N. White, R. Vial and R. Ali

SA TRENDS IN ECSTASY AND RELATED DRUG MARKETS 2006

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

NDARC Technical Report No. 280

SOUTH AUSTRALIAN TRENDS IN ECSTASY AND RELATED DRUG MARKETS 2006

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

Nancy White, Robyn Vial and Robert Ali

Drug and Alcohol Services of South Australia[1]

NDARC Technical Report No. 280

ISBN 978 0 7334 2477 9

[1] Previously known as the Drug and Alcohol Services Council (DASC).

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACKNOWLEDGEMENTS

In 2006, this research was funded by the Australian Government Department of Health and Ageing as a project under the cost-shared funding arrangement, administered through the National Drug and Alcohol Research Centre. The authors would like to thank Ms Emma Black, Dr Matthew Dunn, Dr Louisa Degenhardt, Ms Susannah O'Brien and Dr Richard Mattick of NDARC for their support and assistance throughout this study. We would also like to acknowledge and thank Josephine Weekley from DASSA.

The authors also wish to acknowledge and thank:

- The six research interviewers who conducted the majority of interviews with 'ecstasy' users: Damian Creaser, Aylza Donald, Andrea Gordon, Kate Morefield and Glynn Morrish, and Lynlea Simmonds.

- The sixteen key experts who willingly provided their time, effort, knowledge and experience to contribute to the EDRS.

- The organisations that generously provided us with indicator data or advice where indicator data were not available at the time of publication, including Drug and Alcohol Services South Australia, the Australian Crime Commission, the South Australian Police, the Australian Bureau of Statistics, the Royal Adelaide Hospital, and the National Drug and Alcohol Research Centre.

Finally, the authors wish to thank the 101 'ecstasy' users who participated in the 2006 SA EDRS survey.

ABBREVIATIONS

ABS	Australian Bureau of Statistics
ACC	Australian Crime Commission
ACPR	Australian Centre for Policing Research
ADIS	Alcohol and Drug Information Service
AFP	Australian Federal Police
A&TSI	Aboriginal and/or Torres Strait Islander
AUDIT	Alcohol Use Disorders Identification Test
BBVI	Blood-borne viral infections
CRUFAD	Clinical Research Unit for Anxiety and Depression
DASSA	Drug and Alcohol Services South Australia
ED	Emergency Department (Royal Adelaide Hospital)
EDRS	Ecstasy and related Drugs Reporting System
GBL	Gamma-butyrolactone
GHB	Gamma-hydroxy butyrate ('fantasy', GBH, 'liquid E')
HBV	Hepatitis B virus
HCV	Hepatitis C virus
HIV	Human immunodeficiency virus
ICD – 9; ICD – 10	International Classification of Diseases, 9th Revision & 10th Revision
IDRS	Illicit Drug Reporting System
IDU	Intravenous drug users
KE	Key expert
K10	Kessler Psychological Distress Scale
LSD	Lysergic acid diethylamide ('trips', 'acid')
MDA	3,4-methylenedioxyamphetamine
MDEA	3, 4-methylenedioxyethylamphetamine
MDMA	3, 4-methylenedioxymethamphetamine ('ecstasy')
NDARC	National Drug and Alcohol Research Centre
NDLERF	National Drug Law Enforcement Research Fund
NDSHS	National Drug Strategy Household Survey
NMDS – AODTS	National Minimum Data Set for Alcohol and other Drug Treatment Services

PDI	Party Drugs Initiative
PMA	Para-methoxyamphetamine
RAH	Royal Adelaide Hospital
REU	Regular ecstasy user
SA	South Australia
SAPOL	South Australian Police
SDS	Severity of Dependence Scale
SPSS	Statistical package for the Social Sciences
1,4-B	1,4-butanediol (1,4-B, BD)

DEFINITIONS

Pharmaceutical Stimulants	E.g. dexamphetamine, pseudo ephedrine and methylphenidate (Ritalin®)

EXECUTIVE SUMMARY

This report presents the results of the EDRS (formerly known as the Party Drugs Initiative: PDI), a study undertaken to monitor ecstasy and related drug markets in South Australia. 2006 was the seventh year in which regular ecstasy users in Adelaide have been surveyed, and comparisons with previous years have been drawn where possible. Trends in the demographic characteristics and patterns of drug use among regular ecstasy users, the prevalence of risk-taking and harms related to drug use, as well as the level of criminal involvement among this group, are presented. Also presented are details on current price, purity and availability of ecstasy and related drugs in Adelaide, and the trends in these drug markets.

Demographic characteristics of regular ecstasy users (REU)

Similar to previous years, the majority of REU were male and, on average, aged in their early 20s. They were also generally either employed or full-time students with less than a fifth of the sample unemployed. Most REU were well educated and half had completed some kind of post-school qualification. Very few had a history of imprisonment or were currently undergoing treatment for drug use. Key expert (KE) reports of the demographics of ecstasy users were generally consistent with the 2006 REU sample.

Patterns of drug use among REU

Regular ecstasy users have been consistently described as polydrug users and the EDRS samples continue to verify this. In 2006, as in previous years, most of the sample reported recent use of some form of methamphetamine (at levels equivalent to ecstasy use), as well as cannabis, alcohol and tobacco. Other substances reported as recently used by substantial proportions of REU were nitrous oxide, Lysergic Acid Diethylamide (LSD) and cocaine, though use of these and other drugs was at a much lower frequency. Compared to 2005, there was an increase in the proportion of REU reporting recent use of ice/methamphetamine and benzodiazepines, and a decrease in the proportions of REU reporting recent use of powder and base methamphetamines, cocaine, ketamine, amyl nitrate, Gamma-hydroxy butyrate (GHB) and tobacco.

The trend in binge behaviour stabilised in 2006 with 57% reporting having binged at least once in the preceding six months. There was an increase in binge use of ice/crystal methamphetamine and methamphetamine powder, compared to 2005, with a decrease in binge use of base methamphetamine.

The majority of REU reported use of any drug primarily by swallowing or snorting in 2006. However, 13% of REU reported recent injecting, most commonly some form of methamphetamine. No clear long-term trend in prevalence of injecting among REU was discernible, but it must be noted that there was an increase in REU injecting of ecstasy in 2006. In reference to route of ecstasy administration, KE comments indicated that injecting was uncommon, but increasing, among this group of drug users.

Ecstasy

Over the last seven years there has been little change in parameters of ecstasy use, with the reported mean age of first use, median days of use, 'average' or 'most' amount used in a typical session all remaining relatively stable across this period. There has, however, been a gradual increase in the proportion using more than one tablet in a typical session, to the point that in 2006 this was reported by the majority of the sample (80%) compared to less than half the sample in 2000 (44%). In addition, a large proportion of

the sample has consistently reported binge use of ecstasy across this time, with over half the sample having done so in 2006. REU mainly use ecstasy by swallowing, with substantial proportions also reporting recent use by snorting. Ecstasy continued to be used most commonly at nightclubs, friends' homes, raves/doofs/dance parties, private parties or at their own homes.

Most REU report typically using at least one other drug either 'with ecstasy' or 'at comedown' – with tobacco, alcohol, cannabis and some form of methamphetamine most common. There was an increase in the proportion of REU reporting typically using crystal methamphetamine *with ecstasy,* and increases in the proportion of REU reporting use of benzodiazepines, and anti-depressants *during the comedown period.*

KE information confirms that REU commonly combine other licit and illicit drug use with ecstasy use, with methamphetamine and alcohol particularly common, and that there was a wide range of frequency of ecstasy and related drug use, from every weekend (particularly among younger users) to less frequent or 'special occasion' use.

The reported price of ecstasy was stable (at $30/tablet) compared to 2005, and considered to be stable in the last six months. Availability continued to be considered 'easy' or 'very easy' by REU, and most reported usually obtaining their ecstasy from a friend. Almost two-thirds (64%) of REU were able to obtain drugs other than ecstasy from their main ecstasy dealer, the most common being some form of methamphetamine, cannabis, LSD and cocaine. The majority of REU believed that the purity of ecstasy was either medium or fluctuating in 2006, similar to previous years. The Australian Crime Commission (ACC) reports that the median purity of SAPOL seizures of phenethylamines in 2004/05 was 29%, the same as that reported in 2003/04.

Ecstasy was generally purchased for both self and others, and purchased from a median of four people in the last six months. The majority of REU purchased ecstasy one to six times in the previous six months, with three percent purchasing ecstasy over twenty-five times in that period.

The most commonly perceived benefits of ecstasy use among REU were enhanced communication and sociability, enhanced closeness and empathy toward others, that it added more fun or enjoyment to an occasion, and enhanced mood. The most commonly perceived risks associated with taking ecstasy were some kind of physical, psychological or neuropsychological harm, or risk associated with the unknown content of ecstasy pills.

Methamphetamine

In 2006, more REU reported recent use of ice/crystal methamphetamine (62% from 41% in 2005), but recent use of powder (51% from 66% in 2005) and base (63% from 82% in 2005) forms of methamphetamine decreased, compared to 2005. The frequency of recent methamphetamine use was somewhat different for the three forms of methamphetamine (a median of 12 days for powder, six days for base and four days for crystal). This level of use decreased for base and ice/crystal, but frequency of powder use increased compared to 2005. Despite a decrease in the frequency of recent crystal/ice use, an increase in the percentage of REU reporting recent use of crystal by smoking continued in 2006 (from 14% in 2004, 27% in 2005 and 47% in 2006). Of note was a decrease in the proportion reporting recent use of crystal by swallowing, from 71% in 2005 to 55% in 2006. This was the first time that smoking as a route of administration of crystal methamphetamine has been used as the preferred method of administration by

REU, with larger proportions of REU usually swallowing in previous years. There was some support of increased smoking of ice/crystal among REU from KE reports, including reports that glass pipes (for smoking) were more frequently seen by police.

Overall, the locations at which REU reportedly scored all three forms of methamphetamine were from their friends' homes, with substantial proportions also reporting scoring at a dealer's home, their own home or at an agreed public place and to a lesser extent, private parties.

There has been some changes in price, with a slight decrease in the price of a point of base methamphetamine (from $25 to $22.50), and for a gram of methamphetamine powder (from $65 to $50). Increases were seen for both points (from $25 to $50) and grams (from $200 to $400) of crystal. There was little change in the purity (medium to high for powder, high for base and crystal), and availability (easy to very easy) of methamphetamines. However, ACC data indicate that the median purity of methamphetamine seized by SAPOL in SA for 2004/05 had decreased (to 11.6%) compared to the previous year, and the lowest seen in the past four years. South Australian Police (SAPOL) data on clandestine laboratory detections suggest that local manufacture of methamphetamine was still a contributor to the SA methamphetamine market.

Cocaine

There was a decrease in the proportion of REU reporting recent use of cocaine in 2006 (31% in 2006 from 49% in 2005), though no change in the frequency of cocaine use, which remains low among those that had used recently. The most commonly reported locations of both 'usual' and 'last' use were a friend's home and nightclubs.

Though the number of REU able to comment on these parameters was small, reports indicated that the 'current' price of cocaine was stable (at $300/gram), and the perception was that purity was stable (high), and availability had decreased, compared to 2005. Data from the ACC show an increase in the number of cocaine seizures by SAPOL in 2004/05, while the median purity was relatively stable at 31%. As in previous years, KE suggested that the cocaine market in Adelaide was mostly restricted to a small subset of users.

Ketamine

Eleven percent of REU reported recent use of ketamine in 2006, though frequency of use remained low. The prevalence of recent use of ketamine among REU had decreased for the second year, following a steady increase in use from 2001 to 2004. The most commonly reported locations of both 'usual' and 'last' use of ketamine was a friend's home. KE comments suggest use of ketamine is either 'accidental' (in ecstasy pills) or restricted to a subset of users, and supports REU reports of use at private venues.

Though the number of REU able to comment on these parameters was very small, reports indicated that the current estimated price of ketamine had increased to $300/gram (from $200 in 2005), and it was considered to be of good quality, though difficult to obtain.

GHB

Less than ten percent of REU (7%) reported recent use of GHB, a decrease compared to 2005 (18%). The frequency of recent use was low, consistent with previous years.

Price, purity and availability data for GHB in 2005 were based on a very small sample of REU and are therefore of limited value. Data suggest that the price of GHB had decreased slightly and that it remained more difficult to obtain GHB in general compared to earlier years (2001 and 2002)

KE information suggested that GHB use was not common among REU generally, but evidence of harm associated with its use was evident in emergency department attendances.

LSD

Approximately one-third (34%) of the REU sample reported recent use of LSD, and prevalence of recent use decreased in 2006. Frequency of use of LSD remains consistently low. KE reports suggest that LSD use was not common among REU, and used only occasionally among those that did use.

The price of LSD was stable (at $10 per tab) and low, perceived purity had increased, and availability remained stable and generally easy, compared to 2005.

MDA

Nine percent of REU reported recent use of 3,4 – Methylenedioxyamphetamine (MDA) in 2006. The proportion of REU reporting recent use of MDA was stable compared to 2005, with the frequency of use increased but has remained consistently low across the seven years of the EDRS survey. KE information suggested that MDA was not commonly used by REU, except as a (suspected) constituent of pills sold as ecstasy.

Price, purity and availability data for MDA in 2006 were based on a very small sample of REU and are, therefore, of limited value. Data suggest that the price and purity of MDA was stable, and that it had become easier to obtain.

Cannabis

Eighty-three percent of REU reported recent use of cannabis in 2006. The proportion of REU reporting both lifetime and recent use of cannabis remained stable compared to 2005, but the frequency of recent cannabis decreased (70 days in 2006 from 85 days in 2005). The proportion reporting binge use of cannabis decreased to 24% in 2006 from 32% in 2005. The price, purity and availability of both hydro and bush cannabis remained stable in 2006 compared to 2005.

The number of cannabis possession (from 316 in 2005 to 351 in 2006) and provision offences (from 1,576 in 2005 to 1,612 in 2006) recorded by SAPOL increased in 2006. However, contribution of cannabis to the total number of illicit drug possession and provision offences in 2005/06 decreased (60%), compared to 68% in 2004/05. Telephone calls to the SA Alcohol and Drug Information Service (ADIS) regarding cannabis remained stable. The SA rate of admissions to hospital for cannabis (primary diagnosis) remained stable, however the national rate increased in 2005/06 compared to 2004/05.

Other drugs

As in previous years, the majority of the REU sample reported recent use of alcohol and tobacco and, although the frequency of use of both these drugs has fluctuated somewhat across the years, it has remained relatively high. KE information also suggests that use of these substances was common, but that frequency of use varied widely. In 2006, 17% of the REU sample were found to be in need of an evaluation for alcohol dependence, according to the Alcohol Use Disorders Identification test (AUDIT).

Substantial proportions of the samples have also consistently reported recent use of benzodiazepines, though frequency of use was generally low. However, the use of benzodiazepines is steadily increasing with one-third of REU reporting recent use in 2006 compared to only 26% in 2005. The majority of KE reports suggest that use of benzodiazepines was increasing among REU, although commenting that such use is generally low level and is associated with getting sleep after being up for long periods, or to help with 'comedown' from drug use.

Anti-depressants were recently used by a small proportion of REU, and KE reports suggest use was primarily as prescribed among this group. Use of inhalants has also remained fairly stable across the years, with one-third of the REU sample in 2006 reporting recent use of nitrous oxide, and approximately one-tenth reporting use of amyl nitrate, with frequency of use of both substances remaining consistently low. One-fifth of REU reported recent use of some type of pharmaceutical stimulant (e.g. dexamphetamine), and 18% reported recent use of 'magic mushrooms', both at low frequency.

Drug information-seeking behaviour

Twenty percent of the REU sample reported that they 'always' found out about the content of ecstasy, but only 11% always found out about the content of other drugs before taking them, the majority relying on information from friends that had experience with use of the drug concerned. Over a third (35%) reported that they used reagent-based testing kits to find out the content of ecstasy pills, with a third of these unaware of any limitations regarding use of such kits, and 22% stating they would still take the pill if no reaction occurred on testing (meaning the content was not fully elucidated).

Risk behaviour

Injecting

Thirteen REU reported recently injecting any drug in 2006, most commonly some form of methamphetamine (particularly base and crystal) or ecstasy. With regard to longer-term trends, there was no evidence of an increase in the prevalence of recent injecting among REU across the years. Injecting drug use was considered generally rare, and still taboo, among this illicit drug-using group, and more likely to occur among primarily methamphetamine users, rather than primarily ecstasy users.

As was seen last year, in 2006 there was little reported sharing of needles, or sharing of other injecting equipment, among recent injectors, and most reported usually injecting themselves, in the company of close friends, in private homes.

Blood-borne viral infections

At the time of interview, 44 REU stated that they had completed a hepatitis B virus (HBV) vaccination schedule, mostly unrelated to susceptibility due to any risk factor. Approximately a quarter of the REU sample reported that they had been tested for either hepatitis C virus (HCV) infection or for human immunodeficiency virus (HIV) infection, with almost all, in both cases, reporting that their status was negative.

Sexual risk behaviour

Evidence of risky sexual behaviour was again apparent among the REU sample in 2006. Of the REU that reported having had penetrative sex with a casual partner in the last six months, 68% reported that they had not always used a condom. In addition, 78% of those who reported having had penetrative sex recently, reported having done so whilst under the influence of a drug or drugs – most commonly ecstasy, followed by alcohol, cannabis or some form of methamphetamine – and, of those, 42% reported that they had not always used a condom with a casual partner. In this context, almost half the REU sample reported they had never undergone a sexual health check-up.

Driving risk behaviour

Almost half of the REU that had driven a vehicle recently reported that they had driven over the limit for alcohol, a median five times, in the last six months. Further, 79% of recent drivers reported having driven within an hour of use of 'any' illicit drug, most commonly ecstasy, methamphetamine and cannabis.

Ecstasy and related drug harms

Health

In 2006, seventeen percent of recent methamphetamine users were found to fit the criteria of clinically significant dependence, according to the Severity of Dependence Scale (Kessler, Price & Wortman, 1985; Kessler & Mrozek, 1994). Four percent of REU were found to be at high risk of psychological distress, 61% at medium risk and 35% at low risk of psychological distress, according to the Kessler Psychological Distress Scale (K10).

Twenty-two REU reported that they had 'ever' overdosed on ecstasy or a related drug, most commonly involving alcohol and ice/crystal methamphetamine. Only three REU reported recent experience of overdose; the 'main drugs' believed responsible were ecstasy, alcohol and crystal methamphetamine, respectively, though multiple drugs were involved in each case.

The proportion of clients attending Drug and Alcohol Services South Australia (DASSA) treatment services with ecstasy as the primary drug of concern has been stable for the last two years, and relatively low compared to other illicit drugs (one percent of total clients). The proportion of clients nominating amphetamines as the primary drug of concern has remained relatively stable over the last four years, and was 19% in 2005/06. As such, amphetamines were the second most commonly nominated primary drug of concern by clients of DASSA, after alcohol (52%), and dominated as the most common illicit drug of concern.

As in previous years, two-thirds of the REU sample reported having experienced one or more problems related to their drug use in 2006; the majority of which related to some aspect of their social life or relationships, followed by financial, work or study problems. Use of ecstasy or some form of methamphetamine was most commonly held responsible, at least in part, for these problems.

Criminal activity and perception of police activity

In 2006, thirty percent of REU reported involvement in some type of crime, and 11 REU reported having been arrested in the last 12 months, similar to the previous year. Drug dealing was the most commonly reported crime across all years of the survey. KE agreed that criminal activity was uncommon among this group, with the exception of their illicit drug use, and an increase in dealing drugs to friends.

Three-quarters of the REU sample purchased ecstasy for themselves and others in the previous six months, and as such were engaged in 'supply' of an illicit drug to others. Over half of those who had 'supplied' ecstasy to others had purchased ecstasy monthly or less, with 4% purchasing at least three times per week. Nearly half of those who had purchased ecstasy for themselves and others usually obtained 10 or more pills when purchasing ecstasy. A third of the REU sample believed they knew how much ecstasy they needed to be in possession of to be charged with supply if caught by police. The consequences of being convicted of supplying ecstasy were unknown by the majority of the REU sample, with over half of the REU sample believing there is no difference between getting tablets for personal use or for their friends in the eyes of the law.

As has been consistent across the last five years, the majority of REU reported that their ability to obtain drugs had not become more difficult due to police activity in 2006. The majority of REU believed that police activity had been stable recently.

In 2006, REU were asked if they had seen sniffer dogs at an event in the previous six months, with 27% reporting that they had. Twelve of those who had seen sniffer dogs reported that they had drugs on them when they saw the sniffer dogs, with two reporting that they took the drugs to avoid detection, three did nothing and the remainder made no comment.

Implications

The findings from the 2006 SA EDRS have policy and research implications, and several recommendations are outlined below. It is worth noting that several of these issues may have already received attention and/or may be in the process of further investigation.

- Continued use of multiple drugs in combination, and binge use of drugs, by REU warrants continued education regarding the harms associated with such behaviour, and continued promotion of harm reduction strategies.
- Given the high level of use of methamphetamine, a drug of dependence among REU, development and dissemination of education and harm reduction strategies, regarding the harms associated with use of methamphetamine, need to be directed at young people.
- Continued close monitoring is required of indicators of use, especially use by smoking, of ice/crystal methamphetamine, which is known to have very high purity and subsequently increased risk of harm associated with its use.

- Continued focus is required on reducing supply of ecstasy and amphetamines, including from local clandestine laboratory manufacture.
- Continued close monitoring is required of the prevalence of injecting among REU, and development and implementation of strategies to reduce harms associated with injecting among this group of illicit drug users.
- Increased promotion of 'safe sex' practices is needed within this population of illicit drug users.
- Given the prevalence of drink and drug driving among REU, and the introduction of roadside drug testing in SA, development and implementation of education and harm-reduction programs directed at young people, regarding the harms associated with such behaviour and the effects of different drug types upon driving ability, is needed.
- Considering the prevalence of alcohol related harm among REU and daily alcohol consumption by some REU specific harm reduction information is needed targeting this group.
- Given the lack of knowledge among the REU sample in relation to South Australian legislation regarding the sale/supply/possession of ecstasy, development and implementation of education campaigns directed at young people is needed.
- Development and implementation of strategies to address issues associated with drug misuse and dependence and mental health co-morbidity (particularly effective concurrent treatment).

1 INTRODUCTION

The EDRS evolved from the Illicit Drug Reporting System (IDRS), which is an ongoing annual project funded by the Australian Government Department of Health and Ageing in South Australia (SA) since 1997, and in all states and territories of Australia since 1999. To date, the purpose of the IDRS has been to provide a coordinated approach to the monitoring of the use of illicit drugs, in particular heroin, methamphetamine, cannabis and cocaine. It is intended to serve as a strategic early warning system, identifying emerging trends of local and national concern in various illicit drug markets. The study is designed to be sensitive to such trends, providing data in a timely fashion, rather than to describe phenomena in detail, such that it will provide direction for more detailed data collection on specific issues.

In June 2000, the National Drug Law Enforcement Research Fund (NDLERF), administered by the Australasian Centre for Policing Research (ACPR), funded a two year, two state trial in New South Wales and Queensland of the feasibility of monitoring emerging trends in the markets for ecstasy and related drugs using the extant IDRS methodology. In addition, the Drug and Alcohol Services of South Australia (DASSA) agreed to provide funding for two years to allow the trial to proceed in this state. This component of the IDRS was known as the Party Drugs Module and the term 'party drug' was considered to include any drug that was routinely used in the context of entertainment venues such as nightclubs or dance parties, and by a population of users different to those surveyed by the main IDRS. 'Party drugs' included drugs such as 'ecstasy' (3,4-methylenedioxymethamphetamine, MDMA), methamphetamine, LSD, ketamine, MDA (3,4-methylenedioxyamphetamine) and gamma-hydroxy butyrate (GHB).

In 2002, the National Drug and Alcohol Research Centre (NDARC) provided funding for the Party Drugs Module to be conducted in NSW, as did DASC (now known as DASSA) in South Australia. In 2003, NDLERF provided funding for the Party Drugs Module to be conducted in all jurisdictions across Australia, under the title of the Party Drugs Initiative (PDI), representing the first year that data for this project had been collected nationally. Funding was again provided by NDLERF in 2004. In 2005, funding was provided by the Australian Government Department of Health and Ageing, and the Ministerial Council on Drug Strategy, as a project under the cost shared funding arrangement. In 2006, funding was provided by the Australian Government Department of Health and Ageing. In 2006, the PDI had a name change and is now known as the Ecstasy and Related Drugs Reporting System (EDRS).

As with the IDRS, the EDRS involves the collection and analysis of three data components:

- a survey of current regular 'ecstasy' users, who represent a sentinel population of users likely to be aware of trends in illicit drug markets;
- interviews with 'key experts' – professionals and volunteers who work with, or have regular contact with, ecstasy and related drugs users; and
- secondary indicator data sources, such as existing databases of customs seizures, police drug-related arrests, hospital emergency department admissions, and other relevant survey prevalence data.

These 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.

This 2006 South Australian EDRS report provides information regarding ecstasy and related drug trends in Adelaide, particularly focusing on the 12 months between May 2005 and May 2006.

1.1 Study aims

The specific aims of the 2006 South Australian EDRS were to:

- describe the characteristics of a sample of ecstasy users surveyed in Adelaide in 2006;
- examine the patterns of ecstasy and other drug use among this sample;
- document the current price, purity and availability of ecstasy and related drugs in Adelaide;
- examine participants' perception of the incidence and nature of ecstasy and other drug-related harms, including physical, psychological, financial, work, social and legal harms;
- identify emerging trends in the ecstasy and related drug markets that require further investigation; and
- where possible, to compare findings of the 2006 EDRS with those found in the 2000, 2001 and 2002 Party Drugs Module of the IDRS, and the 2003, 2004, and 2005 PDI (Weekley, Pointer & Ali, 2005a).

2 METHOD

Methodology for this study was conducted as per the methodology trialled in the feasibility study (Breen, Topp & Longo, 2002). Data were triangulated from three sources, as follows:

- a survey of current regular ecstasy users living in the Adelaide metropolitan area;
- a survey of KE who work professionally or as volunteers in the drug and alcohol area or a related field, and have regular contact with ecstasy and related drug users; and
- an examination of existing, current indicators relating to drug use and drug-related issues.

2.1 Survey of regular ecstasy users (REU)

As detailed by White, Breen and Degenhardt (2003), ecstasy has been the most widely used of the group of drugs referred to previously as 'party drugs' in the last several years, and it was decided that regular ecstasy use should define the sentinel population of ecstasy and related drug users that the study sought to recruit. This decision was partly based on the knowledge that a market for 'ecstasy' (tablets sold purporting to contain MDMA) has existed in Australia for more than a decade, and, in contrast, other drugs used by this population have either declined substantially in popularity since the appearance of ecstasy (e.g. LSD), fluctuated widely in availability (e.g. MDA), or are relatively new in the market and are yet to be as widely used as ecstasy (e.g. ketamine and GHB).

2.1.1 Recruitment

A total of 101 regular ecstasy users were interviewed in April to May of 2006. Participants were recruited through a purposive sampling strategy (Kerlinger, 1986), which included advertisements in two entertainment-focused street magazines, on university noticeboards and in several centrally located music stores. In addition, an advertisement was posted on a popular dance music website containing links to a DASSA intranet web-page where potential participants could lodge their interest in taking part. Some participants were also recruited using 'snowball' procedures (Biernacki & Waldorf, 1981). 'Snowballing' is a means of sampling 'hidden' populations that relies on peer referral and is widely used to access illicit drug users both in Australian studies (e.g. Boys, Lenton & Norcoss, 1997; Ovendon & Loxley, 1996; Solowij, Hall & Lee, 1992) and international studies (e.g. Dalgarno & Shewan, 1996; Forsyth, 1996; Peters, Davies & Richardson, 1997). For the EDRS, either on completion of eligibility screening or completion of the EDRS survey, participants were asked to pass on information regarding the study to any friends or associates they believed may have been eligible to participate in the study, and a 'business card' with study contact details was provided for the purpose.

2.1.2 Procedure

Participants contacted the project officer either by telephone or email (via a web-site link) and were screened for eligibility. To meet entry criteria, participants had to be at least 16 years of age (due to ethical constraints), they must have used ecstasy at least six times over the last six months, and have been a resident of the Adelaide metropolitan region for at least the last 12 months.

Participants were assured that all information they provided was strictly confidential and anonymous, and that the study would involve a face-to-face interview that would take between 30 and 60 minutes to complete. All participants were volunteers who were reimbursed $30 for their participation. Interviews took place in varied locations convenient to the person being interviewed. All interviews were conducted by trained research interviewers with experience and understanding of how to administer the survey questionnaire. The nature and purpose of the study was explained to participants before informed consent to participate was obtained, according to ethical guidelines.

2.1.3 Measures

As per previous years, the structured interview schedule for the 2006 EDRS was based on an earlier study of ecstasy users conducted at NDARC (see Topp et al., 1998; Topp et al., 2000), which itself incorporated items from previous NDARC studies of ecstasy users (Solowij, Hall & Lee, 1992), or amphetamine users (e.g. Darke et al*.,* 1994). The interview schedule focused primarily on the six to 12 months preceding the interview, and assessed sample characteristics – ecstasy and other drug use history, including frequency and quantity of use and routes of administration; physical and psychological side-effects of ecstasy use, and other ecstasy-related problems, including relationship, financial, legal and occupational problems; price, purity and availability of ecstasy and a number of other drugs; and general trends, such as new drug types, changes in characteristics of drug use or users, and police activity.

