogen use in the general population has decreased across time; use in other populations where data has been collected also suggests a decrease in the proportion using LSD.
- KE reported that users believe LSD to be in ecstasy pills, when in reality the effects being attributed to the presence of LSD may be due to ketamine.
- LSD was reported to be of 'medium' to 'high' purity, though reports differed in regards to the change in purity in the preceding six months.
- LSD was reported to be 'difficult' to obtain and this had been 'stable' in the six months preceding interview.
- The price of LSD has remained stable in the past three years at \$20 per tab, however the price has steadily increased since data was first collected in 2000.
- Indicator data suggests that LSD and other hallucinogen use is low or decreasing amongst groups where data is collected over time. However, calls to telephone helplines were higher for hallucinogens than drugs such as GHB and ketamine.

## 10 MDA

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

Two-fifths (42%) of the 2006 sample reported lifetime use of MDA, though less than one-fifth (14%) reported using MDA in the preceding six months. The median age of first use was 20 years (range 15-44 years) and there were no significant gender differences regarding age of first use. Twelve percent of those who had ever used MDA reported having ever injected MDA at some time; however, only one respondent reported having injected MDA in the preceding six months.

One respondent from the sample reported that MDA was their drug of choice. Of those who reported bingeing in the preceding six months, one respondent had used MDA in a binge episode and one person who reported usually using other drugs with ecstasy usually used MDA.

### 10.1 MDA use among REU

Fourteen participants reported using MDA on a median of two days (range 1-10) in the preceding six months. All respondents except one had used MDA once a month or less; one participant reported using MDA ten days in the preceding six months.

The majority of recent MDA users quantified their use in terms of caps (n=11) although one respondent referred to 'points' and two referred to 'lines'. Those who reported MDA use in terms of caps used a median of one cap during both a 'typical' (range 0.50-5) and 'heavy' (range 0.50-5) occasion of use.

The most common route of administration reported by recent MDA users was swallowing (86%). More than one-quarter (29%) reported snorting MDA and one participant had injected; no participants had smoked or shelved MDA in the preceding six months.

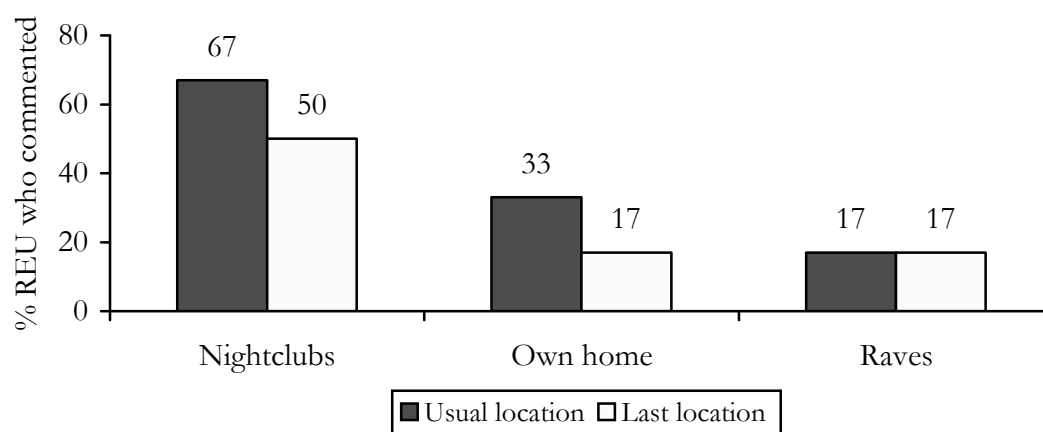
Table 18 shows the prevalence of lifetime and recent MDA use. Lifetime use of MDA has shown a fluctuating pattern between the years 2004 and 2006; lifetime use increased from 2005 to 2006. Recent use of MDA has decreased between the years 2003 and 2006. The median days in which MDA had been used in the preceding six months remained stable at two days, however, the range of days has decreased.

**Table 18: Patterns of MDA use of REU, NSW 2000-2006**

| MDA variable                          | 2000<br>(n=94) | 2001<br>(n=163) | 2002<br>(n=88) | 2003<br>(n=102) | 2004<br>(n=104) | 2005<br>(n=101) | <b>2006<br/>(n=100)</b> |
|---------------------------------------|----------------|-----------------|----------------|-----------------|-----------------|-----------------|-------------------------|
| Ever used (%)                         | 36             | 43              | 56             | 56              | 54              | 32              | <b>42</b>               |
| Used last six months (%)              | 16             | 14              | 35             | 35              | 30              | 19              | <b>14</b>               |
| <b>Of those who had used:</b>         |                |                 |                |                 |                 |                 |                         |
| Median days used last 6 mths (range)  | 2 (1-12)       | 2 (1-30)        | 4 (1-20)       | 1 (1-14)        | 2 (1-23)        | 2 (1-72)        | <b>2 (1-10)</b>         |
| <b>Median quantities used (caps):</b> |                |                 |                |                 |                 |                 |                         |
| Typical (range)                       | 1 (1-2)        | 1 (1-2)         | 1 (1-3)        | 1 (0.25-4)      | 1 (0.25-4)      | 1 (0.50-4)      | <b>1 (0.50-5)</b>       |
| Heavy (range)                         | 1 (1-2)        | 1 (1-2)         | 1.5 (1-6)      | 1 (0.25-6)      | 1 (0.25-4)      | 2 (1-4)         | <b>1 (0.50-5)</b>       |

Source: EDRS Regular ecstasy user interviews 2000-2006

When asked to specify usual locations of MDA use, the most frequently reported location was nightclubs (67%), followed by own home (33%) and raves (17%) (Figure 70). Consistent with typical locations of use, the frequently mentioned location of last MDA use was at nightclubs (50%), followed by own home (17%) and raves (including ‘doofs’ and dance parties; 17%) (Figure 70).

**Figure 70: Usual location and last location of MDA use, NSW 2006**

Source: EDRS Regular ecstasy user interviews 2006

## 10.2 MDA use in other populations

MDA is not coded as a separate drug in studies of other populations. As such, data is unavailable.

### 10.3 Price

The median price for an MDA cap reported by REU in 2006 was \$40. Of those who commented, 46% (5% of the entire sample) reported that the price of MDA had remained ‘stable’ in the preceding six months, while one participant each reporting that the price had either ‘decreased’, ‘increased’ or ‘fluctuated’. One quarter (27%; 3% of the entire sample) was unable to comment on the price change in the preceding six months.

The proportion of users who were able to comment on the price of MDA across sampling years is relatively small, and accordingly these data must be interpreted with caution. Nevertheless, the price of MDA has fluctuated in recent years (2004 to 2006); between 2005 and 2006 the price increased slightly (Table 19).

**Table 19: Price of MDA purchased by REU, NSW 2000-2006**

| Median price MDA (\$) | 2000 (n=8)    | 2001 (n=24)    | 2002 (n=26)   | 2003 (n=21)   | 2004 (n=10)      | 2005 (n=8)      | 2006 (n=9)                  |
|-----------------------|---------------|----------------|---------------|---------------|------------------|-----------------|-----------------------------|
| Capsule price (range) | 50<br>(40-60) | 50<br>(20-80)  | 50<br>(25-60) | 45<br>(30-60) | 47.50<br>(35-60) | 37.5<br>(20-80) | <b>40</b><br><b>(30-60)</b> |
| Lowest price (range)  | 40<br>(35-50) | 40<br>(20-60)  | 35<br>(15-45) | 50<br>(30-60) | -                | -               | -                           |
| Highest price (range) | 55<br>(40-60) | 50<br>(45-100) | 50<br>(35-60) | 60<br>(35-70) | -                | -               | -                           |

Source: EDRS Regular ecstasy user interviews 2000-2006

### 10.4 Purity

Eleven respondents commented on the purity of MDA. Seventy-three percent (8% of the entire sample) reported the purity of MDA to be ‘high’; 9% (1% of the entire sample) reported the purity of MDA to be ‘medium’; and no participants reported the current purity to be ‘low’. Eighteen percent (2% of the entire sample) ‘did not know’ the current purity of MDA.

Three-quarters of those who commented (73%; 8% of the entire sample) believed the purity had remained ‘stable’ in the preceding six months. One respondent believed the purity had ‘increased’; 18% (2% of the entire sample) ‘did not know’ whether the purity of MDA had changed in the preceding six months.

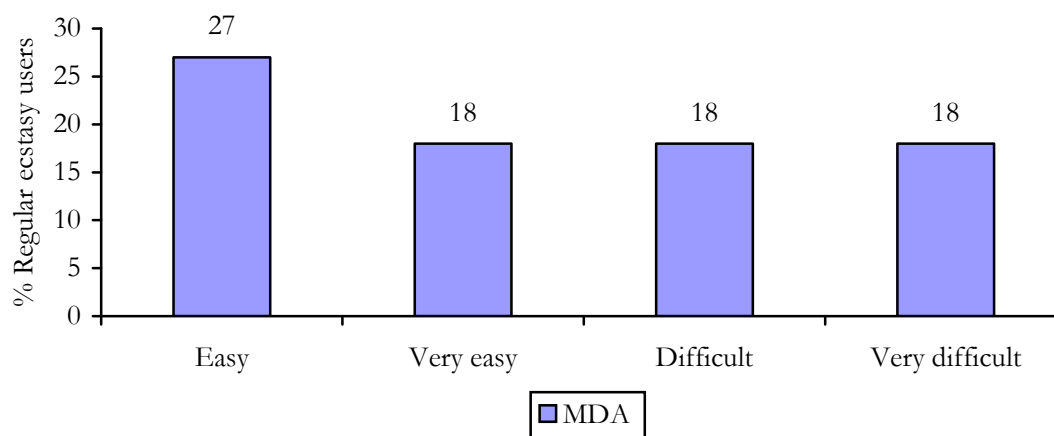
MDA belongs to the phenethylamine family of drugs, which includes ecstasy. Readers are directed to the section regarding ecstasy purity which discusses purity of this drug class.

### 10.5 Availability

One-quarter (27%; 3% of the entire sample) believed that MDA was currently ‘easy’ to obtain; 18% (2% of the entire sample) believed it was ‘very easy’ to obtain; 18% (2% of

the entire sample) believed it was 'difficult' to obtain and 18% (2% of the entire sample) believed it was 'very difficult' to obtain; two participants 'did not know' about the current availability of MDA (Figure 71).

**Figure 71: Current MDA availability, NSW 2006**



Source: EDRS Regular ecstasy user interviews 2006

More than two-fifths (46%; 5% of the entire sample) believed that the availability of MDA had remained 'stable' in the preceding six months, though 36% (4% of the entire sample) believed it had become 'more difficult' to obtain; two participants were unable to comment on the change of availability of MDA in the preceding six months.

### 10.5.1 Source person and source location

Small numbers commented on the person they scored MDA from, and the location from which they scored MDA. Half (50%) nominated friends and 33% nominated known dealers. Half (50%) scored MDA from friends' homes, 17% scored from dealers' homes and 17% scored from agreed public locations.

### 10.5.2 Key expert comments

Few KE were able to comment on MDA. Most believed that MDA use was infrequent, though no reasons were given as to why this may be. KE noted that they were unsure how users knew they were taking MDA as opposed to MDMA. Anecdotal evidence suggests that the effects, while similar, are slightly different. KE believed that appearance may be one way in which users distinguish between the two forms – MDA is often referred to as coming in 'caps' as opposed to tablets. However, one KE noted that this is not necessarily the case, as groups who make MDMA may not have the resources to make pills, whereas empty capsules can be purchased and filled. One KE mentioned that regular users of MDA often prefer it to MDMA and purchase it from the same source to ensure that they are getting MDA.

## 10.6 MDA-related harms

### 10.6.1 Health

#### *Calls to telephone helplines*

There was one call to ADIS where MDA was the primary drug of concern. This occurred in June 2006.

## 10.7 Summary of MDA trends

- Lifetime use of MDA increased markedly between 2005 and 2006, though the proportion reporting recent use decreased in this same period. Median days of use remained stable at two days in the preceding six months.
- Few KE were able to report on the use of MDA, though it was suggested that use occurred on an infrequent basis.
- MDA was usually used in nightclubs, with small proportions reporting use in private locations. However, MDA appeared more likely to be scored from friends in friends' homes.
- The price of an MDA cap increased to \$40 in 2006; the price of an MDA cap has fluctuated in recent years (\$47.50 in 2004; \$37.50 in 2005; \$40 in 2006).
- Two-thirds of those who commented reported that the current purity of MDA was 'high' and that purity had remained 'stable' in the preceding six months.
- Reports of current availability and availability change varied, though given the smaller proportion of users who commented, this may be a reflection of the degree to which users have contact with this drug.

## 11 CANNABIS

For the first time in 2006 the EDRS included a more detailed section asking similar price, potency and availability questions which are asked of the other drug types that the EDRS monitors. Previously, cannabis had been included in the 'other drugs' section of the report. Furthermore, the distinction was made between indoor-cultivated 'hydroponic' cannabis and outdoor-cultivated 'bush' cannabis for price, potency and availability.

The vast majority (95%) of REU in the 2006 NSW sample had ever used cannabis and three-quarters (73%) had used cannabis in the six months preceding interview (Table 20). Cannabis was first used at a median age of 15 years (range 11-28 years). One-fifth (20%) reported cannabis as their drug of choice. One-fifth (20%) reported usually using cannabis with ecstasy and two-fifths (39%) reported usually using cannabis when coming down from ecstasy.

### 11.1 Cannabis use among REU

Amongst those who reported recent cannabis use, cannabis had been used on a median of 24 days (range 1-180 days), which equates to use on approximately one day per week (Table 20). Half (49%) of recent cannabis users reported using cannabis on a weekly basis, and almost one-fifth (18%) reported using cannabis daily.

As can be seen in Table 20, the prevalence of lifetime cannabis use has remained stable across the seven years the EDRS has been conducted in NSW. There appears to be a slight decline in the prevalence of recent use in the last three sampling years.

**Table 20: Patterns of cannabis use of REU, NSW 2000-2006**

| Cannabis variable                    | 2000<br>(n=94)   | 2001<br>(n=163) | 2002<br>(n=88) | 2003<br>(n=102) | 2004<br>(n=104) | 2005<br>(n=101) | <b>2006<br/>(n=100)</b> |
|--------------------------------------|------------------|-----------------|----------------|-----------------|-----------------|-----------------|-------------------------|
| Ever used (%)                        | 99               | 95              | 98             | 96              | 99              | 92              | <b>95</b>               |
| Used last six months (%)             | 90               | 82              | 90             | 82              | 85              | 82              | <b>73</b>               |
| <b>Of those who had used :</b>       |                  |                 |                |                 |                 |                 |                         |
| Median days used last 6 mths (range) | 118.5<br>(1-180) | 48<br>(1-180)   | 48<br>(1-180)  | 49<br>(1-180)   | 48<br>(1-180)   | 48<br>(1-180)   | <b>24<br/>(1-180)</b>   |

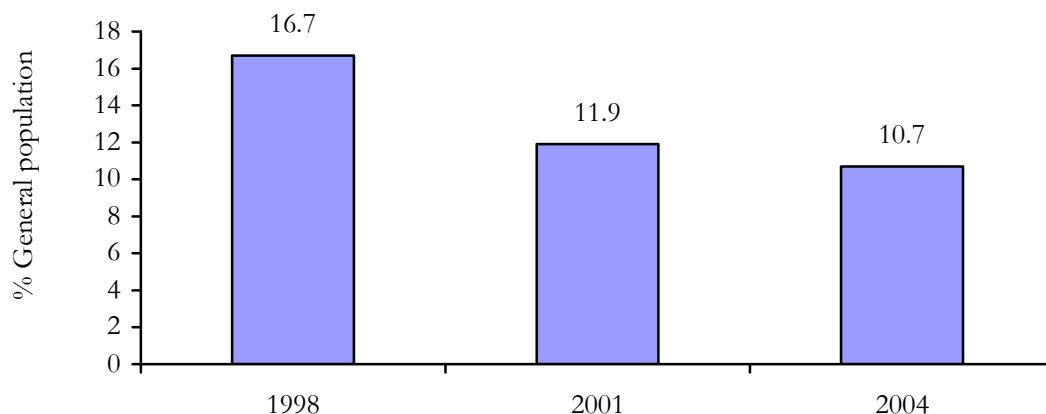
Source: EDRS Regular ecstasy user interviews 2000-2006

### 11.2 Cannabis use in other populations

#### 11.2.1 General population

The recent use of cannabis in the NSW general population decreased between 1998 and 2001, however the proportion using in the past year remained relatively stable between 2001 and 2004 (Figure 72).

**Figure 72: Cannabis use in the NSW general population, 1998-2004**

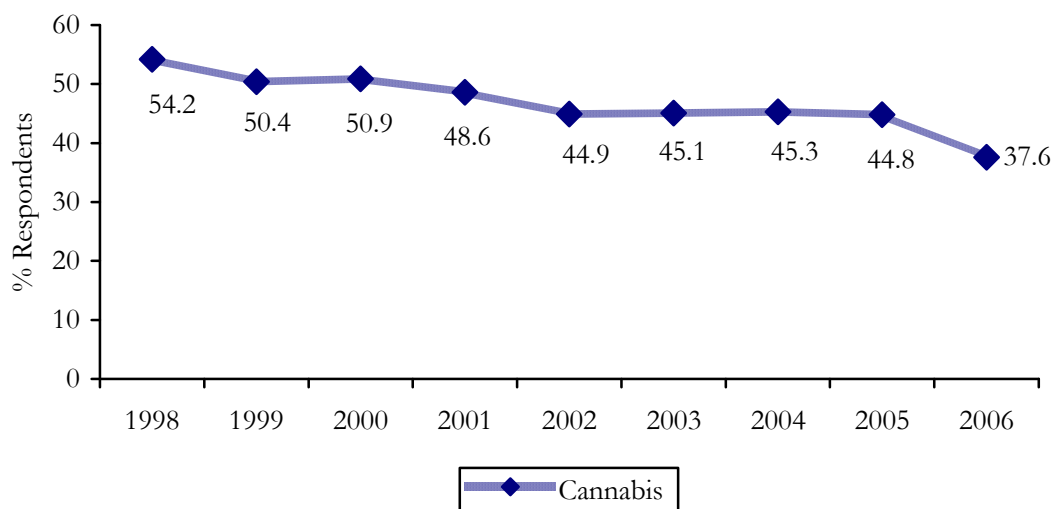


Source: Fitzsimmons & Cooper-Stanbury, 2000; Australian Institute of Health and Welfare, 2002, 2005

### 11.2.2 Sydney Gay Community Periodic Survey

Figure 73 shows the proportion of men surveyed that had used cannabis in the past six months. Data across time shows that sizeable proportions of men had used cannabis in the past six months. A significant downward trend has been observed since 2001 (Zablotska 2006).

**Figure 73: Proportion of gay men in Sydney reporting recent cannabis use, 1998-2006**



Source: Sydney Gay Community Periodic Survey, 1998-2006.

### 11.2.3 Illicit Drug Reporting System (IDRS)

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



### 11.3 Price

Table 21 present the reported price for one ounce and one gram of both hydro and bush cannabis. While the prices for a gram of both types were reported to be similar, an ounce of hydro was priced higher than that for an ounce of bush cannabis.