The EDRS in 2004 was expanded further, incorporating pharmaceutical stimulants and gamma-butyrolactone (GBL); price of substances 'at last purchase'; further questions regarding the supply of ecstasy and related drugs; the Severity of Dependence Scale (SDS) for ecstasy and methamphetamine; additional questions measuring risk behaviours (drug driving, sexual behaviour, injecting); experience of harms (overdose) and help-seeking behaviour. The section on perceived risks and benefits of ecstasy use was modified in 2004.

Additional questions regarding aspects of information-seeking and beliefs about ecstasy and other drugs, factors influencing the purchasing and use of ecstasy, and more detail regarding risk behaviours, were included in the EDRS survey of regular ecstasy users in 2005.

In 2006, additional questions regarding the use of alcohol and alcohol dependency were asked using the Alcohol Use Disorders Identification Test (AUDIT) (Babor, Higgins-Biddle, Saunders & Monteiro, 2001). Psychological distress was also examined in 2006 with the inclusion of the Kessler Psychological Distress Scale (K10) (Kessler & Mroczek, 1994; Andrews & Slade, 2001). Additional questions relating to REU knowledge of the law relating to pill possession were asked, and questions asking about sniffer dogs and reactions to sniffer dogs were also included. Questions relating to the Severity of Dependence Scale (SDS) for ecstasy, and factors influencing the purchasing of ecstasy were removed in 2006.

2.1.4 Data analysis

Statistical analyses (descriptive and inferential) were performed using the Statistical package for the Social Sciences (SPSS) for Windows, Version 14.0. (2006). Where continuous variables were skewed, medians are reported.

2.2 Survey of key experts (KE)

The eligibility criterion for key expert participation in the EDRS was regular contact, in the course of employment or otherwise, with a range of ecstasy users throughout the last six months. Specifically, average weekly contact with at least ten ecstasy users over the time period was required, unless individuals were considered appropriate due to their level of expertise in the field (e.g. police and intelligence analysts). Sixteen KE from various metropolitan regions of Adelaide provided information for the 2006 EDRS regarding ecstasy and related drug users, or drug markets in Adelaide. KE were recruited from previous EDRS survey lists and from recommendations made by existing KE and colleagues. Potential KE were contacted by telephone and assessed for suitability according to the criteria. If eligible, an appointment for a full interview, either by phone or in person, was scheduled. The majority of KE interviews were carried out face-to-face from late June through to October 2006.

Six of the KE worked in the health sector, including in health promotion, community drug and alcohol work, drug treatment services and emergency treatment. Four KE worked within, or had in-depth knowledge of, the dance scene, and included event promoters and performers, venue managers, and health-based education volunteers. There were four law enforcement KE, one KE involved in ecstasy and related drug research and one KE dealer/user.

In the following report, the information obtained from the KE will be presented in a qualitative fashion, by identifying the common themes and discussing them. Any major differences found between the KE reports will also be reviewed. No personal information was collected on any of the ecstasy or other drug users that KE had been in contact with.

2.3 Other indicators

To complement and validate data collected from the ecstasy user and key expert surveys, a range of secondary data sources were utilised, including population surveys and other health and law enforcement data.

Data sources included in the report were:

- telephone advisory data provided by the Alcohol and Drug Information Service (ADIS) of South Australia;
- treatment services data from Drug and Alcohol Services South Australia (DASSA);
- data from the National Campaign Against Drug Abuse Household Survey of 1991 and 1993, and the National Drug Strategy Household Survey (NDSHS) of 1995, 1998, 2001 and 2004 (reports published by the Australian Institute of Health and Welfare);
- purity of drug seizures made by South Australian Police (SAPOL) and the Australian Federal Police (AFP), provided by the Australian Crime Commission (ACC);
- state-wide rates of drug-related arrests provided by SAPOL;
- national rates of methamphetamine-related and cocaine-related fatalities provided by the Australian Bureau of Statistics (ABS), in Degenhardt, Roxburgh & Black, 2004a;
- drug-related admissions to the Emergency Department of the Royal Adelaide Hospital (RAH), provided by the Emergency Department;
- drug-related hospital admissions data (state and national) provided by the Australian Institute of Health and Welfare (AIHW).

2.4 Notes

2.4.1 Methamphetamine

Prior to 2001, IDRS reports used the overarching term 'amphetamines' to refer to both amphetamine and methamphetamine. 'Amphetamine' is used to denote the sulphate of amphetamine, which throughout the 1980s was the form of illicit amphetamine most available in Australia (Chesher, 1993). Chemically, amphetamine and methamphetamine differ in molecular structure but are closely related. In Australia today, the powder traditionally known as 'speed' is almost exclusively methamphetamine rather than amphetamine. The more potent forms of this family of drugs – known by terms such as ice, shabu, crystal meth, base and paste – have been identified as becoming more widely available and used in all jurisdictions (Topp & Churchill, 2002), are also methamphetamine. Therefore, the term methamphetamine was used from 2001 to refer to the drugs available that were previously termed 'amphetamines'. The terms are used interchangeably within this report unless specifically noted within the text. For a further discussion of this issue see White, Breen & Degenhardt (2003).

2.4.2 Variability in the number of REU answering different sections

It should be noted that the price, purity and availability sections of the EDRS survey were not restricted to users of the particular drug, but to those 'who feel confident of their knowledge' of these parameters of the market. In addition, participants may answer any or all price, purity and availability sections; thereby the sample sizes (n) per section may fluctuate for any given drug. In addition, people who answered 'don't know' to the initial question for each price, purity and availability section, were eliminated from the sample for that section, to increase the validity of remaining categories. For the same reason, those providing information in these sections, but who hadn't used in the last six months, were subtracted from the denominator of the location of use and source of drug used questions. The sample sizes are therefore reported in each table (n=*x*), and readers are warned that these, and the consequent proportions per category, may differ to past years' SA reports and to national reports. Care should be taken in interpreting category percentages that may be associated with small sample sizes.

2.4.3 Additional price information

Prior to 2004, REU have been asked 'How much does [drug type] cost at the moment?' to enable us to report an estimation of the 'current' price of a given drug. In 2004, for the first time in the EDRS, users were also asked to provide detail of the cost of a particular drug 'at last purchase' within the last six months (as per the 'price' sections in the IDRS IDU surveys; see Weekley, Pointer & Ali, 2005b).

2.4.4 Changes to terminology

Readers are asked to note that a change in terminology has been adopted since 2006: 'ecstasy and related drugs' (EDRS) replaced the term 'party drugs' in this and future EDRS reports. In addition, participants in the EDRS surveys of regular ecstasy users prior to 2004, referred to as 'party drug users' (PDU), were from 2004, and are currently, referred to as 'regular ecstasy users' (REU).

3 OVERVIEW OF REGULAR ECSTASY USERS

3.1 Demographic characteristics

Table 3.1 summarises the demographic characteristics of the REU sample for 2006, with 2005 statistics for comparison.

The median age of the REU sample was 23 years (range 16-48), and the majority were heterosexual and spoke English as the main language at home. In 2006, similar to 2005, the majority of the sample was employed on a full-time or part-time/casual basis or were full-time students, and 14% were currently unemployed. The median number of years the REU had spent at school was 12 (range 9-13). Half of the REU had completed some form of tertiary qualification, with twenty-eight percent having completed a trade/technical qualification, and a further 22% having completed a tertiary qualification through university or college, since leaving school.

As in 2005, a greater proportion of the sample were from the Central/Eastern (n=44), rather than from the Northern (n=26), Southern (n=24), or Western areas (n=7) of Adelaide. The majority of the REU sample were living in either rental accommodation (55%) or their family/parent's home (39%). A further two percent were living in their own house or flat, while the remaining four percent were boarding elsewhere (for instance, at friend's home).

Only two REU in 2006 reported being currently in some form of treatment for drug use, which is equivalent to 2005.

The demographic profile of the REU sample in 2006 was very similar to that of 2005 in all aspects.

There was only a small overlap of the 2006 EDRS sample with previous years' samples. Sixteen of the 2006 REU sample stated that they had participated in the EDRS before – nine in 2005, five in 2004, and two REU in 2002. Two REU also indicated that they had participated in the 2001 and 2002 SA IDRS survey of injecting drug users.

Table 3.1: Demographic characteristics of the REU sample, 2005 & 2006

Characteristic	2006 (n=101)	2005 (n=100)
Age (median in years)	**23**	22
Gender (% male)	**63**	58
Sexual identity (%)		
Heterosexual	**89**	89
Gay male	**8**	3
Lesbian	**-**	-
Bisexual	**2**	8
Other	**1**	-
English main language spoken at home (%)	**98**	99
A&TSI (%)	**7**	1
Employment** (%)		
Not employed	**14**	18
Full-time	**28**	39
Part-time/casual	**27**	24
Full-time student	**26**	19
School education (median in years)*	**12**	12
Tertiary education (%)		
None	**50**	46
Trade/technical	**28**	38
University/college	**22**	16
Prison history (%)	**5**	1
Area of Adelaide (%)		
Central/Eastern	**44**	39
Western	**7**	10
Southern	**24**	34
Northern	**26**	16
No fixed address/missing	**-**	1

Source: EDRS REU interviews
* 2005 asked 'What grade of school did you complete?'
** 5% of REU stated 'other'

KE reports of the demographics of ecstasy users were generally consistent with the 2006 REU sample. Most KE able to comment on user demographics (n=15) reported that the majority of ecstasy users were in their late teens or early twenties, with an average age around early twenties, but that the age of users may range into the 50s. Several commented that there were different cohorts of users – young and relatively new to ecstasy use, those with more experience in their late twenties, and an older group in their

late thirties and forties that may also be new to ecstasy use. Different age groups or social groups also had generally different patterns of use. Most KE also reported that there were more males than females using ecstasy, but the margin of difference was small, especially among the younger users. However, several KE reported that the number of females using ecstasy had increased in the last year.

All KE able to comment agreed that the majority of ecstasy users were Caucasian-Australian, or of English speaking background, with very few indigenous Australians. As in 2005, most KE also agreed that ecstasy users were generally well-educated (either completed school, a tertiary qualification or still studying), though several also mentioned that this was not always the case, as the profile of users could range from university educated, to trade educated, to factory workers. KE also commented that ecstasy users were generally either employed or studying, and that employment ranged from casual to full-time across a range of professions including computing, hospitality and retail. Two KE mentioned that trade professionals and 'factory workers' were represented, and more so than previously. Several KE commented on the widespread use and 'main-stream' nature of ecstasy use and that this was becoming more embedded in society in general, and in the main-stream entertainment industry in particular.

Of the few KE who commented on the sexual orientation of ecstasy users, most stated that they were predominantly heterosexual, though one KE pointed out that events may be targeted to specific groups (e.g. gay males), and particular venues may attract specific crowds. KE were also in agreement that users they had contact with had very little if any contact with the criminal justice system or drug treatment services.

3.2 Drug use history and current drug use

Regular ecstasy users are often described as polydrug users and the 2006 sample was no exception (see Table 3.2 for a summary of drug use and routes of administration of the different drugs by REU, and Appendix 1 for a summary of lifetime and recent use since 2000). Participants were asked about their history of use of 20 separate drug types[2]. REU reported using a median of ten (range 4 - 18; n = 101), drugs in their lifetime and a median of five (range 4 - 8; n = 92, data missing for nine participants) in the last six months. The median number of drugs used by REU in their lifetime and the median number of drugs used in the last six months remained relatively stable between 2005 and 2006.

KE information supported the view that polydrug use was common among REU, with use of 'speed' or other forms of methamphetamine predominating, as well as alcohol, tobacco and cannabis use being repeatedly mentioned as prevalent among this group. Two law enforcement KE commented that there is a correlation between the use of ecstasy and ice/crystal methamphetamine, which they suggested is a new development noticed in the past six months. Several KE mentioned that benzodiazepines were also being used with ecstasy in the last 12 months. Also, several KE mentioned specific tailoring of use of various substances together to give a desired effect, or to prolong or enhance other drug effects – for example, the increasingly common use of cannabis or LSD to 'bring on' and prolong the effects of ecstasy. In addition, one KE mentioned the avoidance of particular combinations that were felt to have detrimental effects – for

[2] Drug types were: ecstasy (pills & powder), methamphetamine (any form), pharmaceutical stimulants, cocaine, LSD, MDA, 'magic mushrooms', ketamine, GHB (includes 1,4-butanediol and GBL), amyl nitrate, nitrous oxide, alcohol, cannabis, anti-depressants, benzodiazepines, tobacco, heroin, methadone, buprenorphine and other opiates.

example the avoidance of methamphetamine with ecstasy because of the 'flattening' effect on the ecstasy experience. In contrast, several KE commented that methamphetamine use with ecstasy was very common, and part of a pattern of use (including alcohol) that was routine for many.

Also mentioned by several KE was the 'utilitarian' use of methamphetamine by this group of drug users – that is, use for a specific purpose such as being able to perform properly at work or study after a big weekend, or for increasing alertness and the ability to stay up and enjoy the social occasion.

The main drug of choice nominated by REU was ecstasy (54%), followed by some form of methamphetamine (22% – crystal, 13%; powder, 4%; base, 5%); cannabis (10%); cocaine (4%); alcohol (3%); GHB (2%); and LSD (2%). The remaining REU nominated heroin, ketamine, and mushrooms as their drug of choice (1% each). One REU (1%) was unable to specify their drug of choice.

Table 3.2: Drug use history and routes of administration of the REU sample (% of total; n=101), 2006

Drug class	Ever used (%)	Ever injected (%)	Injected in last 6 months (%)	Ever smoked (%)	Smoked in last 6 months (%)	Ever snorted	Snorted in last 6 months (%)	Ever swallowed (%)	Swallowed in last 6 months (%)	Ever shelved (%)	Shelved in last 6 months (%)	Used in last 6 months (%)	Median days used in last 6 months* (range)
Ecstasy pills	100	10	8	16	7	84	67	100	98	9	2	100	12 (6-96)
Ecstasy powder	51	5	3	4	2	41	21	36	21	0	0	27	2 (1-24)
Methamphetamine -powder	75	12	3	24	17	67	45	66	47	1	0	51	12 (1-90)
Methamphetamine -base	72	17	11	20	11	26	17	69	59	0	0	63	6 (1-180)
Methamphetamine -crystal	73	19	13	63	47	20	17	41	28	0	0	62	4 (1-180)
Any methamphetamine	***93***	***20***	***13***									***92***	***12 (1-180)***
Pharmaceutical stimulants	49	2	0	2	0	13	4	46	20	0	0	20	3 (1-90)
Cocaine	49	4	2	57	2	41	28	15	7	0	0	31	2 (1-12)
LSD	71	5	0	3	0	2	0	71	34	0	0	34	3 (1-40)
MDA	21	2	1	1	0	13	4	21	9	0	0	9	3 (1-24)
Ketamine	35	2	1	2	0	28	8	9	2	0	0	11	2 (1-10)
GHB	26	1	0					26	7	0	0	7	2 (2-48)
GBL	2	0	0					2	1	0	0	0	1
1,4B	3	0	0					3	1	0	0	1	2
Amyl nitrate	30											9	1 (1-30)
Nitrous oxide	67											33	5 (1-30)
Cannabis	98			97	82			72	30			83	70 (1-180)
Alcohol	99	2	0					100	97			97	48 (1-180)
Heroin	9	7	1	5	0	1	0	2	0	0	0	1	48
Methadone	6	5	0					6	2	0	0	2	3

Table 3.2 continued: Drug use history and routes of administration of the REU sample (% of total; n=101), 2006

Buprenorphine	3	1	1					3	2	0	0	2	126 (72-180)
Other opiates	21	4	0	5	0	1	0	15	4	0	0	4	8 (1-14)
Anti-depressants	33	0	0					33	16	0	0	16	27 (1-180)
Benzodiazepines	50	4	0			9	4	49	33	0	0	33	6 (1-84)
Tobacco	87											73	180 (1-180)
Mushrooms	50	0	0	4	2	0	0	49	18	0	0	18	2 (1-6)

Source: EDRS REU interviews**;**

***** By those reporting use in the previous six months

As in 2005 (58%), more than half of the sample (57%) reported bingeing on ecstasy or related drugs (ERDS) within the last six months. Bingeing is defined as the use of ecstasy or stimulants for more than 48 hours continuously without sleep (Ovendon & Loxley, 1996). The median longest binge in the last six months was three days (range 2 - 20 days), similar to 2005 (median 3.5 days; range 2 - 13 days). There were increases in the proportions reporting binge use of methamphetamine (powder and crystal), MDA and alcohol, and a decrease seen in the reported binge use of methamphetamine base, cannabis and cocaine in 2006 (see Table 3.3).

Table 3.3: Proportion of REU reporting use of various drugs during a 'binge'* episode in the last six months, 2005 & 2006

Drug	Percent of whole sample to include drug in 'binge' episode in the last 6 months		Percent of 'bingers' to include drug in 'binge' episode in the last 6 months	
	2006 (n=101)	2005 (n=100)	2006 (n=58)	2005 (n=58)
Ecstasy	**55**	57	**95**	98
Meth powder	**27**	22	**47**	38
Meth base	**28**	40	**48**	69
Meth crystal	**33**	17	**57**	29
Pharmaceutical stimulants**	**4**	2	**7**	3
Cocaine	**8**	12	**14**	21
LSD	**12**	12	**21**	21
MDA	**4**	0	**7**	0
Ketamine	**2**	4	**3**	7
GHB	**3**	4	**5**	7
Amyl nitrate	**1**	1	**2**	2
Nitrous oxide	**10**	6	**17**	10
Cannabis	**24**	32	**41**	55
Alcohol	**37**	33	**64**	57
Other	**1**	4	**17**	7

Source: EDRS REU interviews

* Defined as an episode of use of ecstasy and/or related drugs for >48 hours continuously, without sleep

** 2005 was the first year this category was included

In 2006, twenty-one percent of the sample reported ever injecting any drug and 13% reported having injected any drug in the six months prior to interview. For the REU who reported a history of injecting, a median of four drugs (range 1 - 14; n=21) had 'ever' been injected, and a median of three (range 1 - 6; n=13) had been injected in the last six months. Of those that had ever injected, the drug first injected was some form of methamphetamine (81%, n=17): powder (33%, n=7); base (38%, n=8); or ice/crystal (10%, n=2). The most commonly injected drug, by recent injectors, was some form of

methamphetamine. See Section 14.1 for further detail on injecting and injecting-related risk behaviour.

3.3 Summary of demographics and polydrug use trends

- No substantial changes in demographic characteristics were noted compared to 2005:
    - the majority of REU were male (63%);
    - median age was 23 years, though ranged from 16 to 48 years;
    - the majority were employed or full-time students;
    - most were well educated and half had a tertiary qualification; and
    - very few had a history of imprisonment, or were currently in treatment for drug use.
- KE information supported the demographic profile of the REU in the 2006 sample.
- Over half of the sample nominated ecstasy as their drug of choice (54%), with some form of methamphetamine as the next most commonly preferred drug.
- REU were polydrug users: the median number of drug types used was reported to be ten across lifetime and five in the last six months.
- Large proportions of the sample reported recent use of some form of methamphetamine and cannabis, as well as alcohol and tobacco. Other substances reported as recently used by substantial proportions of REU were nitrous oxide, LSD, benzodiazepine, and cocaine.
- Compared to 2005, the proportion of REU reporting recent use had increased considerably for ice/crystal methamphetamine (from 41% in 2005 to 62%), and increased slightly for benzodiazepines, anti-depressants and mushrooms. Decreases in use were seen for methamphetamine (powder and base), cocaine, LSD, GHB and ketamine. Recent use of other substances remained relatively stable.
- The percentage of REU who reported binge behaviour remained stable in 2006, with an increase noted for binge use of crystal methamphetamine, and decreases in methamphetamine base, cocaine, and cannabis use in 2006.
- In 2006, thirteen percent of REU reported recent injecting, most commonly some form of methamphetamine. No clear long-term trend in prevalence of injecting among REU was discernible.

4 ECSTASY

The median age at which participants in the 2006 survey first used ecstasy was 18 years (range 13-45; n = 101) and the median age at which they reported using ecstasy regularly was 19 years (range 13-45; n = 101). This is the same as the median age of first use reported in 2005 (18 years, range 12 - 42; n=100). The transition from first use to regular use was swift and has not changed over the long term.

4.1 Ecstasy use among REU

Table 4.1 summarises the ecstasy use patterns of the REU sample across 2000 to 2006. Ecstasy was the main drug of choice for 54% of the sample in 2006, and had increased slightly compared to 2005 (49%).

In 2006, eleven percent of REU stated that 'all' their friends used ecstasy, while 41% reported 'most' did, 29% that 'about half' did, and the remaining 20% reported that 'a few' of their friends were ecstasy users.

In 2006, REU were asked to provide information on their use of both ecstasy pills and ecstasy powder. The median number of days REU reported using any ecstasy (pills or powder) within the previous six months was twelve (range 6 - 96; n = 101). The most frequent ecstasy use was reported by one participant as 96 days. Frequency of use of ecstasy was similar to previous years, with the median number of days used remaining relatively stable since 2003.

Fifty-five percent of the sample reported using ecstasy (any form) on twelve days or less of the previous six months (180 days), which equates to once a fortnight or less on average (from 40% in 2005). Twenty-eight percent of REU reported using ecstasy between 13 and 24 days, inclusive (from 22% in 2005). These proportions per frequency category increased slightly to those reported in 2005; however, there was a substantial decrease in the proportion of REU reporting use of ecstasy on more than 24 days in the last six months (16% in 2006 compared to 38% in 2005). Twenty-four days within six months equates to once weekly use on average. Readers are reminded that the minimum frequency of use of six days corresponds to the survey entry requirement for participants.

The median number of ecstasy tablets used in an 'average' session was two (range 0.5 - 10; n = 101) and this has remained the same for the last five years of the survey. The small increase that was seen in 2003 for the median 'most' amount typically used in a single session has been maintained, with a median of four tablets (range 0.1 - 20; n = 101) reported by REU in 2006. The median number of grams of ecstasy powder used in an 'average' session was 0.25 (range 0.1 - 1; n = 101), the same as the median 'most' amount (grams) typically used in a single session (range 0.1 - 1; n = 101).

The proportion of REU that reported use of ecstasy within a 'binge' episode remained fairly stable in 2006 at 55%, compared to 2005 (57%). No clear long-term trend can be discerned in this parameter, however, as the percentage of REU reporting use of ecstasy in a 'binge' has fluctuated over the years that the survey has been conducted (see Table 4.1).

Table 4.1 Patterns of ecstasy use among REU, 2000 - 2006

Variable	2006 (n=101)	2005 (n=100)	2004 (n=100)	2003 (n=101)	2002 (n=68)	2001 (n=70)	2000 (n=50)
Mean age first used (years)	**18**	18	19	19.7	19.2	19.2	19.7
Ecstasy as main drug of choice (%)	**54**	49	56	67	62	45	40
Median days used in last 6 months* (range)	**12 (6-96)**	15 (6-96)	12 (6-180)	12 (6-72)	19 (6-78)	13 (6-50)	17.5 (6-78)
Average amount used in a single session#:							
median number of tablets/pills (range)	**2 (0.5-10)**	2 (0.25-6)	2 (0.8-7)	2 (0.5-10)	2 (0.5-7)	2 (0.5-15)	1.5 (1-6)
Most amount used in a single session#:							
median number of tablets/pills (range)	**4 (0.10-20)**	4 (0.5-13)	4 (1-21)	4 (1-20)	3 (1-12)	3 (1-30)	3 (1-25)
Use >1 tablet/pill per 'typical' session (%)	**80**	73	84	71	71	61	44
Ecstasy included in 'binge'** episode (%)	**55**	57	47	40	72	49	54

Source: EDRS REU interviews

* By those reporting use in the previous six months

\# A session was defined as a period of continuous drug use without sleep, in the last 6 months

** A 'binge' was defined as an episode of use of party drugs or stimulants for >48 hours continuously, without sleep

As in previous years, there was a wide range of comment from KE with regard to frequency of use among the ecstasy users who they had contact with. Most stated that there was a variety of use patterns, with a large proportion, especially among younger users, using every weekend ('caning it'), while others will use less frequently (anywhere from fortnightly to once or twice a year) and on key event nights or special occasions (such as birthdays, long weekends, New Year's Eve, specific dance music events etc.). The amount of pills used also varied according to KE reports, with two to three pills commonly being used in a session. Binge use was also noted by several KE, with 'special occasion' use (e.g. at major dance events) of larger quantities of pills.

Table 4.2a: Routes of administration of ecstasy, 2005 & 2006

Variable	2006 (n=101)		2005 (n=100)	
How ever used in lifetime (%)	**pills**	**powder**	**pills**	**powder**
Injected	**10**	**5**	9	6
Smoked	**16**	**4**	14	0
Snorted	**84**	**41**	93	33
Swallowed	**100**	**36**	100	37
How used in last 6 months (%)				
Injected	**8**	**3**	4	1
Smoked	**7**	**2**	8	0
Snorted	**67**	**21**	81	22
Swallowed	**98**	**21**	100	23
How mainly used in last 6 months (%)				
Injected	**4**		2	
Smoked	**0**		0	
Snorted	**11**		6	
Swallowed	**84**		89	

Source: EDRS REU interviews

The predominant route of administration for both forms of ecstasy in the last six months was oral (see Tables 4.2a and 4.2b). Reported routes of administration for both recent and lifetime use have remained largely unchanged over the last few years. There were substantial proportions of the sample reporting use of ecstasy by snorting, both across lifetime and in the last six months, but prevalence of use, particularly recent use, by other routes of administration (smoking, injecting or shelving) remains low.

All KE reported that the predominant form of ecstasy was pills, with several mentioning that powder was also available, though still less common. Swallowing was considered the main route of administration, though use by snorting was also reported. An increase in use by injecting was mentioned by two KE in 2006. In previous years KE have not referred to injecting as a route of administration, therefore mention of an increase does suggest this should be closely monitored as a possible change in the route of administration of ecstasy.

Table 4.2b: Routes of administration of ecstasy, 2000 - 2004

Variable	2004 (n=100)	2003 (n=101)	2002 (n=68)	2001 (n=70)	2000 (n=50)
How ever used in lifetime (%)					
Injected	18	11	13	11	16
Smoked	22	16	19	14	38
Snorted	82	83	72	56	62
Swallowed	100	100	100	100	100
How used in last 6 months (%)					
Injected	3	3	7	9	6
Smoked	5	5	6	6	12
Snorted	62	70	62	49	30
Swallowed	99	100	100	100	100
How mainly used in last 6 months (%)					
Injected	3	2	2	1	0
Smoked	0	0	0	0	0
Snorted	6	3	0	4	0
Swallowed	91	95	82	83	94

Source: EDRS REU interviews

Participants were asked to provide detail on the other substances they had typically used, either 'with ecstasy', or when 'coming down' from ecstasy, in the last six months, and the results are presented in Table 4.3. As can be seen, the majority of REU report typically using at least one other substance in either case (93% and 85%, respectively). The substances most commonly reported as being typically used 'with ecstasy' were tobacco, alcohol, cannabis or some form of methamphetamine. Although the prevalence of typical use of the different substances 'with ecstasy' was generally stable between the 2005 and 2006, there was a notable increase in the proportion of REU reporting typically using ice/crystal methamphetamine 'with ecstasy' (from 7% in 2005 to 17% in 2006) and drinking any alcohol (from 49% in 2005 to 66% in 2006) and of those who had reported drinking more than five standard drinks with ecstasy (from 36% in 2005 to 48% in 2006). The substances most commonly reported as being typically used when 'coming down' from ecstasy were tobacco, cannabis, benzodiazepines, and alcohol. Although the prevalence of typical use of the different substances when 'coming down' from ecstasy was again generally stable between 2005 and 2006, there was a notable increase in the proportion reporting typically using benzodiazepines (from 7% in 2005 to 12% in 2006) and antidepressants (from 2% in 2005 to 9% in 2006) when 'coming down' from ecstasy. In addition, there was a small decrease in the proportions reporting typically using methamphetamine base when coming down from ecstasy (from 12% in 2005 to 7% in 2006). Readers should note that whether the use of benzodiazepines in these circumstances was licit (used as prescribed) or illicit was not determined.

Table 4.3: Proportion of REU reporting typical* use of other drugs in combination with ecstasy, by drug type, 2005 & 2006

Drug	Typically use with ecstasy (% of REU)		Typically use to come down from ecstasy (% of REU)	
	2006 (n=101)	2005 (n=100)	2006 (n=101)	2005 (n=100)
Methamphetamine powder	**20**	16	**5**	3
Methamphetamine base	**26**	22	**7**	12
Methamphetamine crystal	**17**	7	**3**	2
Methamphetamine non-specific	**9**	14	**2**	3
Pharmaceutical stimulants	**3**	1	**1**	0
Cocaine	**1**	2	**0**	1
LSD	**6**	1	**0**	1
MDA	**0**	0	**0**	0
Ketamine	**2**	0	**1**	0
GHB	**2**	1	**0**	2
Amyl nitrate	**0**	0	**0**	0
Nitrous oxide	**7**	8	**9**	7
Cannabis	**43**	37	**53**	56
Alcohol:				
Any	**66**	49	**31**	40
>5 standard drinks	**48**	36	**21**	23
Anti-depressants	**6**	2	**9**	2
Benzodiazepines	**4**	2	**12**	7
Tobacco	**65**	69	**61**	62
Other	**1**	0	**3**	2
% of REU that typically use one or more other drug(s) in combination with ecstasy	**93**	87	**85**	83

Source: EDRS REU interviews

***** 'Typically' was specified as use on two-thirds or more occasions of ecstasy use

Table 4.4: Venues where ecstasy was usually and last used by REU in the last six months, 2005 & 2006

Venue	Where usually used (% of REU)		Where last used (% of REU)	
	2006 (n=101)	2005 (n=98)	2006 (n=101)	2005 (n=99)
Own home	**55**	51	**22**	20
Dealer's home	**8**	5	**0**	0
Friend's home	**70**	65	**16**	21
Raves/doofs/dance parties	**63**	60	**4**	11
Nightclubs	**80**	69	**32**	25
Pubs	**44**	36	**5**	9
Private party	**65**	60	**10**	7
Day Club#	**14**	-	**2**	-
Restaurant/café	**3**	2	**0**	0
Public place (street/park)	**21**	16	**1**	1
Live music event	**38**	36	**4**	1
Outdoors	**30**	28	**2**	2
Car or other vehicle	**26*/12****	18*/6**	**2*/0****	2*/0**
Work	**5**	2	**0**	0
Educational institution	**2**	2	**0**	0
Acquaintance's home	**19**	12	**1**	0
Other	**1**	6	**0**	1

Source: EDRS REU interviews
***** As a passenger
****** As the driver (separate categories in 2005)
- Indicates the data were not collected for the category in that year
Day Club included for first time in 2006
Note: REU were allowed to nominate more than one response for where usually used, but only one response for where last used.