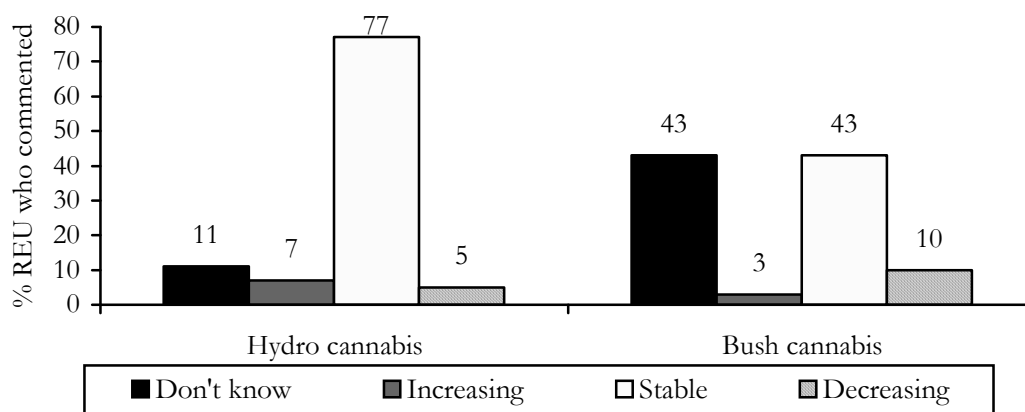
**Table 21: Median price per ounce and gram of bush and hydro cannabis, NSW 2006**

| Median price cannabis (\$)      | 2006                 |
|---------------------------------|----------------------|
| <b>Price (\$) HYDRO (range)</b> |                      |
| per ounce                       | <b>300 (250-360)</b> |
| per gram                        | <b>20 (10-30)</b>    |
| <b>Price (\$) BUSH (range)</b>  |                      |
| per ounce                       | <b>210 (80-300)</b>  |
| per gram                        | <b>20 (10-20)</b>    |

Source: EDRS interviews 2006

Participants were asked to comment on the price of hydro and bush cannabis in the six months preceding interview. Three-quarters (77%; 34% of the entire sample) reported that the price of hydro had remained 'stable' in the six months preceding interview, while 43% (13% of the entire sample) reported this to be the case for bush (Figure 74). A larger proportion was unable to comment on the price change of bush cannabis (43%; 13% of the entire sample) than hydro cannabis (11%; 5% of the entire sample).

**Figure 74: Price change of bush and hydroponic cannabis\*, NSW 2006**



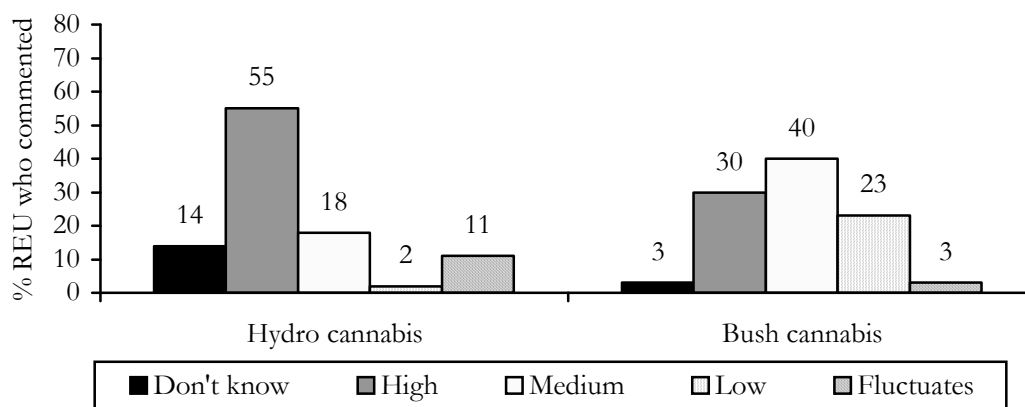
Source: EDRS Regular ecstasy user interviews 2006

\*Of those who commented

### 11.4 Potency

More than half (55%; 24%) reported that the current potency of hydro cannabis was 'high', while 18% (8% of the entire sample) reported that the current potency was 'medium' (Figure 75). However, conflicting reports were given surrounding the current potency of bush cannabis, with 40% (12% of the entire sample) reporting that the current potency was 'medium' followed by 30% (9% of the entire sample) reporting that it was 'high'.

**Figure 75: Current potency of bush and hydroponic cannabis\*, NSW 2006**



Source: EDRS Regular ecstasy user interviews 2006

\*Of those who commented

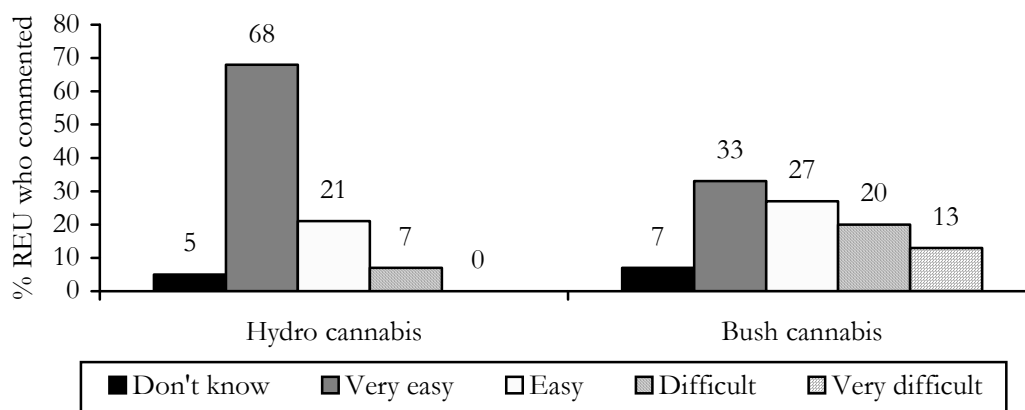
The majority of both those who commented on hydro potency (68%; 30% of the entire sample) and bush potency (70%; 21% of the entire sample) reported that potency had remained ‘stable’ in the six months preceding interview. Eleven percent (5% of the entire sample) who commented on hydro potency and 10% (3% of the entire sample) who commented on bush potency reported that the potency had ‘increased’ in the six months preceding interview.

### 11.5 Availability

The majority (68%; 30% of the entire sample) reported that hydro cannabis was ‘very easy’ to obtain (Figure 76), while almost one-quarter (21%; 9% of the entire sample) reported that it was ‘easy’ to obtain and 7% (3% of the entire sample) reported that it was ‘difficult’ to obtain; no respondents reported that hydro was ‘very difficult’ to obtain.

Mixed reports were given surrounding the current availability of bush cannabis (Figure 76). While one-third (33%; 10% of the entire sample) reported that it was ‘very easy’ to obtain and one-quarter (27%; 8% of the entire sample) reported that it was ‘easy’ to obtain, one-fifth (20%; 6% of the entire sample) reported that it was ‘difficult’ to obtain and 13% (4% of the entire sample) reported that it was ‘very difficult’ to obtain.

**Figure 76: Current availability of bush and hydroponic cannabis\*, NSW 2006**



Source: EDRS Regular ecstasy user interviews 2006

\*Of those who commented

Three-quarters (74%; 32% of the entire sample) of those who commented on hydro availability reported that availability had remained 'stable' in the six months preceding interview; 9% (4% of the entire sample) reported that it had become 'more difficult' to obtain; 7% (3% of the entire sample) reported it had become 'easier' to obtain; and 5% (2% of the entire sample) reported that availability in the past six months had 'fluctuated'. Five percent (2% of the entire sample) did not know.

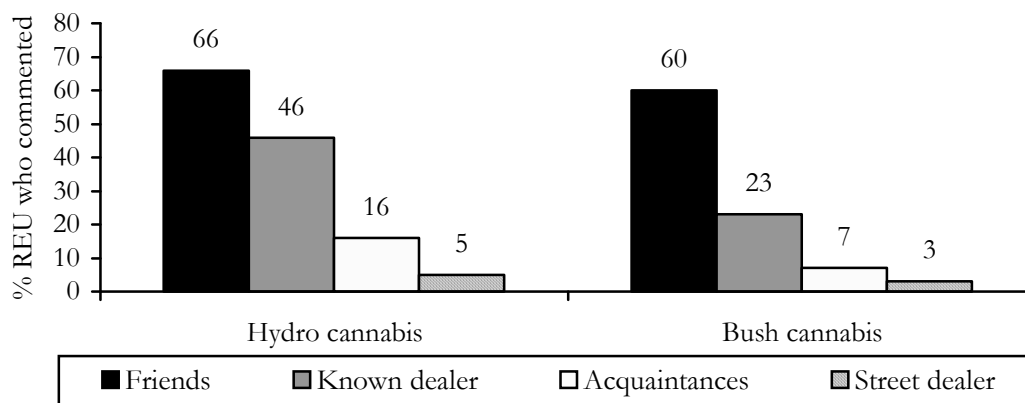
Almost two-thirds (63%; 19% of the entire sample) of those who commented on bush availability reported that it had been 'stable' in the preceding six months; 17% (5% of the entire sample) reported it had become 'more difficult' and 10% (3% of the entire sample) reported it had become 'easier' to obtain. Ten percent (3% of the entire sample) did not know.

### 11.5.1 Source person and source location

Participants who were confident in answering questions regarding cannabis were asked to distinguish between hydroponic cannabis and bush cannabis. This distinction is made in the following sections.

Hydro cannabis was most commonly scored from people known to them, such as friends (66%; 29% of the entire sample) and known dealers (46%; 20% of the entire sample) (Figure 77). Hydro was less frequently purchased from acquaintances (16%; 7% of the entire sample) and street dealers (5%; 2% of the entire sample). These findings were replicated when examining person scored from for bush cannabis: friends (60%; 18% of the entire sample) and known dealers (23%; 7% of the entire sample) were the most commonly mentioned person scored from (Figure 77), with acquaintances (7%; 2% of the entire sample) and street dealers (3%; 1% of the entire sample) mentioned less frequently.

**Figure 77: Source person of bush and hydroponic cannabis\*, NSW 2006**



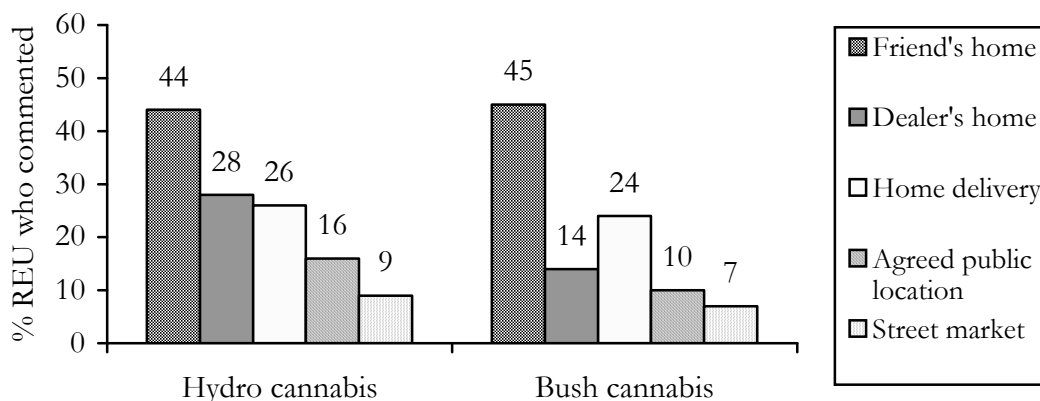
Source: EDRS Regular ecstasy user interviews 2006

\*Of those who commented

Hydro cannabis was most frequently scored from private locations such as friends' homes (44%; 19% of the entire sample) and dealers' homes (28%; 12% of the entire sample) (Figure 78). Home delivery was reported by one-quarter (26%; 11% of the entire sample) of those who commented. Other locations scored from included agreed public locations (16%; 7% of the entire sample) and street markets (9%; 4% of the entire sample).

Similarly, bush cannabis was also frequently scored in private locations such as friends' homes (45%; 13% of the entire sample) and dealers' homes (14%; 4% of the entire sample), and again, home delivery was mentioned by one-quarter (24%; 7% of the entire sample) of those who commented (Figure 78). Other locations scored from included agreed public locations (10%; 3% of the entire sample) and street markets (7%; 2% of the entire sample).

**Figure 78: Source location of bush and hydroponic cannabis\*, NSW 2006**



Source: EDRS Regular ecstasy user interviews 2006

\*Of those who commented

### 11.5.2 Key expert comments

Most KE were able to discuss cannabis use amongst the groups they had contact with. Most KE mentioned that cannabis, along with alcohol, wasn't necessarily seen as a 'drug' anymore by those who used it because its use was so common. Cannabis was often talked about by KE in a polydrug context, often being used with ecstasy, crystal methamphetamine and alcohol. In particular, cannabis was said to be used when coming down from stimulants. KE noted that cannabis was not often used in clubs, though the

issue of concern that those who worked in these venues had was not that the drug was illegal, but the new smoking laws have tougher penalties on those who smoke.

Several KE mentioned the recent debate surrounding potency of cannabis. KE mentioned that there is a ‘credibility crisis’ in that messages are being put forth that cannabis has become more potent, yet there is no evidence to back this claim.

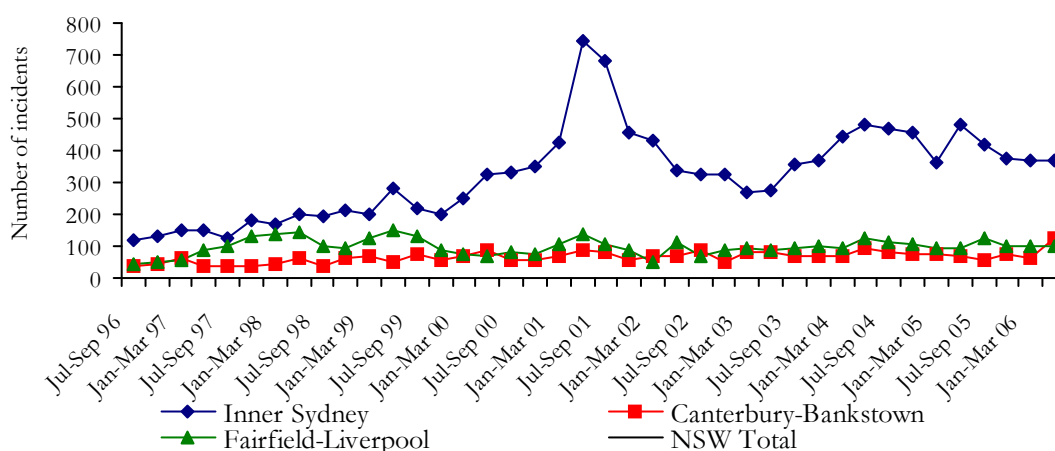
One KE mentioned that a large number of the group they have contact with are quitting cannabis, possibly due to the anti-smoking campaigns which have been distributed in recent times.

## 11.6 Cannabis-related harms

### 11.6.1 Law enforcement

Figure 79 shows the number of police recorded criminal incidents of cannabis possession/use per quarter in the Inner Sydney area, Fairfield-Liverpool and Canterbury-Bankstown<sup>5</sup>. The number of recorded incidents in the Inner Sydney area has remained fairly stable over the past 12 months following a gradual increase from the second quarter of 2003 and fluctuations in early-mid 2005. The numbers of incidents recorded in the Fairfield-Liverpool and Canterbury-Bankstown areas are much lower than inner city figures, and have remained stable over time.

**Figure 79: Recorded incidents of cannabis possession/use by geographic area per quarter, July-September 1996 to April-June 2006**



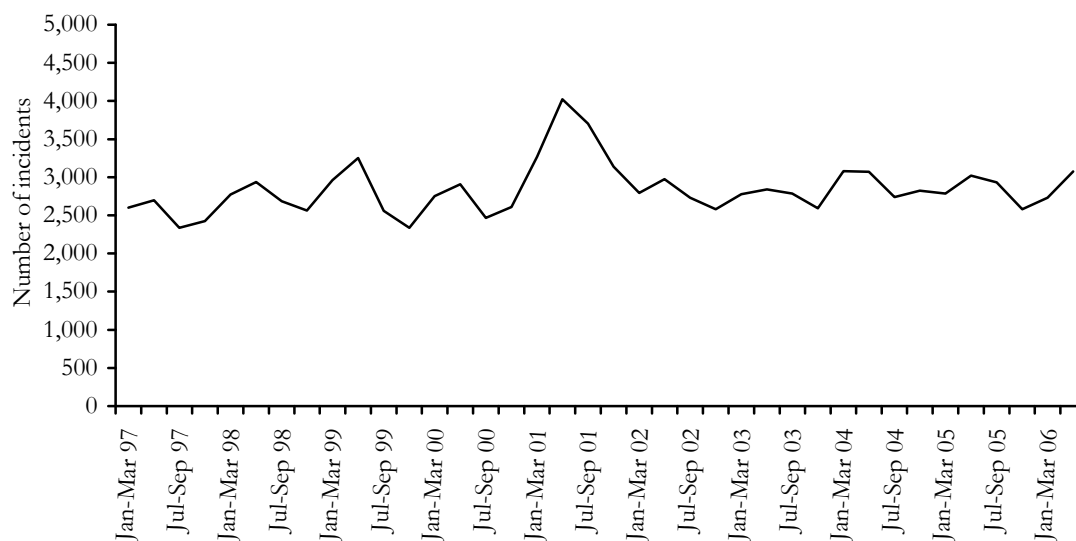
Source: NSW Bureau of Crime Statistics and Research

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

Across NSW as a whole, recorded incidents of cannabis possession/use per quarter have remained relatively stable over time (Figure 80). A substantial peak occurred in the second quarter of 2001.

<sup>5</sup> The regions Inner Sydney, Fairfield-Liverpool and Canterbury-Bankstown refer to ABS Statistical Subdivisions.

**Figure 80: Recorded incidents of cannabis possession/use (whole of NSW) per quarter, 1997 to 2006**



**Source: NSW Bureau of Crime Statistics and Research**

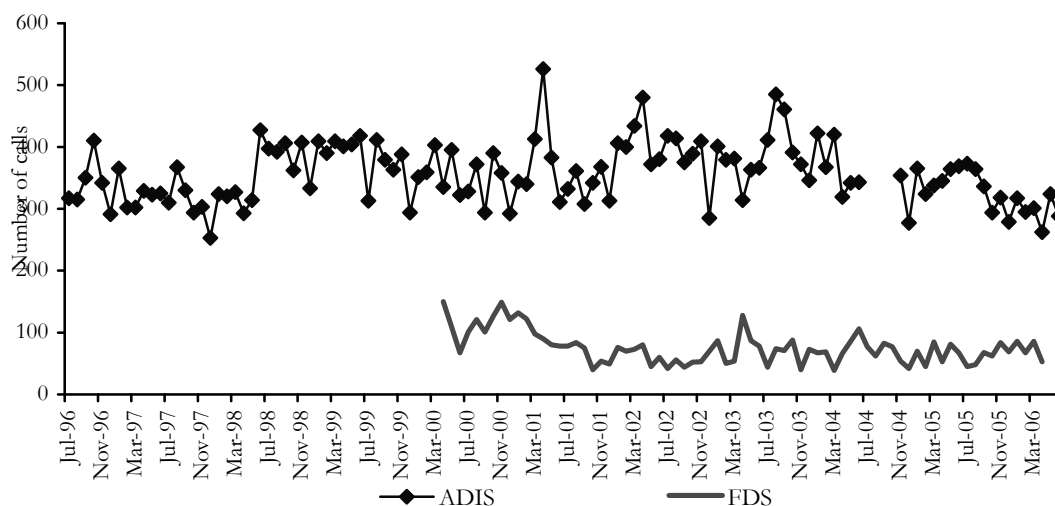
NB: Changes in the number of recorded incidents may be indicative of changes in police activity, or an increase in possession/use, or a reflection of both

## 11.6.2 Health

### *Calls to telephone helplines*

The number of calls to ADIS regarding cannabis has decreased slightly over the last year, from 373 calls in July 2005 to 288 in June 2006 (Figure 81). The peak in calls to FDS where cannabis was mentioned during 2003 may be due to an irregularity in the data recorded rather than reflecting a real increase. The number of calls to FDS relating to cannabis has remained fairly stable over the past few years.

**Figure 81: Number of enquiries to ADIS and FDS regarding cannabis, July 1996-June 2006**

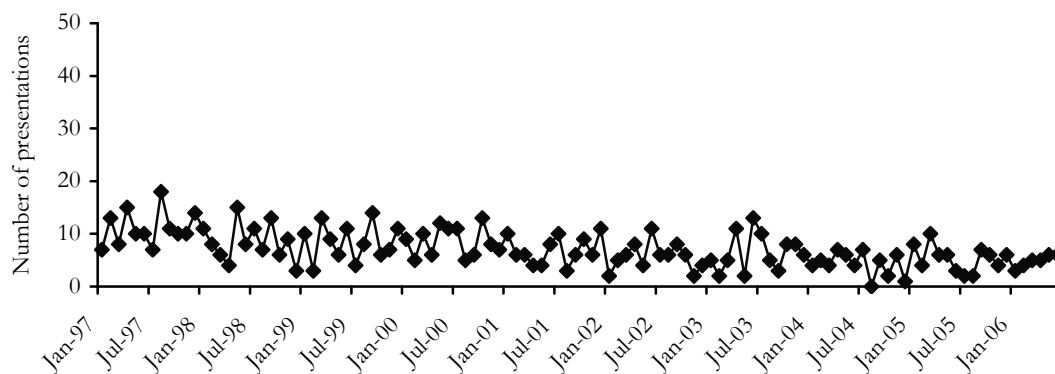


**Source: ADIS and FDS**

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

The number of cannabis toxicity presentations to emergency departments has remained extremely low at less than twenty per month since 1997 (Figure 82).

**Figure 82: Cannabis toxicity presentations to NSW emergency departments, 1997-2006**

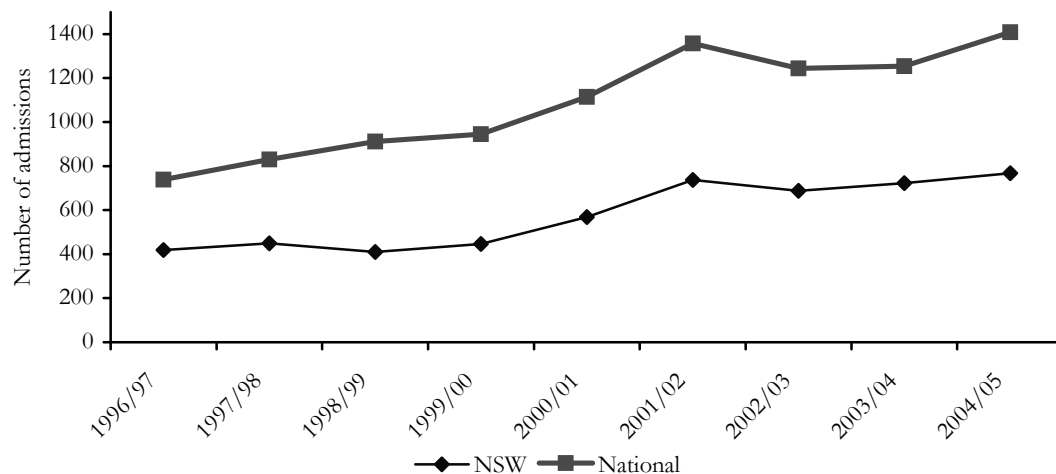


**Source: Emergency Department Information System, NSW Department of Health**

NB: Figures do not include emergency department presentations for use disorders

The number of hospital admissions in which cannabis was implicated as a principal diagnosis is shown in Figure 83 below. As specified in previous chapters, diagnoses for the period 1998 to 2004 were recorded using ICD-10-AM codes, and prior to this ICD-9-CM was used to code hospital separations. A principal diagnosis is defined as having been chiefly responsible for occasioning the patient's episode of care in hospital. These figures refer to persons aged between 15-54 years of age. Figures have remained relatively stable over the past two years, following an increase from 1996/97.

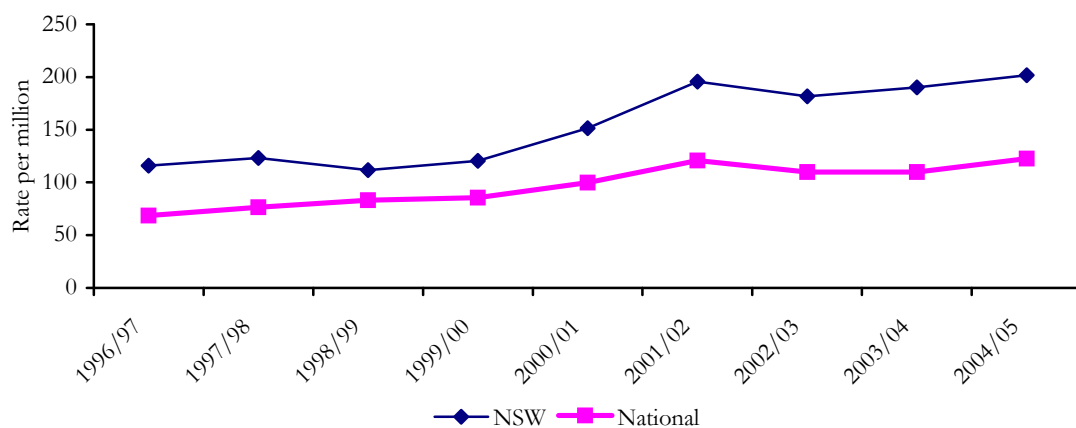
**Figure 83: Number of inpatient hospital admissions for persons aged 15-54 where cannabis was the principal diagnosis, NSW and nationally, 1996/97-2004/05**



Source: National Hospital Morbidity Database; Roxburgh & Degenhardt (2006)

Figure 84 shows the rates of hospital admissions where cannabis was the principal diagnosis per million people aged 15-54 years. Rates in NSW remain higher than nationally, and have remained higher over the past two years than previously. Since 2000/01, NSW has accounted for between 50-60% of Australian inpatient hospital admissions where cannabis was the principal diagnosis.

**Figure 84: Rate of inpatient hospital admissions where cannabis was the principal diagnosis per million people aged 15-54 years, 1996/97 to 2004/05**

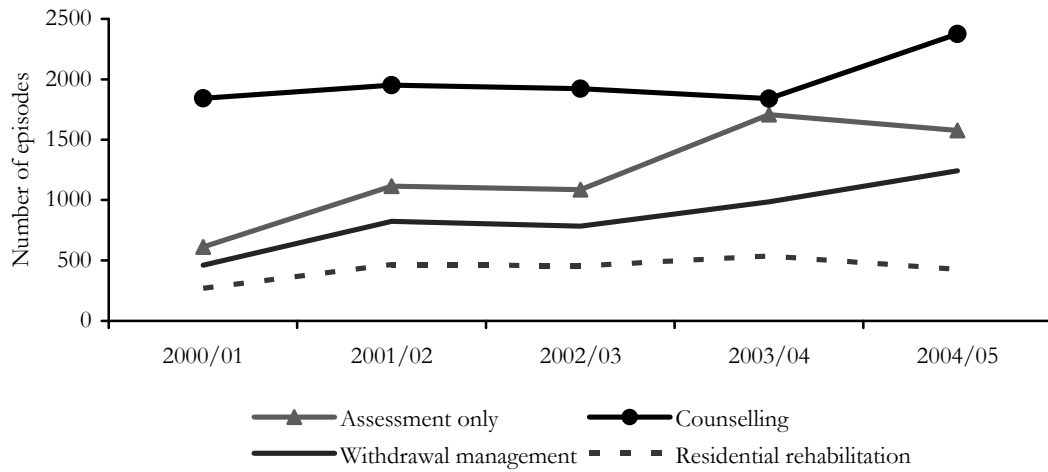


Source: National Hospital Morbidity Database; Roxburgh & Degenhardt (2006)

Figure 85 shows the number of closed treatment episodes based on the date of commencement where the principal drug of concern was cannabis, by treatment type. Numbers entering for assessment only have declined over the past year, following a gradual increase from 613 in 2000/01 to 1,707 in 2003/04 (this figure was 1,575 in 2004/05). Overall, numbers entering withdrawal management have increased since 2000/01 while numbers entering counselling remained relatively stable until 2004/05 when a sharp increase was observed. Numbers commencing residential rehabilitation have remained relatively stable since 2001/02 at 400 or more per year (this figure was 270 in 2000/01).



**Figure 85: Number of cannabis treatment episodes by treatment type, NSW 2000/01-2004/05**



**Source: NSW MDS DATS, NSW Department of Health**

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

## 11.7 Summary of cannabis trends

- Lifetime prevalence of cannabis has remained stable across sampling years, however, there has been a slight decrease in the past three years in recent cannabis use.
- In 2006 there was a decrease in the median days in which cannabis was used; however, one-fifth were daily cannabis users.
- Approximately one in ten in the general population had used cannabis in the past year. In other groups where data is available across time there has been a decrease observed in the proportion reporting cannabis use in the past six months.
- KE reports suggest that cannabis use is prevalent in many drug using groups in which they come into contact, though there may be a decrease in cannabis use due to the anti-smoking campaigns which have been featured in recent times.
- Hydro and bush cannabis were both scored most frequently from friends and known dealers, though respondents reported that both forms were scored from a wide range of locations.
- The price for an ounce of hydro was higher than an ounce of bush cannabis. The prices for both hydro and bush were largely reported to have remained stable in the preceding six months.
- The potency of hydro was considered 'high' by those who commented while the potency of bush varied. For both hydro and bush, participants reported that the potency had remained largely stable in the preceding six months.
- Hydro cannabis was largely reported to be 'very easy' to obtain, while reports for the availability of bush cannabis varied. For both cannabis types the availability in the preceding six months was reported to have remained stable.
- The majority of indicator data suggested that the prevalence of cannabis use within the broader community, and harms related to such use, has remained relatively stable, however, numbers of hospital admissions where the principal diagnosis was related to cannabis have gradually increased over time.

## 12 OTHER DRUGS

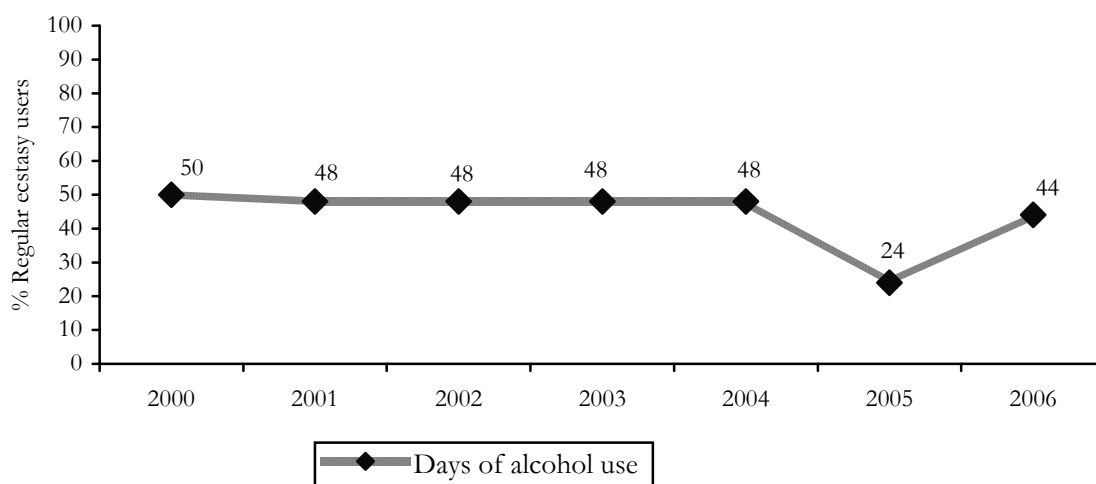
Significant proportions of regular ecstasy users have reported the use of other licit and illicit drugs across sampling years.

### 12.1 Alcohol

The use of alcohol was reported by almost all 2006 respondents, with 98% reporting lifetime use of alcohol and 94% reporting recent use. Of those that reported lifetime use of alcohol, the median age of first use was 14 years (range 5-22 years) and there were no significant gender differences regarding age of first use. Alcohol was consumed a median of 44 days (range 1-180 days) by those who had consumed alcohol in the previous six months. More than half (56%) reported consuming alcohol more than once per week.

Figure 86 presents the number of days alcohol had been used in the six months preceding interview amongst recent alcohol users. Despite a decrease in 2005, the median days in which alcohol had been used in the six months prior to interview has remained stable across time.

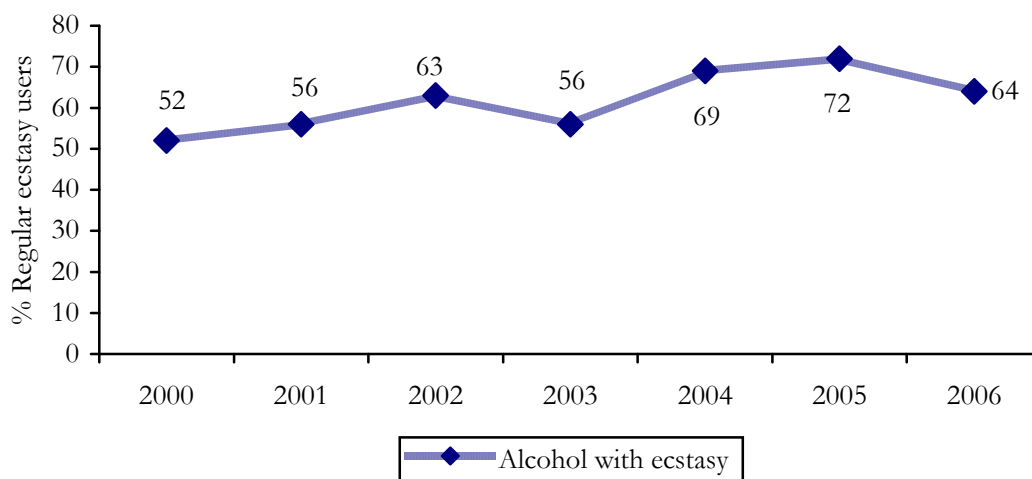
**Figure 86: Days of alcohol use in the six months preceding interview, NSW 2000-2006**



Source: EDRS Regular ecstasy user interviews 2000-2006

The proportion of participants who reported typically drinking alcohol while using ecstasy (64%) appeared to decrease in 2006 compared with recent sampling years (69% in 2004 and 72% in 2005) (Figure 87). 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, 58% in 2005 and 52% in 2006). Nevertheless, these data suggest that substantial proportions of ecstasy users consume large quantities of alcohol in conjunction with their ecstasy use.

**Figure 87: Prevalence of regular ecstasy users consuming alcohol with ecstasy, NSW 2000-2006**



Source: EDRS Regular ecstasy user interviews 2000-2006

### 12.1.1 Key expert comments

All KE mentioned that alcohol use was prevalent amongst the groups they had contact with. KE who work in entertainment venues noted a marked increase in the consumption of alcohol at these venues. Whilst a proportion of REU were reported to solely use alcohol, it was reported to be also commonly used in combination with ecstasy, or with ecstasy and GHB. KE noted that this could reflect a generational change – traditionally ecstasy was not used with alcohol, and younger users may now be more likely to engage in this pattern of use.

KE noted that the difficulty with such polydrug use is that it is difficult to discern whether harms which stem from drug use are primarily from the use of alcohol or any other drugs being used. This is a particular problem for those working in first aid at dance venues. One KE mentioned that if people combine alcohol with ecstasy, and they don't know what is in the pills they are taking, then it makes anticipating the reaction difficult.

KE noted that alcohol use tends to be the cause of violence in polydrug users. Alcohol was also linked to drink spiking, though some KE who mentioned drink spiking noted it is difficult to detect, and that a large proportion of those who claim to have their drinks spiked are instead consuming large amounts of alcohol.

KE who worked in licensed venues noted that responsible service of alcohol (RSA) laws were well received, and that patrons are aware that if they drink too much they will be refused service and respect staff if and when they are refused service.

### 12.1.2 Alcohol Use Disorders Identification Test (AUDIT)

In 2006, the EDRS made use of the Alcohol Use Disorders Identification Test (AUDIT) (Saunders 1993). The AUDIT was designed by the World Health Organization as a brief screening scale to identify individuals with alcohol problems, including those in early stages. It is a 10-item scale, designed to assess three conceptual domains: alcohol intake, dependence and adverse consequences (Reinert 2002).

Total scores of 8 or more are recommended as indicators of hazardous and harmful alcohol use, as well as possible alcohol dependence (Babor, de la Fluenta et al. 1992). Higher scores indicate greater likelihood of hazardous and harmful drinking; such scores may also reflect greater severity of alcohol problems and dependence, as well as a greater need for more intensive treatment (Babor, de la Fluenta et al. 1992).

The overall sample mean score on the AUDIT was 9.5 (SD=6.9; range 0-38). No significant difference was observed between males and females (9.43 vs. 9.48;  $t_{75,1}=0.03$ ,  $p>0.05$ ). Fifty-three percent of the NSW sample scored 8 or more, levels at which alcohol intake may be considered hazardous. There was a significant, positive correlation between number of days alcohol was consumed in the last six months and total AUDIT scores (Spearman's  $\rho=0.6$ ,  $p<0.001$ ).

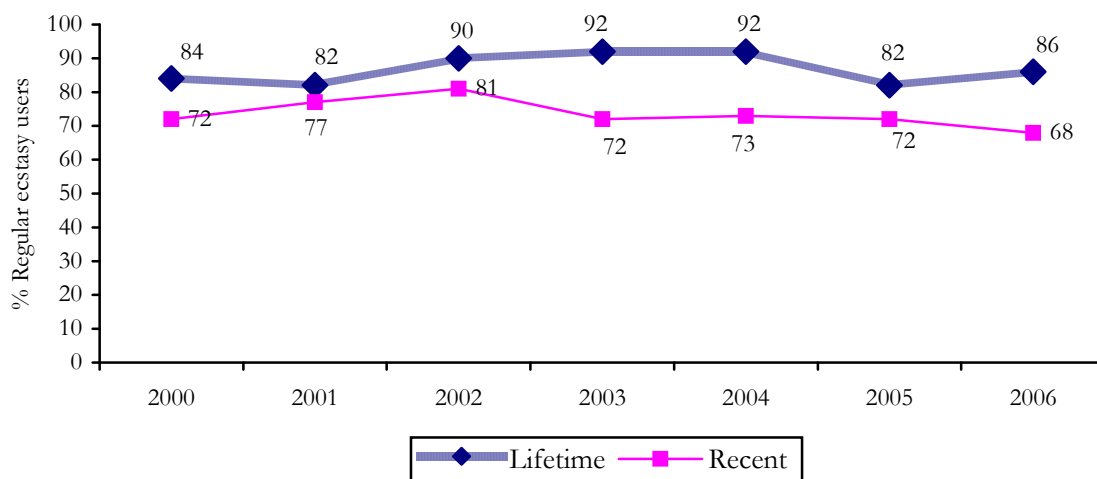
The total AUDIT score places respondents into one of four 'zones' or risk levels. Almost half (47%) scored in zone 1 (low-risk drinking or abstinence), 35% scored in zone 2 (alcohol use in excess of low-risk guidelines), 11% scored in zone 3 (harmful or hazardous drinking) and 7% scored in zone 4 (those in this zone may be referred for evaluation and possible treatment for alcohol dependence).