Regular ecstasy users were asked where they 'usually' and 'last' used ecstasy, the results of which are presented in Table 4.4, with 2005 data for comparison. Day Club was included for the first time in 2006. A day club is a club that operates during the day, and is usually held in nightclub venues which are open during normal nightclub hours, but then close for a few hours, and then re-open during daytime hours. Readers should note that users were asked to consider where they were for the majority of the time they were 'under the influence' of the drug, not where they were when they 'took (administered) the drug'. As can be seen, there was no substantial difference in either parameter of use between the years depicted. The most commonly reported locations of usual use of ecstasy were nightclubs, friend's home, raves/doofs/dance parties, a private party, or their own home.

Substantial proportions also reported *usual* use at a live music event, at a pub, outdoors, in a car (as a passenger) or in a public place. With respect to the 'last' location of ecstasy use, the largest proportion of responses were recorded for nightclubs followed by a friend's or their own home and raves/doofs/dance parties.

4.2 Use of ecstasy in the general population

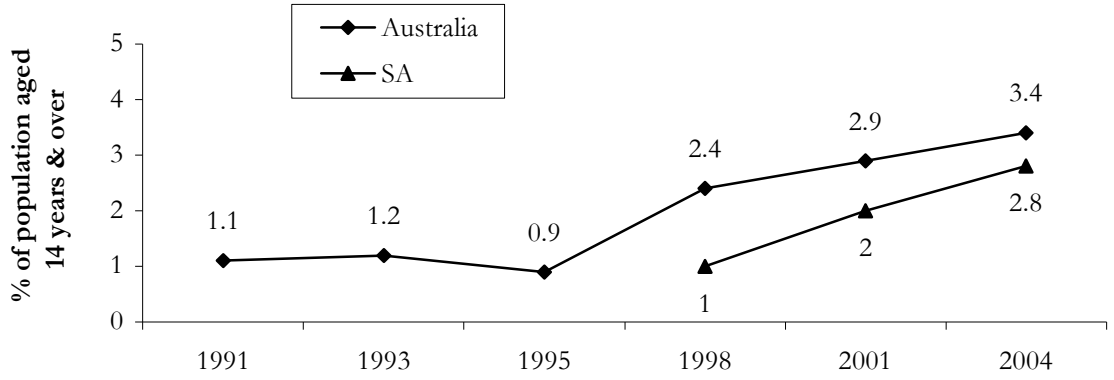
National prevalence data

The Australian Institute of Health and Welfare has conducted household surveys over the last decade and collected data on the prevalence of use of various illicit drugs among the general population of Australia (Australian Institute of Health and Welfare (AIHW) 2005a). Figure 4.1 shows the long-term trend in the prevalence of ecstasy/designer drug use in Australia from 1991 to 2004, and in South Australia from 1998 to 2004. As can be seen, there has been a rapid increase in the prevalence of use in this category of drug from 1995 onward. Recent use of ecstasy was most prevalent among the 20 - 29 year olds, and continued to rise among this age group, but a decline in prevalence of recent use was noted among 14 - 19 year olds in 2004 compared to 2001 (AIHW, 2005a). In general, males were more likely to be recent users of ecstasy except among 14 - 19 year olds, where females were more likely to be recent users (4.7% vs. 3.9%) (AIHW, 2005a). Of those that had used ecstasy in the last 12 months, the majority reported using once or twice a year (47.5%) or every few months (31.3%), with 6.3% reporting daily or weekly use during that period (AIHW, 2005b).

Figure 4.1 also shows that South Australia had a slightly lower prevalence of recent use of ecstasy than among the national population (2.8% vs. 3.4% in 2004), but that the gap between the state and national figures had decreased since 1998 (AIHW, 2005c).

In 2004, seventeen and a half percent of the Australian population aged 14 years and older had ever used ecstasy, an increase from 6.1% in 2001. Again, the highest proportion of the population reporting they had ever used ecstasy was in the 20 - 29 year age group (22%) (AIHW, 2005a).

Figure 4.1: Prevalence of recent* ecstasy/designer drugs use in Australia and South Australia, 1991 - 2004



Sources: National Campaign Against Drug Abuse Household Survey 1991, 1993; National Drug Strategy Household Survey 1995, 1998, 2001, 2004 (AIHW, 2005a, 2005b)
***** Used at least once in the last 12 months

Similarly to the EDRS sample, the majority of recent users of ecstasy surveyed by the National Drug Strategy Household Survey (NDSHS) in 2004 reported that they had used other drugs, on at least one occasion, at the same time as using ecstasy. Most commonly this was use of alcohol (82.6%), cannabis (56.8%), or some form of amphetamine (38.5%) (AIHW, 2005b).

4.3 Price

In past years REU have been asked 'How much does ecstasy cost at the moment?' to enable us to report an estimation of the 'current' price of ecstasy. In addition, for the past three years users were asked to provide detail of the cost of ecstasy 'at last purchase' within the last six months (as per the 'price' sections in the IDRS IDU survey; see Weekley, Pointer & Ali, 2005b). In 2006, most REU were able to provide an estimate of the 'current' price of ecstasy, and the price of ecstasy 'at last purchase', as detailed in Table 4.5. The median 'current' price of a tablet/pill of ecstasy reported by users in 2006 was $30 (range $16 - $45; n = 100), this is the same price as in 2005, which was the lowest reported price since 2000 (see Figure 4.3). The median reported price of ecstasy 'at last purchase' was the same as in 2005, at $30 (range $19 - $40; n = 97). Equal numbers of REU reported that the price of ecstasy had been stable (n = 6) or had decreased (n = 6) in the preceding six months.

In 2006, seven REU reported that the median 'current' price of ecstasy was $30/ tablet or pill (range: $20 - $25) for 'bulk' purchases, where 'bulk' referred to ten tablets/pills or more. It was generally considered that purchasing in bulk resulted in lower prices.

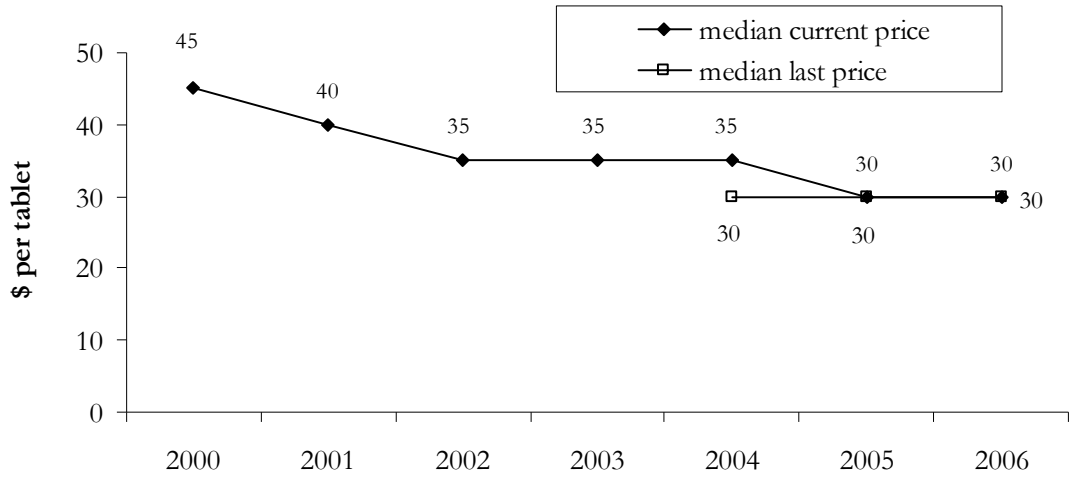
Five REU were able to provide information pertaining to the price of ecstasy powder, reporting the 'current' price to be $25 (range: $20 - $40)/gram.

Table 4.5: Current price of ecstasy and change in price over the last six months, 2005 & 2006

	2006	2005
Tablet/pill:		
Median 'current' price (range; *n*)	**30 ($16-$45, *100*)**	$30 ($20 - $50; *86*)
Median price of last purchase (range; n)	**30 ($19-$40, *97*)**	$30 ($18 - $30; *89*)
Price change in last 6 months (%)	**n=101**	n=*98*
Increasing	**9**	8
Stable	**62**	68
Decreasing	**19**	13
Fluctuating	**8**	9
Don't know	**2**	1

Source: EDRS REU interviews

Figure 4.2: Trend in the price of ecstasy per tablet/pill, 2000 - 2006



Source: EDRS REU interviews

Of the thirteen KE who provided information on the cost of ecstasy, estimates ranged from $15 to $60 ('occasionally') with an average price $30 to $35 most common, similar to that reported by the users themselves. Also in accord with the users, three KE believed that the price of ecstasy per pill decreased when 'buying in bulk'; that is, when buying ten or more tablets at a time. Six of the thirteen KE who were able to comment stated that the price of ecstasy had remained stable over the past six months, with the remaining KE reporting a decrease. Two KE also provided information on the price of ecstasy powder, with the price ranging from $200 to $300 per gram, and reported that it was cheaper as the quantity bought increased. While one of these KE reported that the powder was sold in an uncut form (100% pure MDMA) and people dosed as 0.1 gram amounts, the other reported that users equated a gram as equivalent to five or six ecstasy pills, therefore it was likely the powder was cut (given a pill of 'good' quality would contain 100 to 120mg of MDMA).

4.4 Purity

Table 4.6 summarises the current purity of ecstasy, and the changes in purity in the last six months, as perceived by the REU. The proportion of REU reporting that current purity of ecstasy was medium (31%) in 2006 remained stable compared to 2005, but there was a decrease in the proportion reporting purity as high (from 26% in 2005 to 17% in 2006), and a small increase in the proportion reporting purity as low (from 5% in 2005 to 11% in 2006). REU opinion of recent change in purity was also somewhat equivocal, with the largest proportion reporting purity had been fluctuating (38%), and smaller but similar proportions reporting purity to be decreasing or stable in the last six months. There was a decrease in the proportion of REU reporting the purity as increasing (from 17% in 2005 to 10% in 2006).

Table 4.6: Perceived purity of ecstasy and change in purity over the last six months, 2005 & 2006

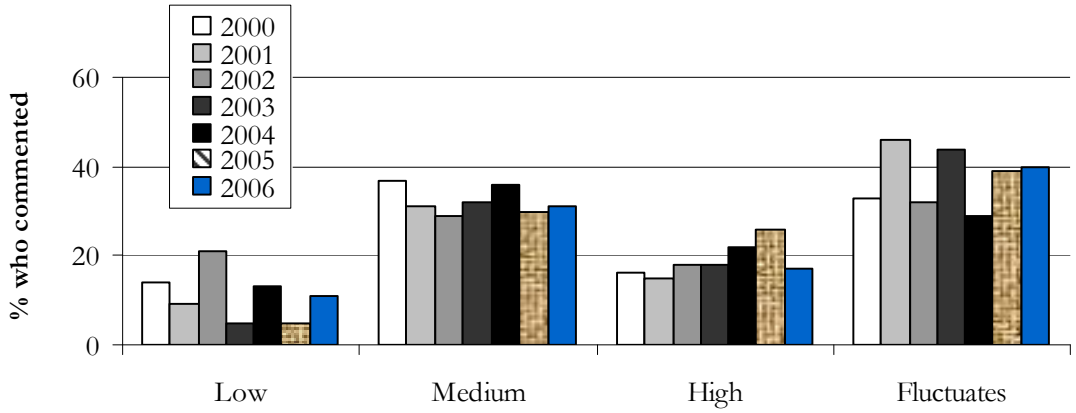
	2006 (n=99)	**2005 (n=95)**
Current purity (%)		
Low	**11**	5
Medium	**31**	30
High	**17**	26
Fluctuates	**40**	39
Recent change in purity (%)	**(n=101)**	(n=95)
Increasing	**10**	17
Stable	**21**	21
Decreasing	**24**	17
Fluctuating	**38**	43
Don't know	**8**	2

Source: EDRS REU interviews

KE reports supported REU perception of ecstasy purity with seven KE stating that the current purity was high or medium, and three stating that it fluctuated. Regarding recent change in purity, five KE reported that purity had been stable, one that it had increased, three that it had decreased and two that it had been fluctuating in the last six months. Two KE reported that purity had been consistently good recently, with MDMA content more reliable and also that several batches were perceived to be of high quality. One KE commented that the purity of ecstasy was high, and that there had been a surge of high purity tablets that also meant toxicity was increasing, and another KE commented that there had been some spikes which resulted in some high quality ecstasy.

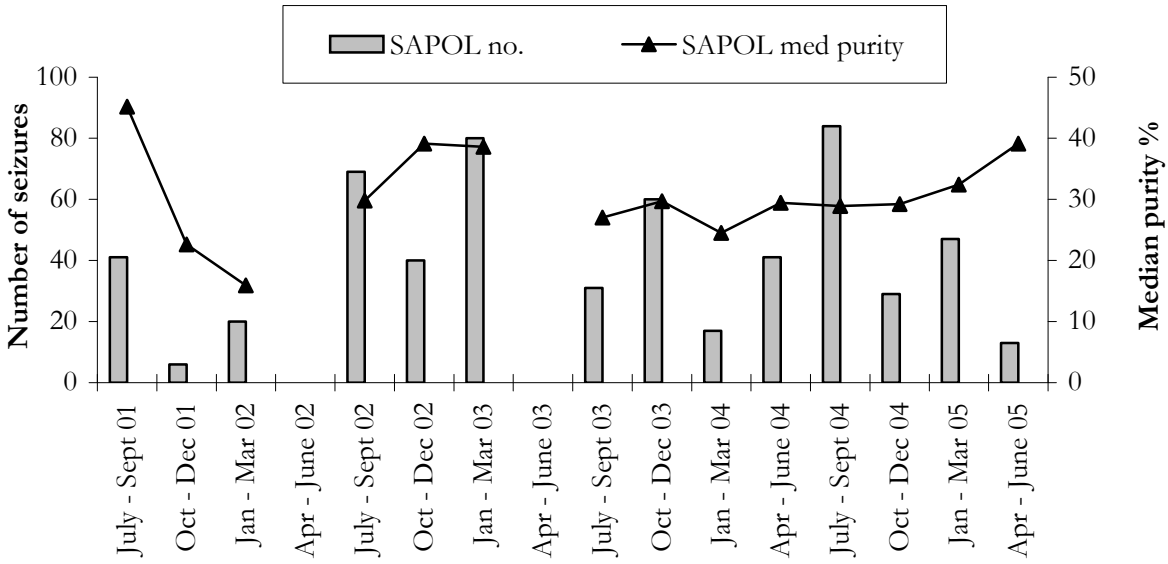
The purity of ecstasy, as perceived by REU, has remained relatively stable over the seven years of the survey (as depicted in Figure 4.4), and no clear trend of increasing or decreasing purity can be discerned over this time period. The greatest variation can be seen in the proportions reporting purity as low or that it fluctuates.

Figure 4.3: Trend in the perceived purity of ecstasy in the last six months, 2000 - 2006



Source: EDRS REU interviews

Figure 4.4: Number of phenethylamine* seizures analysed and median purity, 2001/02 - 2004/05



Source: Australian Crime Commission (2003, 2004, in press)
***** Phenethylamines include MDMA ('ecstasy'), MDEA, MDA, PMA and others (see Australian Crime Commission, 2004)

The Australian Crime Commission (ACC) data were unavailable for 2005/06 at the time of publication. As such data provided by the ACC relates to the purity data on phenethylamines (including MDMA) seized in SA during the last financial year 2004/2005 (Australian Crime Commission, 2005). Figure 4.4 shows the number of seizures received and analysed by the state forensic laboratory (within the quarter depicted) and the median purity per quarter of those seizures, from 2001/02 to 2004/05. The total number of SAPOL phenethylamine seizures analysed for July 2004 to June 2005 was 173 and the median purity was 29.3%. These parameters were stable compared to the previous year (median purity of 29%, n=149). A total of two seizures by the Australian Federal Police (AFP) in SA were analysed in 2004/05, with a median purity of 50.7%. No comparison to previous years was possible as no AFP seizures were analysed since 2001/02.

A recent South Australian study confirmed that pills sold as ecstasy contained a variety of substances other than ecstasy, including MDA, methamphetamine, ketamine and caffeine, in a variety of combinations (Camilleri and Caldicott, 2005). The findings also indicated that users commonly (in at least half the 'cases' tested) did not know (or did not even think they knew) what the pill contained prior to any testing. Another investigation of pill content, by the Victoria Police Forensic Services Department, also showed that pills increasingly contain substances other than MDMA, including methamphetamine and ketamine, in both single-drug and multi-drug combinations, with varying drug content or purity (PDI Drug Trends Bulletin, June 2004).

The majority of KE reported that pills came in a variety of designs and logos, and of varying quality (particularly with regard to MDMA content). Several KE also commented that users were aware, for the most part, of the variety in content, and given the scale of the market, were able to 'shop around' as one KE put it, to the extent that users may seek out pills according to the specific effect they were purported to have. However, several other KE commented that many REU would take whatever was available regardless of the design or logo. Several KE thought that it was generally understood that a brand could no longer define quality, though acknowledged that particular brands with a good reputation would still be sought after.

4.5 Availability

Table 4.7 summarises the current availability of ecstasy, and the changes in availability in the last six months, as perceived by the REU. The majority of REU reported that ecstasy was 'very easy' or 'easy' to obtain in 2006, and that this availability had been stable in the previous six months. A graph of the long-term trend of ecstasy availability (Figure 4.5) also shows that, despite fluctuating proportions within the 'easy' categories, ecstasy has consistently been perceived as largely easy to obtain in SA across this time period.

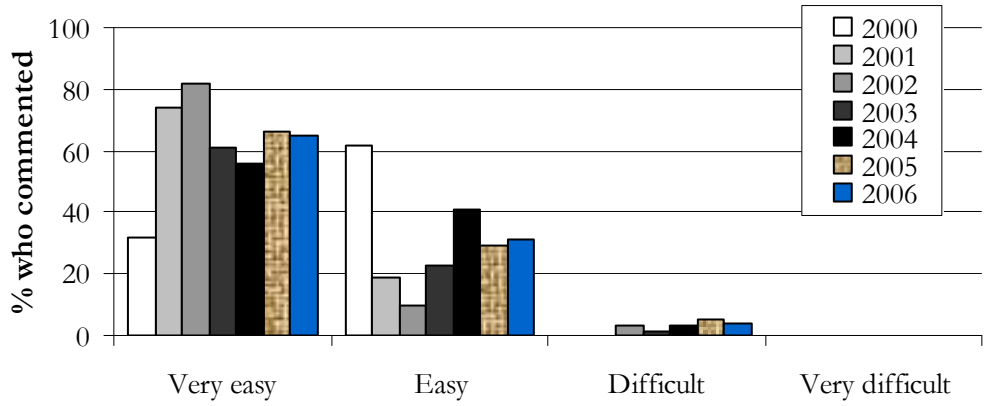
All KE able to comment also considered ecstasy 'very easy' or 'easy' to obtain and that availability had recently remained stable. Two KE commented that they considered that ecstasy was easier to obtain in 2006.

Table 4.7: Availability of ecstasy and change in availability over the last six months, 2005 & 2006

	2006 (n=100)	2005 (n=97)
Current availability (%)		
Very easy	**65**	66
Easy	**31**	29
Difficult	**4**	5
Very difficult	**0**	0
Change in availability in last 6 months (%)	**(n=101)**	(n=97)
More difficult	**6**	6
Stable	**65**	65
Easier	**22**	27
Fluctuates	**5**	2
Don't know	**2**	0

Source: EDRS REU interviews

Figure 4.5: Trend in availability of ecstasy in the preceding six months, 2000 - 2006



Source: EDRS REU interviews

Regular ecstasy users were asked from whom they had obtained their ecstasy within the last six months and at what venues they 'usually' scored their ecstasy: the results are presented in Table 4.8. Please note that the categories of response for these questions have varied slightly over the years, with 2005 including a 'used, not scored' category, as well as a combined 'raves/doofs/dance parties' category, and the extra categories 'agreed public location', 'private party' and 'work' included as possible score venues. Readers should note that the category 'day club' was included for the first time in 2006.

In 2006, REU reported most commonly that they had bought ecstasy from friends (88%), from known dealers (56%) or from acquaintances (39%) in the last six months. Smaller proportions reported buying from strangers (25%) or workmates (20%). An analysis of the location where REU obtain ecstasy indicates that REU most commonly obtain (or 'score')

ecstasy from a friend's home (69%), at an agreed (pre-arranged) public location (42%), at nightclubs (41%), at a dealer's home (37%) or at a private party (36%).

Table 4.8: Trend in the source and venue of ecstasy for REU, 2000 - 2006

Variable	2006 n = 101	2005 n = 98	2004 n = 99	2003 n = 101	2002 n = 68	2001 n = 70	2000 n = 50
Used, not scored	**1**	0	3	-	-	-	-
Who have you bought ecstasy from in the last 6 months?							
Friends	**88**	89	84	93	32	96	98
Dealer - friend	**-**	-	-	-	68	-	-
Known dealers	**56**	48	46	55	9	63	58
Workmates	**20**	10	8	16	16	20	22
Acquaintances	**39**	36	29	34	52	64	50
Strangers/unknown*	**25**	10	14	11	15	13	24
What venues do you normally score [ecstasy] at?							
Own home	**38**	31	40	40	62	49	74
Dealer's home	**37**	36	32	45	52	30	54
Friend's home	**69**	70	63	66	77	61	94
Raves/dance parties**	**29**	26	27	37/29	47/46	47/40	72/30
Nightclubs	**41**	33	33	48	34	51	32
Pubs	**24**	19	13	15	13	16	10
Agreed public location	**42**	48	44	-	-	-	-
Private party	36	29					
Street	**8**	4	0	-	-	-	-
Day Club#	**7**			-	-	-	-

Source: EDRS REU interviews
***** Includes 'unknown dealer' category from 2004
****** Combined categories in 2004
- Indicates the data were not collected for the variable in that year
Day club included in 2006
Note: REU were allowed to nominate more than one response

It is clear from the data across the years, depicted in Table 4.8, that users consistently purchased their ecstasy most commonly from friends or known dealers (categories that are not always exclusive in the eye of the user), and scoring from strangers or at entertainment venues was less common. Information from a limited number of KE in 2006 made less mention of the friend/dealer relationship, but those who commented (n=5) still suggested the reliance on people known to the buyer – 'people have their people' – meaning that one person within a group will have a connection to a dealer/supplier, and that dealers were ordinary people (not 'your stereotypical average drug dealer'). A few KE commented that

user/dealers were becoming more popular, with many users buying in bulk (up to 100 tablets) and selling to their friends and that this trend had increased in the past 12 months.

4.6 Ecstasy markets and patterns of purchasing ecstasy

REU were asked to provide information pertaining to the recent purchase of ecstasy and other drugs. The results of those providing information (n=101) are presented in Table 4.9. Ecstasy was generally purchased both for self and others (by 76% of REU) and purchased from a median of four people (range 1 - 15), in the last six months. REU reported purchasing a median of five ecstasy tablets and 64% indicated that they had a 'main ecstasy dealer' from whom they could obtain other drugs at the time of ecstasy purchase (that is, without pre-arrangement). The most commonly available drugs 'at time of purchase' were any form of methamphetamine (88%, n=56): including ice/crystal methamphetamine (50%, n=32); methamphetamine base (45%, n=29); and methamphetamine powder (45%, n=29). Other drugs available at the time of purchase were cannabis (58%, n=37), followed by LSD (27%, n=17), cocaine (16%, n=10), and GHB (13%, n=8). It is clear that the availability of methamphetamine base 'at the time of purchase' decreased in 2006 in comparison to 2005 (45% in 2006 from 77% in 2005).

Table 4.9: Patterns of purchasing ecstasy in the last six months, 2005 & 2006

	2006 (n=101)	2005 (n=98)
Median no. of people purchased from	**4 (n=101)**	4 (n=97)
Purchased for (%)		
Self only	**24**	24
Self and others	**76**	76
Others only	**0**	0
No. of times purchased in the last 6 months (%)		
1 - 6	**51**	21
7 - 12	**30**	41
13 - 24	**16**	30
25 +	**3**	8
Median no. of ecstasy tablets purchased	**5**	5
Able to purchase other drugs from main dealer (%)	**64 (n=64)**	76 (n=74)
Drugs able to purchase*		
Methamphetamine – powder ('speed')	**45**	45
Methamphetamine – base	**45**	77
Methamphetamine – crystal	**50**	45
Pharmaceutical stimulants	**8**	12
Cocaine	**16**	23
MDA	**5**	8
LSD	**27**	35
Ketamine	**11**	22
GHB	**13**	7
Cannabis	**58**	51
Heroin	**5**	1

Source: EDRS REU interviews

***** Among those who reported been able to purchase other drugs from main dealer

4.7 Ecstasy-related harms

4.7.1 Law enforcement

In 2006, there were no ecstasy-related use or provision offences recorded in SA.

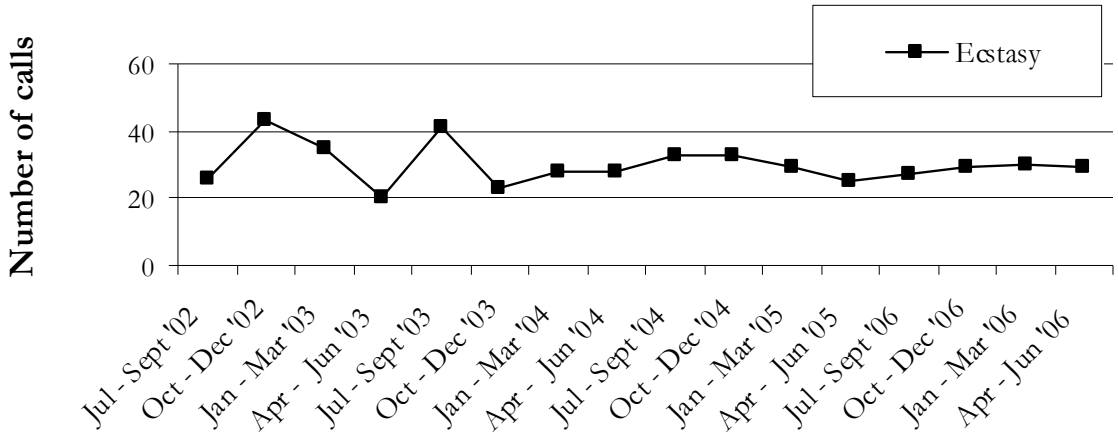
4.7.2 Health-related harms

Health-related harm associated with ecstasy use is detailed more fully in Chapter 15. Information provided by health service organisations is presented here and provides a general indicator of the level of harm experienced by ecstasy users.

Treatment services – ADIS

Telephone calls to the SA Alcohol and Drug Information Service (ADIS) regarding ecstasy accounted for 0.9% of the total coded telephone contacts (drug-related) in the 2005/06 financial year (n=13,231), the same as for the previous three years. Figure 4.6 depicts the number of ecstasy-related calls per quarter for the last five financial years, and Figure 15.1 compares the frequency of ecstasy-related calls to calls related to other drug types.

Figure 4.6: Number of inquiries to ADIS regarding ecstasy July 2002 - June 2006



Source: SA ADIS

Treatment services – DASSA

DASSA treatment data revealed that in 2005/06 there were 60 clients (individuals) to all DASSA treatment services that nominated ecstasy as the primary drug of concern. This constitutes 1.1% of total clients for that year and indicates an increase in the number of clients accessing DASSA treatment services for their ecstasy use (from 33 clients, 0.6% of total). Although, the number of clients with ecstasy as the primary drug of concern, therefore, remains very low compared to other drugs, it is apparent that the number of clients accessing DASSA treatment services who nominate ecstasy as their primary drug of concern is steadily increasing. See also Table 15.3 for a comparison of ecstasy to other primary drugs of concern among clients of DASSA treatment services.

4.8 Benefit and risk perception

Participants were asked to provide up to three of the biggest benefits and risks they perceived to be associated with taking ecstasy.

4.8.1 Perceived benefits

All REU (n=101) reported they perceived benefits associated with taking ecstasy; that 81 reported at least two benefits and 54 reported three benefits. The benefit categories, and the number of REU who considered each as one of the three biggest benefits of their own ecstasy use, are summarised in Table 4.10. The most commonly perceived benefits of ecstasy use among REU were enhanced communication and sociability, enhanced closeness and empathy toward others, that it added more fun or enjoyment to an occasion, and enhanced mood.