## 12.2 Tobacco

More than eighty percent (86%) of the 2006 sample reported lifetime use of tobacco and two-thirds (66%) had used tobacco in the six months preceding interview. The median days used in the preceding six months was 180 days (range 1-180); 65% of those who had used tobacco in the preceding six months were daily smokers. The median age of first use was 15 years (range 6-30 years) and there were no gender differences regarding age of first use. Of those who use other drugs with ecstasy, more than half (58%) use tobacco with ecstasy, and, of those who use other drugs to come down from ecstasy, 54% reported using tobacco to come down from ecstasy. These figures may be reflected in the proportion who report daily tobacco use.

Figure 88 presents the proportion of REU reporting lifetime and recent tobacco use since data was first collected in 2000. Whilst reports of lifetime use have remained relatively stable during this time, the proportion of REU reporting recent tobacco use appears to have declined since 2002, from 81% reporting recent use in that year to 68% in 2006 reporting recent use.

**Figure 88: Prevalence of regular ecstasy users reporting lifetime and recent tobacco use, NSW 2000-2006**



Source: EDRS Regular ecstasy user interviews 2000-2006

### 12.2.1 Key expert comments

KE reports regarding the prevalence of the use of tobacco varied, and this may be an indication of the groups the KE had contact with. Reports ranged from only a few REU use tobacco to most being regular smokers. One KE mentioned that there was an effort by some to start quitting. Those who worked in entertainment venues appreciated the new smoking laws.

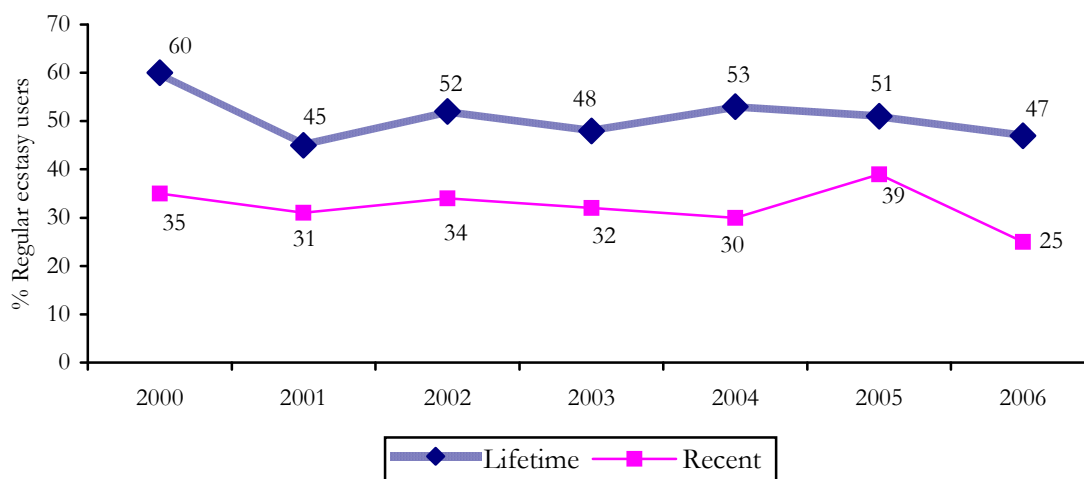
### 12.3 Benzodiazepines

Almost half (47%) of the 2006 sample reported having ever used benzodiazepines and one-quarter (25%) had used benzodiazepines in the six months preceding interview. Median age of first use was 21 years (range 14-42 years). Benzodiazepines had been used on a median of ten days (range 1-180) in the preceding six months; two participants reported using benzodiazepines every day in the past six months.

No respondents reported using benzodiazepines with ecstasy, in comparison to four respondents from the 2005 sample who reported doing so. Of those who reported typically using other drugs to comedown from ecstasy, 10% (n=7) reported using benzodiazepines in this manner; this prevalence has decreased when compared with data collected from the 2005 sample (23%, n=23 people).

Figure 89 presents the proportion of REU reporting lifetime and recent benzodiazepine use since data was first collected in 2000. Despite an initial decline in lifetime use being observed between 2000 and 2001, the proportion reporting lifetime use has remained stable. The proportion reporting recent use has remained stable, though some decline was observed between 2005 and 2006.

**Figure 89: Prevalence of regular ecstasy users reporting lifetime and recent benzodiazepine use, NSW 2000-2006**



Source: EDRS Regular ecstasy user interviews 2000-2006

### 12.3.1 Key expert comments

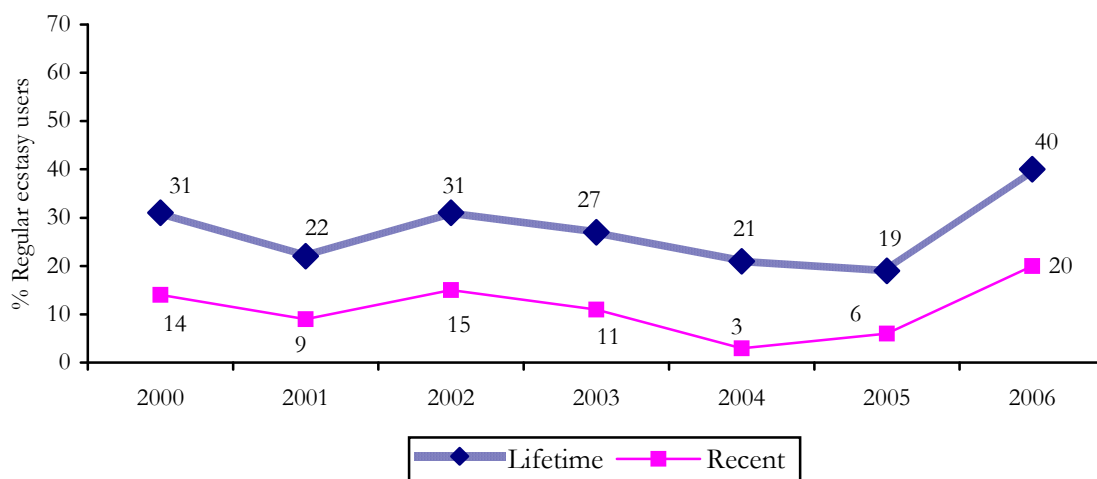
Few KE were able to comment on the use of benzodiazepines amongst ecstasy users. Those who commented reported that use tends to be concentrated in older age groups. The KE who were able to comment reported that the users they had contact with preferred to use alcohol or cannabis in conjunction with ecstasy rather than using benzodiazepines.

## 12.4 Antidepressants

Two-fifths (40%) of respondents reported lifetime antidepressant use and one-fifth (20%) reported using antidepressants in the preceding six months. The median age of first use was 21 years (range 14-42 years). Antidepressants had been used on a median of 66 days (range 5-180 days) in the preceding six months; 25% of those who reported recent antidepressant use reported using them every day in the past six months (i.e. 180 days). One respondent reported typically using antidepressants to come down from ecstasy.

Figure 90 presents the proportion of REU reporting lifetime and recent antidepressant use since data was first collected in 2000. Despite the appearance of a trend towards a decline in lifetime use, in 2006 there was an increase in lifetime use of antidepressants, increasing from 19% in 2005 to 40% in 2006. Similarly, whilst the proportion of REU reporting recent use remained low, in 2006 there was an increase in the proportion reporting recent use, from 6% in 2005 to 20% in 2006.

**Figure 90: Prevalence of regular ecstasy users reporting lifetime and recent antidepressant use, NSW 2000-2006**



Source: EDRS Regular ecstasy user interviews 2000-2006

### 12.4.1 Key expert comments

As with benzodiazepines, few KE were able to comment on the use of antidepressants. Those who did reported that they were being used by those who were prescribed them, and that there did not appear to be any diversion or 'black market' for antidepressants. As with benzodiazepines, antidepressants have previously been reported to be used when coming down from ecstasy, though KE now report that the groups they come into contact with prefer to use cannabis or alcohol.

## 12.5 Inhalants

### 12.5.1 Amyl Nitrate

Sixty-six percent of the sample reported lifetime amyl nitrate use with the median age of first use being 18 years (range 12-36 years). Almost two-fifths (37%) of the sample reported recent amyl nitrate use. The median days of use in the preceding six months was five days (range 1-96 days); half (51%) reported using less than once a month. Only two respondents who reported typically using other drugs with ecstasy used amyl nitrate with ecstasy; no respondents reported using amyl nitrate to come down from ecstasy.

### 12.5.2 Nitrous Oxide

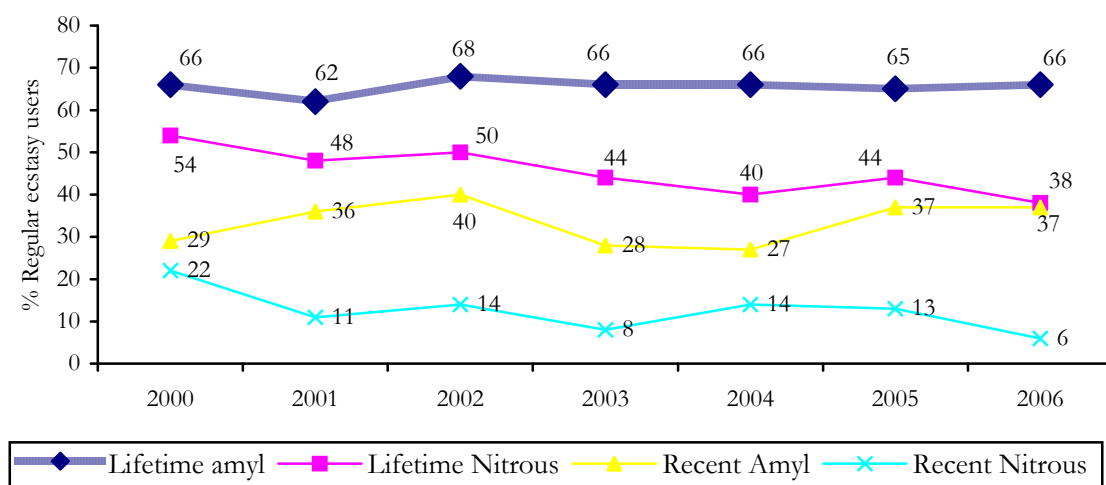
Thirty-eight percent of respondents reported lifetime use of nitrous oxide with a median age of first use of 17 years (range 12-54 years). Only six respondents reported using nitrous oxide in the last six months on a median of one and a half days (range 1-30 days). Three participants reported using nitrous oxide on one day in the preceding six months; one participant reported using on two days; one participant reported using on three days; and one participant reported using nitrous oxide on thirty days in the preceding six months.

Figure 91 presents data across time on the lifetime and recent use of both amyl nitrate and nitrous oxide. Lifetime use of amyl nitrate has remained constant across the sampling



years; however, lifetime use of nitrous oxide appears to have declined between 2002 and 2006. The proportion reporting recent use of both drugs has fluctuated, though it should be noted that recent amyl nitrates use has constantly been greater than recent nitrous use.

**Figure 91: Prevalence of regular ecstasy users reporting lifetime and recent amyl nitrate and nitrous oxide use, NSW 2000-2006**



Source: EDRS Regular ecstasy user interviews 2000-2006

### 12.5.3 Key expert comments

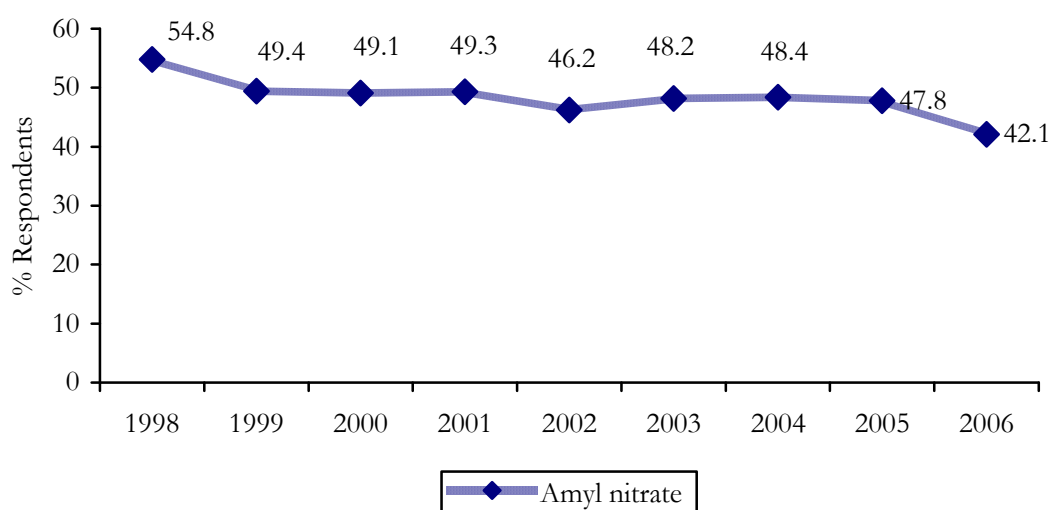
Few KE were able to comment on the use of inhalants. One KE mentioned that inhalant use was more concentrated amongst adolescents. Amyl nitrate was reported by KE to be used almost exclusively by those in the GLBTQ community to enhance sexual sensations.

### 12.5.4 Inhalant use in other populations

The recent use of inhalants in the NSW general population aged 14 years and above has remained low and stable in the past two surveys (0.5% in 2001 and 0.4% in 2004). Data collected across time from the Sydney Gay Community Periodic Survey has shown that large proportions of men reported the use of amyl nitrate in the past six months (Figure 92). Data from 2001 suggests a significant downward trend in the use of amyl nitrate (Zablotska 2006).

Given that KE reports, as well as data sources such as the Periodic Survey, suggest that amyl nitrate use is higher amongst those who identify as GLBTQ, statistical analyses were performed to investigate this hypothesis amongst REU in the present study. It was found that those who identify as GLBTQ were significantly more likely to report the recent use of amyl nitrate than those who identified as heterosexual (65% vs. 16%; OR=9.9, 95%CI=3.8, 26.0).

**Figure 92: Proportion of gay men in Sydney reporting recent amyl nitrate use, 1998-2006**



Source: Sydney Gay Community Periodic Survey, 1996-2006.

## 12.6 Heroin and other opiates

Two-fifths (19%) of the 2006 NSW sample reported having ever used heroin, with 7% reporting heroin use in the preceding six months (see Table 2). The median age of first use was 21 years (range 14-42). Amongst recent users, heroin had been used on a median of four days (range 2-80); 57% had used heroin less than once per month in the six months preceding interview. All of those who had recently used heroin had injected it, while one respondent also reported swallowing it.

### 12.6.1 Methadone

Ten percent of the sample had ever used methadone, a medication used for the treatment of opioid dependence, and five percent had used methadone in the last six months (see Table 2). Methadone was used on a median of 84 days in the six months preceding interview (range 7-180). One participant had recently used methadone for seven days in the preceding six months; four participants reported using methadone on a greater than weekly basis – two participants reported daily methadone use. This frequency may suggest that they were in treatment.

### 12.6.2 Other opiates

Seventeen percent of the 2006 sample reported lifetime 'other opiate' use while 6% had used 'other opiates' in the preceding six months; these numbers have decreased from previous years (see Table 2). Median age of initiation was 21 years (range 14-37 years) and had been used for a median of 3.5 days in the preceding six months (range 1-20) with two-thirds (67%) having used 'other opiates' less than once per month.

Reports of lifetime heroin use have fluctuated across time, though in the past three sampling years this proportion has remained stable. Lifetime methadone use has remained constant and low, and in 2006 approximately 1 in 10 had ever used methadone. Lifetime other opiate use has shown a fluctuating pattern, and a marked decrease was observed between 2005 (30%) and 2006 (17%).

Recent use for heroin has typically remained considerably lower than lifetime use; few REU have reported recent methadone use. Recent other opiate use has fluctuated, though, as with lifetime use, the proportion reporting recent use decreased considerably between 2005 (20%) and 2006 (6%).

### **12.6.3 Opiate use in other populations**

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

## **12.7 Mushrooms**

Over two-fifths (44%) of the sample reported a lifetime use of mushrooms while only seven participants reported using mushrooms in the preceding six months. Of those who reported lifetime use, the median age of first use was 20 years (range 14-34 years). Of the seven participants who had used mushrooms in the preceding six months, six had used mushrooms once and one participant had used mushrooms on two days. All seven respondents had swallowed mushrooms in the preceding six months while one respondent also indicated that they had smoked mushrooms.

## **12.8 Pharmaceutical stimulants**

Thirty-nine percent reported having ever used pharmaceutical stimulants (such as dexamphetamine or Ritalin), with a median age of first use being 18 years (8-45 years). Seven percent reported recent use of pharmaceutical stimulants on a median of two days (1-10 days). Six participants reported using once a month or less, and one participant reported their use on ten days in the preceding six months.

## **12.9 Other drugs**

From the REU interviews we found three participants who reported having ever used 2-CB, three participants who reported having ever used mescaline, three participants who had ever used DMT, and one participant each who had ever used black wattle, Datura, kava, and 2-CI. None of these respondents reported having used these drugs in the past six months, and in most cases these drugs were consumed on one occasion, often in foreign countries.

### **12.9.1 Key expert comments**

Some KE noted that there was a small increase in the use of research chemicals such as 2-CB and 2-CI in the groups they had contact with, though use tended to occur at home and was more often concentrated amongst those with knowledge of these drugs rather than novice users.

## 12.10 Summary of other drug use

- Almost all participants report lifetime and recent alcohol use. A large proportion of REU consume alcohol with ecstasy. Half of the 2006 sample consumes alcohol at levels considered hazardous and at levels possibly indicating dependence.
- More than four-fifths of the sample reported lifetime tobacco use and two-thirds reported recent tobacco use. Two-thirds of recent users were daily smokers. Data across time suggests a decline in the proportion reporting tobacco use in the six months preceding interview.
- Almost half (47%) of the sample reported lifetime benzodiazepine use and one-quarter (25%) reported recent use. Use occurred on a median of ten days in the preceding six months. Data collected across time suggests a decline in the recent use between 2005 and 2006.
- Two-fifths of the sample reported lifetime antidepressant use and one-fifth reported their use in the six months preceding interview. One-quarter of those recently using antidepressants used them each day in the preceding six months. There were marked increases observed in both the proportion reporting lifetime and recent antidepressant use between 2005 and 2006.
- Two-thirds (66%) of the sample reported lifetime amyl nitrate use and two-fifths reported recent use. Use occurred on a median of five days in the past six months. Two-fifths reported lifetime nitrous oxide use though only six percent reported recent use. Use of amyl nitrate has consistently been higher than use of nitrous oxide.
- Two-fifths of the sample had ever used heroin with seven percent reporting use in the past six months and was primarily injected by those who had recently used it. Smaller proportions report the recent use of both methadone and other opiates. The proportion of lifetime and recent other opiate use declined markedly between 2005 and 2006.
- More than two-fifths had ever used mushrooms though seven percent had used them in the past six months; six participants reported one day's use and one participant reported two days' use.
- Two-fifths reported lifetime use of pharmaceutical stimulants such as dexamphetamine or Ritalin with only seven participants reporting recent use. Recent use predominantly occurred on a less than monthly basis.

## 13 RISK BEHAVIOUR

### 13.1 Injecting risk behaviour

One in four (25%) respondents in the 2006 sample reported having injected at some time in their lives and 18% reported injecting in the six months preceding interview. A median of 4 drugs (range 1-10) had ever been injected, while those who reported injecting in the preceding six months had injected a median of two (range 1-6) drugs (Table 22).

**Table 22: Injecting risk behaviour among REU, NSW 2006**

| Variable                                                | 2006<br>(n=100) |
|---------------------------------------------------------|-----------------|
| Ever injected (%)                                       | 25              |
| Median number of drugs ever injected* (range)           | 4 (1-10)        |
| Injected last 6 months (%)                              | 18              |
| Median number of drugs injected last 6 months** (range) | 2 (1-6)         |

Source: EDRS Regular ecstasy user interviews 2006

\* Of those who had ever injected

\*\* Of those who had injected in the last six months

#### 13.1.1 Lifetime injectors

##### *Patterns of lifetime injecting drug use*

Those who reported injecting a drug at some time first did so at a median age of 21 years (range 14-42 years). Lifetime injectors had injected a range of drugs, with the most common drug ever injected being crystal (84% of lifetime injectors), followed by speed (80% of lifetime injectors) and heroin (64% of lifetime injectors) (Table 23).