Table 4.10: Perceived benefits of taking ecstasy, as reported by REU, 2006

Benefit	Number of REU (n=101)
Enhanced closeness/bonding/empathy with others	30
Enhanced communication/talkativeness/more social	38
Enhanced mood (e.g. euphoria/wellbeing/happiness)	34
Enhanced appreciation of music &/or dance	8
The high/rush/buzz	11
Increased energy/to stay awake	10
Fun	40
Increased confidence/decreased inhibitions	9
Relax/escape/release	19
Drug effects (e.g. hallucinations/insight/heightened senses)	11
Different to effects of alcohol	8
Enhanced sexual experience	3
Feeling in control/focused	1
Cheap	2
Other	7

Source: EDRS REU interviews

4.8.2 Perceived risks

Twelve REU reported they perceived no risk associated with taking ecstasy. Of the remaining 89 REU, all reported at least one risk, 80 reported at least two risks, and 54 reported three risks. The risk categories, and the number of REU who considered each as one of the three biggest risks of their own ecstasy use, are summarised in Table 4.11. As can be seen, the most commonly perceived risks associated with taking ecstasy were some kind of physical harm, psychological harm, neuropsychological harms, or risks associated with unknown content of ecstasy pills. Physical harms mentioned as risks included non-

fatal (n=7) or fatal (n=22) overdose, dehydration (n=20), general acute physical harms (e.g. vomiting/headaches/weight loss) (n=15), or some kind of long-term organ damage (n=5). Risk of perceived psychological harm included depression (n=16) and drug dependence (n=6). Perceived neuropsychological harms included general neurological damage (n=21), memory impairment (n=5) and cognitive impairment (n=2). Risk was also associated with unknown content or contaminants present in ecstasy pills by a quarter of the REU sample (n=25).

Table 4.11: Perceived risks of taking ecstasy, as reported by REU, 2006

Risk	Number of REU (n=101)
None	12
Don't know	0
Psychological harms (e.g. addiction/dependence, depression, anxiety, psychosis)	47
Neuropsychological harms (e.g. memory impairment, neurological damage)	28
Physical harms (e.g. overdose, dehydration, temperature regulation)	69
Unknown drug strength (i.e. 'dose')	19
Unknown drug contaminants (i.e. cutting agents or other drugs)	25
Effects of intoxication (e.g. increased risk-taking or vulnerability)	5
Legal/police problems	4
Financial problems	4
Social/relationship problems	4
Employment problems	2
Unknown long-term harms	4
Other harms	11

Source: EDRS REU interviews

4.9 Summary of ecstasy trends

- Over the last seven years there has been little change in parameters of ecstasy use, with the reported mean age of first use, median days of use, 'average' or 'most' amount used in a typical session, all remaining relatively stable across this period.
- Between 2000 and 2004, there was a gradual increase in the proportion using more than one tablet in a typical session, to the point that in 2004 this was reported by the majority of the sample (84%) compared to less than half the sample in 2000 (44%). This proportion had declined in 2005, but in 2006 this again increased with more than three-quarters of REU reported using more than one tablet in a single session.
- A large proportion of the samples have consistently reported binge use of ecstasy across this time, with more than half the sample having done so in 2006.
- REU mainly use ecstasy by swallowing, with substantial proportions also reporting recent use by snorting.
- Most REU report typically using at least one other drug either 'with ecstasy' or 'at comedown', with tobacco, alcohol, cannabis and some form of methamphetamine most common.
- Ecstasy continued to be used most commonly at nightclubs, friend's house, raves/doofs/dance parties, private parties or at people's homes.
- The price of ecstasy was stable, availability continued to be considered 'easy' or 'very easy' by REU, and most reported usually obtaining their ecstasy from a friend.
- The majority of REU believed that the purity of ecstasy was either medium or fluctuating in 2005, similar to previous years. The ACC reports that the median purity of SAPOL seizures of phenethylamines in 2004/05 was 29%, the same as that reported in 2003/04. Data for 2005/06 were unavailable at time of printing.
- The number of ecstasy-related calls to ADIS remained stable and low, however, the number of clients to all DASSA treatment services increased but remains low over the last three years.
- The most commonly perceived benefits of ecstasy use among REU were enhanced communication and sociability, enhanced closeness & empathy toward others, that it added more fun or enjoyment to an occasion, and enhanced mood.
- The most commonly perceived risks associated with taking ecstasy were some kind of physical harm, psychological harm, neuropsychological harm or risk associated with unknown content of ecstasy pills.

5 METHAMPHETAMINE

The distinction between three forms of methamphetamine continued in the 2006 survey. For a detailed commentary on the reasons for the differentiation into three distinct types, see White, Breen and Degenhardt (2003). The three forms of methamphetamine discussed are the same as those differentiated within the IDRS – namely powder, base and ice/crystal methamphetamine.

5.1 Methamphetamine use among REU

In 2006, REU reported having first used powder at a median 18 years, base at 18 years and crystal at 19 years. The proportion of REU reporting lifetime use of methamphetamine differed slightly between the three forms, with equivalent proportions reporting use of powder (75%), base (72%) or crystal (73%) in their lifetime. In 2006, the proportions of REU reporting both lifetime and recent use of methamphetamine powder and base decreased compared to 2005, whereas both lifetime (73% in 2006 from 32% in 2005) and recent use of crystal methamphetamine had increased in the previous year (62% in 2006 from 41% in 2005). The largest proportion of the REU sample reported recent use of base (63%), followed by crystal (62%) and powder (51%) in 2006. It should be noted that in 2005 the largest proportion of REU had reported recent use of base, followed by powder and then crystal, therefore, recent use of crystal has overtaken the use of powder.

5.1.1 Methamphetamine powder (speed)

Table 5.1 summarises the patterns of use of methamphetamine powder among REU in 2006, with 2005 data for comparison. In 2006, 51% of REU reported using methamphetamine powder a median of 12 days (range 1 - 90), in the six months prior to interview. A closer analysis of frequency of use revealed that 40% (n=21) of methamphetamine powder users had used 6 days or less in the six months prior to interview, which equates to using once a month or less, on average, during this period. A further 29% (n=15) reported using greater than monthly and up to once per fortnight (7 - 12 days inclusive); 25% (n=13) reported using greater than fortnightly and up to once per week (13 - 24 days inclusive); and the remaining six percent (n=3) reported using greater than weekly (25 - 120 days inclusive), on average, in the last six months.

With respect to the 'average' and 'most' amounts used in a single session of use, similar numbers of REU provided information in terms of grams and 'points', with fewer commenting on the use of lines. The median amount of grams and points used in an 'average' single session were 0.5 and 1.5, respectively. The 'most' amount of powder methamphetamine used in a single session reported by REU was a median of one gram or four points. Compared to 2005, both the 'average' and 'most' amounts of all quantities reported remained relatively stable. Readers are reminded, however, that the measure of a 'point' is likely to be variable and unreliable as a measure of quantity actually consumed.

Most users of methamphetamine powder reported having used by swallowing (90%) or snorting (87%) in the last six months. Thirty-three percent reported having smoked powder, and 6% reported having injected powder, in that time. A similar proportion of REU reported bingeing on powder methamphetamine in 2005 (27%; or 52% of those who had used methamphetamine powder in the last 6 months) compared to 2005 (22%).

Table 5.1: Patterns of methamphetamine powder use and route of administration of methamphetamine powder among the REU sample, 2005 & 2006

Variable	2006 (n=101)	2005 (n=100)
Age first used: median in years (range)	**18 (13-42)**	18 (13-31)
Ever used (lifetime) (%)	**75**	83
Used in last 6 months (%)	**51**	66
Meth powder as main drug of choice (%)	**4**	5
Days used in last 6 months#: median (range)	**12 (1-90)**	8 (1-120)
Average amount used in a single session*:		
grams: median (range; n)	**0.5 (0.1-2; 26)**	1 (0.1-4; 27)
points: median (range; n)	**1.5 (0.5-5; 22)**	2 (1-5; 23)
lines: median (range; n)	**3 (n=1)**	2 (1-6; 12)
Most amount used in a single session*:		
grams: median (range; n)	**1 (0.1-5; 30)**	1 (0.25-6.5; 32)
points: median (range; n)	**4 (1.5-8; 19)**	4 (1-26; 17)
lines: median (range; n)	**5 (n=1)**	2 (1-10; 10)
Meth powder included in 'binge' episode (%)	**27**	22
Routes of Administration recent use (%)#	**(n=52)**	(n=66)
Swallowing	**90**	79
Snorting	**87**	77
Smoking	**33**	15
Injecting	**6**	6

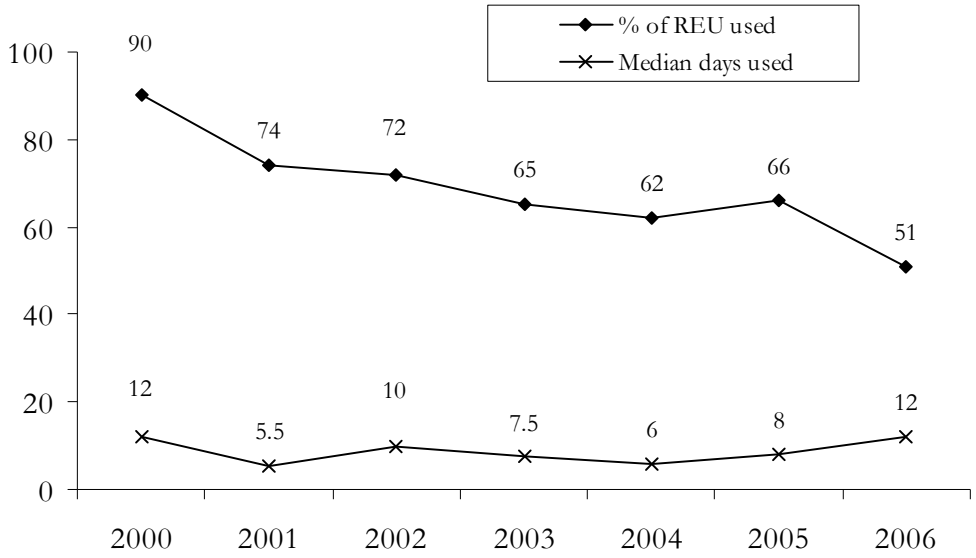
Source: EDRS REU interviews

Of those who reported use in the last 6 months

***** A session was defined as a period of continuous drug use without sleep, in the last 6 months

An analysis of trends over time (see Figure 5.1) reveals that between 2000 and 2003 there was a steady decline in the proportion of REU who reported recent use of powder methamphetamine, from a high of 90% in 2000 to 65% in 2003. In the last three years, the proportion of REU reporting recent use of methamphetamine powder had remained relatively stable. However, in 2006 the proportion of REU who reported recent use of powder methamphetamine decreased to a low of 51%, but the frequency of use of methamphetamine powder increased slightly (from a median of 8 days in 2005 to 12 days in 2006).

Figure 5.1: Methamphetamine powder – Trends in recent use* and median days used#, 2000 - 2006



Source: EDRS REU interviews
***** Use in the previous six months
# By those reporting use in the previous six months

5.1.2 Methamphetamine base

Table 5.2 summarises the patterns of use of methamphetamine base by REU in 2006, with 2005 data for comparison. In 2006, 63% of REU reported using methamphetamine base for a median of six days (range 1-180), in the six months prior to interview. A closer analysis of the frequency of use revealed that 64% (n=41) of base users had used six days or less in the six months prior to interview, which equates to using once a month or less, on average, during this period. A further 11% (n=7) reported using greater than monthly and up to once per fortnight (7 - 12 days inclusive), 14% (n=9) reported using greater than fortnightly and up to once per week (13 - 24 days inclusive), and the remaining 11% (n=7) reported using greater than weekly (25 - 120 days inclusive), on average, in the last six months.

With respect to the 'average' and 'most' amounts used in a single session of use, most REU provided information in terms of 'points' of base, with considerably fewer commenting on the use of grams. The median amount of points and grams used in an 'average' single session were two and 0.5, respectively. The median 'most' amount of points and grams of powder methamphetamine used in a single session were three and one respectively. Compared to 2005, there has been little change in either the 'average' or 'most' amounts of points or grams reported as consumed.

REU who had used methamphetamine base in the last six months reported having used by swallowing (94%), twenty-seven percent reported having snorted base, 17% reported having smoked base, and 17% reported use by injecting, in that time. A lower proportion of REU reported bingeing on methamphetamine base in 2006 (28%) compared to 2005 (40%).

Table 5.2: Patterns of methamphetamine base use and route of administration of methamphetamine base among the REU sample, 2005 & 2006

Variable	2006 (n=101)	2005 (n=100)
Age first used: median in years (range)	**18 (13-45)**	18 (13–31)
Ever used (lifetime) (%)	**72**	88
Used in last 6 months (%)	**63**	82
Methamphetamine base as main drug of choice (%)	**5**	3
Days used in last 6 months#: median (range)	**6 (1-180)**	12 (1-120)
Average amount used in a single session*:		
Grams: median (range; n)	**0.5 (.13-2.5; 12)**	0.75 (.25-1.5; 12)
Points: median (range; n)	**2 (0.5-10; 57)**	2 (0.5-10; 63)
Most amount used in a single session*:		
Grams: median (range; n)	**1 (0.2-2, 9)**	1 (0.5-4; 19)
Points: median (range; n)	**3 (0.05-15, 50)**	2 (0.5-10; 57)
Methamphetamine base included in 'binge' episode (%)	**28**	40
Routes of Administration recent use (%)#	**(n=64)**	(n=82)
Swallowing	**94**	95
Snorting	**27**	31
Smoking	**17**	16
Injecting	**17**	10

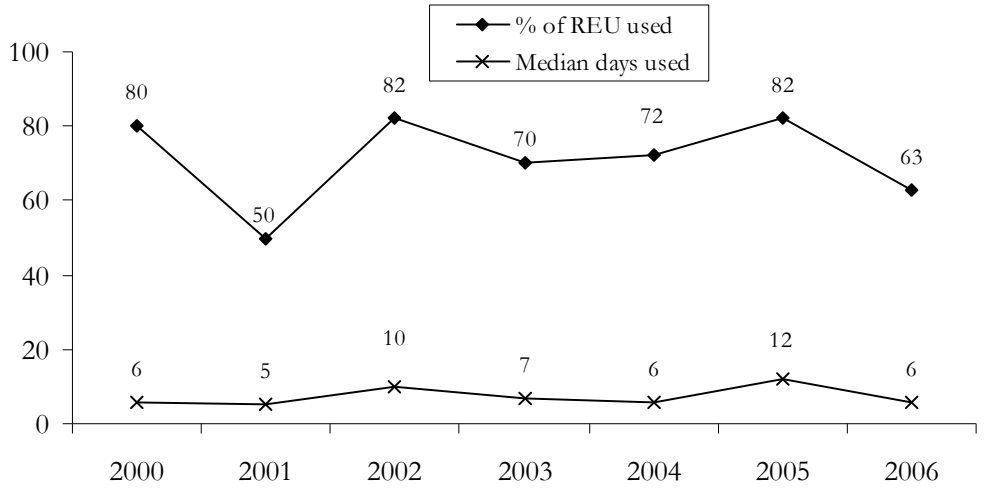
Source: EDRS REU interviews

Of those who reported use in the last 6 months

***** A session was defined as a period of continuous drug use without sleep, in the last six months

An analysis of trends over time (see Figure 5.2) reveals a striking decrease in both the proportion of REU reporting recent use of base methamphetamine (from 82% in 2005 to 63%) and the median number of days used in 2006 (from a median of 12 days use in 2005 to six days), following an increase in these parameters in 2005.

Figure 5.2: Methamphetamine base – Trends in recent use* and median days used#, 2000 - 2006



Source: EDRS REU interviews
***** Use in the previous six months
# By those reporting use in the previous six months

5.1.3 Crystal methamphetamine

Table 5.3 summarises the patterns of use of ice/crystal methamphetamine by REU in 2006, with 2005 data for comparison. In 2006, 62% of REU reported using crystal methamphetamine for a median of four days (range 1-180) in the six months prior to interview. A closer analysis of frequency of use revealed that 69% (n=43) of crystal users had used six days or less in the six months prior to interview, which equates to using once a month or less, on average, during this period. A further 11% (n=7) reported using greater than monthly and up to once per fortnight (7 - 12 days inclusive), 8% (n=5) reported using greater than fortnightly and up to once per week (13 - 24 days inclusive), and the remaining 11% (n=7) reported using greater than weekly (25 - 90 days inclusive), on average, in the last six months.

With respect to the 'average' and 'most' amounts used in a single session of use, most REU provided information in terms of 'points' of crystal, with a limited number commenting on the use of grams. The median number of points and grams of crystal methamphetamine used in an 'average' single session was two and one respectively, and the median 'most' amounts used in a single session was two points or one gram. Compared to 2005, there has been little change in either the 'average' or 'most' amounts of points or grams reported as consumed.

REU who had used ice/crystal methamphetamine reported having used by smoking (65%) in the last six months. Fifty-five percent reported having swallowed crystal, 36% reported having snorted crystal and 15% reported use by injecting, in that time. There was a decrease in the proportion reporting recent use of crystal by swallowing, from 71% in 2005 to 55% in 2006. This is the first time that smoking as a route of administration of crystal methamphetamine has been used as the preferred method of administration by REU, with larger proportions of REU usually swallowing in previous years. The proportion of REU who reported binge use of crystal methamphetamine also increased over this same period,

from 17% - 33% of REU (or 53% of those REU who had used crystal methamphetamine) in the previous six-months.

Table 5.3: Patterns of crystal methamphetamine use and route of administration of crystal methamphetamine among the REU sample, 2005 & 2006

Variable	2006 (n=101)	2005 (n=100)
Age first used: median in years (range)	**19**	20 (13-34)
Ever used (lifetime) (%)	**73**	62
Used in last 6 months (%)	**62**	41
Crystal meth as main drug of choice (%)	**13**	8
Days used in last 6 months#: median (range)	**4 (1-180)**	6 (1-90)
Average amount used in a single session*:		
Grams: median (range; n)	**1 (0.5-2.5; 4)**	0.5 (0.25-1; 12)
Points: median (range; n)	**2 (0.3-5; 5)**	1.75 (0.25-8; 24)
Most amount used in a single session*:		
Grams: median (range; n)	**1(0.5-20; 48)**	1 (0.5-4; 14)
Points: median (range; n)	**1 (0.5-4; 14)**	2 (0.25-9; 22)
Crystal meth included in 'binge' episode (%)	**33**	17
Routes of Administration recent use (%)	**(n=62)**	(n=41)
Swallowing	**55**	71
Snorting	**36**	22
Smoking	**65**	66
Injecting	**15**	12

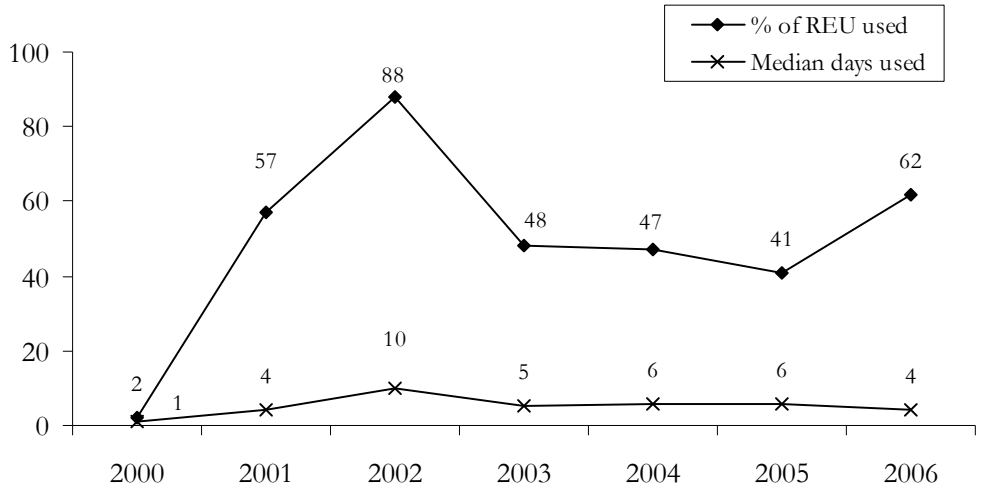
Source: EDRS REU interviews

Of those who reported use in the last 6 months

***** A session was defined as a period of continuous drug use without sleep, in the last six months

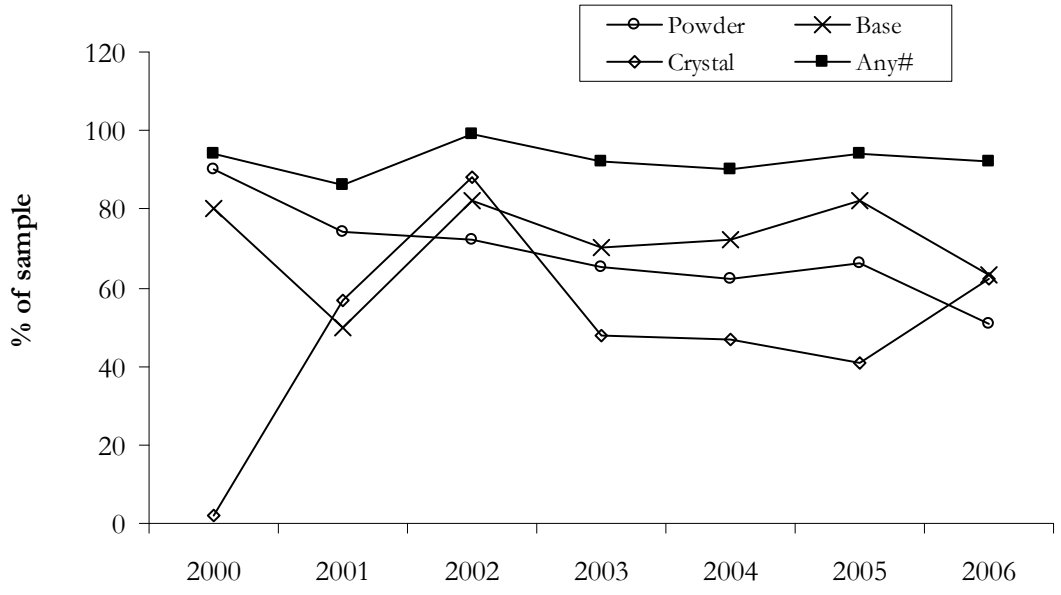
An analysis of trends over time (see Figure 5.3) reveals that after a stabilisation of both the proportion of REU reporting recent use of crystal methamphetamine and the median number of days used in the last three years, recent use of ice/crystal methamphetamine has increased (from 41% in 2005 to 62% in 2006), however the frequency of use decreased to that of 2001 levels (from a median of six days in 2005 to four days in 2006).

Figure 5.3: Methamphetamine crystal – Trends in recent use* and median days used#, 2000 - 2006



Source: EDRS REU interviews
***** Use in the previous six months
# By those reporting use in the previous six months

Figure 5.4: Trends in recent use* of the main forms of methamphetamine, 2000 - 2006



Source: EDRS REU interviews
***** Use in the previous six months
# Collapsed powder, base and crystal categories

Figure 5.4 presents trends in recent methamphetamine (all forms) use from 2000 to 2006. Overall, prevalence of recent use of 'any' methamphetamine (collapsed data) by REU has remained high and relatively stable across the years. The most interesting aspect is the dramatic rise and subsequent decline and stabilisation of the prevalence of use of the ice/crystal form of methamphetamine during this period, followed by another dramatic increase in 2006.

In 2006 the majority of the KE who commented on the use of methamphetamine by REU (11 of 13) stated that the use of crystal methamphetamine had increased in the previous 12 months. This finding is interesting considering in 2005 several KE reported that use of crystal methamphetamine was still rare, and occurred among a small percentage of REU, but that it was considered desirable and was sought after by some, though it was considered difficult to obtain. Several KE also commented that the use of crystal methamphetamine was becoming more common among REU. Seven KE (of the 11 who commented) observed that the use of methamphetamine powder had decreased in the previous year, with three KE commenting that it had increased, and one stating that "*people had either moved away or gotten right into it*". Six KE mentioned the use of ice/crystal methamphetamine by smoking among users, but one doubted that this was actually ice/crystal methamphetamine, except on rare occasions.

Information about where REU used the three different forms of methamphetamine is presented in Table 5.4. 'Day Club' was included for the first time in 2006 as an alternative venue. There were some small differences in the most commonly reported locations of 'usual' use between the different types of methamphetamine, but, overall, the most common locations REU reported 'usually' using methamphetamine were nightclubs, friends' homes, their own home, live music venues, raves/dance parties, private parties or pubs.

An analysis of the 'last' location used revealed that crystal methamphetamine had been used 'last' most commonly at a friend's home by REU, whereas powder and base were most commonly reported as 'last' used at nightclubs.

Table 5.4: Venue where methamphetamine was used by REU in the last six months (% REU by venue for each form of methamphetamine), 2006

	Where have you usually used methamphetamine?			Where did you last use methamphetamine?		
	Powder (n=35)	Base (n=39)	Crystal (n=43)	Powder (n=37)	Base (n=34)	Crystal (n=43)
Own home	46	59	47	24	30	30
Dealer's home	20	13	14	0	0	2
Friend's home	57	59	58	24	16	28
Raves/doof/dance parties	60	54	37	3	8	9
Nightclubs	80	64	56	24	22	9
Pubs	46	36	37	3	5	7
Private party	69	59	42	18	8	7
Day Club	11	15	16	0	0	0
Restaurant/café	3	51	5	0	0	0
Public place	23	13	16	0	0	0
Car or other vehicle (passenger)	34	23	23	3	0	2
Car or other vehicle (driver)	20	18	12	0	0	0
Outdoors	29	31	26	3	8	2
Live music event	46	23	21	0	3	2
Work	20	13	14	0	0	0
Educational institution	0	0	5	0	0	0
Acquaintance's house	23	15	12	0	0	0
Other	0	6	0	0	3	0

Source: EDRS REU interviews
Note: REU were allowed to nominate more than one response in the 'usually' used category

5.2 Price

Not all REU were able to comment on the price of all three, or any, of the forms of methamphetamine. Table 5.5 presents the prices of the three forms of methamphetamine provided by REU who were able to comment (sample sizes given per category). When compared to 2005, in 2006 the estimated 'current' price of a point of methamphetamine powder remained stable at $25, but the price of a point of base methamphetamine decreased slightly (from $25 to $22.50), whereas the price of a point of crystal methamphetamine increased from an estimated $26 to $50. In comparison to the 2006 current price the median reported price of a point at last purchase in 2006 was slightly lower for crystal (at $40), was slightly higher for base methamphetamine ($25) and remained stable for powder.

The estimated median 'current' price of a gram of crystal methamphetamine increased to $400 (from $200 in 2005), while powder methamphetamine was estimated to be much lower, at a median $50 (from $65), the price of base methamphetamine remained stable at $200 a gram. The median price reported by REU at last purchase was the same as the estimates of 'current' price for base and powder ($200 and $50 respectively), but was slightly lower for crystal ($325). Compared to 2005, there appears to have been a small decrease in the price of a point of base methamphetamine (from $25 to $22.50), and for a

gram of methamphetamine powder (from $65 to $50). Increases were seen for both points (from $25 to $50) and grams (from $200 to $400) of crystal methamphetamine.

Table 5.5: Price of the main forms of methamphetamine and change in price over the last six months, 2005 & 2006

Amount	Median price per amount $ (range; n)		
	Powder	**Base**	**Crystal**
Point			
Current price	25 (15-50; 22) *25 (20-30; 11)*	22.50 (15-200; 28) *25 (18-50; 36)*	50 (20-60; 31) *25 (20-50; 12)*
Price at last purchase	25 (15-100; 17) *20 (15-30; 8)*	25 (15-200; 23) *25 (20-50; 28)*	40 (20-60; 26) *25 (20-50; 7)*
Gram			
Current price	50 (20-200; 15) *65 (20-200; 28)*	200 (140-200; 12) *200 (130-300; 19)*	400 (120-600; 13) *200 (70-350; 9)*
Price at last purchase	50 (30-200; 9) *50 (20-200; 23)*	200 (150-200; 9) *200 (130-300; 17)*	325 (100-550; 12) *200 (70-400; 7)*

Price change in last 6 months (%)	**2006 (n=36)**	***2005 (n=44)***	**2006 (n=39)**	***2005 (n=63)***	**2006 (n=42)**	***2005 (n=31)***
Increasing	**6**	*0*	**10**	*2*	**10**	*19*
Stable	**64**	*64*	**77**	*73*	**59**	*48*
Decreasing	**11**	*14*	**8**	*11*	**10**	*0*
Fluctuating	**11**	*7*	**0**	*2*	**5**	*10*
Don't know	**8**	*16*	**5**	*13*	**17**	*23*

Source: EDRS REU interviews
***** 2005 data in italics

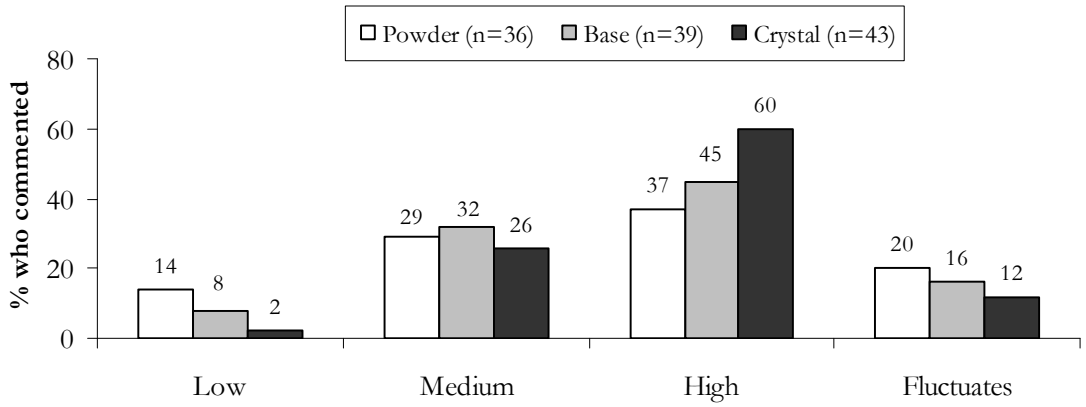
Similarly to 2005, the majority of REU reported that the price of all forms of methamphetamine had been stable in the preceding six months.

Four KE were able to provide information on the price of methamphetamine, and their range of estimates was in agreement with those given by REU. All agreed that the price varied according to quality and that the purer crystal form was the most expensive and increasing in price. One KE also commented that the point amount was somewhat flexible and, rather than the price changing, the actual quantity of the 'gram' would be smaller for the purer crystal form.

5.3 Purity

As would be expected, REU reports of the current purity of methamphetamine varied according to the three forms, with the purity of crystal rated higher than both base and powder (see Figure 5.5).

Figure 5.5: Trend in the perceived purity of methamphetamine in the last six months, 2006



Source: EDRS REU interviews

The purity of both base and ice/crystal was considered high by the majority of REU able to answer (see Table 5.6). Estimates regarding the purity of powder were more varied, with similar proportions reporting the perceived purity to be medium or high. Compared to 2005, there was no change in the perceived purity of powder and base. However, there was a decrease in the proportion of REU reporting the purity of ice/crystal as high, from 82% in 2005 to 60% (or 25% of the entire sample) reversing the trend reported in 2005, where the proportion of REU who perceived the purity of ice/crystal methamphetamine to be high increased from 61% to 82%. With regard to recent changes in purity, the largest proportion of REU reported purity as stable for all three forms.

Few KE provided information on the purity of methamphetamine, but of the seven that did all agreed with the views of REU. Three commented that the purity of methamphetamine powder and base had decreased. Four KE also commented that, in general, the purity of ice/crystal methamphetamine was high.

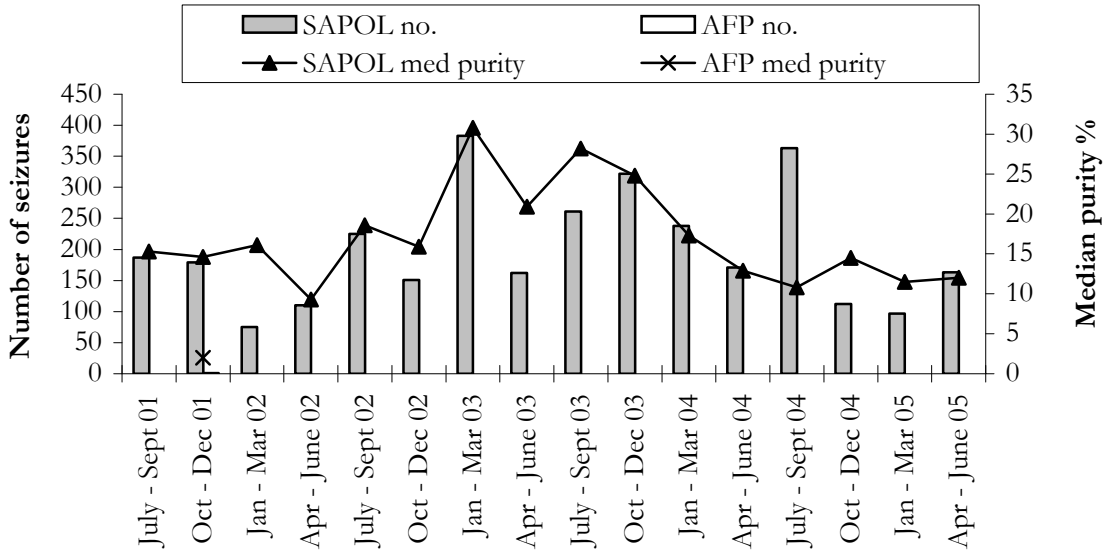
Table 5.6: Purity of the main forms of methamphetamine and change in purity over the last six months, 2005* & 2006

	Powder		Base		Crystal	
	2006 (n=35)	**2005 (n=41)**	**2006 (n=38)**	**2005 (n=61)**	**2006 (n=42)**	**2005 (n=28)**
Current purity (%)						
Low	**14**	*27*	**8**	*0*	**2**	*4*
Medium	**29**	*37*	**32**	*31*	**26**	*11*
High	**37**	*27*	**45**	*57*	**60**	*82*
Fluctuates	**20**	*10*	**16**	*12*	**12**	*4*
Change in purity in last 6 months (%)	**(n=36)**	(n=44)	**(n=39)**	(n=63)	**(n=43)**	(n=31)
Increasing	**14**	*10*	**8**	*15*	**9**	*14*
Stable	**42**	*46*	**49**	*61*	**44**	*61*
Decreasing	**14**	*27*	**10**	*2*	**7**	*0*
Fluctuating	**22**	*15*	**26**	*15*	**21**	*18*
Don't know	**8**	*2*	**8**	*8*	**19**	*7*

Source: EDRS REU interviews
***** 2005 data in italics

The Australian Crime Commission (ACC) data were unavailable for 2005/06 at the time of publication. As such data provided by the ACC relates to the purity data on methamphetamine seized in SA during the last financial year 2004/2005 (Australian Crime Commission, 2005). Figure 5.6 shows the number of seizures received and analysed by the state forensic laboratory (within the quarter depicted) and the median purity per quarter of those seizures, from 2001/02 to 2004/05. The total number of SAPOL methamphetamine seizures analysed for July 2004 to June 2005 was 735 and the median purity was 11.6%. The majority of seizures analysed (n=566) were less than or equal to 2 grams. Overall, the number of seizures and the median purity of methamphetamine seized by SAPOL in SA for 2004/05 was decreased compared to the previous year, and the median purity was the lowest seen in the past four years. Specifically, median purity had decreased from 19.8% in 2003/04 (n=992), 21.5% in 2002/03 (n=921) and 15% in 2001/02 (n=551). This decline in median purity began in the last three-quarters of 2003/04, and may indicate the start of a trend of lower purity. Only one methamphetamine seizure by the Australian Federal Police was analysed across this timeframe, in 2001/02.

Figure 5.6: Number of methamphetamine seizures analysed and median methamphetamine purity in SA, 2001/02 - 2004/05



Source: Australian Crime Commission, 2003, 2004, 2005

5.4 Availability

Overall, all three forms were considered to be 'easy' or 'very easy' to obtain by the majority of REU (see Table 5.7). However, a larger proportion of REU reported base and powder as 'very easy' or 'easy' to obtain than for ice/crystal methamphetamine. The majority of REU report the availability of all forms of methamphetamine as stable in the last six months. In comparison to 2005, there has been a shift in percentages from 'easy' to 'difficult' for both base and ice/crystal, suggesting some increased difficulty with obtaining these forms.

Figure 5.7 depicts the trend in recent availability over the last four years. It can be seen that although all forms were considered easily available, the perceived availability of base methamphetamine has been highest and most stable across this time period.

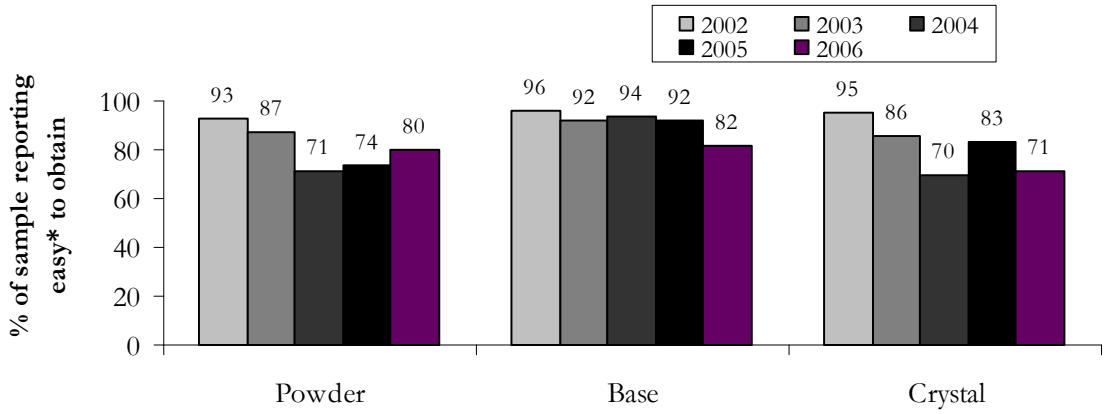
Seven KE were able to provide information on methamphetamine availability, with two commenting that the availability of methamphetamines in general was increasing, and one commenting that it was decreasing. Two KE also commented on the purer crystal form had increased in availability. One KE commented that the availability of methamphetamine powder had increased, while another commented that it had decreased. No KE commented on the availability of base methamphetamine. Three KE reported that there were indications of increased availability of ice/crystal use with the increase in seizures of glass pipes for smoking.

Table 5.7: Availability of the main forms of methamphetamine and change in availability over the last six months, 2005* & 2006

	Powder		Base		Crystal	
	2006 (n=35)	2005 (n=42)	2006 (n=39)	2005 (n=63)	2006 (n=41)	2005 (n=30)
Current availability (%)						
Very Easy	**60**	*41*	**54**	*48*	**34**	*30*
Easy	**20**	*33*	**28**	*44*	**37**	*53*
Difficult	**17**	*21*	**18**	*8*	**29**	*17*
Very difficult	**3**	*5*	**0**	*0*	**0**	*0*
Change in availability in last 6 months (%)	**(n=36)**	(n=44)	**(n=39)**	(n=63)	**(n=43)**	(n=31)
More difficult	**14**	*14*	**13**	*8*	**7**	*17*
Stable	**61**	*52*	**67**	*71*	**54**	*63*
Easier	**11**	*24*	**10**	*16*	**19**	*13*
Fluctuates	**8**	*5*	**8**	*3*	**12**	*3*
Don't know	**6**	*5*	**3**	*2*	**9**	*3*

Source: EDRS REU interviews
***** 2005 data in italics

Figure 5.7: Trend in availability of methamphetamine in the preceding six months, 2002 - 2006



Source: EDRS REU interviews
***** Collapsed categories of 'very easy' and 'easy'

When asked where they had bought the different forms of methamphetamine, REU provided similar profiles for each of the three forms (see Table 5.8). The majority of REU able to comment reported that they purchased all forms of methamphetamine from friends. Substantial proportions also reported purchasing all forms of methamphetamine from a known dealer and acquaintances. An analysis of the location at which

methamphetamine was reportedly scored reveals that REU most commonly obtained all three forms of methamphetamine from their friends' homes, with substantial proportions also reporting scoring at a dealer's home, their own home or at an agreed public place and to a lesser extent, private parties.

Table 5.8: Usual person and source venue where REU purchased methamphetamine, 2006

	Powder (n=36)	Base (n=39)	Crystal (n=43)
Used, not scored	***14***	***5***	***9***
Who have you bought [meth] from in the last 6 months?			
Friends	67	72	51
Known dealers	39	46	40
Workmates	8	3	5
Acquaintances	22	23	30
Strangers/unknown	6	8	7
What venues do you normally score [meth] at?			
Own home	22	39	26
Dealer's home	22	33	30
Friend's home	61	64	51
Raves/doofs/dance parties	14	8	7
Nightclubs	19	13	9
Pubs	17	8	5
Private party	19	13	7
Day Club	0	3	0
Street	3	10	2
Agreed public location	28	26	21
Work	8	3	9
Educational institution	0	0	0
Acquaintance's home	14	10	19
Other	0	3	5

Source: EDRS REU interviews
Note: REU were allowed to nominate more than one response

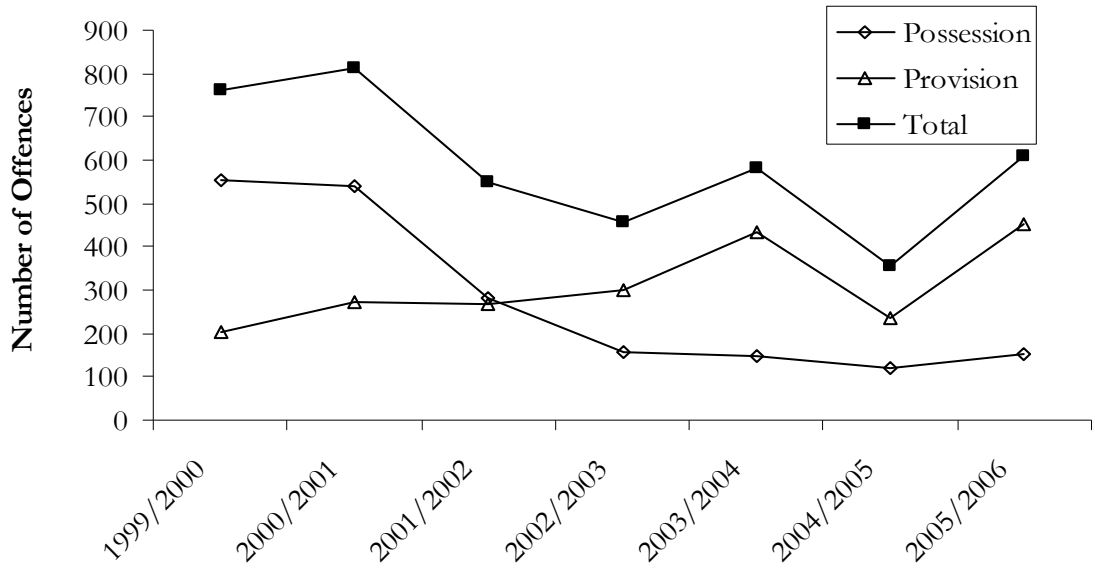
Information supplied by the South Australian Police indicates that the detection of clandestine laboratories in South Australia has increased in 2006, despite remaining stable for the two previous years, with 48 labs detected in 2006, compared to 38 labs detected in 2005 and 39 in 2004. Please note that these figures incorporate those laboratories that may not have been processed under South Australian legislation, but which are defined as clandestine laboratories under the guidelines for national reporting. They may, therefore, differ from figures released in the South Australian Police Annual Report.

5.5 Methamphetamine-related harms

5.5.1 Law enforcement

Figure 5.8 presents the number of amphetamine possession/use and provision (incorporating import/export drugs, sell/trade drugs, produce/manufacture drugs categories) offences reported or becoming known to police from 1999/00 to 2005/06 (SAPOL Annual Reports, 2000/2001, 2001/2002, 2002/2003, 2003/2004, 2004/2005, 2005/2006). As can be seen, between 2004/05 and 2005/06, the number of amphetamine possession offences recorded increased (from 122 in 2005 to 153 in 2006), and there was a substantial increase in provision offences for amphetamines (from 234 to 454) following a decrease in the previous year. Amphetamine possession and provision offences made up 23% of the total number of illicit drug possession and provision offences in 2005/06, compared to 15.3% in 2004/05, 19.5% in 2003/04 and 14.6% in 2002/03.

Figure 5.8: Number of amphetamine-related offences reported by SAPOL in South Australia, 1999/2000 - 2005/06



Source: SAPOL Annual Reports (2000/2001, 2001/2002, 2002/2003, 2003/2004, 2004/2005, 2005/2006)

5.5.2 Health

Severity of methamphetamine dependence

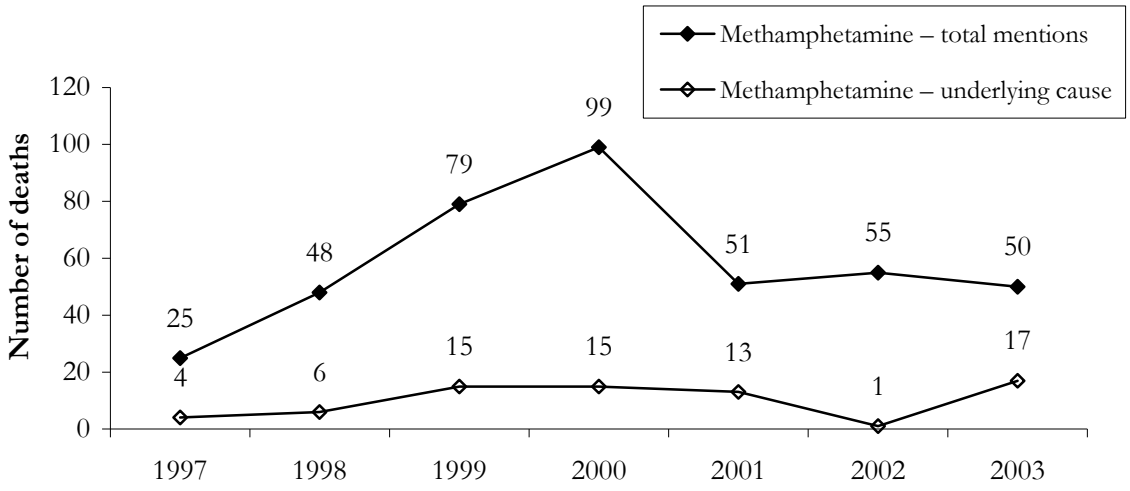
In 2006, the Severity of Dependence Scale (SDS) (Gossop et al., 1995) was used to give a measure of the level of problematic or dependent use of ecstasy and methamphetamine among the REU sample (see Section 13.2 for more detail). A total score of greater than four was taken as indicative of clinically significant, dependent use (Topp & Mattick, 1997).

Of the 93 REU who had reported use of some form of methamphetamine in the preceding six months, the median SDS score for methamphetamine was one (range 0 - 15). Forty-six REU scored zero (indicating no problematic use or dependence), 31 scored from one to four (indicating less than clinically significant dependence, but some level of problematic use), and 16 scored five or above (indicating clinically significant dependence). Therefore, 17% of methamphetamine users in the 2005 sample indicated clinically significant dependent use of methamphetamine in the last twelve months, as measured by the SDS.

Methamphetamine-related deaths

In the 2004 SA EDRS report, the investigation of Australian Bureau of Statistics data in relation to the number of accidental drug-induced deaths in which methamphetamine and cocaine were mentioned, undertaken by Degenhardt, Roxburgh and Black (2004), was presented. This included deaths where methamphetamine was determined to be either the underlying cause – the 'primary' factor responsible for the person's death – as well as where methamphetamine was noted but another drug was thought to be primarily responsible for the death (mentions). The 'underlying cause' data are a subset of the 'total mentions' data. Up-to-date data regarding methamphetamine-related deaths were unavailable at the time of preparing the current EDRS report, but national data for 1997 to 2003 (as presented previously), are shown in Figure 5.9.

Figure 5.9: Number of accidental drug-induced deaths mentioning methamphetamine among those aged 15-54 years in Australia, 1997 - 2003



Source: Australian Bureau of Statistics morbidity database (Degenhardt, Roxburgh & Black, 2004)

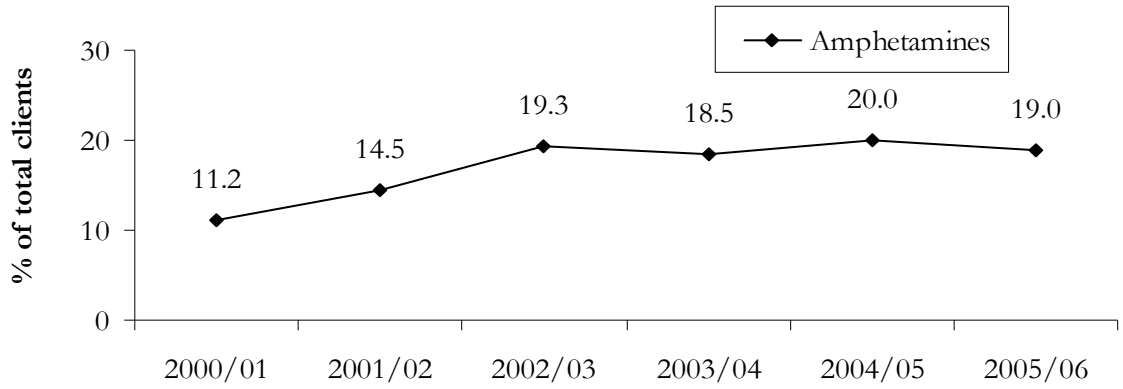
Treatment services – ADIS

Telephone calls to the SA Alcohol and Drug Information Service (ADIS) regarding amphetamines accounted for 10.7% of the 13,231 total coded telephone contacts (drug-related) in the 2005/06 financial year, similar to that of previous years: 12.5% in 2004/05 (of a total 12,639), 12% in 2003/04 (of a total 13,336 coded calls) and 11.6% in 2002/03 (of a total 13,825 coded calls). Figure 15.1 depicts the number of amphetamine-related calls per quarter for the last three financial years compared to calls related to other drug types.

Treatment services – DASSA

The proportion of clients to all treatment services of DASSA, by primary drug of concern, is presented in Table 15.3 and shows that the proportion of clients nominating amphetamines as their primary drug of concern has remained relatively stable for the last four years (see also Figure 5.10), and was 19% in 2005/06. This follows two consecutive years of increase in the proportion of clients nominating amphetamine as their primary drug of concern. In 2005/06, amphetamines were the second most commonly nominated primary drug of concern by clients of DASSA, after alcohol (51.8%), and dominated as the most common illicit drug of concern, well above heroin (9.7%).

Figure 5.10: Percentage of total DASSA clients with amphetamines as the primary drug of concern, 2000/01 - 2005/06*



Source: Drug and Alcohol Services South Australia
***** During 2002/03 a new data collection system was employed to meet the requirements of the National Minimum Data Set for Alcohol and Other Drug Treatment Services (NMDS-AODTS)

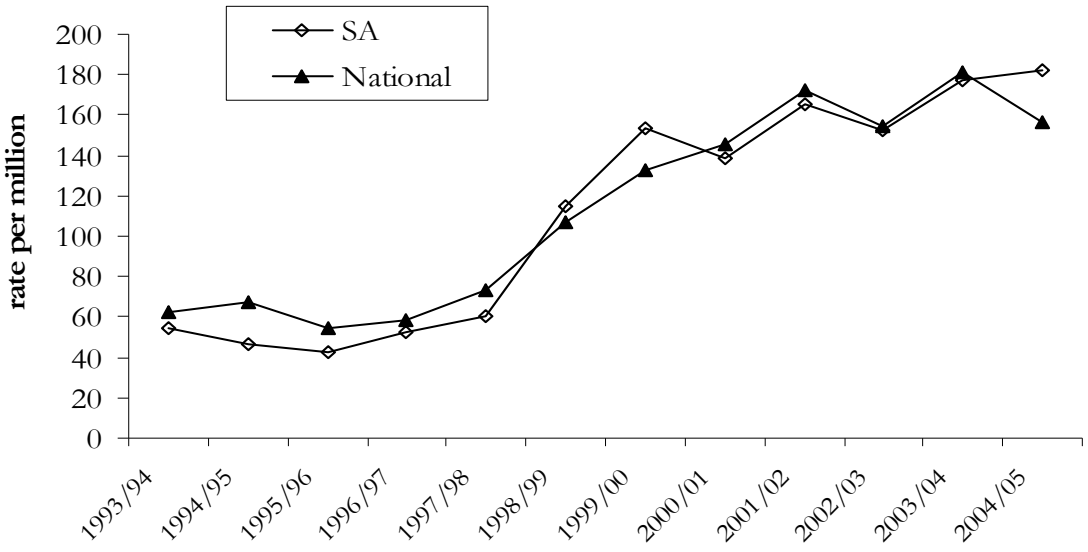
Emergency department attendances

Information on drug-related attendances to the emergency department was provided by the Royal Adelaide Hospital (RAH), the largest central public hospital in Adelaide, and is presented in Table 15.4. Readers are warned that these are 'uncleaned' data and should be interpreted with caution; however, they are included here to give a picture of trends over time, rather than to provide precise numbers. It can be seen that attendances regarding amphetamines had increased across the last three years depicted, with the number of attendances in 2005/06 for amphetamines being higher than for any other illicit drug. In 2006 the number of attendances for amphetamines decreased. In addition, if the diagnosis 'drug-induced psychosis' is examined, it can be seen that the number of attendances with this diagnosis also decreased in the last year, and amphetamine-induced psychosis attendances are likely to have contributed to this. However, it is unclear to what extent this has occurred, as more specific drug information was not available in the coding of these attendances.

Amphetamine-related hospital admissions

An analysis of data provided by the Australian Institute of Health and Welfare from the National Hospital Morbidity Dataset, for the period 1993/1994 to 2004/05 (financial years), was undertaken by NDARC (please see Section 15.2.4 for a more detailed explanation of method). Figure 5.11 shows that the SA rate of admissions to hospital for amphetamines (primary diagnosis) increased slightly, however, the national rate decreased in 2004/05 compared to 2003/04. The long-term trend shows that the rates of admissions to hospital in SA and nationally have steadily increased since 1997/98, despite some fluctuation in the last few years. The total number of admissions to SA hospitals with a primary diagnosis involving amphetamines in 2005 was 154. Readers are reminded that this figure does not include amphetamine-related psychosis or withdrawal admissions.

Figure 5.11: Rate of amphetamine-related admissions* (primary diagnosis) to hospital in South Australia and nationally, per million people, 1993/1994 - 2004/05



Source: Australian Institute of Health and Welfare
* For persons aged between 15 and 54 years, excluding amphetamine withdrawal and psychosis admissions
Note: A 'primary diagnosis' was given when amphetamines were considered chiefly responsible for the patient's episode of care in hospital

5.6 Summary of methamphetamine trends

- In 2006, the proportions of REU reporting both lifetime and recent use of methamphetamine powder and base had decreased compared to 2005. The proportion of REU reporting both lifetime and recent use of crystal methamphetamine increased compared to 2005. The largest proportion of the REU sample reported recent use of base (63%), followed by crystal (62%) and powder (51%) in 2006.
- The frequency of recent methamphetamine use was somewhat different for the three forms of methamphetamine (a median of 12 days for powder, six days for base and four days for crystal). Frequency of use of base and crystal forms decreased, but frequency of powder use increased compared to 2005.
- An increase in both lifetime and recent smoking of crystal methamphetamine was noted in 2006. There was some support of increased smoking of crystal by REU from KE reports.
- Overall, prevalence of recent use of any form of methamphetamine has decreased compared to the previous three years.
- There were some small differences in the most commonly reported locations of 'usual' use between the different types of methamphetamine, but, overall, the most common locations REU reported 'usually' using methamphetamine were friends' homes, their own home, raves/dance parties, private parties or pubs.
- In comparison to 2005, there was a slight decrease in the price of a point of base methamphetamine (from $25 - $22.50), and for a gram of methamphetamine powder (from $65 - $50). Increases were seen for both points (from $25 - $50) and grams (from $200 - $400) of crystal methamphetamine. However, ACC data indicate that the median purity of methamphetamine seized by SAPOL in SA for 2004/05 had decreased (to 11.6%) compared to the previous year, and the lowest seen in the past four years. Data were unavailable for the 2005/06 at the time of printing.
- Availability of all forms of methamphetamine remained generally easy, with the majority of REU reporting that availability had remained stable in the six months prior to interview.
- REU most commonly obtained all three forms of methamphetamine from their friends' homes, with substantial proportions also reporting scoring at a dealer's home, their own home or at an agreed public place.
- SAPOL data indicates that clandestine production of methamphetamine continues in SA.
- In 2006, seventeen percent of recent methamphetamine users were found to fit the criteria of clinically significant dependence on the drug, according to the Severity of Dependence Scale.
- The number of amphetamine-related calls to ADIS, and the number of clients to DASSA treatment services with amphetamine as the primary drug of concern remained stable.

6 COCAINE

The median age of first use of cocaine by REU was 20 years, and four percent nominated cocaine as their drug of choice in 2006 (see Table 6.1). In 2006, there have been changes in the parameters of cocaine use compared to 2005, with the proportion of REU reporting lifetime use (67% and 49% respectively) and recent use (49% and 31% respectively) decreasing.

6.1 Cocaine use among REU

Table 6.1 summarises the patterns of use of cocaine by REU in 2006, with 2005 data for comparison. In 2006, 31% of REU reported having used cocaine a median of two days (range 1 - 12), in the six months prior to interview. A comparison with previous years reveals a decrease in the proportion of REU reporting recent use of cocaine, but no change in the frequency of use, which has been consistently low (see Figure 6.1).

Table 6.1: Patterns of cocaine use among the REU sample, 2005 & 2006

Variable	2006 (n=101)	2005 (n=100)
Age first used: median in years (range)	**20 (14-41)**	20 (14-21)
Ever used (lifetime) (%)	**49**	67
Used in last 6 months (%)	**31**	49
Cocaine as main drug of choice (%)	**4**	9
Days used in last 6 months**: median (range)	**2 (1-12)**	2 (1-60)
Average amount used in a single session*:		
Grams: median (range; n)	**0.5 (0.25-1.5; 13)**	0.6 (0.25-2; 20)
Lines: median (range; n)	**1 (1-5; 8)**	2 (1-10; 18)
Points; median (range; n)	**1.25 (1-2; 8)**	2 (0.5-4; 10)
Most amount used in a single session*:		
Grams: median (range; n)	**0.75 (0.25-2; 14)**	0.9 (0.25-2; 20)
Lines: median (range; n)	**1 (1-5; 8)**	2.5 (1-15; 18)
Points; median (range; n)	**1.5 (1-2; 7)**	2 (0.5-4; 9)
Cocaine included in 'binge' episode (%)	**8**	12

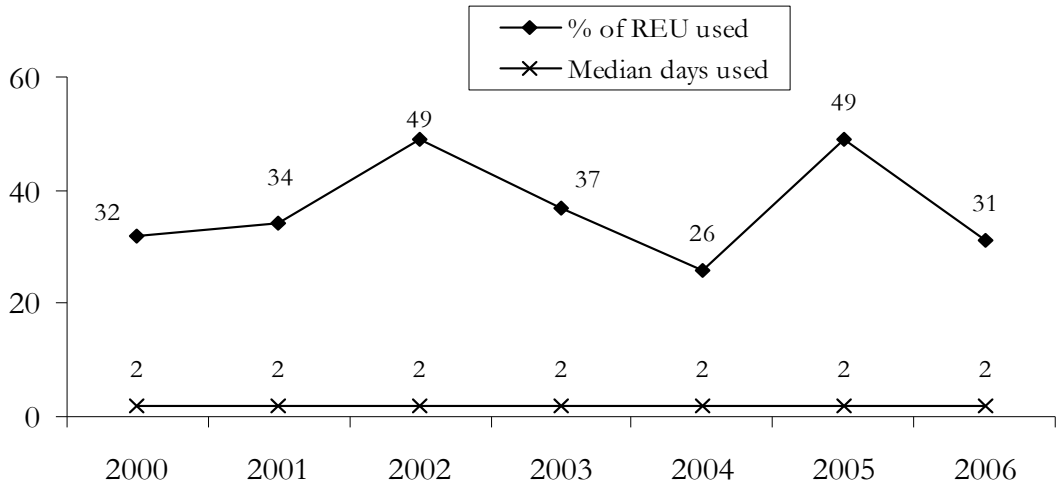
Source: EDRS REU interviews

****** Of those who reported use in the last six months

***** A session was defined as a period of continuous drug use without sleep, in the last six months

The 'average' amount of cocaine used in a single session was generally reported in grams, points or lines, with a median amount of 0.5 grams, 1.25 points or one line reported as used on average. The 'most' amount of cocaine used in a single session was a median of 0.75 grams, 1.5 points or one line. Compared to 2005, both the 'average' and 'most' amounts used had decreased slightly in terms of the grams, lines and points REU used.