**Table 23: Injecting drug use history among REU injectors, NSW 2006**

| Drug          | Ever injected (%) |
|---------------|-------------------|
| Crystal       | 84 (n=21)         |
| Speed         | 80 (n=20)         |
| Heroin        | 64 (n=16)         |
| Base          | 52 (n=13)         |
| Ecstasy       | 44 (n=11)         |
| Cocaine       | 44 (n=11)         |
| Methadone     | 28 (n=7)          |
| Ketamine      | 24 (n=6)          |
| Other opiates | 24 (n=6)          |
| LSD           | 20 (n=5)          |
| MDA           | 20 (n=5)          |

Source: EDRS Regular ecstasy user interviews 2006

### *Context of initiation to injecting*

Participants were asked whether they were under the influence of drugs when they first injected: 58% of lifetime injectors reported that they had been under the influence of ecstasy or other drugs when they had first injected. The most frequently reported drugs that participants were under the influence of when they first injected were alcohol (38%), ecstasy (17%), cannabis (17%), and speed (13%) (Table 24).

**Table 24: Injecting drug use history among REU injectors, NSW 2006**

| <b>Drug</b> | <b>Under influence when first injected (%)</b> |
|-------------|------------------------------------------------|
| Alcohol     | 38                                             |
| Ecstasy     | 17                                             |
| Cannabis    | 17                                             |
| Speed       | 13                                             |
| Heroin      | 8                                              |
| Crystal     | 4                                              |
| Base        | 4                                              |
| GHB         | 4                                              |
| LSD         | 4                                              |
| Cocaine     | 0                                              |

Source: EDRS Regular ecstasy user interviews 2006

When lifetime injectors were asked to specify how they learned to inject, two-thirds (67%; n=16) reported that a friend or partner showed them how; 8% (n=2) reported that they did not inject themselves. Other responses included that a dealer showed them how to inject (n=1) and that a health professional showed them how to inject (n=1); one user reported learning how to inject from watching other users.

Lifetime injectors were significantly older than non-injectors (32 vs. 26,  $t_{98}=-2.8$ ,  $p<0.01$ ); no gender difference was found regarding lifetime injectors and non-injectors (OR=1.7; 95%CI=0.6, 4.7). Lifetime injectors had used more drugs ever (mean 12.6 vs. 8.9,  $t_{98}=-5.6$ ,  $p<0.001$ ) and recently (mean 7.5 vs. 6.2,  $t_{98}=-2.5$ ,  $p<0.05$ ) compared to non-injectors.

### *Patterns of recent injecting drug use*

Among those who reported injecting in the preceding six months, recent patterns of injecting drug use were similar with lifetime patterns; crystal methamphetamine was the most commonly injected drug in the preceding six months with more than four-fifths (83%) of recent injectors injecting crystal in the preceding six months (Table 25). Approximately two-fifths (39%) reported recent speed injection; equal proportions reported recently injecting cocaine (39%) and heroin (39%).

Crystal was most often reported as the last drug injected (65%), while 24% reported last injecting heroin and 12% reported last injecting speed (Table 25).

**Table 25: Recent injecting drug use patterns (recent injectors) among REU, NSW 2006**

| Drug          | % injected past 6 months<br>n=18 | Median days injected last 6 months* (range) | Last drug injected (%)<br>n=17 |
|---------------|----------------------------------|---------------------------------------------|--------------------------------|
| Crystal       | 83                               | 10 (1-35)                                   | 65                             |
| Cocaine       | 39                               | 3 (1-5)                                     | 0                              |
| Heroin        | 39                               | 4 (2-80)                                    | 24                             |
| Speed         | 39                               | 24 (1-180)                                  | 12                             |
| Ecstasy       | 17                               | 2 (1-3)                                     | 0                              |
| Other opiates | 17                               | 4 (2-20)                                    | 0                              |
| MDA           | 6                                | 1 (no range)                                | 0                              |

Source: EDRS Regular ecstasy user interviews 2006

\* Of those who had injected in the preceding six months

#### *Injecting risk behaviour*

One person reported using a needle or syringe after another person (in this instance, a regular sex partner) in the month preceding interview, and this occurred on two occasions. One person reported that somebody else used a needle or syringe after them in the preceding six months, and this occurred on one occasion.

Half (n=9) of those who reported recent injecting drug use reported using other equipment after somebody else. The most frequently cited equipment was spoons (n=7) and tourniquets (n=7), followed by water (n=5) and filters (n=3).

#### *Context of injecting*

Most (82%) recent injectors reported that they injected themselves 'every time'. Three participants reported that they 'never' injected themselves (Table 26). Three-fifths (59%) reported that they usually injected with close friends, while 29% reported that they usually injected with a regular sex partner; 18% reported that they usually injected alone (Table 26).

**Table 26: Context and patterns of recent injection among REU, NSW 2006**

| Variable                                     | Recent injectors<br>(n=18) |
|----------------------------------------------|----------------------------|
| Frequency of self injection                  |                            |
| Every time (%)                               | 82 (n=14)                  |
| Never (%)                                    | 18 (n=3)                   |
| People usually inject with*                  |                            |
| Close friends (%)                            | 59 (n=10)                  |
| Regular sex partner (%)                      | 29 (n=5)                   |
| No one (%)                                   | 18 (n=3)                   |
| Locales injected*                            |                            |
| Own home (%)                                 | 83 (n=15)                  |
| Friend's home (%)                            | 44 (n=8)                   |
| Commercial injecting room (%)                | 33 (n=6)                   |
| Street (%)                                   | 17 (n=3)                   |
| Dealer's home (%)                            | 6 (n=1)                    |
| Sex venue (%)                                | 6 (n=1)                    |
| Medically supervised injecting room (%)      | 6 (n=1)                    |
| Public toilet                                | 0                          |
| Median times injected any drug last 6 months | 10 (1-247)                 |

**Source: EDRS Regular ecstasy user interviews 2006**

\*Could nominate more than one response

#### *Obtaining needles*

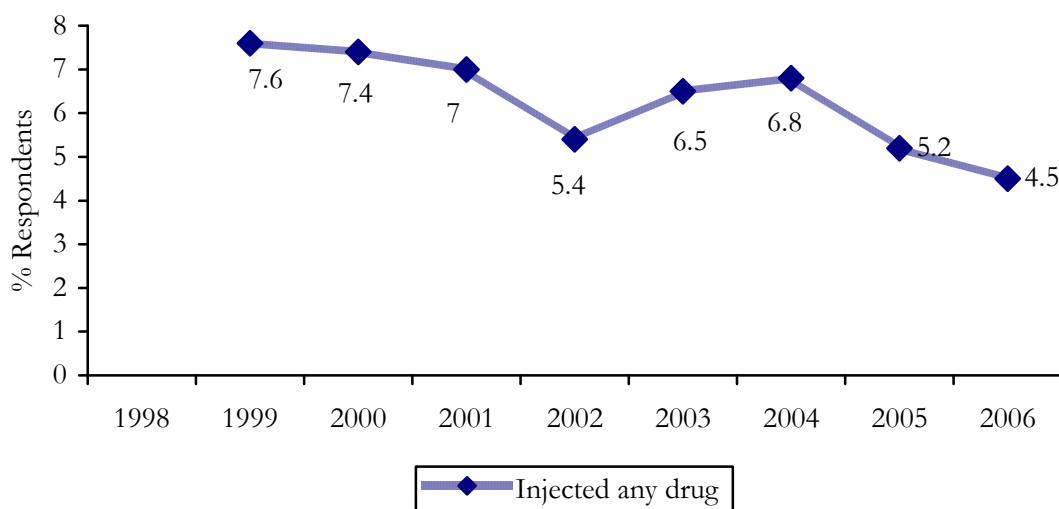
The majority of recent injectors reported obtaining needles from chemists (56%) or NSP (44%) in the six months preceding interview. Other sources included from a vending machine (33%), a friend (11%) and a partner (6%). No participants obtained needles from a dealer. Two participants reported difficulty obtained needles in the preceding six months.

### **13.1.2 Injecting drug use in other populations**

Findings from the National Drug Strategy Household Survey have found that in the past three surveys, 0.3% of the NSW general population aged 14 years and above had injected a drug in the preceding twelve months (Fitzsimmons 2000); (Australian Institute of Health and Welfare 2002). Data collected from the Sydney Gay Community Periodic Survey shows that, across sampling years, less than one in ten had injected any drug in six months prior to interview (Figure 93)(Zablotska 2006).



**Figure 93: Proportion of gay men in Sydney reporting injecting drug use\*, 1998-2006**

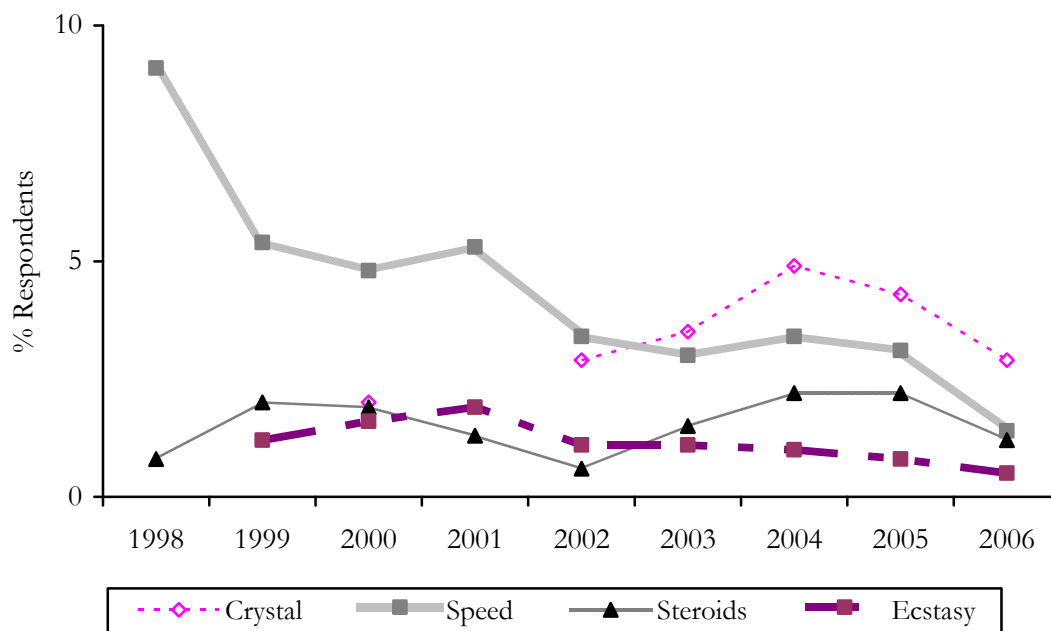


Source: Sydney Gay Community Periodic Survey, 1998-2006.

\*Not asked in all surveys

In 2006, the most commonly injected drugs were crystal meth, speed and steroids. Trends over time suggest that while speed was the drug most commonly injected in the six months prior to interview from the years 1999 to 2001, crystal meth has subsequently taken over as the drug most commonly injected (Figure 94).

**Figure 94: Drugs\* injected in the preceding six months, 1998-2006**



Source: Sydney Gay Community Periodic Survey, 1998-2006.

\* Not all drugs asked about in each survey

## 13.2 Blood-borne viral infections (BBVI)

Twenty percent of the sample reported that they had never been vaccinated for hepatitis B virus (HBV). Forty-two percent reported that they had finished the vaccination schedule, with a further 13% reporting that they had not finished the vaccination schedule; 24% did not know whether they had been vaccinated for hepatitis B.

Travelling overseas (n=11) and being at risk due to sexual activity (n=9) were the most frequently cited responses for attempting to be vaccinated for hepatitis B. Other responses included for work (n=6), being at risk due to injecting drug use (n=6) and being vaccinated as a child (n=5).

Twenty-seven percent reported that they had never been tested for hepatitis C virus (HCV); 33% reported they had been tested in the past year; and 32% reported that their last test had been more than one year ago. Seven percent did know if they had been tested or had not received their results. Ten participants reported being positive for hepatitis C.

Twenty percent reported that they had never been tested for HIV. Half (51%) of the sample had been tested in the past year, and one-quarter (27%) had last been tested more than a year ago. One participant reported either not knowing if they had been tested, or had not received their results. Eight participants reported being HIV positive.

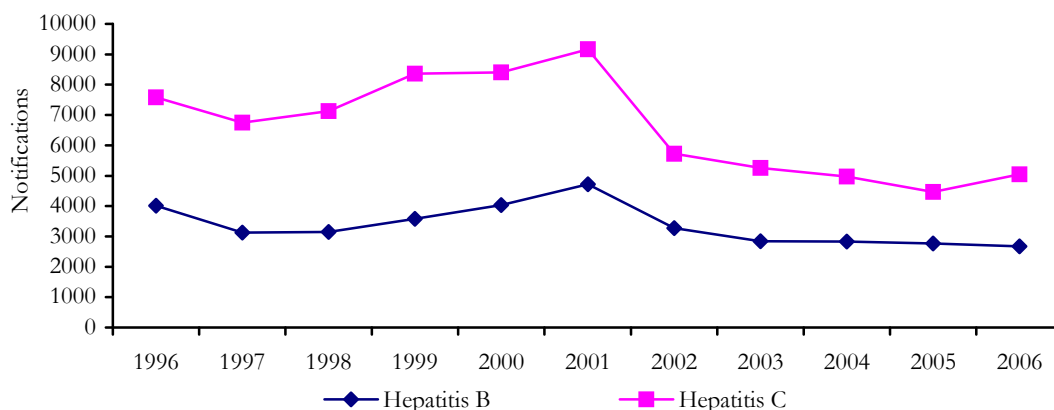
Given the higher frequency of HIV testing, further analyses were conducted to explore whether those who had ever had a HIV test were more likely to be tested for hepatitis C or seek hepatitis B vaccination. Those who had ever been tested for HIV were significantly more likely to ever have been tested for hepatitis C (81% vs. 9%; OR=42.0; 95%CI=8.8, 199.6) and to have sought hepatitis B vaccination (65% vs. 18%; OR=8.5; 95%CI=2.6, 27.7).

People with a history of injecting drug use are at significantly greater risk of acquiring HBV, HCV and HIV than the general population (NCHECR, 2002). This is because BBVI can be transmitted through the sharing of needles, syringes and other equipment. BBVI vaccination and testing may be considered a marker of awareness of the risks involved with injecting. Therefore, those who had a history of injecting drug use were compared with those who had never injected to investigate whether they were more likely to report HBV vaccination and HCV and HIV testing.

Those with a history of injecting drug use were significantly more likely than those who had never injected to report seeking hepatitis B vaccination (80% vs. 47%; OR=4.6; 95%CI=1.6, 13.5); to have ever been tested for hepatitis C (92% vs. 56%; OR=9.0; 95%CI=2.0, 41.1); and to have ever been tested for HIV (100% vs. 71%; OR=0.7; 95%CI=0.6, 0.8).

Figure 95 shows the total number of notifications for HBV and HCV in NSW. Incident (newly acquired) infections and unspecified infections (i.e. notifications where the timing of the disease acquisition is unknown) are presented. HCV continued to be more commonly notified than HBV, and for the first time since 2000 there has been an increase in notifications, from 4,465 in 2005 to 5,051 in 2006. HBV notifications have remained relatively stable since 2003 (2,844 in 2003; 2,675 in 2006). Notifications remain lower than levels reported in 2001.

**Figure 95: Total notifications for (unspecified and incident) HBV and HCV infections, NSW 1996-2006**

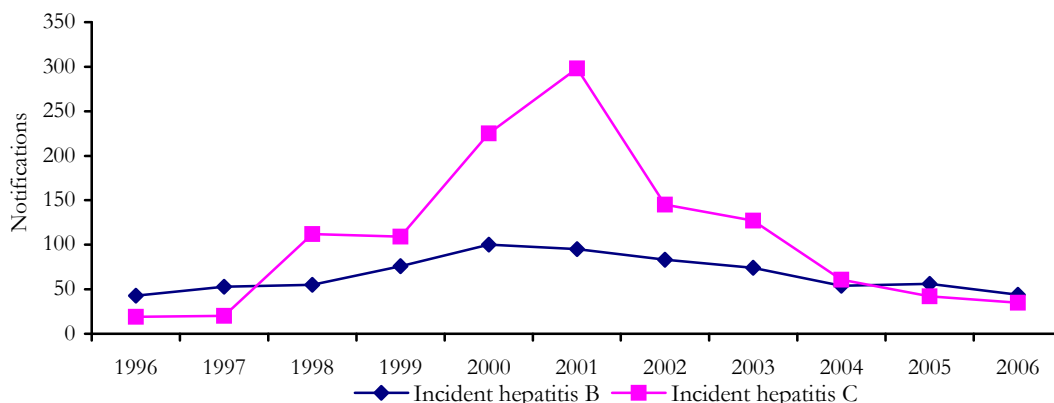


Source: Communicable Diseases Network – Australia – NNDSS<sup>6</sup>

NB: The 2006 data are provisional

Trends in the number of incident notifications for HBV and HCV in NSW are shown in Figure 96. HBV incident reporting has remained stable and low, recorded as 56 in 2005 and 44 in 2006. A steady decline has been observed in the number of HCV incident notifications, from 298 in 2001 to 35 in 2006.

**Figure 96: Total notifications for incident HBV and HCV infection, 1996-2006**



Source: Communicable Diseases Network – Australia – NNDSS

NB: The 2006 data are provisional

### 13.3 Sexual risk behaviour

More than four-fifths (88%) of the sample reported penetrative sex in the six months preceding interview. Penetrative sex was defined as ‘penetration of penis or fist of the vagina or anus’. Given the sensitive nature of these questions, participants were given the option of self-completing this section of the questionnaire.

<sup>6</sup> There are several caveats to the NNDSS data that need to be considered. As no personal identifiers are collected, duplication in reporting may occur if patients move from one jurisdiction to another and are notified in both. In addition, notified cases are likely to represent only a proportion of the total number of cases that occur, and this proportion may vary between diseases, between jurisdictions, and over time.

### *Recent sexual activity*

Of those who reported penetrative sex in the preceding six months, more than one-third (35%) reported one sexual partner during this time and one-quarter (26%) reported six or more sexual partners. Participants were asked about the use of 'protective barriers', which were defined as 'condoms, dams or gloves' with each partner type. In the 2006 sample, 28% reported 'always' using a barrier with a regular partner, compared with 64% who 'always' used a barrier with a casual partner. Nearly half (47%) of those who reported having penetrative sex reported having anal sex in the preceding six months (Table 27).

**Table 27: Prevalence of sexual activity and number of sexual partners in the preceding six months, NSW 2006**

| Variable                              | 2006<br>n=100     |
|---------------------------------------|-------------------|
| <b>Penetrative sex (%)</b>            | <b>88</b><br>n=88 |
| <b>No. of sexual partners (%):*</b>   |                   |
| One person                            | 35                |
| Two people                            | 17                |
| 3-5 people                            | 22                |
| 6-10 people                           | 8                 |
| 10+ people                            | 18                |
| <b>With a regular partner (%):</b>    |                   |
| Use a protective barrier every time   | 28                |
| Use a protective barrier sometimes    | 6                 |
| Never use a protective barrier use    | 41                |
| <b>With a casual partner (%):</b>     |                   |
| Use a protective barrier every time   | 64                |
| Use a protective barrier sometimes    | 7                 |
| Never use a protective barrier use    | 13                |
| <b>Anal sex (%)*</b>                  | <b>47</b>         |
| <b>No. of times has anal sex (%):</b> |                   |
| Monthly or less                       | 54                |
| Fortnightly or less                   | 12                |
| Weekly or less                        | 10                |

Source: EDRS Regular ecstasy user interviews 2006

\* Of those who had penetrative sex in the last 6 months

### *Drug use during sex*

The majority (85%) of those reporting recent penetrative sex reported using drugs during sex in the previous six months. More than one-quarter (29%) reporting that drug use during sex had occurred ten or more times in the preceding six months followed by three to five times (23%).