Figure 6.1: Cocaine – Trends in recent use* and median days used#, 2000 - 2006



Source: EDRS REU interviews
***** Use in the previous six months
# By those reporting use in the previous six months

Most cocaine users reported recent use of cocaine by snorting (90%), almost a quarter also reported having used by swallowing (23%), seven percent reported use by smoking, and 7% reported use by injecting, in the last six months. A relatively small proportion of REU reported having recently binged on cocaine (8%), a decrease from 12% in 2005.

Information about where REU 'usually' used and 'last' used cocaine is presented in Table 6.2. Only a very small number of REU were able to comment on these parameters in 2006 (n=10), so readers are cautioned that the reliability of this information is limited. The most commonly reported locations of both 'usual' and 'last' use were a friend's home and nightclubs.

Of the KE who were able to provide information on cocaine use among the REU they had contact with, all (n=6) reported that use was not common among this group of illicit drug users, being restricted to 'a few', with several commenting that this was due to the lack of affordability and/or the different 'culture' (that is, generally older and more affluent) that cocaine was associated with.

Table 6.2: Venue where cocaine was used by REU in the last six months, 2006

	% Of REU (n=10)	
	Where have you usually used cocaine?	**Where did you last use cocaine?**
Own home	10	0
Dealer's home	0	0
Friend's home	50	30
Raves/doofs/dance parties	20	0
Nightclubs	40	20
Pubs	20	0
Private party	20	10
Restaurant/café	0	0
Public place (street/park)	0	0
Car or other vehicle (passenger)	0	0
Car or other vehicle (driver)	0	0
Outdoors	10	0
Live music event	10	0
Work	0	0
Educational Institution	0	0
Acquaintance's house	10	0
Day Club	10	10
Other	0	0

Source: EDRS REU interviews
Note: REU were allowed to nominate more than one response

6.2 Price

Table 6.3 presents a summary of information regarding the price of cocaine and the recent changes in price as provided by REU in 2006, with 2005 data for comparison. The median estimated 'current' price of a gram of cocaine was $300 and the median price 'at last purchase' was $275, in 2006. Compared to 2005, this constitutes an increase with regard to the price 'at last purchase'. The majority of those REU reported the price of cocaine had remained stable in 2006.

Table 6.3: Price of cocaine and change in price over last six months, 2005 & 2006

	2006	2005
Median price per gram (range; n)		
Current price	**$300 ($250-$400; 7)**	$300 ($200-$800; 11)
Price at last purchase	**$275 ($250-$300; 4)**	$250 ($200-$300; 8)
Price change in last 6 months (%)	**(n=10)**	(n=10)
Increasing	**20**	13
Stable	**50**	13
Decreasing	**10**	0
Fluctuating	**0**	17
Don't know	**20**	57

Source: EDRS REU interviews

No KE commented on the price of cocaine, suggesting a lack of familiarity with the cocaine market.

6.3 Purity

Table 6.4 summarises the current purity of cocaine, and the changes in purity in the last six months, as perceived by the REU in 2006, with 2005 data for comparison. The majority of REU able to comment on the purity of cocaine reported that cocaine purity was medium (38%; or 3% of entire sample) or high (50%; or 4% of entire sample), with 20% (n=2) stating that they did not know. With regard to recent change in purity of cocaine, REU reported purity as stable, but the largest proportion did not know about recent changes. Compared to 2005, there was no change in these parameters.

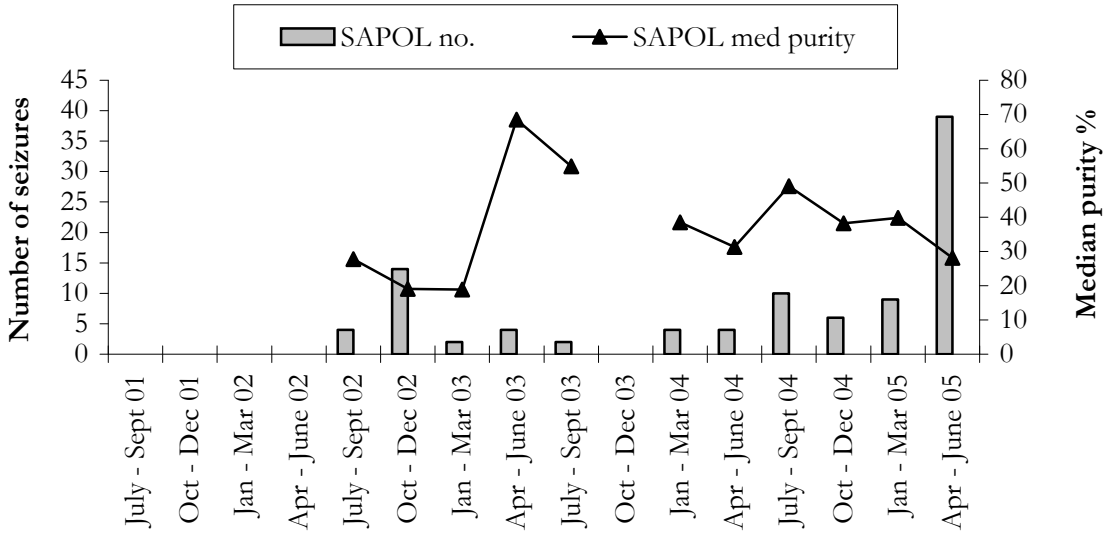
Three KE commented on the purity of cocaine, and stated that quality of cocaine had increased recently.

Table 6.4: Purity of cocaine and change in purity over the last six months, 2005 & 2006

	2006 (n=8)	2005 (n=17)
Current purity (%)		
Low	**13**	6
Medium	**38**	53
High	**50**	41
Fluctuates	**0**	0
Change purity in last 6 months (%)	**(n=10)**	(n=23)
Increasing	**10**	0
Stable	**30**	24
Decreasing	**0**	0
Fluctuating	**20**	29
Don't know	**40**	47

Source: EDRS REU interviews

Figure 6.2: Number of cocaine seizures analysed and median cocaine purity in SA 2001/02 - 2004/05



Source: Australian Crime Commission (2003, 2004, 2005)

The Australian Crime Commission (ACC) data were unavailable for 2005/06 at the time of publication. As such data provided by the ACC relates to the purity data on cocaine seized in SA during the last financial year 2004/2005 (Australian Crime Commission, 2005). Figure 6.2 shows the number of cocaine seizures received and analysed by the state forensic laboratory (within the quarter depicted) and the median purity per quarter of those seizures, from 2001/02 to 2004/05. There were no seizures by the AFP and analysed for the time period depicted. There was an increase in the number of SAPOL seizures analysed in 2004/05 compared to previous years. The total number of SAPOL cocaine seizures analysed for July 2004 to June 2005 was 64 (compared to 10 in 2003/04) and the median purity was 30.7% (compared to 38.5% in 2003/04). The lack of comparable data

from previous years makes meaningful analysis difficult, but it seems that purity has been stable and the number of seizures had increased in the last year.

6.4 Availability

Table 6.5 summarises the current availability of cocaine, and the recent changes in availability, as perceived by the REU in 2006, with 2005 data for comparison. A larger proportion of REU (70%) who were able to comment reported that cocaine was 'difficult' to obtain in 2006 compared to 2005 (29%). However, compared to 2005 (19%) no REU reported that cocaine was 'very difficult' to obtain in 2006. A larger majority of the REU (90%) reported that availability had been stable in the previous six months in comparison to 2005 (52%).

Table 6.5: Availability of cocaine and change in availability over the last six months, 2005 & 2006

	2006 (n=10)	2005 (n=21)
Current availability (%)		
Very easy	**10**	14
Easy	**20**	38
Difficult	**70**	29
Very difficult	**0**	19
Change in availability in last 6 months (%)	**(n=10)**	(n=23)
More difficult	**0**	5
Stable	**90**	52
Easier	**10**	14
Fluctuates	**0**	10
Don't know	**0**	19

Source: EDRS REU interviews

The REU able to provide information reported that they had most commonly bought their cocaine from friends or acquaintances. The most common venues at which cocaine was reportedly obtained were at friends' homes (see Table 6.6). It is also noteworthy that 20% of those cocaine users who provided information reported they had used cocaine, but not scored it (i.e. not purchased cocaine themselves) in the last six months.

Six KE commented on the availability of cocaine, with five KE commenting that the availability had increased, and one KE commenting that it had decreased.

Table 6.6: Usual person and source venue where REU purchased cocaine, 2006

	% of REU (n=10)
Used, not scored	**20**
Who have you bought cocaine from in the last 6 months?	
Friends	40
Known dealers	0
Workmates	0
Acquaintances	20
Strangers/unknown	10
Other	0
What venues do you normally score cocaine at?	
Own home	0
Dealer's home	0
Friend's home	40
Raves/doofs/dance parties	10
Nightclubs	20
Pubs	10
Agreed public location	10
Work	0
Street	10
Private party	10
Day Club	10

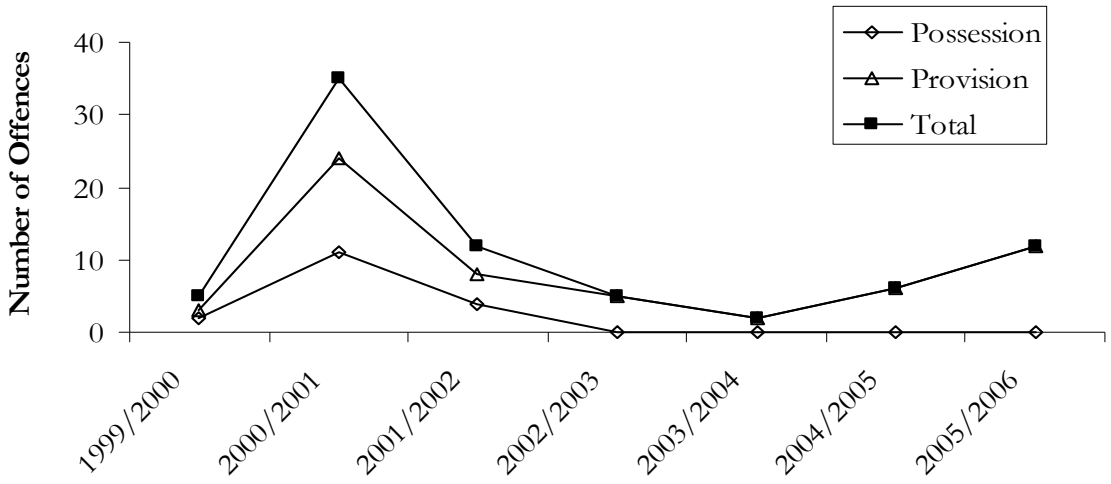
Source: EDRS REU interviews
Note: REU were allowed to nominate more than one response

6.5 Cocaine-related harms

6.5.1 Law enforcement

Figure 6.3 presents the number of cocaine possession/use and provision (incorporating import/export drugs, sell/trade drugs, produce/manufacture drugs categories) offences reported or becoming known to police from 1999/00 to 2005/06 (SAPOL Annual Reports, 2000/2001, 2001/2002, 2002/2003, 2003/2004, 2004/2005, 2005/2006). As can be seen in Figure 6.3, the number of cocaine possession offences remained at zero, and the number of provision offences for cocaine remained low (at 12) in 2005/06. Cocaine possession and provision offences continued to make up less than one percent of the total number of illicit drug possession and provision offences in 2004/05 (0.4%), as they have in all years depicted, despite a 'spike' in 2000/01 (when cocaine-related offences contributed 0.9% of the total illicit drug-related offences for that year).

Figure 6.3: Number of cocaine-related offences reported by SAPOL in South Australia, 1999/2001 - 2005/06



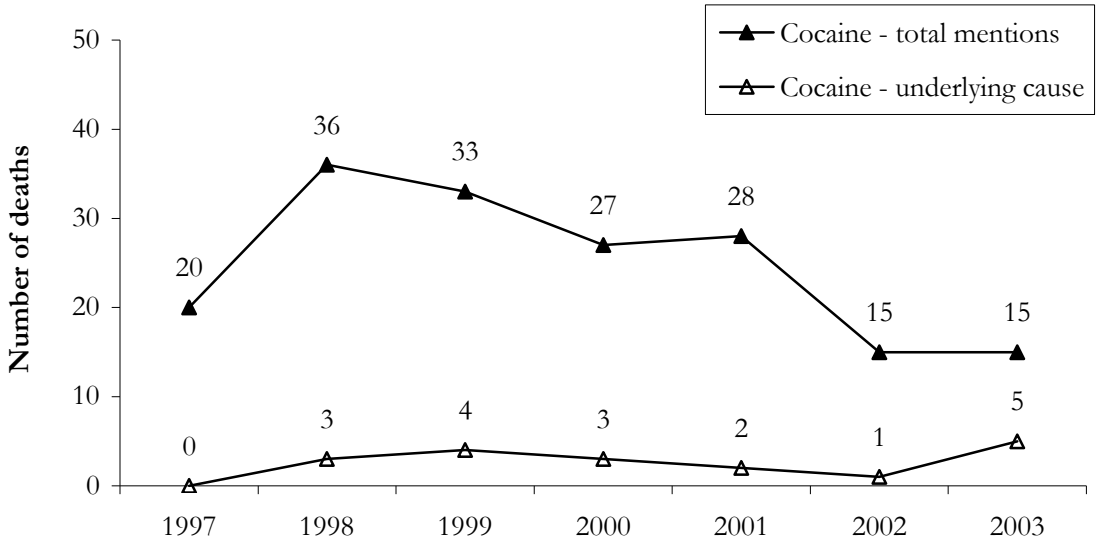
Source: South Australian Police Annual Reports (2000/2001, 2001/2002, 2002/2003, 2003/2004, 2004/2005, 2005/2006)

6.5.2 Health

In the 2004 SA EDRS report, the investigation of Australian Bureau of Statistics data in relation to the number of accidental drug-induced deaths in which methamphetamine and cocaine were mentioned, undertaken by Degenhardt, Roxburgh and Black (2004), was presented. This included deaths where cocaine was determined to be either the underlying cause – the 'primary' factor responsible for the person's death – as well as where cocaine was noted but another drug was thought to be primarily responsible for the death (mentions). The 'underlying cause' data are a subset of the 'total mentions' data. Up-to-date data regarding cocaine-related deaths were unavailable at the time of preparing the current EDRS report, but national data for 1997 to 2003 (as presented previously), are shown in Figure 6.4.

The total number of deaths Australia-wide in which cocaine was mentioned was stable from 2002 to 2003. All of the fifteen drug-induced deaths that mentioned cocaine in 2003 occurred in New South Wales. Five deaths were recorded as having cocaine as the underlying cause of death in 2003, the most recorded since 1997.

Figure 6.4: Number of accidental drug-induced deaths mentioning cocaine among those aged 15-54 years in Australia, 1997 - 2003



Source: Australian Bureau of Statistics morbidity database

Treatment services – ADIS

Telephone calls to the SA Alcohol and Drug Information Service (ADIS) regarding cocaine accounted for only 0.32% (n=43) of the total coded telephone contacts (drug-related) in the 2005/06 financial year. Numbers of calls to SA ADIS concerning cocaine have been consistently low across the past few years; specifically, 0.32 (n=41) of coded drug-related calls in the 2004/05 financial year, 0.20% (n=27) in 2003/04, 0.25% (n=35) in 2002/03, and 0.4% (n=50) in 2001/02. Figure 15.1 depicts the number of cocaine-related calls per quarter for the last three financial years compared to calls related to other drug types.

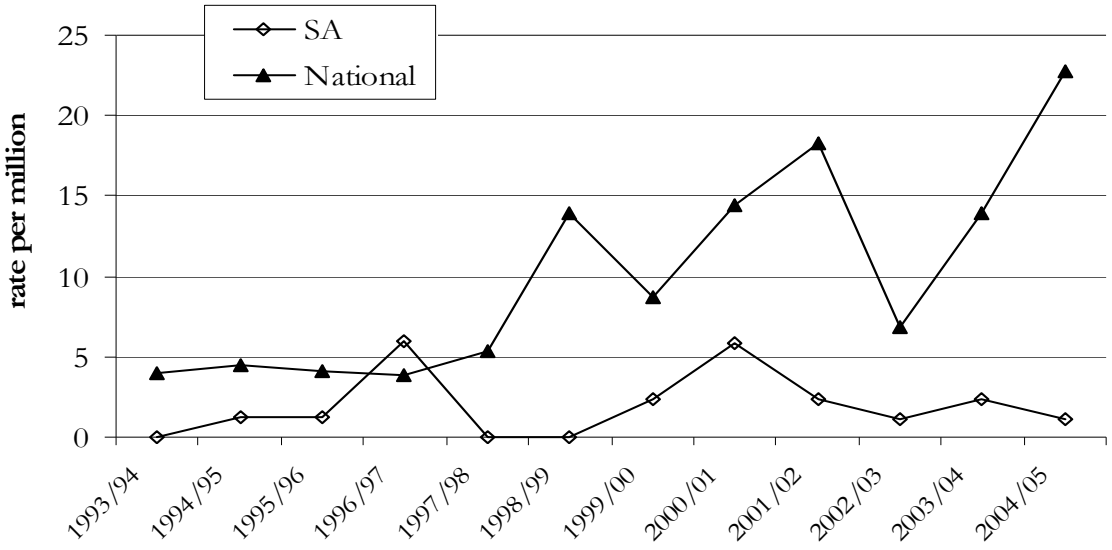
Treatment services – DASSA

The proportion of clients to all treatment services of DASSA, by primary drug of concern, is presented in Table 15.3 and shows that the proportion of clients nominating cocaine as their primary drug of concern has remained stable and low across all years reported. In 2005/06, only 0.4% of clients to all DASSA treatment services nominated cocaine as their primary drug of concern.

Cocaine-related hospital admissions

An analysis of data, provided by the Australian Institute of Health and Welfare from the National Hospital Morbidity Dataset, for the period 1993/1994 to 2004/05 (financial years) was undertaken by NDARC (please see Section 15.2.4 for a more detailed explanation of method). Figure 6.5 shows that the rates of admissions to hospital in South Australia and nationally have fluctuated over the years, but that the national rate has been consistently higher than the SA rate since 1997/98. In SA only very small numbers of admissions to hospital with a cocaine-related primary diagnosis were recorded over the time period depicted, with only one admission in 2004/05.

Figure 6.5: Rate of cocaine-related admissions* (primary diagnosis) to hospital in South Australia and nationally, per million people, 1993/1994 - 2004/05



Source: Australian Institute of Health and Welfare
***** For persons aged between 15 and 54 years, excluding cocaine withdrawal and psychosis admissions
Note: A 'primary diagnosis' was given when cocaine was considered chiefly responsible for the patient's episode of care in hospital

6.6 Summary of cocaine trends

- There was a decrease in the proportion of REU reporting recent use of cocaine in 2006 (31%, compared to 49% in 2005), though no change in the frequency of cocaine use, which remains low among those that had used recently.
- The most commonly reported locations of both 'usual' and 'last' use were a friend's home, and a nightclub.
- Though the number of REU able to comment on these parameters was small, reports indicated that the price of cocaine 'at last purchase' had increased slightly, and the perception was that purity was high, and availability had decreased, compared to 2005. Despite this KE commented that the availability of cocaine had increased in 2006.
- Data from the ACC show an increase in the number of cocaine seizures by SAPOL in 2004/05, while the median purity was relatively stable at 31%. Data for 2005/06 were unavailable at time of printing.
- As in previous years, KE suggested that the cocaine market in Adelaide was mostly restricted to a small subset of users.
- Cocaine-related calls to ADIS and the number of clients to DASSA treatment services with cocaine as the primary drug of concern remained low and stable.

7 KETAMINE

The median age of first use of ketamine among REU was 20 years, and just over a third (35%) reported having used ketamine in their lifetime. One REU nominated ketamine as their drug of choice in 2006 (see Table 7.1). These parameters remained largely unchanged compared to 2005, with the exception a slight decrease in lifetime use of Ketamine compared to 2005 (from 44% to 35%).

7.1 Ketamine use among REU

Table 7.1 summarises the patterns of use of ketamine by REU in 2006, with 2005 data for comparison. In 2006, 11% of REU reported having used ketamine a median of two days (range 1 - 10), in the six months prior to interview. A comparison with previous years reveals a decline in the prevalence of ketamine use (see Figure 7.1). Frequency of recent ketamine use remains low, similar to previous years.

Table 7.1: Patterns of ketamine use among the REU sample, 2005 & 2006

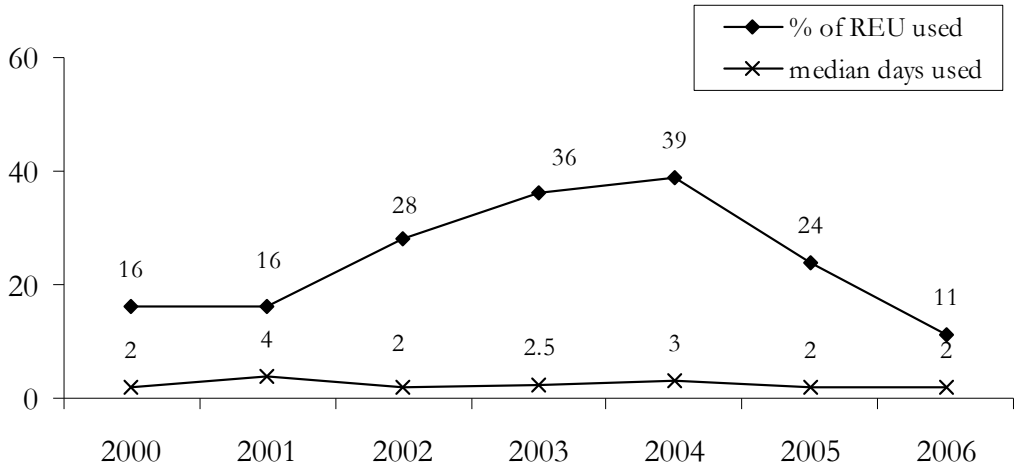
Variable	2006 (n=101)	2005 (n=101)
Age first used: median in years (range)	**20 (15-42)**	20 (14-33)
Ever used (lifetime) (%)	**35**	44
Used in last 6 months (%)	**11**	24
Ketamine as main drug of choice (%)	**1**	0
Days used in last 6 months*: median (range)	**2 (1-10)**	2 (1-20)
Average amount used in a single session**:		
Grams: median (range; n)	**0.5 (1)**	0.5 (0.25-1; 5)
Points: median (range; n)	**1 (1-3; 5)**	2 (0.5-6; 9)
Most amount used in a single session**:		
Grams: median (range; n)	**0.63 (0.25-1; 2)**	0.5 (0.25-1; 7)
Points: median (range; n)	**1.5 (0.5-2; 4)**	2.5 (0. 5-6; 7)
Ketamine included in 'binge' episode (%)	**1**	4

Source: EDRS REU interviews
***** Of those who reported use in the last six months
****** A session was defined as a period of continuous drug use without sleep, in the last six months

In 2006, REU who had used ketamine reported having used in terms of grams or points, indicating use of a powdered form. In 2006, the median 'average' amount used in a single session was reported as either one point or half a gram, slightly lower for points than that reported in 2005. The median 'most' amount of points reported as used in a single session was reported as either 1.5 points or just over half a gram, slightly lower than that reported in 2005 for points.

Most ketamine users reported recent use of ketamine by snorting (73%; n=11), and 18% (n=2) reported having used by swallowing, in the last six months. One REU reported use by injecting, but no REU reported use by smoking, during this period. One REU reported having recently binged on ketamine (1%).

Figure 7.1: Ketamine – Trends in recent use* and median days used#, 2000 - 2006



Source: EDRS REU interviews
***** Use in the previous six months
# By those reporting use in the previous six months

Only two REU provided information about where they 'usually' used and 'last' used ketamine. One KE commented that ketamine was "*possibly not amenable to clubbing*" with another commenting that that "*only club heads*" use it.

Fourteen KE provided information about ketamine use by REU, with comments varying. The majority (n=6), believed that ketamine was not generally popular among this group, with use being limited to experimental use, or for special occasions (once or twice), accidental (present in pills bought as ecstasy), or limited to a subset of '*hard-core*' users who preferred to use ketamine. Five KE reported that use had increased in the last year, while two KE reported that use had been 'scaled back' recently. This information is supportive of what REU report with regard to the venue ketamine was used at.

7.2 Price

All price, purity and availability data for ketamine were based on a very small sample of REU and readers are cautioned that the reliability of this data is therefore limited and trend analysis restricted.

Only three REU were able to provide information on the price of ketamine in 2006. The median estimated 'current' price of a gram of ketamine was $300 (n=3), and three REU reported purchasing a gram for $300 within the last six months. This is an increase in the estimated 'current' and 'last' purchase price of ketamine since 2005 ($200, n=8). A variety of other quantities were reported as 'last' purchases as follows: $15/tablet (n=1), and $20/point (n=1). The four REU able to comment on recent changes in price reported that it had been stable in the last six months.

7.3 Purity

Only three REU were able to provide information on the purity of ketamine in 2006. Of these, one reported that ketamine purity was high and two that purity was medium. One REU also reported that purity of ketamine had decreased recently, with another reporting

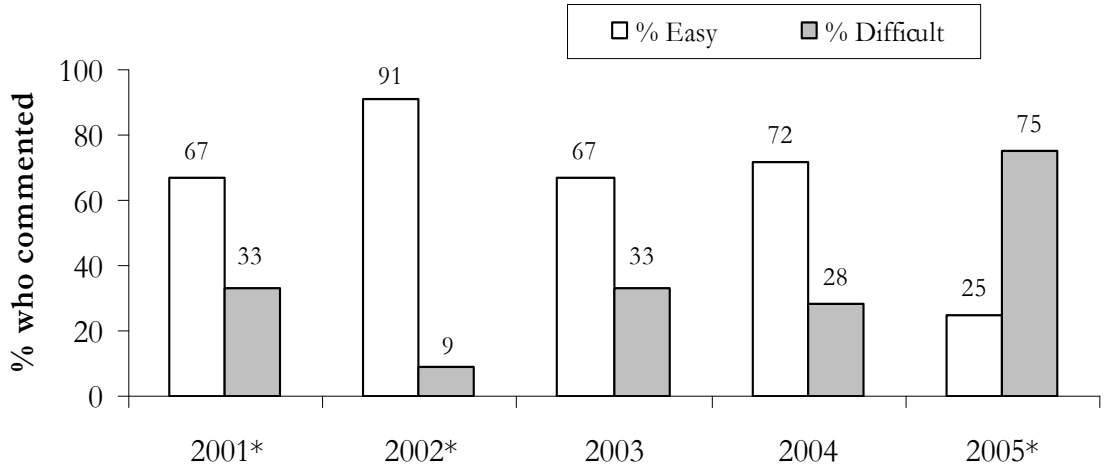
purity as recently increasing. The remaining two were unable to comment on recent changes. No comparisons with 2005 were made due to the limited number of REU providing comment.

7.4 Availability

Only four REU were able to provide information on the availability of ketamine in 2006. Of these, two reported that ketamine was 'difficult' and two reported that it was 'easy' to obtain. Two REU reported that availability had been more difficult, one that it was stable, and one that availability was fluctuating. No comparisons with 2005 were made due to the limited number of REU providing comment.

The reliability of trend data concerning the availability of ketamine is limited due to the small numbers of REU able to provide information in several of the years surveyed (see Figure 7.2). Figures from 2006 have not been added, because of the small sample size (n=4).

Figure 7.2: Trend in availability of ketamine, 2001 - 2005



Source: EDRS REU interviews
***** Sample sizes were small; n=9 in 2001, n=11 in 2002, n=8 in 2005. Data for 2000 (n=3), and 2006 (n=4) are therefore not reported
Note: 'Easy' are the collapsed categories 'very easy' and 'easy' (for 2004) and 'moderately easy' for 2000 to 2003, where 'difficult' is the collapsed categories 'difficult' and 'very difficult' for all years

In 2006, there was an increase in the proportion of REU reporting increased difficulty in obtaining ketamine, though this is based on a very small number of REU providing information. This is compared to previous years, when the availability has been considered generally easy. From 2000 to 2004, there was an increase in the number of REU able to answer questions regarding availability and it may be surmised that ketamine became more available to this group of users during that time. Given the marked decrease in the number of REU able to provide information regarding availability of ketamine in 2005 and then in 2006, it may also be surmised that availability among REU has decreased, but it is unclear whether this reflects a real change or is an artefact of sampling.

The REU able to provide information reported that they had bought ketamine from friends (n=1), acquaintances (n=1) or unknown dealers (n=1), at their friend's home (n=2) or at a dealer's home (n=1).

7.5 Summary of ketamine trends

- Eleven percent of REU reported recent use of ketamine in 2006, and frequency of use remained low. The prevalence of use of ketamine by REU seems to have decreased dramatically, following a steady increase in use from 2001 to 2004.
- The most commonly reported locations of both 'usual' and 'last' use of ketamine were a friend's home.
- Though the number of REU able to comment on these parameters was very small, reports indicated that the current estimated price of ketamine had increased to $300/gram (from $200 in 2005), and it was considered to be of good quality, though difficult to obtain.
- KE comments suggest use of ketamine is either 'accidental' (in ecstasy pills) or restricted to a subset of users, and supports REU reports of use at private venues.

8 GHB

The median age of first use of GHB by REU was 19 years (15-38 years) and around a quarter (26%) reported having used GHB in their lifetime. Two REU nominated GHB as their drug of choice in 2006 (see Table 8.1). These parameters indicate a decrease in the median age of first use in 2006 compared to 2005 (median age: 21 years).

8.1 GHB use among REU

Table 8.1 summarises the patterns of use of GHB by REU in 2006, with 2005 data for comparison. In 2006, seven percent of REU reported having used GHB a median of two days (range 2-48), in the six months prior to interview. This indicates a decrease in the prevalence of use of GHB, in 2006, following an increase in use in 2005 (at 18%). The frequency of GHB use remained low in 2006 (see Figure 8.1).

The 'average' amount of GHB used in a single session was generally reported in millilitres (ml), with a median amount of four ml reported as used on 'average'. The 'most' amount of GHB used in a single session was the same as in 2005 with a median of five ml. This indicates a slight increase in the 'average' amount used from three mls in 2005, but the 'most' amount was unchanged compared to 2005.

All GHB users reported recent use by swallowing in the last six months. Three percent of REU reported having recently binged on GHB.

Table 8.1: Patterns of GHB use among the REU sample

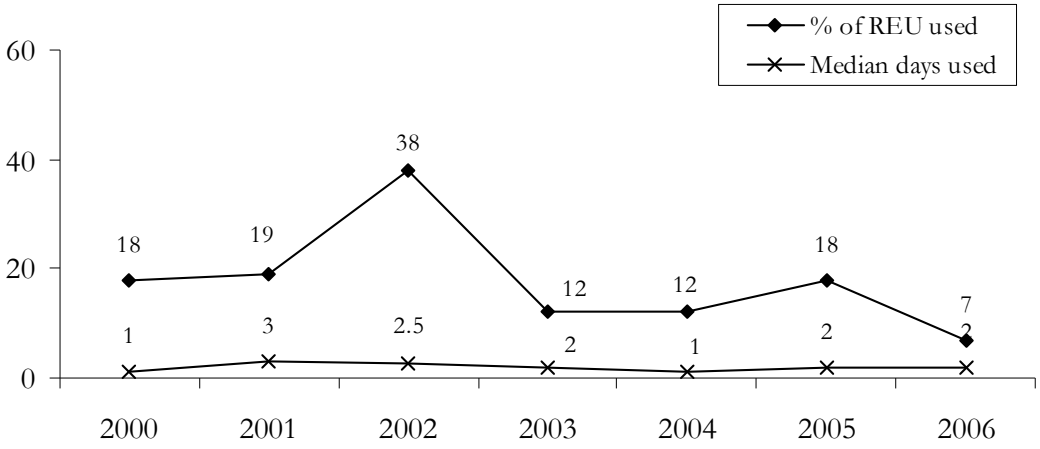
Variable	2006 (n=101)	2005 (n=100)
Age first used: median in years (range)	**19 (15-38)**	21 (15-34)
Ever used (lifetime) (%)	**26**	32
Used in last 6 months (%)	**7**	18
GHB as main drug of choice (%)	**2**	0
Days used in last 6 months#: median (range)	**2 (2-48)**	2 (1-24)
Average amount used in a single session*: ml: median (range; n)	**4 (1-30; 7)**	3 (2-10; 15)
Most amount used in a single session*: ml: median (range; n)	**5 (1-60; 7)**	5 (2-20; 15)
GHB included in 'binge' episode (%)	**3**	4

Source: EDRS REU interviews

Of those who reported use in the last 6 months

* A session was defined as a period of continuous drug use without sleep, in the last six months

Figure 8.1: GHB – Trends in recent use* and median days used#, 2000 - 2006



Source: EDRS REU interviews
***** Use in the previous six months
# By those reporting use in the previous six months

Two drugs closely related to GHB, 1,4-butanediol (1,4B) and gamma-butyrolactone (GBL) were also included in the list of illicit substances asked about in the EDRS in 2005 and 2006. Both these drugs are metabolised to GHB in the body (Zvosec et al., 2001) and there are concerns that a new market for these substances may appear. In the current sample, two REU reported having knowingly used GBL in their lifetime, and had not used it recently. Three REU reported ever having used 1,4B, and of these one had used recently. In 2005, only one REU reported having used GBL in their lifetime and no REU reported ever having used 1,4B either in their lifetime or recently.

In 2006, only six users of GHB provided information on the location that they 'usually' and 'last' used GHB in the six months prior to interview. The locations of 'usual' use reported were own home (n=1), a friend's home (n=3), nightclub (n=3), private party (n=2), pub (n=1), day club (n=1), car as a passenger or driver (n=1), at a live music event (n=1), an acquaintances house (n=1) or rave/doofs/dance party (n=1). The locations of 'last' use reported were a friend's home (n=3).

Thirteen KE were able to supply information about use of GHB among REU and the majority (n=6) commented that use was limited. Reports were that GHB was not commonly used, used by only a few, used only once or twice, used by more females, or is part of a niche market. Three KE reported that GHB use had increased in the past year. One KE reported that GHB seems to have re-emerged and that overdose rates "*had gone through the roof because users had no idea what they were using*". However, this information is not supported with a decrease in the number of GHB-related attendances at a central Adelaide hospital emergency department (from 48 in 2004/05 - 38 in 2005/06 (see Chapter 15).

8.2 Price

All price, purity and availability data for GHB were based on a very small sample of REU and readers are cautioned that the reliability of these data is therefore limited and trend analysis restricted.

The median estimated 'current' price of a gram of GHB was $3.50/ml, the same as the median price at 'last' purchase in 2006. The reported prices of GHB in 2006 were similar, although slightly lower to that reported for 2005 when REU paid $4 per ml for 'estimated' and 'last' purchase price. The majority of REU able to comment indicated the price of GHB was increasing (n=3) and one reported that the price was fluctuating. A further two REU reported that they didn't know whether the price had changed recently (suggesting a lack of familiarity with the GHB market).

Table 8.2: Price of GHB and change in price over last six months, 2005 & 2006

	2006	2005
Median price per ml (range; n)		
Current price	**$3.50 ($3-10; 5)**	$4.00 ($1-8; 11)
Price at last purchase#	**$3.50 ($3-3.50; 3)**	$4.00 ($1-5; 5)
Price change in last 6 months (%)	**(n=6)**	(n=14)
Increasing	**50**	7
Stable	**0**	29
Decreasing	**0**	14
Fluctuating	**17**	14
Don't know	**33**	36

Source: EDRS REU interviews
Asked for the first time in 2004

8.3 Purity

Only five REU were able to provide information on the purity of GHB in 2006, and just under half of the REU able to answer reported purity to be high (n=2). One perceived the purity of GHB as medium, two REU perceived purity as fluctuating, and one REU did not know about current purity. The majority (n=3) perceived that GHB purity was fluctuating, two reported it was increasing, and one was unable to comment.

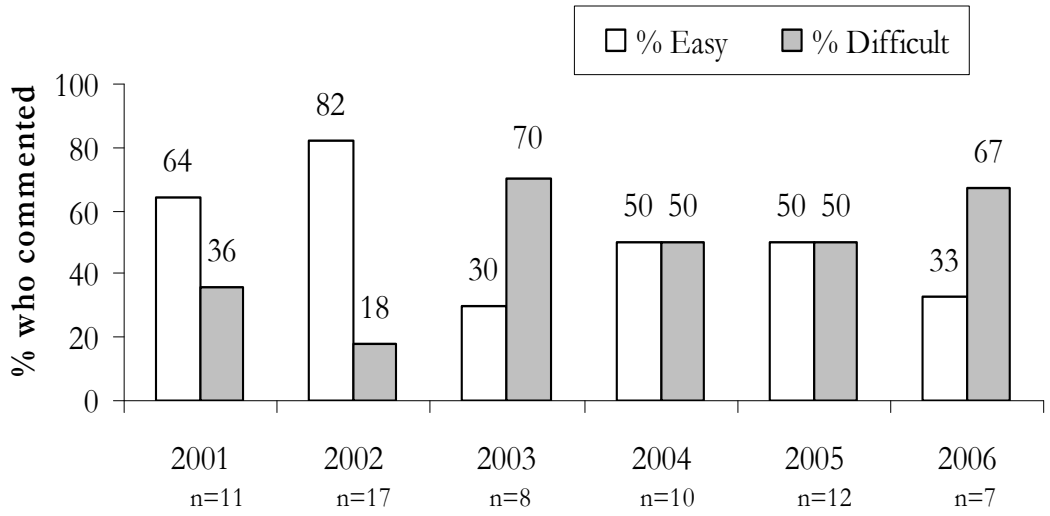
Forensic KE report that recent seizures of 'GHB' in Adelaide were primarily 1,4-Butanediol (1,4-B), and that there is a bit around and it is making a comeback.

8.4 Availability

Six REU were able to provide information on the availability of GHB in 2006, with two-thirds (n=4) reporting it was difficult to obtain, and two of whom reported that it was 'easy (n=2) to obtain currently. When asked about recent change in availability of GHB, the majority indicated that it had been stable (n=3), more difficult (n=2), or easier (n=1), in the last six months.

Although the number of REU able to provide information on the availability of GHB in Adelaide has been small over the years, Figure 8.2 reveals that perceptions of GHB availability have changed in 2006 with more REU reporting that it was difficult to obtain. In the two years prior to this REU reports had been both stable and equivocal (with equal numbers reporting it to be 'difficult' or 'easy' to obtain) and that it has been perceived as more difficult to obtain in the last three years (2003 - 2005) compared to the first two years depicted (2001 and 2002).

Figure 8.2: Trend in availability of GHB, 2001 - 2006



Source: EDRS REU interviews
Note: Data for 2000 has n=5, and are therefore not reported; 'easy' is the collapsed categories 'very easy' and 'easy' (for 2004) and 'moderately easy' for 2000 to 2003, where 'difficult' is the collapsed categories 'difficult' and 'very difficult' for all years

In 2006, only six recent users of GHB provided information regarding from whom, and where, they had usually bought GHB in the six months prior to interview. REU reported purchasing GHB from a friend (n=3) or known dealer (n=1), and most commonly scored at a friend's home (n=2), a private party (n=1), or an agreed public location (n=2).

Reports from forensic KE indicate that there has been some seizures of GHB in last six months, indicating local manufacture, and that there is a bit around with GHB making a comeback.

8.5 Summary of GHB trends

- Recent use of GHB decreased in 2006 from 18% in 2005 to 7% in 2006.
- Around a quarter of REU reported lifetime use of GHB, a small decrease compared to the last two years. The frequency of recent use was low, consistent with previous years.
- Price, purity and availability data for GHB in 2006 were based on a very small sample of REU and are therefore of limited value. Data suggest that the price of GHB had remained stable and that it remained more difficult to obtain GHB in general compared to earlier years (2001 and 2002).
- KE information suggested that GHB use was not common by REU generally, but evidence of harm associated with its use was evident in emergency department attendances.
- Forensic KE indicate that there has been some seizures of GHB in last six months, indicating local manufacture, and that there is a bit around with GHB making a comeback.

9 LSD

The median age of first use of LSD by REU was 17 years (younger than for ecstasy), 71% of REU reported having used LSD in their lifetime, and two percent nominated LSD as their drug of choice in 2006 (see Table 9.1). These parameters remained largely unchanged compared to 2005.

9.1 LSD use among REU

Table 9.1 summarises the patterns of use of LSD by REU in 2006, with 2005 data for comparison. In 2006, 34% of REU reported having used LSD a median of three days (range 1-40), in the six months prior to interview. A comparison with previous years reveals that the proportion of REU reporting recent use of LSD has decreased compared to 2005, returning to prevalence levels seen in 2003 and 2004. There has been little change in the frequency of use, with this parameter remaining consistently low across the years (see Figure 9.1).

The 'average' and 'most' amounts of LSD used in a single session were generally reported as tabs/trips, with a median amount of one tab/trip used on 'average' and at 'most' (see Table 9.1). Compared to 2005, both the 'average' and 'most' amounts used remained stable.

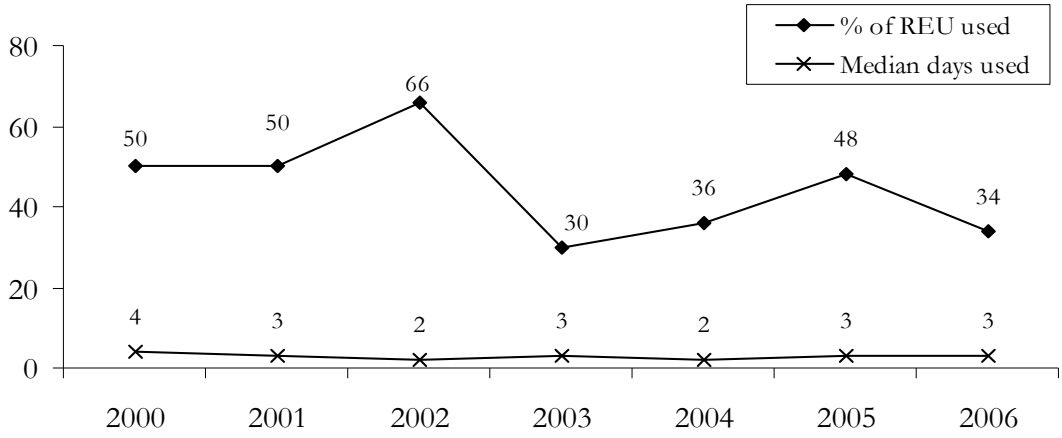
All LSD users reported recent use of LSD by swallowing, with one REU also reporting use by snorting, in the last six months. Twelve percent of REU reported having recently binged on LSD.

Table 9.1: Patterns of LSD use among the REU sample, 2005 & 2006

Variable	2006 (n=101)	2005 (n=100)
Age first used: median in years (range)	**17 (11-26)**	17 (13-40)
Ever used (lifetime) (%)	**71**	82
Used in last 6 months (%)	**34**	48
LSD as main drug of choice (%)	**2**	6
Days used in last 6 months*: median (range)	**3 (1-40)**	3 (1-24)
Average amount used in a single session**: Tabs: median (range; n)	**1 (0.5-4; 34)**	1 (0.5-4; 45)
Most amount used in a single session*: Tabs: median (range; n)	**1 (0.5-6; 34)**	1 (0.5-9; 45)
LSD included in 'binge' episode (%)	**12**	12

Source: EDRS REU interviews
***** Of those who reported use in the last six months
****** A session was defined as a period of continuous drug use without sleep, in the last six months

Figure 9.1: LSD – Trends in recent use* and median days used#, 2000 - 2006



Source: EDRS REU interviews
* Use in the previous six months
# By those reporting use in the previous six months

Information about where REU 'usually' used and 'last' used LSD is presented in Table 9.2. Those providing information reported use of LSD across a wide range of locations. The most commonly reported location of 'usual' use was at a friend's home, their own home, an outdoor location, raves/doofs/dance parties, private parties and in a public place such as a street or a park. The most commonly reported locations of 'last' use of LSD were a friend's home, their own home, or an outdoor location.

Table 9.2: Venue where LSD was used by REU in the last six months, 2006

	% Of REU (n=32)	
	Where have you usually used LSD?	Where did you last use LSD?
Own home	31	19
Dealer's home	6	0
Friend's home	44	19
Raves/doofs/dance parties	22	6
Nightclubs	9	3
Pubs	19	0
Private party	19	0
Restaurant/café	3	0
Public place (street/park)	22	9
Car or other vehicle (passenger)	16	0
Car or other vehicle (driver)	13	0
Outdoors	34	19
Live music event	13	0
Work	0	0
Educational institution	0	0
Acquaintance's house	13	0
Day Club	3	0
Other	0	0

Source: EDRS REU interviews
Note: REU were allowed to nominate more than one response

Of the ten KE able to comment on LSD use among REU, most agreed that use was limited, with few people using and only very occasionally, and use of LSD not strongly associated with this group, whereas one KE commented that LSD use "*goes hand in hand with ecstasy use*". Two KE commented that younger users were more likely to use LSD. Three KE commented that they had noticed, "*that trips are back again*".

9.2 Price

Table 9.3 presents a summary of information regarding the price of LSD and the recent changes in price as provided by REU in 2006, with 2005 data for comparison. The median estimated 'current' price of a tab of LSD was $10 in 2006, the same as the median price at 'last' purchase. The reported prices of LSD in 2006 were the same as those reported in 2005. The majority of those REU able to comment reported that the price of LSD had been stable recently.

Table 9.3: Current price of LSD and change of price over the last six months, 2005 & 2006

	2006	2005
Median price per tab (range; n)		
Current price	**$10 ($5 - $15; 32)**	$10 ($5 - $20; 37)
Price at last purchase	**$10 ($3 - $15; 23)**	$10 ($8 - $15; 30)
Price change in last 6 months (%)	**(n=32)**	*(n=44)*
Increasing	**9**	*9*
Stable	**41**	*64*
Decreasing	**9**	*2*
Fluctuating	**16**	*5*
Don't know	**25**	*21*

Source: EDRS REU interviews

9.3 Purity

Table 9.4 summarises the current purity of LSD, and the changes in purity in the last six months, as perceived by the REU in 2006, with 2005 data for comparison. The majority of REU able to comment on the purity of LSD perceived that current purity was high (52%), a decrease compared to 2005 (from 64% in 2005). With regard to recent changes in purity, the largest proportions reported purity as stable (28%) or fluctuating (22%), in the six months prior to interview.

One forensic KE commented that the purity of cocaine was around 20-30%.

Table 9.4: Purity of LSD and change in purity over the last six months, 2005 & 2006

	2006 (n=29)	2005 (n=36)
Current purity (%)		
Low	**3**	11
Medium	**28**	19
High	**52**	64
Fluctuates	**17**	6
Change purity in last 6 months (%)	**(n=32)**	(n=44)
Increasing	**16**	36
Stable	**28**	28
Decreasing	**6**	6
Fluctuating	**22**	8
Don't know	**28**	22

Source: EDRS REU interviews

9.4 Availability

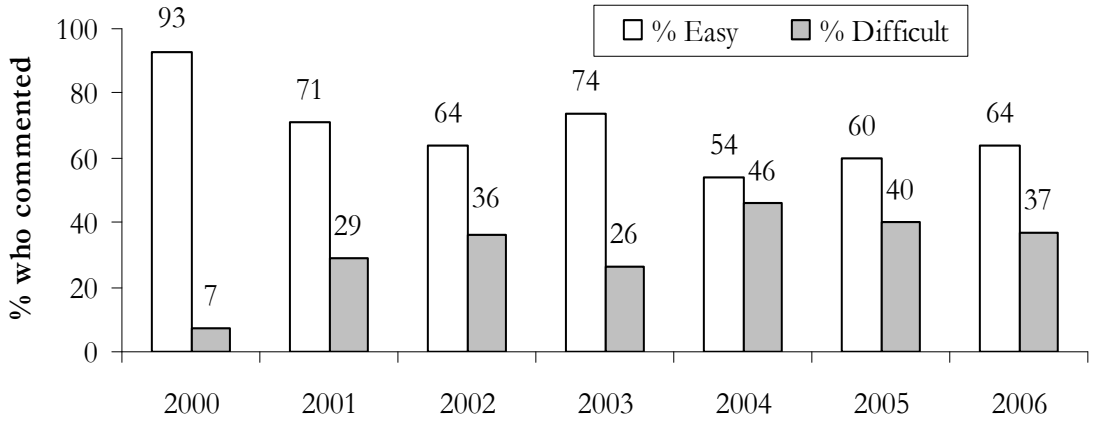
Table 9.5 summarises the current availability of LSD, and the recent changes in availability, as perceived by the REU in 2006, with 2005 data for comparison. The majority of REU able to comment reported that it was 'easy' or 'very easy' (64%) to obtain LSD and that availability had been stable, in the previous six months. Figure 9.2 shows clearly that perception regarding the availability of LSD has remained relatively unchanged since the previous year.

Table 9.5: Availability of LSD and change in availability over the last six months, 2005 & 2006

	2006 (n=30)	**2005 (n=40)**
Current availability (%)		
Very easy	**27**	18
Easy	**37**	43
Difficult	**37**	35
Very difficult	**0**	5
Change in availability in last 6 months (%)	**(n=32)**	(n=44)
More difficult	**16**	10
Stable	**50**	48
Easier	**9**	20
Fluctuates	**13**	10
Don't know	**13**	13

Source: EDRS REU interviews

Figure 9.2: Trend in availability of LSD, 2000 - 2006



Source: EDRS REU interviews

Note: Data for 'easy' contains the collapsed categories 'very easy' and 'easy' (for 2004 and 2005) and 'moderately easy' for 2000 to 2003, where 'difficult' is the collapsed categories 'difficult' and 'very difficult' for all years

The REU able to provide information reported that they had bought LSD most commonly from friends or known dealers, at their friend's home, at an agreed public location or at a private party (see Table 9.6).

Table 9.6: Usual person and source venue where REU purchased LSD, 2006

Source	% Of REU (n= 32)
Used, not scored	**6**
Who have you got LSD from in the last 6 months?	
Friends	53
Known dealers	22
Workmates	6
Acquaintances	16
Strangers/unknown	13
What venues do you normally score LSD at?	
Own home	9
Dealer's home	19
Friend's home	28
Raves/doofs/dance parties	13
Nightclubs	9
Pubs	6
Private Party	16
Agreed public location	22
Street	3
Acquaintance's home	6
Work	13

Source: EDRS REU interviews
Note: REU were allowed to nominate more than one response

9.5 Summary of LSD trends

- Approximately one-third of the REU sample reported recent use of LSD, and prevalence of recent use decreased in 2006.
- Frequency of use of LSD remains consistently low.
- The price of LSD in 2006 was unchanged and low (at $10 per tab).
- Perceived purity had increased and availability had remained stable, compared to 2005.
- KE reports suggest that LSD use was not common by REU, and used only occasionally among those that did use.

10 MDA

The median age of first use of MDA by REU was 19 years, twenty-one percent reported having used MDA in their lifetime, and no one nominated MDA as their drug of choice in 2006 (see Table 10.1). These parameters remained largely unchanged compared to 2005.

10.1 MDA use among REU

Table 10.1 summarises the patterns of use of MDA by REU in 2006, with 2005 data for comparison. In 2006, nine percent of REU reported having used MDA a median of three days (range 1 - 24), in the six months prior to interview. A comparison with previous years reveals that the proportion of REU reporting recent use of MDA has remained stable in 2006 compared to 2005, but the frequency of use increased slightly, however, this use has been consistently low across the six years of the EDRS survey (see Figure 10.1).

In 2006, the 'average' and 'most' amount of MDA used in a single session were generally reported as two caps used on 'average' and a median of two caps used at 'most'. The small number of MDA users able to provide information makes it difficult to make comparisons regarding the quantities used over time.

Table 10.1: Patterns of MDA use among the REU sample, 2005 & 2006

Variable	2006 (n=101)	2005 (n=100)
Age first used: median in years (range)	**19 (13-28)**	20 (15-32)
Ever used (lifetime) (%)	**21**	19
Used in last 6 months (%)	**9**	9
MDA as main drug of choice (%)	**0**	0
Days used in last 6 months#: median (range)	**3 (1-24)**	2 (1-6)
Average amount used in a single session*:		
Caps: median (range; n)	**2 (1-3; 5)**	2 (1-3; 2)
Tablets/pills: median (range; n)	**-**	1.25 (0.5-2; 4)
Most amount used in a single session*:		
Caps: median (range; n)	**2 (1-3; 5)**	2 (1-3; 2)
Tablets/pills: median (range; n)	**-**	1.25 (1-3.5; 4)
MDA included in 'binge' episode (%)	**4**	0

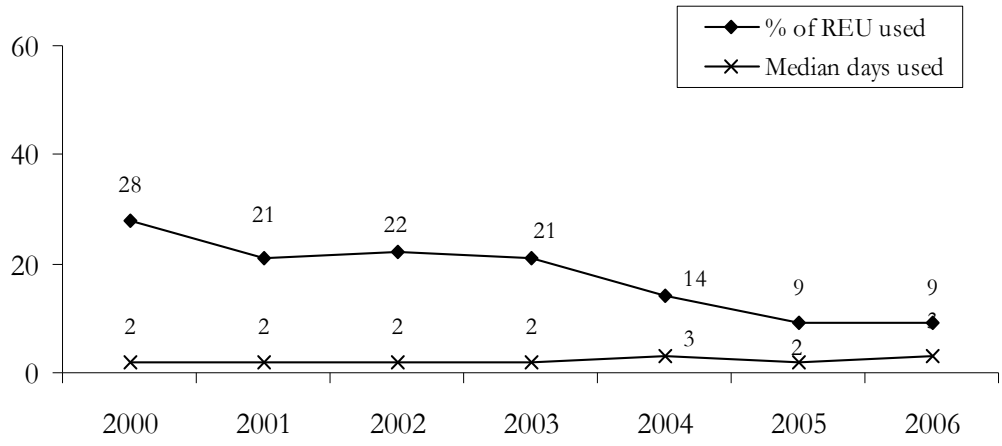
Source: EDRS REU interviews

Of those who reported use in the last six months

* A session was defined as a period of continuous drug use without sleep, in the last six months

All MDA users reported recent use by swallowing (n=9), four also reported use by snorting, and one by injecting, in the six months prior to interview. Four REU reported having recently binged on MDA.

Figure 10.1: MDA – Trends in recent use* and median days used#, 2000 - 2006



Source: EDRS REU interviews
***** Use in the previous six months
# By those reporting use in the previous six months

Several KE (n=10) were able to provide information on the use of MDA, and reported that purposeful use was limited to a few, or that it was either generally not heard of, or not perceived as different to MDMA. Four KE reported that people suspected that MDA was in pills sold as ecstasy and that they were unperturbed by that as the effect was similar enough to MDMA. Several KE (n=4) commented that many REU do not actually know what is in the pills they take. One law enforcement KE reported that a lot more MDA has been found in raids and at analysis, however, forensic KE commented that MDA had hardly been seen at all in the past 12 months.

In 2006, only five recent users of MDA provided information on the locations that they 'usually' and 'last' used MDA in the six months prior to interview. The locations of 'usual' use reported were raves/dance parties (n=4), a friend's home (n=3), nightclubs (n=3), a pub (n=3), a private party (n=3), a live music event (n=3), a dealer's home (n=1), a day club (included for first time in 2006) (n=1), public place such as street or park (n=1), car/vehicle (passenger), n=1; or driver, n=1), outdoors (n=1), an acquaintance's house (n=1), or their own home (n=1). The locations of 'last' use reported were a rave/doof/dance party (n=1), a pub (n=2) or a nightclub (n=2).

10.2 Price

All price, purity and availability data for MDA are based on a very small sample of REU and readers are cautioned that the reliability of this data is, therefore, limited and trend analysis restricted.

The median estimated 'current' price of a pill of MDA was $32.50 in 2006, the same as the median price at 'last' purchase, reported by only two REU. No other prices per quantity were reported in 2006. Three of the five REU able to comment reported that the price of MDA had been stable recently. The remaining two REU were unable to comment on recent price changes.

10.3 Purity

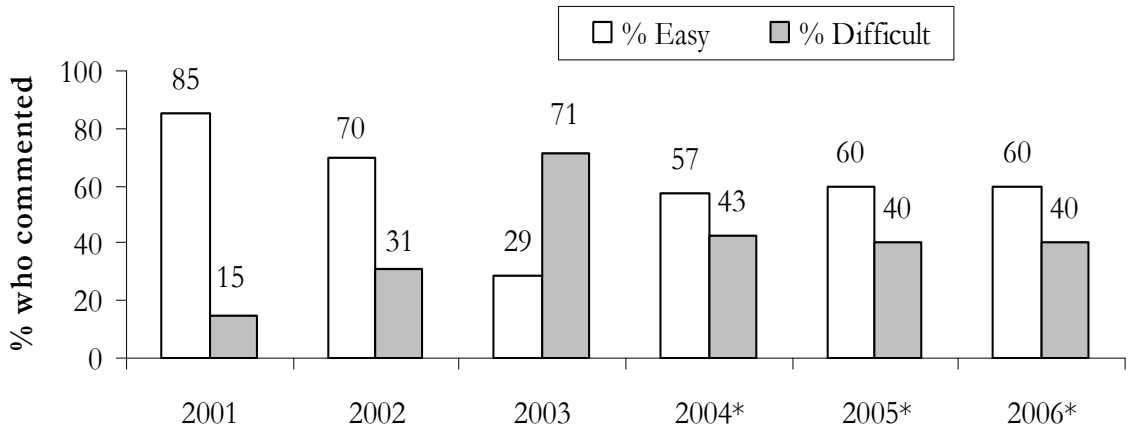
Only five REU were able to provide information on the purity of MDA in 2006, over half of whom reported perceived purity to be high (n=3), one reported it to be medium and one was unable to comment. With regard to recent changes in purity, one REU reported that purity of MDA had been stable; one reported that the purity had been increasing and one that purity had been decreasing, in the six months prior to interview. The remaining two REU were unable to comment on recent changes.