The drugs most commonly used were ecstasy (80%), followed by cannabis (33%), crystal (32%) and alcohol (21%). Participants were asked about barrier use during sex combined with party drugs. Half (51%) of those who had penetrative sex combined with drugs with a regular partner reported 'never' using a barrier, while 22% reported using a barrier 'every time'. This pattern appeared to be reversed for casual partners, with more than half (59%) of those who had penetrative sex combined with drugs with a casual partner reporting using barriers 'every time' and 18% reporting that they 'never' used a barrier with a casual partner when engaging in penetrative sex combined with drugs (Table 28).

**Table 28: Drug use during sex in the preceding six months, NSW 2006**

|                                                                      | N=100 |
|----------------------------------------------------------------------|-------|
| <b>Penetrative sex while on drugs* (%)</b>                           | 85    |
| <i>Of those who had penetrative sex under the influence of drugs</i> |       |
| <b>Number of times:</b>                                              |       |
| Once                                                                 | 7     |
| Twice                                                                | 20    |
| 3-5 times                                                            | 23    |
| 6-10 times                                                           | 21    |
| Ten +                                                                | 29    |
| <b>Drug used (%):</b>                                                |       |
| Ecstasy                                                              | 80    |
| Cannabis                                                             | 33    |
| Crystal                                                              | 32    |
| Alcohol                                                              | 21    |
| Speed                                                                | 13    |
| Base                                                                 | 8     |
| Cocaine                                                              | 8     |
| GHB                                                                  | 8     |
| Ketamine                                                             | 4     |
| <b>Sex with a regular partner using drugs (%):</b>                   |       |
| Use a protective barrier every time                                  | 22    |
| Use a protective barrier sometimes                                   | 6     |
| Never use a protective barrier use                                   | 51    |
| <b>Sex with a casual partner using drugs (%):</b>                    |       |
| Use a protective barrier every time                                  | 59    |
| Use a protective barrier sometimes                                   | 5     |
| Never use a protective barrier use                                   | 18    |

**Source: EDRS Regular ecstasy user interviews 2006**

\* Of those who had penetrative sex in the last 6 months

**Author comment:** An issue of concern which arose from the REU interviews was the large proportion of mainly young participants who saw the use of the contraception pill by either themselves or their partners as a form of protection during sex. It is unclear, however, whether participants saw this as a form of protection to be used in conjunction with such barriers as condoms, or whether they perceived the contraceptive pill as a form of protection in its own right. Furthermore, it is unclear whether participants viewed the contraception pill as a form of protection against BBVI. Future research may wish to monitor participants' views regarding the use of protection.

### 13.3.1 Sydney Gay Community Periodic Survey

Findings from the Sydney Gay Community Periodic Survey show that in February 2006, 20.8% of men recruited reported unprotected anal intercourse with casual male partners (UAIC). The authors note that data across time shows that rates of UAIC increased from 1996 to 2001 and have decreased since (Zablotska 2006).

In February 2006, 56% of men who had sex with a regular partner in the last six months reported engaging in unprotected anal intercourse with a regular partner (UAIR); the authors note that, compared with previous year, the February 2006 survey showed a

decrease in UAIR in the six months preceding interview (though this change was not significant) (Zablotska 2006).

In February 2006, 69.4% of non-HIV positive men had been tested for HIV antibodies in the twelve months prior to the survey, and since 2001 there has been a slight but significant upward trend in the proportion of men who reported having a HIV test in the past year (Zablotska 2006).

### **13.4 Driving risk behaviour**

Participants were asked a series of questions regarding driving under the influence of alcohol and drugs. Two-thirds (64%) of the NSW sample had driven a car in the preceding six months. Of those, 22% had driven over the limit of alcohol (Table 29). This occurred on a median of two occasions in the preceding six months, ranging from once to approximately ever second day.

More than two-thirds (69%) of those who had driven a car in the past six months had driven soon (within one hour) after taking an illicit drug, and this occurred on a median of four occasions in the past six months (ranging from once to every day). The drugs most commonly cited as having been consumed within one hour of driving were ecstasy (71%), cannabis (43%), crystal (43%) and speed (39%) (Table 29).

Participants who had driven under the influence of drugs in the past six months were asked to indicate how impaired they felt their driving was the last time they drove under the influence of drugs. More than two-fifths (46%) felt that their driving had 'not at all' been impaired; 41% felt their driving had been 'slightly impaired'; 7% felt their driving had been 'moderately impaired'; 5% felt their driving had been 'substantially impaired'; and one participant felt their driving had been 'totally impaired'.

**Table 29: Drug driving in the last six months among REU, NSW 2006**

| Variable                                                        | 2006<br>n=100 |
|-----------------------------------------------------------------|---------------|
| Driven a car in the past six months (%)                         | 64            |
| Driven while over the limit of alcohol* (%)                     | n=64<br>22    |
| Driven soon after taking an illicit drug* (%)                   | 69            |
| <b><i>Of those who'd driven soon after taking a drug:**</i></b> |               |
| <b>Drug (%)</b>                                                 | <b>n=44</b>   |
| Ecstasy                                                         | 71            |
| Cannabis                                                        | 43            |
| Crystal                                                         | 43            |
| Speed                                                           | 39            |
| Cocaine                                                         | 14            |
| Base                                                            | 7             |
| LSD                                                             | 7             |
| Ketamine                                                        | 5             |
| GHB                                                             | 2             |
| Heroin                                                          | 2             |

**Source: EDRS Regular ecstasy user interviews 2006**

\*Of those who had driven a car in the last six months

\*\*Within one hour of taking

Participants who had driven a car in the preceding six months were asked to indicate how impaired a person's driving ability would be if they drove under the influence of a range of substances (Table 30). For all drugs except ecstasy and cannabis, the majority of participants indicated that driving under the influence of these substances carried a high risk. The diversity of responses for ecstasy and cannabis may be reflective of the higher prevalence of ecstasy and cannabis use in this sample, as well as the high prevalence of driving soon after the use of ecstasy and cannabis.

**Table 30: Participant\* beliefs concerning driving ability under the influence of alcohol and other drugs, 2006**

|                                              | Don't know | No risk | Low risk | Moderate risk | High risk |
|----------------------------------------------|------------|---------|----------|---------------|-----------|
| Over the legal blood alcohol limit (%)       | 3          | 0       | 2        | 12            | 82        |
| Ecstasy (%)                                  | 2          | 5       | 15       | 34            | 20        |
| Methamphetamine (speed, base or crystal) (%) | 12         | 5       | 33       | 18            | 33        |
| LSD (%)                                      | 18         | 0       | 2        | 13            | 67        |
| Ketamine (%)                                 | 28         | 0       | 2        | 7             | 64        |
| GHB (%)                                      | 36         | 0       | 0        | 3             | 61        |
| Cannabis (%)                                 | 2          | 7       | 23       | 41            | 28        |
| Benzodiazepines (%)                          | 43         | 0       | 5        | 13            | 39        |

Source: EDRS regular ecstasy interviews 2006

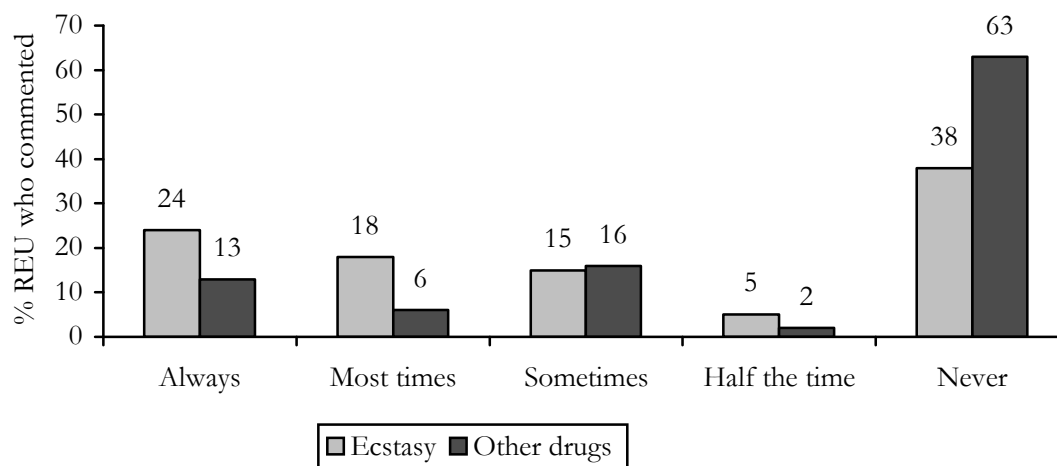
\*n=61

### 13.5 Drug information-seeking behaviour

Participants were asked a series of questions relating to the content, purity and testing of ecstasy tablets and the use of 'information resources'. This is the second year in which this data was collected.

Figure 97 presents the frequency with which participants found out the content and purity of ecstasy compared with related drugs. One-quarter (24%) 'always' found out the content and purity of ecstasy, compared with 13% who 'always' did this for drugs other than ecstasy. Sixty-three percent 'never' found out the content and purity of drugs other than ecstasy, and there was a high proportion that 'never' found out the content and purity of ecstasy (38%).

**Figure 97: Frequency of finding out content and purity of ecstasy, NSW 2006**

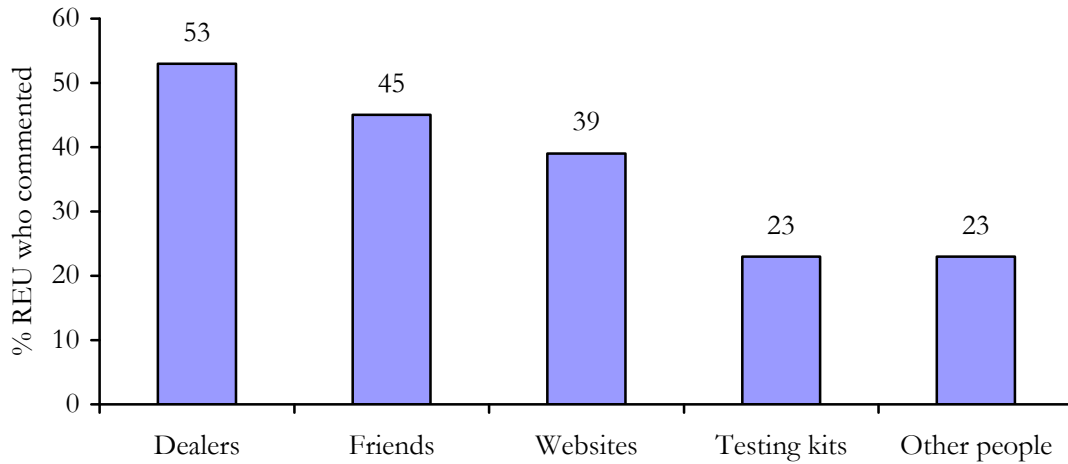


Source: EDRS Regular ecstasy user interviews 2006



Amongst those who reported finding out the content and purity of ecstasy, dealers (53%) and friends (45%) were the most frequently cited sources of information, followed by internet websites (39%) and testing kits (23%) (Figure 98).

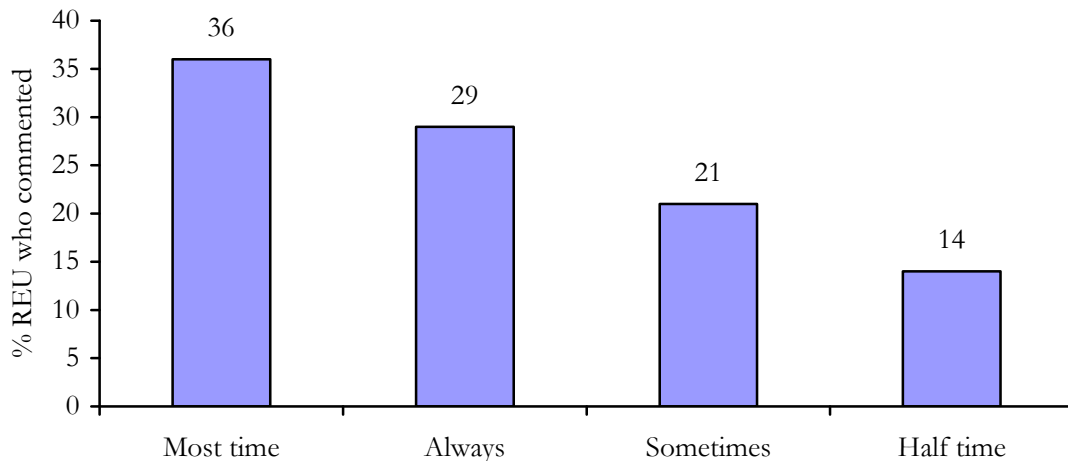
**Figure 98: Sources of ecstasy content and purity, NSW 2006**



Source: EDRS Regular ecstasy user interviews 2006

Of those who reported using testing kits (n=14), 29% indicated that they used these ‘always’ while 36% indicated that they used these ‘most times’ (Figure 99). Nearly two-thirds (64%) of respondents who used testing kits were aware of the limitations to using these kits.

**Figure 99: Frequency of testing kit use\*, NSW 2006**

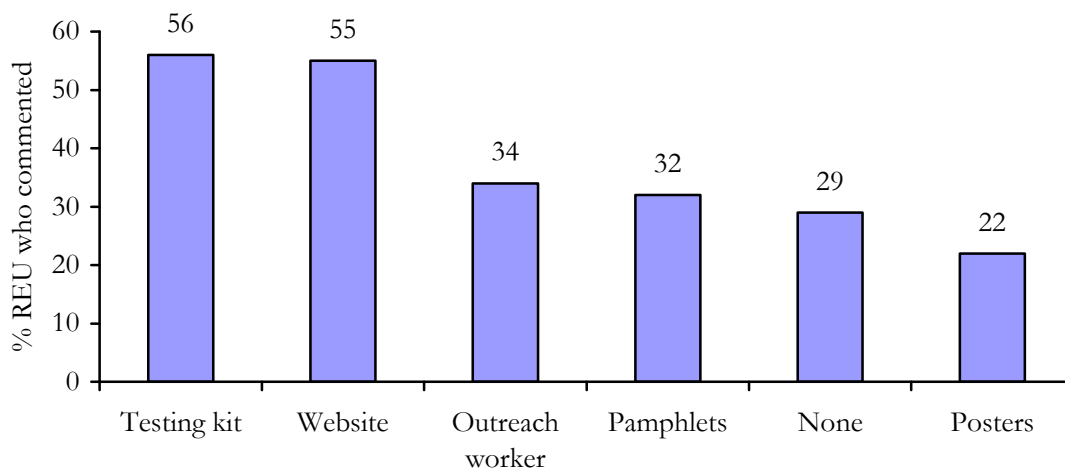


Source: EDRS Regular ecstasy user interviews 2006

\*Amongst those who used testing kits

Respondents were asked to indicate which information resources they would personally find useful if available locally. The majority indicated testing kits (56%) and local websites (55%) would be the most useful resource (Figure 100); 29% indicated they would not find any resources useful.

**Figure 100: Information resources that would be useful to REU, NSW 2006**



**Source: EDRS Regular ecstasy user interviews 2006**

Participants (n=62) who indicated they sought the content and purity of ecstasy were asked whether they would continue to take a tablet if a pill testing kit indicated the presence of a range of substances. Almost all (98%) indicated they would continue to take a tablet if it contained an 'ecstasy-like substance', 86% would take a pill if it contained an 'amphetamine-type substance', 52% if it contained ketamine, 44% if it contained DXM, 42% if it contained opiates, 42% if it contained 2CB/2CI, 32% if it contained PMA, and 32% would continue to take a pill if it showed no reaction.

Participants were asked whether logos on ecstasy were a good indication of what the pill would be like. Twenty-nine percent disagreed, 27% agreed, 23% strongly disagreed, 6% strongly agreed and 14% remained neutral. When asked if they believed that using ecstasy should be legal, more than two-fifths (44%) disagreed, 28% agreed and 16% remained neutral. More than half (53%) disagreed or strongly disagreed (3%) that selling ecstasy should be legal; 18% agreed, 6% strongly agreed, and 15% remained neutral. When asked if they knew the content of the pills they took, the majority either disagreed or strongly disagreed (61% and 12% respectively), 11% agreed, 1% strongly agreed whilst 15% remained neutral.

## 13.6 Summary of risk behaviour

- One in four (25%) respondents reported having injected at some time in their lives and 18% reported injecting in the six months preceding interview.
- A median of four drugs (range 1-10) had ever been injected, while those who reported injecting in the preceding six months had injected a median of two (range 1-6) drugs.
- Three-fifths (58%) of lifetime injectors reported injecting for the first time while under the influence of drugs (mainly alcohol, ecstasy and cannabis).
- When lifetime injectors were asked to specify how they learned to inject, three-fifths (67%) reported that a friend or partner showed them how.
- Of those that injected in the preceding six months, one participant reported using a needle after someone else in the month preceding interview.
- Eighteen percent of recent injectors reported that they usually injected alone.
- Injecting drug use in the NSW general population remains quite low, though in samples of other drug using populations where data has been collected over time, injecting drug use is higher.
- Forty-two percent of the sample reported having completed the vaccination schedule for hepatitis B; 33% of the sample had been tested for hepatitis C in the past year; 51% of the sample had been tested for HIV in the past year. Lifetime injectors were significantly more likely than non-injectors to seek vaccination for hepatitis B and to have ever been tested for hepatitis C and for HIV.
- The majority (88%) of the sample had engaged in penetrative sex in the past six months. Twenty-eight percent always used a barrier with a regular partner and 64% always used a barrier with a casual partner. One-quarter of the sample reported having six or more sexual partners in the six months preceding interview.
- The majority (85%) of those reporting recent penetrative sex reported using drugs during sex in the previous six months. Users were most commonly under the influence of ecstasy, cannabis and crystal during sex.
- Almost half (47%) of those who reported penetrative sex in the preceding six months had had anal sex.
- Of the sample, 44% had driven within one hour of taking a drug. The drug most commonly taken was ecstasy, followed by cannabis, crystal and alcohol.
- Thirty-eight percent 'never' found out the content and purity of ecstasy and 63% reported that they 'never' found out the content and purity of drugs other than ecstasy. Of those who did, dealers and internet websites were the most commonly nominated sources of information.

## 14 HEALTH-RELATED ISSUES

### 14.1 Mental health

For the first time in 2006, the EDRS included the 10-item Kessler Psychological Distress Scale (K10)(Kessler 2002) which is a questionnaire designed to measure the level of distress and severity associated with psychological symptoms in population surveys.

The mean score was 18 (median=16.5; SD= 6.0; range 10-33). Scores ranging from 10 to 15 were classified as 'low', 16 to 29 as 'medium' and 30 to 50 as 'high'. According to this classification, 45% (n=44) were in the low range, 48% (n=47) in the medium range, and 7% (n=7) in the high range.

#### 14.1.1 Key expert comments

KE were asked to describe whether there were any mental health issues amongst the groups they had contact with. While all KE who commented mentioned that there were no diagnosed mental problems in the groups they had contact with, issues such as mood problems, depression, anxiety and some levels of paranoia were mentioned. Most KE who commented on mental health issues discussed the difficulty in discerning whether such issues were drug-induced or were pre-existing issues of concern.

A small number of ecstasy users were reported by one KE to be presenting for treatment with problems relating to paranoia, and this KE was concerned that these symptoms may be exacerbated if users begin to use methamphetamine, in particular crystal methamphetamine.

### 14.2 Overdose

One-fifth (22%) had ever overdosed on ecstasy or other drugs, on a mean of four occasions (range 1-40). Overdose was defined as 'passed out or fallen into a coma'. Four participants reported overdosing in the past six months, with the main substance involved being GHB (n=2), followed by ecstasy (n=1) and alcohol (n=1).

On the occasion of last overdose, participants reported either being in a nightclub (n=2), a friend's home (n=1) or a family function (n=1). On the last occasion of overdose, the main substance involved was ecstasy (n=1), alcohol (n=1), GHB (n=1) and ketamine (n=1). After their last overdose, three participants reported that they were monitored by friends, while one participant was monitored by a relative. No participants reported seeking medical assistance.

### 14.3 Help-seeking behaviour

Participants were asked if they had accessed any medical or health services in relation to their drug use in the last six months. Of the sample, 26% had accessed either a medical or health service in the preceding six months of the interview.

Of those who had sought help, the majority accessed their general practitioner (GP; n=12) followed by a counsellor (n=9) (Table 31). Of those who accessed a GP, crystal

was the drug frequently cited as the main drug of concern, and the main issue of concern was dependence. Of those who accessed a counsellor, ecstasy and crystal were the drugs of main concern, with the main issue of concern being depression.

Table 31 presents the proportion of participants who accessed a health or medical service, with the main drug(s) and issue of concern.

**Table 31: Proportion of REU who accessed health help by main drug type and main reason, NSW 2006**

| Service             | Ecstasy (%) | Speed (%) | Crystal (%) | Alcohol (%) | Cannabis (%) | Main issue     |
|---------------------|-------------|-----------|-------------|-------------|--------------|----------------|
| GP (n=12)           | 25          | 8         | 33          | 0           | 8            | Dependence     |
| Counsellor (n=9)    | 44          | 0         | 44          | 0           | 0            | Depression     |
| D&A* worker (n=4)   | 0           | 0         | 50          | 0           | 0            | Dependence     |
| Psychologist (n=4)  | 25          | 0         | 25          | 25          | 25           | Dependence     |
| Emergency (n=4)     | 50          | 0         | 25          | 0           | 0            | Physical probs |
| Hospital (n=4)      | 25          | 0         | 25          | 25          | 0            | Physical probs |
| Ambulance (n=3)     | 100         | 0         | 0           | 0           | 0            | Physical probs |
| First aid (n=2)     | 50          | 0         | 0           | 0           | 0            | Overdose       |
| Social worker (n=2) | 0           | 0         | 0           | 0           | 0            | -              |
| Psychiatrist (n=1)  | 0           | 0         | 100         | 0           | 0            | Duty of care   |

Source: EDRS Regular ecstasy user interviews 2006

\*D&A – drug and alcohol

### 14.3.1 Key expert comments

When asked to comment on help-seeking behaviour, those who worked at entertainment venues were overwhelmingly supportive of ‘drug rovers’. KE noted that users may not necessarily seek help from first aid and medical officers at events (perhaps, as one KE noted, due to beliefs that reporting drug-related harm may warrant the involvement of law enforcement) but are willing to seek help from drug rovers. KE mentioned that at such events there is a need to let people know there is help available; this is especially true because more ‘experienced’ drug users were reported to not seek help while newer users may lack knowledge regarding available assistance. However, one KE did mention that experienced users were more likely to seek help because they knew this would not involve law enforcement.

## 14.4 Other problems

Participants in 2006 were asked about a range of other problems associated with their drug use. Participants were asked if they had experienced any occupational/educational, social/relationship, financial or legal/police problems in the six months preceding interview that they would attribute to their drug use. Table 32 presents the proportion experiencing these problem and the main drugs of cause.

Almost half (46%) of the sample reported experiencing social/relationship problems in the preceding six months related to their drug use, with crystal meth the most frequently nominated drug of cause (41%; n=19), followed by ecstasy (30%; n=14). The main social/relationship problem reported to be caused by drug use was arguments (63%; n=29), followed by ending a relationship (13%; n=6).

Almost half (46%) of the sample reported experiencing financial problems in the preceding six months related to their drug use, with ecstasy (28%; n=13) and crystal (26%; n=12) the drugs most frequently cited as being the main drug causing the problem. The main financial problem reported to be caused by drug use was lack of money for recreational activities (65%; n=30), followed by having no money for food or rent (24%; n=11).

Almost two-fifths (37%) of the sample reported experiencing occupational/educational problems in the preceding six months related to their drug use, with ecstasy (35%; n=13) and crystal (30%; n=11) the drugs most frequently cited as being the main drug of cause. The main occupational/educational problem reported to be caused by drug use was reduced work performance (30%; n=11) followed by trouble concentrating (24%; n=9).

Four participants reported police/legal problems attributed to drug use in the preceding six months, with one participant each nominating ecstasy, crystal, cannabis and polydrug use as the main drug of concern. Two participants reported being arrested, one participant was involved in a vehicular accident that warranted police investigation, and once participant reported experiencing police contact due to drugs being found on their possessions.

**Table 32: Self-reported drug-related problems, NSW 2006**

| Variable          | Any drug<br>(n=100) | Ecstasy (%) | Speed (%) | Crystal (%) | Cannabis (%) | Alcohol (%) | Polydrug use (%) |
|-------------------|---------------------|-------------|-----------|-------------|--------------|-------------|------------------|
| Social/rel (%)    | 46                  | 30          | 2         | 41          | 4            | 7           | 11               |
| Financial (%)     | 46                  | 28          | 2         | 26          | 20           | 2           | 20               |
| Educ/occupant (%) | 37                  | 35          | 3         | 30          | 11           | 3           | 16               |
| Legal/police (%)  | 4                   | 25          | 0         | 25          | 25           | 0           | 25               |

Source: EDRS Regular ecstasy user interviews 2006

## 14.5 Summary of health-related issues

- Only a small proportion of the NSW sample could be classified as 'high' on the Kessler Psychological Distress Scale.
- One-fifth (22%) had ever overdosed, with four participants overdosing in the six months prior to interview. No participant reported seeking medical assistance for an overdose in the past six months.
- Of those who reported accessing a medical or health service, most accessed a GP, with the main drug of concern being crystal and the main issue of concern being dependence. A counsellor was the second most commonly accessed health professional, with the two main drugs of concern being ecstasy and crystal, and the main issue being depression.
- Social and relationship problems (46%) and financial problems (46%) were most commonly reported by regular ecstasy users. Few reported legal or police problems (4%).

## 15 CRIMINAL ACTIVITY, POLICING AND MARKET CHANGES

### 15.1 Reports of criminal activity among REU

More than one-quarter (27%) of the sample had committed a crime in the month preceding interview (Table 33). Twenty-one percent of the sample had dealt drugs in the previous month, though frequency of drug dealing was low, with the majority (71%; n=15) of those who had dealt drugs doing so less than once per week. Thirteen percent of the sample had committed property crime in the past month, with the majority (92%) having done so less than once per week.

Four participants had committed fraud in the past month; three had done so less than once per week while one participant had done so daily. Two participants had engaged in violent crime in the past month; frequency of occurrence was less than once per week for both participants.

Seven participants had been arrested in the past twelve months. Offences ranged from drug use/possession (n=1), drug dealing/trafficking (n=1), shoplifting (n=1) and possessing false identification (n=1).

Since 2000, smaller proportions of regular ecstasy users have reported involvement in any criminal activity and this proportion appears to have remained stable in 2006 (Table 33). Whilst the proportions engaging in dealing, fraud and violent crime remained relatively stable in 2006, there was a slight increase in property crime observed.

**Table 33: Criminal activity reported by REU, NSW 2000-2006**

| <b>Criminal activity in the last month</b> | 2000<br>(n=94) | 2001<br>(n=163) | 2002<br>(n=88) | 2003<br>(n=102) | 2004<br>(n=104) | 2005<br>(n=101) | <b>2006<br/>(n=100)</b> |
|--------------------------------------------|----------------|-----------------|----------------|-----------------|-----------------|-----------------|-------------------------|
| Any crime                                  | 49             | 44              | 43             | 30              | 19              | 29              | <b>27</b>               |
| Drug dealing                               | 40             | 38              | 40             | 28              | 12              | 23              | <b>21</b>               |
| Property crime                             | 11             | 4               | 5              | 4               | 5               | 8               | <b>13</b>               |
| Fraud                                      | 3              | 4               | 1              | 1               | 4               | 2               | <b>4</b>                |
| Violent crime                              | 2              | 4               | 2              | 5               | 4               | 1               | <b>2</b>                |
| <b>Arrested last 12 months*</b>            | -              | -               | -              | -               | 11              | 6               | <b>7</b>                |

Source: EDRS Regular ecstasy user interviews 2000-2006

\*Not recorded prior to 2004



### 15.1.1 Key expert comments

KE in law enforcement were able to comment on high-end drug manufacturing and supply. KE mentioned that those who are involved in this aspect were often specialised, and did not tend to be involved in other types of crime. Those involved in the low-end may be more diverse, involved in supply and perhaps manufacture if they were able to obtain the necessary resources.

Violence was often attributed to alcohol. In many circumstances, those who use drugs may be more likely to be victims of crime rather than perpetrators. This was especially true in entertainment areas of Sydney, where large numbers of people from different cultural backgrounds and of differing sexual identities were in close proximity.

## 15.2 Perceptions of police activity towards REU

In 2006 there was a larger proportion of REU who reported a 'decrease' in police activity (Table 34). Correspondingly, there was a decrease in the proportion of REU reporting an 'increase' in police activity. A majority (86%) reported that police activity had not made it more difficult for them personally to obtain illicit drugs recently<sup>7</sup>. However, whilst participants stated that police activity had not made it more difficult for them to score drugs, it is not possible to draw conclusions regarding the effect of police activity on other participant behaviours – for example, it may act as a deterrent to entering nightclubs in possession of drugs.

Participants were asked to specify changes in police activity which they had observed. Increased street presence of police was noted, as was increased presence in venues such as nightclubs and raves. Participants also noticed increased use of sniffer dogs at venues, either inside or waiting for participants at venue entry locations.

Smaller proportions of REU perceived a decrease in police presence in venues or on the street. Some noted that presence varied by venue type – for example, while there may have been a decrease in police activity in nightclubs, there had been an increase in police activity in raves.

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

**Table 34: Perceptions of police activity by REU, NSW 2000-2006**

| Perception                          | 2000<br>(n=94) | 2001<br>(n=163) | 2002<br>(n=88) | 2003<br>(n=102) | 2004<br>(n=104) | 2005<br>(n=101) | <b>2006<br/>(n=100)</b> |
|-------------------------------------|----------------|-----------------|----------------|-----------------|-----------------|-----------------|-------------------------|
| <b>Recent police activity:</b>      |                |                 |                |                 |                 |                 |                         |
| Decreased                           | 5              | 5               | 2              | 7               | 1               | 2               | <b>10</b>               |
| Stable                              | 52             | 34              | 16             | 36              | 41              | 36              | <b>29</b>               |
| Increased                           | 32             | 49              | 78             | 37              | 45              | 49              | <b>32</b>               |
| Don't know                          | 11             | 12              | 3              | 20              | 13              | 14              | <b>28</b>               |
| Did not make scoring more difficult | 87             | 94              | 88             | 80              | 85              | 92              | <b>86</b>               |

Source: EDRS Regular ecstasy user interviews 2000-2006

### 15.2.1 Key expert comments

KE comments regarding police activity tended to be anecdotal, with reports coming from the groups they had contact with. There were conflicting reports regarding police activity, with some KE indicating that police were less visible and that the use of sniffer dogs had decreased, while other KE reported an increase in uniformed police activity and presence and an increase in the use of sniffer dogs. Law enforcement KE again noted the increased focus on precursor materials; comment was also made that law enforcement were seeking to place greater restriction on pill-press machines.

### 15.3 Perceptions of changes in ecstasy and related drug markets

Three-quarters (75%) of the sample had perceived changes in the ecstasy and related drug market in Sydney. Three recurrent themes were identified: the use of GHB; the use of crystal methamphetamine; and trends in other drug use. It should be noted that often comments were made in relation to user's particular social group, and thus caution should be used when interpreting these findings.

A large proportion of REU commented on the increase in GHB use amongst their social group. Many commented that this increase was not in the quantities used, but rather the larger proportion that were now using the drug. It was unknown whether this increase was an increase in the number of people who had never used the drug now doing so, or whether the increase was due to people admitting GHB use. In relation to this, there was a small minority that mentioned a slight increase in GBL and 1,4-B.

Many REU mentioned changes in the use of crystal meth. The majority of those who mentioned crystal meth use indicated that use was increasing amongst their social group, with some REU noting an increase in the problems associated with crystal use; however, such an increase was concentrated in those who had been using the drug for a longer period of time. There were some REU who described the use of crystal occurring mainly in private homes, with its use intended to enhance sexual experiences. A minority of REU who made comment on crystal meth use discussed a decrease amongst those who used this drugs; however, this tended to be concentrated in those who were identified as

more chronic crystal meth users and that this decrease in use was in relation to experiencing problems associated with the drug.

There were varying reports surrounding the use of other drugs. Alcohol use was often commented upon, with REU perceiving an ‘increase’ not only in alcohol consumption but in binge alcohol use. A small number of REU commented that there was an increase in hallucinogen use, in particular LSD, as well as in the experimental use of research chemicals such as 2-CB and 2-CI. Some REU noted that this was occurring predominantly in younger groups, such as those aged in their late adolescence. Polydrug use was regarded as increasing in most social networks.

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

## 15.4 Experiences with drug detection ‘sniffer’ dogs

For the first time in 2006 participants were asked about their experiences with drug detection ‘sniffer’ dogs. Two-thirds (64%) of participants had seen sniffer dogs in the preceding six months on an average of four occasions (range 1-24). Of those who had seen sniffer dogs, the majority (89%) reported that they took some precaution if they were made aware that the dogs would be at an event that they were going to. As can be seen in Table 35, half (51%) reported that they concealed their drugs better, while one-quarter (23%) reported that they chose not to take drugs to that event. Other precautions included consuming drugs before attending event (19%), avoiding the area or location where the dogs were reported to be (12%), and only carrying the quantity that they intended to use (8%).

**Table 35: Precautions taken by REU who had been made aware sniffer dogs will be at an event, NSW 2006**

| Precaution (%)                                 | n=64 |
|------------------------------------------------|------|
| Conceal drugs better                           | 51   |
| Did not take drugs to event                    | 23   |
| Consumed drugs beforehand                      | 19   |
| Avoided area/location where dogs were          | 12   |
| Carried small amount/amount intended to use    | 8    |
| Disposed of drugs                              | 2    |
| Purchase drugs at event from a known source    | 2    |
| Purchase drugs at event from an unknown source | 0    |

Source: EDRS Regular ecstasy user interviews 2006

Almost three-quarters (70%) of those who had seen sniffer dogs in the past six months reported having had drugs on them when they had seen the dogs. Participants were asked to report their reactions to seeing the dogs when they had drugs on them. Forty-four percent reported walking away, 41% reported acting calm, normal or not reacting in any way, 4% reported disposing of their drugs and 4% reported taking their drugs.

Participants were asked what their reactions would be if they saw sniffer dogs in the future when they had drugs on them. Almost two-fifths (37%) of the sample reported that they would walk away or avoid the dogs, 26% reported that they would dispose of

the drugs, 26% reported that they would act calm, and 18% reported that they would consume the drugs.

The use of sniffer dogs was a contentious issue for many participants, who saw that the use of sniffer dogs aided in the detection of drug users, but not necessarily drug dealers. Others noted that the use of sniffer dogs had spread beyond nightclubs and raves, and that there had been an increase in the use of sniffer dogs at venues such as RSLs and pubs.

#### **15.4.1 Key expert comments**

Comments regarding sniffer dogs by KE appeared to fall into one of three categories. KE who worked in law enforcement viewed them as useful, commenting that licencees and the majority of the patrons had no issue about the use of sniffer dogs, and that only a minority viewed them as a breach of civil liberties.

A proportion of KE who worked in the entertainment industry were of the opinion that while they did not necessarily like sniffer dogs, they cooperated with police when they were being used.

A proportion of KE who worked in the entertainment industry were of the opinion that sniffer dogs caused more harm than good; that they did not work; and were used only as a public relations exercise for law enforcement.

There was also comment from KE that sniffer dogs targeted users, not dealers or suppliers, and as such did not serve their purpose.

#### **15.4.2 NSW Ombudsman Review of the Police Powers (Drug Detection Dogs) Act 2001**

In NSW, the *Police Powers (Drug Detection Dogs) Act* & the *Police Powers (Drug Detection Dogs) Regulations* commenced on 22 February 2002 and 10 May 2002 respectively. The Act and the Regulations conferred on police the power to use drug detection dogs without a warrant to assist in the identification of persons committing drug offences in certain public places such as licensed premises, prescribed public transport routes, and sporting and entertainment venues. They may also use the dogs in other public places with a warrant where an authorized justice issues a warrant after being satisfied that police have reasonable grounds for believing that drug offences are occurring in the place specified in the warrant application.

On the 1st December 2005 the *Law Enforcement (Powers and Responsibilities) Act* came into force, replacing the *Police Powers (Drug Detection Dogs) Act*. The provisions of the new Act are, for all intents and purposes, identical to the old Act.

The *Drug Dogs Act* required the Ombudsman to review the use of drug detection dogs for the first two years after commencement, and the report submitted outlined the activities undertaken as part of the review, and outlined findings and recommendations.

There were several findings of note from the Ombudsman's report. Firstly, three-quarters of those searched did not result in the location of prohibited drugs. Secondly, the most common drug found was cannabis, which was found in approximately 84% of all incidents where one or more drugs were detected; this was followed by ecstasy (8.5%)

and meth/amphetamine (7.7%). Thirdly, police generally located only small amounts of cannabis; two-thirds of those found with cannabis were issued a 'cannabis caution', and the Ombudsman found that this was a case of the police exercising appropriate discretion. Fourthly, in contrast to claims which suggested that the dogs' accuracy is 70%, the Ombudsman's report suggested that during the review period only 26% of persons searched in a public place as a result of an indication were found in possession of prohibited drugs.

Only one amount of cannabis exceeded the prescribed quantity of 300 grams required for a 'deemed' supply charge, and this person was subsequently only charged with cannabis possession and not supply. Only 19 successful 'supply prohibited drug' prosecutions resulted from drug detection dog operations, and ecstasy was involved in 16 of these. However, the Ombudsman reported that more than half of those found in possession of ecstasy could have been charged with supply of a prohibited substance based on the quantity they were in possession of. Nine of the 19 successful prosecutions involved methamphetamine; on 20 occasions, or 10% of the meth/amphetamine finds, police located persons in possession of 'deemed' supply amounts. No successful prosecutions for cocaine or heroin supply resulted from detection dog operations.

## 15.5 Summary of criminal and police activity

- More than one-quarter (27%) of the sample had committed a crime in the month preceding interview, with 21% of the sample having dealt drugs in the month preceding interview, though the frequency of doing so was low.
- There was a larger proportion of REU who reported a decrease in police activity. The majority of REU reported that police activity had not made it more difficult for them to obtain drugs.
- Participant-reported changes in the ecstasy and related drug market centred on: the increase use of GHB; concern regarding the use of crystal meth; and changes in other drugs such as the use of alcohol, hallucinogens and research chemicals.
- Two-thirds of participants had seen sniffer dogs in the preceding six months; and of those, the majority took some form of precaution if they were aware that sniffer dogs could be at an event they were attending.
- KE comments regarding sniffer dogs varied: a proportion viewed them as useful; a proportion viewed them as a 'necessary evil'; and a proportion viewed them as an 'unnecessary evil'.

## 16 SUMMARY

### 16.1 Demographic characteristics of REU

The 2006 results indicate that regular ecstasy users, a population defined in this study by at least monthly use of tablets sold as ‘ecstasy’, tend to be young, relatively well-educated, and likely to be employed or engaged in full-time study. Few participants were in treatment for drug-related problems, and only a small proportion had previously been incarcerated. The demographic characteristics of the sample have changed little since 2000, though a slight increase in age, and a decrease in the proportion identifying as heterosexual, has been observed.

### 16.2 Patterns of polydrug use

As in previous surveys, participants could be characterised as extensive polydrug users; however, participants are not necessarily regular users of other drugs. Ecstasy was the drug of choice for more than two-fifths of the sample. Large proportions reported the use of alcohol, cannabis and tobacco in the six months prior to interview. There were specific drug trends observed in 2006, such as methamphetamine, GHB, MDA and LSD. This may suggest that despite these drugs being used by substantial minorities in the sample, factors such as price, purity and availability may have a greater impact on use than for other drugs such as ecstasy and cannabis. Furthermore, opportunistic use may have a large influence on the use of these drugs, perhaps reflected in the lower frequency of use.

### 16.3 Ecstasy

Ecstasy was first used at a median of 18 years of age, and was first used regularly at a median age of 19 years. Ecstasy had been used for a median of around 15 days in the six months preceding interview; 47% reported using ecstasy between monthly and fortnightly, 32% reported using ecstasy between fortnightly and weekly, and 19% reported using ecstasy once per week or more.

Participants reported using a median of two ecstasy tablets in a ‘typical’ session of use and three and a half tablets in a ‘heavy’ session of use. In the six months preceding interview, all participants had swallowed ecstasy, 37% had snorted ecstasy, 3% had injected ecstasy and 2% had smoked ecstasy. A large proportion (85%) of participants reported typically using other drugs when they used ecstasy, and 68% reported that they typically used other drugs when coming down from ecstasy.

The median price paid for a single ecstasy tablet was \$30 in 2006, with large proportions of participants reporting that this price had remained stable in the six months preceding interview. Ecstasy was commonly obtained from people known to participants, such as friends and in private locations, such as friends’ homes.

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

Tablets sold as ecstasy have remained readily available in Sydney since 2000. Consistent with previous years, the majority of participants reported that ecstasy was ‘very easy’ or ‘easy’ to obtain.

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

Participants identified both benefits and risks associated with ecstasy use. Commonly identified benefits included enhanced feelings of closeness and bonding with others, while commonly identified risks included the unknown contaminants and cutting agents which can be found in ecstasy.

## 16.4 Methamphetamine

A majority (88%) of participants reported having ever used speed, with 55% reporting use in the six months prior to interview. Amongst recent users, the median days of use in the six months prior to interview were five. Speed was commonly used in nightclubs (78%) and, to a less extent, participant’s own home (39%) and friends’ homes (37%). It was more commonly purchased from friends in friends’ homes. Snorting (80%) and swallowing (64%) were the more prevalent routes of administration, with only a small number (7%) injecting speed in the six months prior to interview.

Amongst those who commented, speed was purchased for a median of \$40 per point, or \$60 per gram; the price of speed was largely reported to have remained stable in the six months prior to interview. Current purity varied, with reports ranging from low to high, though purity was largely thought to have remained stable in the six months prior to interview. Speed was largely reported to be ‘very easy’ to ‘easy’ to obtain; availability was considered to have remained stable in the six months prior to interview.

Half (50%) of the sample reported having ever used methamphetamine base, with one-quarter (24%) reporting its use in the six months prior to interview. Median days of use in the past six months were three and a half. Base was used in variety of both public and private locations, such as nightclubs (47%), participant’s own home (40%), private parties (33%) and friends’ homes (33%). Base was mostly obtained from friends (67%) in a variety of locations, such as friends’ homes (33%) and agreed public locations (33%). Base was commonly swallowed (79%), though proportions did report snorting (38%) and smoking (21%) base in the six months prior to interview. Small proportions (8% of recent base users) had injected it in the six months prior to interview.

Amongst those who commented, base was purchased for \$37.5 per point or \$100 per gram, with the price reported to have remained largely stable in the six months prior to



interview. Current purity was reported to be high, though mixed reports were obtained regarding purity change in the six months prior to interview. Base was reported to be largely 'very easy' to 'easy' to obtain, and most reported that this had remained stable in the six months prior to interview.

Two-thirds (68%) of the sample had ever used crystal methamphetamine, and more than half (56%) reported using it in the six months prior to interview (on a median of six days). Unlike speed and base, crystal was frequently used in more private locations, such as participant's own home (63%) and friends' homes (50%). Crystal was obtained from known dealers (46%) and friends (42%) in private locations (dealers' homes, 38%, and friends' homes, 31%). Smoking (88%) was the most frequently mentioned route of administration reported by recent users, though one-quarter (27%) of recent users had injected in the six months prior to interview.

Amongst those who commented, crystal was purchased for \$50 per point or \$350 per gram; price was reported to have remained stable in the six months prior to interview. Current purity was reported to be 'high' to 'medium' and had remained stable. Crystal was reported to be 'very easy' to 'easy' to obtain, and this too had remained stable.

Varying proportions of the sample were able to report on price, purity and availability of all three methamphetamine forms. Where small numbers are reported, caution should be taken when interpreting results.

## **16.5 Cocaine**

The prevalence of lifetime cocaine use has remained stable across time, though in 2006 a decrease was observed in the proportion of participants reporting recent use (from 55% to 45%). This decrease is consistent not only with the majority of KE who commented on cocaine use, but with other data sources that suggest low population prevalence as well as a decline in use amongst other groups. Cocaine was most commonly used in nightclubs (52%), followed by friends' homes (35%), and was most frequently purchased from friends (75%) at friends' homes (75%).

Amongst those who commented, cocaine was purchased for \$300 per gram, and reports of price change varied from remaining stable (27%) to increasing (15%). Reports of current purity also varied, though one-third suggested purity had remained stable in the six months prior to interview. Regarding availability, one-third (35%) of those who commented suggested it was 'easy' to obtain while similar proportions (32%) reported it was 'difficult' to obtain; however, availability was reported to have remained stable in the six months prior to interview.

## **16.6 Ketamine**

The prevalence of lifetime ketamine use decreased in 2006, with 57% reporting having ever used ketamine. Reports of recent ketamine use also decreased, declining from 39% in 2005 to 27% in 2006. This represents the lowest proportion of the sample reporting recent use in five years. The majority of recent users used ketamine less than once per month. Snorting ketamine was the most common route of administration amongst recent users; no participants had injected ketamine in the six months prior to interview. Ketamine was commonly purchased from friends in friends' homes; use occurred in a range of locations, such as nightclubs (73%), raves (43%), participant's own home (27%) and friends' homes (27%).

Amongst those who commented, ketamine was purchased for \$175 per gram, and more than half reported that the price had remained stable in the six months prior to interview (56%). Most (69%) reported that the current purity was high, with more than half (56%) reporting that purity had remained stable in the six months prior to interview. Reports concerning current availability varied, from 'very easy' (31%) and 'easy' (31%) to 'difficult' (38%), though half (50%) reported that availability had remained 'stable' in the six months prior to interview.

## **16.7 GHB**

Two-fifths (40%) of the sample reported lifetime GHB use, and one-fifth (21%) reported recent GHB use. NSW reported the largest increase in the proportion of the sample reporting recent use, observing an increase from 13% in 2005 to 21% in 2006. Despite low general population use of GHB, the increase observed in recent use is consistent with not only KE reports, but also with data from other populations of drug users. Three-quarters (71%) of recent users reported using less than monthly. GHB was commonly purchased from friends and known dealers in private locations, and use tended to occur more in private locations such as participant's own home (44%) and friends' homes (33%), though one-third (33%) also used GHB in nightclubs.

Small numbers were able to comment on price, purity and availability, and thus caution should be used when interpreting data. However, the median price of a 'vial' of GHB was \$25 and two-fifths (39%) of those who commented reported that price had remained stable in the six months prior to interview. Two-thirds (69% of those who commented) reported the current purity to be 'high', though varying reports were given regarding purity change in the six months prior to interview. Concerning availability, reports were mixed, though two-thirds (67% of those who commented) reported that availability had remained stable in the six months prior to interview.

## **16.8 LSD**

Two-thirds (65%) reported the lifetime use of LSD, though recent use was considerably lower, with only 17% reporting recent use. Two-thirds (65%) of recent users reported using LSD less than once per month in the six months prior to interview. LSD was commonly reported to be used at friends' homes (50%), in public places (50%) and outdoors (43%).

Of those who commented, LSD was purchased for \$20 per tab, and almost half (46%) of those who commented suggested that price had remained 'stable' in the six months prior to interview. Data collected since 2000 has shown a steady increase in the price of LSD, from \$10 per tab in 2000-01, \$15 in 2002-2003, and \$20 in 2004-2006. Reports concerning current purity were mixed, with reports (from those who commented) ranging from 'high' (36%), 'medium' (25%) to 'fluctuating' (11%). Reports concerning purity change were also mixed. Half (50%) of those who commented reported that LSD was 'difficult' to obtain and more than half of those who commented (54%) reported that availability had remained 'stable' in the six months prior to interview.

## **16.9 MDA**

Despite an increase in the lifetime use of MDA (42% in 2006 compared to 32% in 2005), the proportion reporting recent use decreased in this same period (19% in 2005 to 14% in 2006). Of those who reported recent MDA use, all except one participant reported use

on a less-than-monthly basis. Use occurred mostly in nightclubs (67%). Friends (50%) and known dealers (33%) were the most frequently nominated source of MDA, and half (50%) scored from friends' homes.

The price for a 'cap' of MDA in 2006 was \$40, with almost half (46%) of those who commented reporting that price had remained 'stable' in the six months prior to interview. Of those who commented on purity, 73% reported the current purity to be 'high' and the majority (73%) reported that purity had remained 'stable' in the six months prior to interview. Reports concerning current availability were mixed, though 46% of those who commented reported that availability in the six months prior to interview remained 'stable'.

## **16.10 Cannabis**

The lifetime prevalence of cannabis use has remained stable across sampling years, with the majority (95%) in 2006 reporting lifetime use. Recent use decreased in 2006, with 73% reporting cannabis use in the six months prior to interview, a decrease observed from 82% in 2005. Median days of use in the past six months also decreased, from 48 days in 2005 to 24 days in 2006; 18% of recent cannabis users were daily users.

For the first time in 2006, the EDRS reported on the price, purity and availability of cannabis, and, in line with the Illicit Drug Reporting System, participants were asked to distinguish between commercial 'hydroponic' cannabis and outdoor-grown 'bush' cannabis. Hydro and bush were mostly purchased from friends in friends' homes. While prices were comparable, hydro was more expensive per ounce than bush (\$300 vs. \$210), and of those who commented, more participants reported the price of hydro remaining 'stable' (77%) in the six months prior to interview than for bush (43%).

Of those who commented, 55% reported the potency of bush to be 'high' compared to 40% who reported bush to be 'high'. There was greater variation in reports for bush potency than for hydro potency. Though for both cannabis types, the majority reported potency to have remained 'stable' in the six months prior to interview. Differences were observed in reports of current availability – 68% of those who commented reported that hydro was 'very easy' to obtain compared to 33% of those who commented that bush was 'very easy' to obtain; the majority who commented on both types reported availability to have remained 'stable' in the six months prior to interview.

## **16.11 Other drugs**

Almost all participants reported lifetime and recent use of alcohol. A large proportion of the sample consumes alcohol with ecstasy, and half of the sample consumes alcohol at levels which are considered hazardous and may indicate possible dependence. Large proportions of the sample reported lifetime and recent tobacco use, with two-thirds of recent tobacco users reporting daily use. One-quarter of the sample reported recent benzodiazepine use and one-fifth of the sample reported recent antidepressant use. Regarding inhalant use, higher proportions reported recent amyl nitrate use compared to recent nitrous oxide use (37% vs. 6%). Small proportions of the sample reported recent heroin, methadone and other opiate use. Similarly, small proportions reported recent mushroom and recent pharmaceutical stimulant use.

## 16.12 Risk behaviour

One in four (25%) respondents reported having injected a drug at some time in their lives and 18% reported injected drug use in the six months preceding interview. Injecting drug use first occurred at a median age of 21 years. Crystal and speed were the drugs commonly reported as the drugs first injected (84% and 80% of lifetime injectors respectively). More than half (58%) of lifetime injectors had been under the influence of other drugs when they first injected, mostly commonly alcohol, ecstasy and cannabis.

Crystal was the drug most commonly injected in the past six months amongst recent injectors (83%), followed by cocaine (39%), heroin (39%) and speed (39%). Most (82%) recent injectors injected themselves 'every time'; 18% reported that they typically injected alone. Needles were mostly obtained from chemists (56%) or NSP (44%).

Twenty percent of the sample had never been vaccinated against hepatitis B, with a further 13% reporting that they had not finished the vaccination schedule. Twenty-seven percent had never been tested for hepatitis C, and a further 32% reported that their last test had been more than one year ago. Twenty percent had never been tested for HIV, and a further 27% reported that their last test had been more than one year ago.

More than four-fifths (88%) had engaged in penetrative sex in the six months prior to interview. Of those, more than one-third (35%) reported having one partner during this time, though one-quarter (26%) reported having six or more partners in this time. The proportion reporting always using a condom or other form of protection was higher with a casual partner (64%) than with a regular partner (28%). Of those who had had penetrative sex in the past six months, 85% had had penetrative sex while under the influence of drugs. Ecstasy (80%), cannabis (33%) and crystal (32%) were the drugs most frequently mentioned.

Two-thirds (64%) had driven a car in the six months prior to interview, and of those, 64% had driven under the influence of alcohol and 69% had driven within one hour of taking an illicit drug. Of those who had driven within an hour of taking an illicit drug, ecstasy (71%), cannabis (43%), crystal (43%) and speed (39%) were commonly nominated.

## 16.13 Health-related issues

For the first time in 2006, the EDRS included the Kessler Psychological Distress Scale, a questionnaire designed to measure the level of distress and severity associated with psychological symptoms. Forty-five percent scored in the 'low' range, 48% scored in the 'medium' range and 7% scored in the 'high range'. KE reports suggested that issues of concern amongst illicit drug users may be depression, anxiety and paranoia.

One-fifth (22%) of the sample had ever overdosed on ecstasy and other drugs, though only four participants had done so in the six months preceding interview. The main substances involved were GHB (n=2), ecstasy (n=1) and alcohol (n=1). No participants reported seeking medical assistance for an overdose in the six months preceding interview.

One-quarter (26%) of the sample had accessed medical or health services specifically in regards to their drug use in the six months prior to interview. The majority accessed their General Practitioner (n=12), with the main drug of concern being crystal (33%) and the main issue of concern being dependence.

Almost half (46%) had experienced social/relationship problems related to their drug use in the six months prior to interview; 46% reported financial problems related to their drug use; 37% reported educational/occupational problems related to their drug use; and 4% reported legal/police problems related to their drug use.

#### **16.14 Criminal and police activity**

One-fifth (21%) reported dealing drugs in the six months prior to interview, though frequency of occurrence was relatively low. Property crime, fraud and violent crime was reported by a small proportion of the sample; 7% reported having been arrested in the six months prior to interview.

There was a decrease in the proportion of the sample reporting increased police activity in the six months preceding interview, and a large proportion (86%) reported that police activity had not made it difficult for them to personally obtain drugs in the six months prior to interview. Two-thirds (64%) reported that they had observed drug detection 'sniffer' dogs in the six months preceding interview on an average of four occasions. Of those, 89% reported that they took some form of precaution if they were aware that dogs would be at an event they intended to go to.

## 17 IMPLICATIONS

The regular ecstasy users in the current sample have been using ecstasy on average for six years. During this time, users may have formulated their own harm strategies to alleviate negative effects of ecstasy and other drug use, based perhaps not only on first hand experiences but experiences observed amongst social groups and other wider networks of other illicit drug users. The challenge is to present credible information to users.

In 2006, data from both the regular ecstasy users surveyed and reports from key experts indicated an increase in the proportion of drug users engaging in the use of GHB. What is unclear is whether this increase is due to new users partaking in the use of the drug, or whether the increases observed are due to users admitting to using the drug. Previous research has suggested a 'hidden' culture of GHB use that resulted from the growing intolerance many users and establishments had towards this drug. Such intolerance was reported to be, in part, due to the increased overdoses which were caused from GHB use. Users may therefore partake in private locations, such as their own homes, without disclosing use to non-using peers.

An increase in GHB use presents two important implications. Firstly, novice users of the drug need to be educated about the harms which can result from its use. (Degenhardt, Darke et al. 2002) found that despite having a limited experience with the drug, 99% of recent GHB users reported at least one side effect from its use. (Degenhardt, Darke et al. 2003) also found that half of recent GHB users had experienced an overdose. Liechti (2006) found that approximately one-quarter of intoxications with illicit drugs presenting to an emergency department in the United States resulted from a GHB overdose. As such, it is important to disseminate credible harm reduction information to users about the drug in such a way that users will be receptive to the information.

The second important implication concerns GHB use in a polydrug context. Other depressant drugs, such as alcohol and opiates, may potentiate GHB toxicity (Miotto, Darakjian et al. 2001). Even closely spaced doses of GHB can have greater than additive effects. The difficulty in determine concentration of the drug may cause users to underestimate the dose-dependent effects of the drug (Gonzalez 2005). Given that ecstasy users in Australia have been found to have extensive polydrug using histories (Degenhardt, Barker et al. 2004), it is important that users are made aware of the negative effects which can occur from combining GHB with other drugs, especially other depressants like alcohol.

The challenge now is to present credible, reliable education and re-education initiatives concerning GHB use and related harms to users who many well have an extensive polydrug use history as well as an extensive drug using career. Users need to be given information which enables them to make informed decisions regarding their drug use without relying on anecdotal evidence and myths.

Results from the current study suggest that users are aware that what they purchase and consume as 'ecstasy' may not necessarily contain MDMA; however, large proportions rely on anecdotal reports from friends and dealers to inform them of drug content and purity. This is despite many participants indicating that a major risk of consuming ecstasy is the unknown contaminants, and proportions indicating that they would not consume pills if they contained other substances such as methamphetamine and ketamine.

Consuming a drug, which may contain a range of other substances, presents difficulties for users when attempting to anticipate not only drug effects, but also the effects of polydrug consumption. Given that users may not wish to use, or have access to,

equipment to test drug content, users need to be presented with credible evidence of the adulterants which have been found in ecstasy rather than have them rely on anecdotal evidence. Results from analyses, such as those conducted by Victorian Police Forensic Services Department, may be used to inform users of substances detected in pills, providing them with credible evidence with which they can make informed decisions about their drug use.

The findings from the current study suggest that many users lack appropriate knowledge regarding drug possession and the law. The EDRS has consistently shown that regular ecstasy users are not only a polydrug using group, but also a polydrug purchasing group, able to purchase a wide range of drugs from their main source. Furthermore, the current findings suggest that users purchase drugs not only for themselves but for other as well, and that discount for bulk purchases are available. This places users at a heightened risk of more serious penalties if they were to be apprehended by police. Many may be underestimating the quantity needed to have a charge upgraded from possession to trafficking. Given that the vast majority of this group have little to no contact with law enforcement, dissemination of the law surrounding illicit substances may need to come from other sources with which users come into contact.

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