10.4 Availability

Only five REU were able to provide information on the availability of MDA in 2006, three of whom reported that it was 'very easy' or 'easy' to obtain, and two of whom reported that it was 'difficult' to obtain currently. Regarding recent change in availability of MDA, the majority of REU reported that it was stable (n=4), with one reporting that it was easier to obtain.

Although the number of REU able to provide information on the availability of MDA in Adelaide has been small over the years that the EDRS has been conducted, Figure 10.2 reveals that MDA has been perceived as easier to obtain in the last three years (2004 to 2006) compared to 2003.

Figure 10.2: Trend in availability of MDA, 2001 - 2006



Source: EDRS REU interviews
***** Data for 2004, 2005 and 2006 have n<10
Note: 'easy' is the collapsed categories 'very easy' and 'easy' (for 2004) and 'moderately easy' for 2000 to 2003, where 'difficult' is the collapsed categories 'difficult' and 'very difficult' for all years

In 2006, only five recent users of MDA provided information on from whom and where, they had usually bought MDA in the six months prior to interview. Four reported they had purchased MDA from friends, acquaintances (n=2), known dealers (n=2) or strangers (n=1). With regard to where they had scored, three REU reported that they had done so at a nightclub, an agreed public location, or a private party, two at a friend's home, a dealer's home, an agreed public location, a rave/doof/dance party, or a pub. One REU reported that they had done so at an acquaintance's home, a street location, or a day club.

10.5 Summary of MDA trends

- Nine percent of REU reported recent use of MDA in 2006. The proportion of REU reporting recent use of MDA was stable compared to previous years, but the frequency of use increased slightly, despite remaining consistently low across the six years of the EDRS survey.
- Price, purity and availability data for MDA in 2006 were based on a very small sample of REU and are therefore of limited value. Data suggest that the price and purity of MDA was stable, and that it has become easier to obtain in the last three years (2004 to 2006) compared to 2003.
- KE information suggests that MDA was not commonly used by REU, except as a (Suspected) constituent of pills sold as ecstasy.

11 CANNABIS

Readers should note that in March 2003 the law in South Australia changed, introducing a prohibition on the growing (for personal use) of any hydroponically grown cannabis plants and restricting the number of 'outdoor' grown plants allowable for 'personal use'.

To ensure more detailed information was collected on the different forms of cannabis, the cannabis section was separated, from 2003 onward, into 'hydro' (hydroponically grown) and 'bush' (grown outdoors). IDU were therefore asked to consider these two types of cannabis separately for all questions.

The following sections refer to a 'bag' as a standard measure (particular to the South Australian cannabis market). A detailed investigation of the weight/content of a bag of cannabis was undertaken in 2002 (Longo et al., 2003). Briefly, in the 2002 survey 33 IDU gave a single value of the average weight of cannabis bags sold in South Australia, with a median of two grams and a mean of 2.5 grams. A further 19 gave both a lower and upper weight range for cannabis bags. The median lower range was two grams (mean 2.1) and the median upper range was three grams (mean 2.9). It can be understood, therefore, that the amount of cannabis in a 'bag' may fluctuate, but that a 'bag' in SA generally conveys a weight of cannabis between two and three grams.

The median age at which REU first used cannabis was 15 years in 2006, the same as reported in 2005. Ninety-eight percent reported having used cannabis in their lifetime, and ten percent nominated cannabis as their drug of choice in 2006 (see Table 11.1).

11.1 Cannabis use among REU

Table 11.1 summarises the patterns of use of cannabis by REU in 2006, few comparisons with previous years are available as this is the first year cannabis use has been examined in such detail.

In 2006, the proportion of REU reporting recent cannabis use was 83% and in comparison to 2005 there has been little change in prevalence of recent cannabis use (87% in 2005). The frequency of use of cannabis by REU in 2006 was a median 70 days, a decrease compared to 2005 (85 days). However, frequency of use of cannabis has fluctuated widely across the seven years the EDRS has been conducted.

Twenty-four percent of REU reported bingeing on cannabis in 2006, a decrease compared to 2005 (from 32%). In the six months prior to interview, forty-three of REU reported typically using cannabis with ecstasy, and 53% report typically using cannabis at ecstasy comedown.

Table 11.1: Patterns of hydroponic and bush cannabis use among the REU sample, 2006

Variable	2006 (n=101)
Age first used: median in years (range)	15 (10-25)
Ever used (lifetime) (%)	98
Used in last 6 months (%)	83
Cannabis as main drug of choice (%)	10
Days used in last 6 months#: median (range)	70 (1-180)
Cannabis included in 'binge' episode (%)	24

Source: EDRS REU interviews

Of those who reported use in the last six months

* A session was defined as a period of continuous drug use without sleep, in the last six months

Ninety-nine percent of those who had used cannabis reported recent use by smoking (n=83), and thirty-six percent (n=30) reported use by swallowing.

Most KE reports regarding REU cannabis use stated use was common and ranged from casual to regular use. Nine KE commented that REU cannabis use was common, but one KE commented that such use was decreasing, and two KE commented that such use was increasing.

Table 11.2 presents information from REU on the usual source (both person and venue) from which REU had 'usually' obtained the cannabis they had recently used. In 2006, the majority of REU able to comment reported that they had 'usually' obtained cannabis from a friend (62% for hydro, 51% for bush), in the six months prior to interview. The remainder of the REU reported they had 'usually' scored cannabis from some form of dealer (37% for hydro, 28% for bush), or acquaintances (17% for hydro, 14% for bush), or workmates (10% for hydro, 4% for bush). The majority of REU able to comment reported that the venue they had 'usually' obtained cannabis from was a friend's house (hydro: 38%; bush: 33%), home delivery (hydro: 28%; bush: 19%), a dealer's home (hydro: 21%; bush: 16%), or an agreed public location (hydro: 16%; bush: 12%). Three percent (n=2) of REU reported they had produced their own hydro, with 4% (n=2) reporting they had grown their own bush cannabis.

Table 11.2: Usual person and source venue where REU purchased hydro and bush cannabis, 2006

Usual source both person and venue	Hydro (n=63)	Bush (n=56)
Person (%)		
Street dealer	5	5
Known/unknown dealer	30	23
Friend	62	51
Acquaintances	17	14
Workmates	10	4
Venue (%)		
Home delivery	28	19
Dealer's home	21	16
Friend's home	38	33
Mobile dealer	8	4
Agreed public location	16	12

Source: EDRS REU interviews

11.2 Price

The median price at 'last' purchase (by those able to comment) for a 'bag' of hydro cannabis was $25 (range: $20-$35; n=38), and was the same for a bag of bush cannabis at $25 (range: $20-$30; n=37). Thirty-five REU were able to comment on the price of an ounce of hydro cannabis at 'last' purchase and reported that an ounce of hydro was $200 (range: $160-$300), this was the same as the price paid for an ounce of bush cannabis at 'last' purchase ($200, range: $150-$250; n=29). The majority of REU who were able to comment reported that the price of hydro (73%, n=46) and bush cannabis (80%, n=45) had remained stable in the last six months.

11.3 Purity

Table 11.3 summarises the current purity of cannabis and the changes in the purity of cannabis over the last six months, according to REU reports. In 2006, the purity of both hydro and bush cannabis was reported as high or medium by more than 70% of the REU able to comment (hydro: 87%, or 50% of entire sample; bush: 71%, or 42% of entire sample). The majority of REU able to comment reported that the purity of both hydro (67%) and bush (55%) cannabis was stable in the last six months.

Table 11.3: Purity of hydro and bush cannabis and change in purity over the last six months, 2006

	Hydro (n=59)	Bush (n=52)
Current purity (%)		
High*	63	33
Medium	22	48
Low	8	12
Fluctuates	7	8
Change purity in last 6 months (%)	(n=63)	(n=56)
Increasing	5	7
Stable	67	55
Decreasing	5	5
Fluctuating	14	18
Don't know	10	14

Source: EDRS REU interviews

***** Four participants answered 'did not know' for both hydro and bush cannabis

11.4 Availability

Table 11.4 summarises the current availability of cannabis and the changes in the availability of cannabis over the last six months, according to REU reports. In 2006, the majority of REU able to comment reported both hydro and bush cannabis as easy or very easy to obtain, with 95% (59% of entire sample) for hydro and 85% (47% of entire sample) for bush. The majority of those able to comment reported that the availability of hydro (81%, or 51% of the entire sample) and bush (68%, or 38% of the entire sample) cannabis had remained stable in the last six months.

Table 11.4: Availability of hydro and bush cannabis and change in availability over the last six months, 2006

	Hydro (n=62)	Bush (n=55)
Current availability (%)		
Very easy	63	47
Easy	32	38
Difficult	5	13
Very difficult	-	2
Change in availability in last 6 months (%)	(n=63)	(n=56)
More difficult	5	13
Stable	81	68
Easier	5	9
Fluctuating	8	7
Don't know	2	4

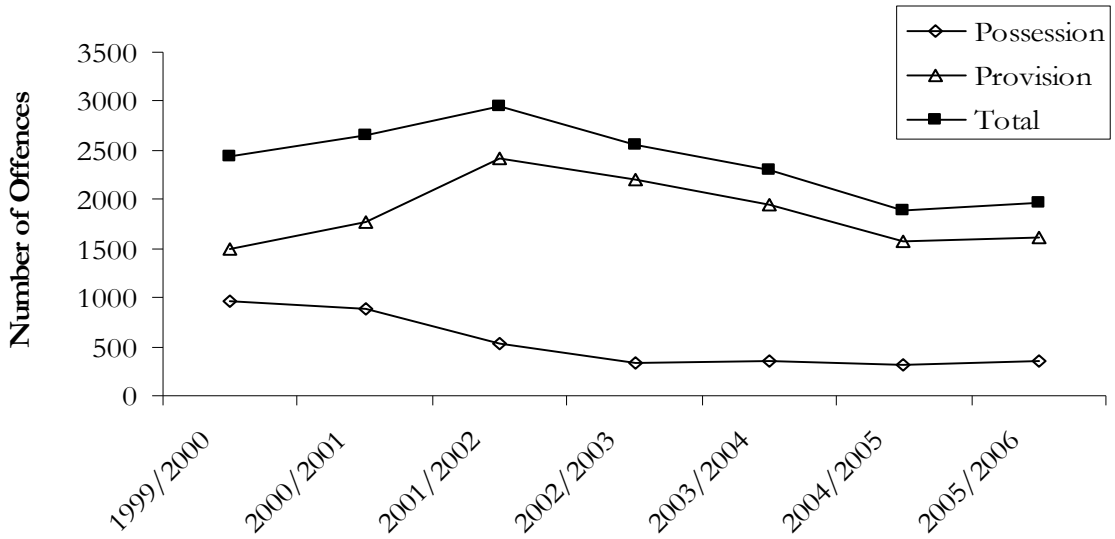
Source: EDRS REU interviews

11.5 Cannabis-related harms

11.5.1 Law enforcement

Figure 11.1 presents the number of cannabis possession/use and provision (incorporating import/export drugs, sell/trade drugs, produce/manufacture drugs categories) offences reported or becoming known to police from 1999/2000 to 2005/06 (SAPOL Annual Reports, 2000/2001, 2001/2002, 2002/2003, 2003/2004, 2004/2005, 2005/2006). As can be seen, between 2004/05 and 2005/06 the number of recorded cannabis possession offences increased (from 316 in 2005 to 351 in 2006), and there was also an increase in provision offences for cannabis (from 1,576 in 2005 to 1,612 in 2006). Cannabis possession and provision offences made up 60% of the total number of illicit drug possession and provision offences in 2005/06, compared to 68% in 2004/05.

Figure 11.1: Number of cannabis-related offences reported by SAPOL in South Australia, 1999/2000 - 2005/06



Source: South Australian Police Annual Reports (2000/2001, 2001/2002, 2002/2003, 2003/2004, 2004/2005, 2005/2006)

11.5.2 Health

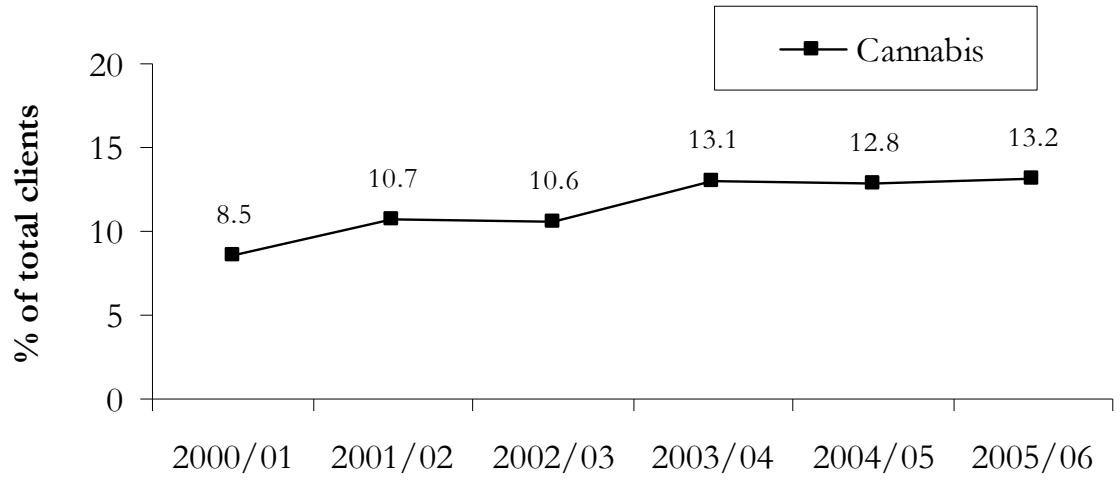
Treatment Services – ADIS

Telephone calls to the SA Alcohol and Drug Information Service (ADIS) regarding cannabis accounted for 11.65% of the 13,231 total coded telephone contacts (drug-related) in the 2005/06 financial year, similar to that in 2004/05 (12% of a total 12,639). Figure 15.1 depicts the number of cannabis-related calls per quarter for the last three financial years compared to calls related to other drug types.

Treatment Services - DASSA

The proportion of clients to all treatment services of DASSA, by primary drug of concern, is presented in Table 15.3 and shows that the proportion of clients nominating cannabis as their primary drug of concern has remained relatively stable for the last four years and was 13.2% in 2005/06 (Figure 11.2). In 2005/06, cannabis was the third most commonly nominated primary drug of concern by clients of DASSA, after alcohol (51.8%) and amphetamines (18.8%), and well above heroin (9.7%).

Figure 11.2: Percentage of total DASSA clients with cannabis as the primary drug of concern, 2000/01 - 2005/06*

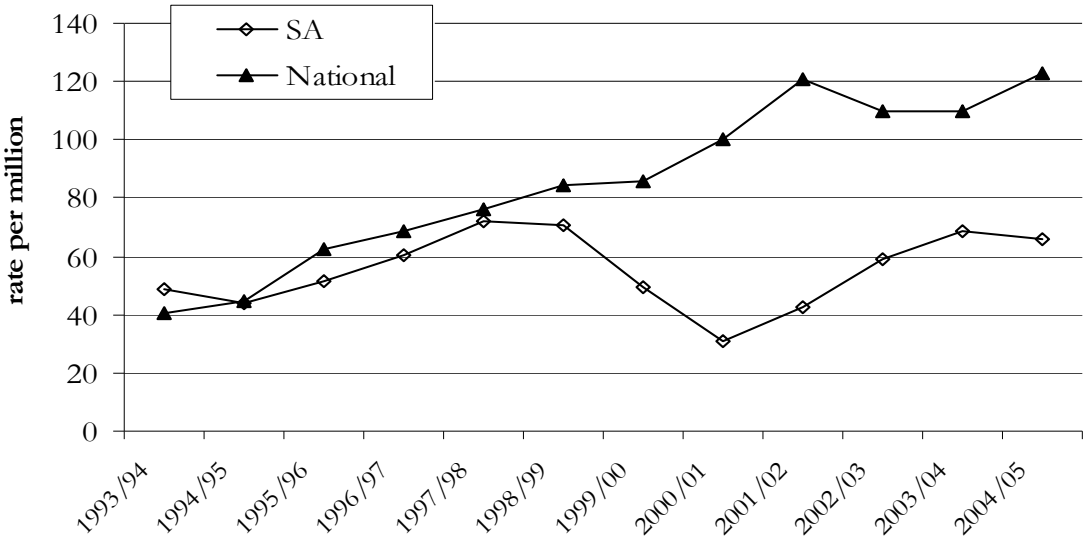


Source: Drug and Alcohol Services South Australia
***** During 2002/03 a new data collection system was employed to meet the requirements of the National Minimum Data Set for Alcohol and Other Drug Treatment Services (NMDS-AODTS)

Cannabis-related hospital admissions

An analysis of data provided by the Australian Institute of Health and Welfare from the National Hospital Morbidity Dataset, for the period 1993/1994 to 2004/05 (financial years), was undertaken by NDARC (please see Section 15.2.4 for a more detailed explanation of method). Figure 11.3 shows that the SA rate of admissions to hospital for cannabis (primary diagnosis) remained stable, however, the national rate increased in 2004/05 compared to 2003/04. The long-term trend shows that the rates of admissions to hospital in SA and nationally have fluctuated since 1997/98. The total number of admissions to SA hospitals with a primary diagnosis involving cannabis in 2004/05 was 56.

Figure 11.3: Rate of cannabis-related admissions* (primary diagnosis) to hospital in South Australia and nationally, per million people, 1993/1994 - 2004/05



Source: Australian Institute of Health and Welfare
***** For persons aged between 15 and 54 years, excluding cocaine withdrawal and psychosis admissions
Note: A 'primary diagnosis' was given when cannabis was considered chiefly responsible for the patient's episode of care in hospital

11.6 Summary of Cannabis trends

- In 2006, the proportions of REU reporting both lifetime and recent use of cannabis remained stable compared to 2005.
- In comparison to 2005, in 2006 the frequency of recent cannabis decreased (70 days in 2006 from 85 days in 2005)
- The proportion reporting binge use of cannabis decreased in 2006 from 32% in 2005 to 24% in 2006
- The number of cannabis possession (316 in 2005 to 351 in 2006) and provision offences (1,576 in 2005 to 1,612 in 2006) recorded by SAPOL increased in 2006. However, contribution of cannabis to the total number of illicit drug possession and provision offences in 2005/06 decreased (60%), compared to 68% in 2004/05.
- Telephone calls to the SA Alcohol and Drug Information Service (ADIS) regarding cannabis remained stable.
- The SA rate of admissions to hospital for cannabis (primary diagnosis) remained stable, however, the national rate increased in 2004/05 compared to 2003/04.

12 OTHER DRUGS

Table 12.1 summarises recent use and frequency of use of other drugs over the last seven years of the survey. A more detailed summary of each drug follows the table.

Table 12.1: Trends in recent use*, and frequency of use, of different substances by REU, 2000 - 2006**

Drug type (% used)	**2006 (n=101)**	**2005 (n=100)**	**2004 (n=100)**	**2003 (n=101)**	**2002 (n=68)**	**2001 (n=70)**
Alcohol						
Median days	**97**	99	96	98	90	94
(range)	**48 (1-180)**	52 (2-180)	33 (1-180)	48 (2-180)	20 (1-104)	52 (1-180)
Tobacco						
Median days	**73**	78	65	72	71	67
(range)	**180 (1-180)**	180 (1-180)	180 (3-180)	180 (2-180)	180 (2-180)	180 (1-180)
Benzo-diazepines						
Median days	**33**	26	40	30	40	27
(range)	**6 (1-84)**	9 (1-180)	4.5 (1-180)	6 (1-180)	2 (1-180)	3 (1-180)
Anti-depressants						
Median days	**16**	10	14	12	29	13
(range)	**27 (1-180)**	125 (2-180)	165 (1-180)	3.5 (1-180)	6.5 (1-180)	42 (1-180)
Amyl nitrate						
Median days	**9**	9	16	13	25	17
(range)	**1 (1-30)**	2 (1-6)	3 (1-26)	2 (1-72)	1 (1-20)	2 (1-100)
Nitrous oxide						
Median days	**33**	46	47	55	53	53
(range)	**5 (1-30)**	3 (1-72)	4 (1-72)	6 (1-90)	3.5 (1-90)	8 (1-104)
Heroin						
Median days	**1**	3	3	2	6	4
(range)	**48**	72 (1-180)	10 (3-48)	9 (6-12)	6.5 (1-10)	1 (1-10)
Other opiates						
Median days	**4**	8	10	7	7	1
(range)	**8 (1-14)**	3 (1-24)	4.5 (1-180)	24 (2-48)	6 (1-30)	1 day only

Source: EDRS REU interviews

***** Use in the six months preceding interview

****** Median days used for those REU that reported use in the six months prior to interview

12.1 Alcohol

The median age at which REU reported first using alcohol was 14 years in 2006, the same as reported in the previous three years. The proportion of REU reporting recent use of alcohol remains high in 2006, at 97%. Fluctuations in the frequency of alcohol use have continued over time with the median number of days used at 48 in 2006, compared to a median 52 days in 2005, 32.5 days in 2004, 48 days in 2003, 20 days in 2002 and 52 days in 2001.

Thirty seven percent of REU reported including alcohol in a binge session in 2006, and 67% of REU reported typically using alcohol with ecstasy, with 48% reporting typically consuming more than five standard drinks when they did so. With the exception of 48% reporting typically consuming more than five standard drinks of alcohol in a binge session, which increased from 12% in 2005, the other parameters of alcohol use remained relatively stable since the previous year.

The majority of KE able to comment reported REU alcohol use was common. Seven KE commented that REU alcohol use had increased in the previous 12 months, with many drinking alcohol with ecstasy and at comedown from ecstasy. Moreover, three KE commented that female REU alcohol use was increasing in 2006. Eight KE reported that alcohol would routinely be used with other drugs, with two reporting that levels of drinking could be high even when other drugs were being used. This supports REU reports of combined use of alcohol and ecstasy (see Section 4.1).

12.1.1 Alcohol Related Harm

In 2006, the EDRS made use of the Alcohol Use Disorders Identification Test (AUDIT; Saunders et al. 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 & Allen, 2002).

Total scores of 8 or more are recommended as indicators of hazardous and harmful alcohol use, as well as possible alcohol dependence (Babor et al. 2001). 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 to more intensive treatment (Babor et al., 2001).

Of those REU who had consumed alcohol in the previous six months (n = 98) the majority had consumed alcohol two-three times per week (46%), with 24% using alcohol four or more times, 20% using alcohol two to four times per week and 10% using monthly or less. REU were also asked how many standard drinks they would consume on a typical day when they are drinking, with the majority (29%) of REU reporting consuming five to six drinks, 20% having seven to nine drinks, and 18% reporting consuming 10 or more standard drinks on a typical drinking day. When asked how often REU have six or more standard drinks the majority of REU (50%) reported consuming six or more standard alcoholic drinks on a weekly basis, 24% on a monthly basis, and 19% less than monthly. Five percent of REU reported that they never consumed more than six standard drinks, with two percent reporting daily consumption of more than 6 standard alcoholic drinks in the last six months.

Of the 98 REU who had reported use of alcohol in the preceding six months, the median total AUDIT score for alcohol consumption was 14 (range 1 - 28; n=98). Twenty REU scored less than eight (indicating no problematic use or dependence), 40% scored from eight to 15 (indicating a need for guidance regarding hazardous drinking), 22% scored between 16 to 19 (indicating the need for counselling and continual monitoring for hazardous drinking), and 17% scoring 20 or more (indicating the need for evaluation for alcohol dependence).

12.2 Tobacco

The median reported age of first use of tobacco was similar to that for alcohol and cannabis, at 15 years.

The proportion of REU reporting recent use of tobacco decreased slightly compared to 2005, with approximately three-quarters of the sample (73%) reporting recent use in 2006 (see Table 12.1). The frequency of REU tobacco use remained at peak levels across the seven years of the survey at a median of 180 days in the previous six months (equivalent to daily use). This compares to the 2004 daily smoking prevalence rate in the South Australia population aged 14 years and over, of less than one in five (Australian Institute of Health & Welfare, 2005c). Over sixty percent of REU report typically smoking either 'with ecstasy' (66%), or ecstasy 'at comedown' (62%), in 2006.

In support of these results, most KE reported that REU use of tobacco was common, with reports ranging from 50% of REU to it being 'universal'.

12.3 Benzodiazepines

The median age of first use of benzodiazepines was 19 years in 2006, as it was in 2005. The proportion of REU reporting recent use of benzodiazepines has fluctuated over the six years of the survey, and, in 2006, 33% of REU reported recent use. The frequency of benzodiazepine use has fluctuated somewhat over the years, with a median six days use reported in 2006 (see Table 12.1). Four REU reported typically using benzodiazepines with ecstasy and twelve reported typically using benzodiazepines during ecstasy comedown in 2006, in the last six months, which indicates a slight increase in the patterns of use reported in 2005.

Use of benzodiazepines was mentioned by a limited number of KE (n=13), with a variety of comments. Seven KE reported that substantial proportions of REU use benzodiazepines, but that use was functional; for example, to sleep when *"been up too long"* or when a person doesn't want to deal with the comedown from ecstasy, and that "*only one or two*" were used, infrequently. Seven KE commented that REU use of benzodiazepines was increasing, with one law enforcement KE stating, "*drug toxicology at RAH shows plenty of these around*".

12.4 Anti-depressants

The median reported age of first use of anti-depressants was 18 years in 2006, with the age of first use varying from 10 - 45-years. Sixteen percent of REU reported recent use of anti-depressants on a median 27 days, in 2006. The prevalence of REU use of anti-depressants has been consistent across the years of the EDRS, apart from a 'spike' in 2002 (29%) (see Table 12.1). The frequency of use of anti-depressants among the REU samples has fluctuated over the years, but decreased dramatically in 2006 (median of 27 days) compared to the previous two years (from a median of 125 days in 2005, and 165 days in 2004). Whether use was medical (as prescribed) or non-medical (un-prescribed or otherwise) was not elucidated by the EDRS survey of REU.

Thirteen KE commented on REU use of anti-depressants in the previous year. Five KE mentioned that it was 'quite common' for people to be using medically prescribed anti-depressants. Five KE mentioned REU illicit use of anti-depressants, with two commenting that these were received from others. Two KE commented that the use of illicit anti-depressants was decreasing in the previous year, but that licit use was increasing in the same period. Functional use of anti-depressants by REU was also mentioned by two KE, though both commented that people may stop their use of anti-depressants (for a day or two) when they use ecstasy, to avoid any flattening of the ecstasy effect, or to avoid 'serotonin syndrome'.

12.5 Inhalants

The EDRS asked about the use of the inhalants amyl nitrate and nitrous oxide. The median age of first use of amyl nitrate was 18 years, and the median age of first use of nitrous oxide was 17 years, indicating that REU in 2006 started using inhalants at an earlier age than REU in 2005 (amyl nitrate: 20 years; nitrous oxide: 18 years).

In 2006, nine percent of REU reported recent use of amyl nitrate for a median of one day. The prevalence of recent amyl nitrate use has fluctuated slightly over the years, but frequency of use has remained relatively stable and low since 2000, and decreased slightly in 2006 (see Table 12.1). Only one REU reported having binged on amyl nitrate, and no REU reported typically using amyl nitrate either 'with' ecstasy or 'at comedown' from ecstasy, in the last six months. These patterns of use were also unchanged compared to 2005.

In 2006, 33% of REU reported recent use of nitrous oxide for a median of five days. The prevalence of nitrous oxide use decreased in 2006 (from 46% in 2005), and is the lowest level of such use since the EDRS data collection was initiated. Frequency of nitrous oxide use has remained relatively stable since 2001 (see Table 12.1). Ten percent of REU reported having binged on nitrous oxide, seven percent reported having typically used nitrous oxide 'with' ecstasy, and nine percent reported using nitrous oxide during an ecstasy 'comedown' in the last six months.

Use of inhalants was not generally mentioned by KE, though one reported nitrous oxide was 'pretty commonly used' among the REU they had contact with. Three KE reported that there had been an increase in REU use of nitrous oxide in the previous 12 months, and three KE commented that REU use of amyl nitrate was rare.

12.6 Pharmaceutical stimulants

For the past three years, REU have been asked about their use of pharmaceutical stimulants, such as dexamphetamine, pseudo ephedrine and methylphenidate (Ritalin) (see Table 3.2). In 2006, the median reported age of first use of any pharmaceutical stimulant was 17 years, with the age of first use varying from 5 - 42-years. Forty-nine percent of the sample reported use of pharmaceutical stimulants in their lifetime. Twenty percent of REU reported recent use of some type of pharmaceutical stimulant on a median of three days (range 1-90). The prevalence of REU lifetime use of pharmaceutical stimulants decreased in 2006 when compared to 2005 (from 60%), but the frequency of REU recent use of pharmaceutical stimulants increased slightly in 2006 (from a median of two days in 2005).

12.7 Magic mushrooms

For the second time, in 2006, REU were asked about their use of 'magic mushrooms' (hallucinogenic mushrooms) (see Table 3.2). The median reported age of first use of 'magic mushrooms' was 17½ years and 50% of REU reported having used them in their lifetime. Eighteen percent of REU reported use of 'magic mushrooms' a median of two days in the last six months. These use parameters are similar to those reported by REU in 2005.

13 DRUG INFORMATION-SEEKING BEHAVIOUR

For the second time, in 2006, REU were asked questions about whether they obtained information about the ecstasy and other drugs they used (including information about content and purity), and, if so, from what sources or by what methods they obtained such information. Questions were also included in relation to users' beliefs. These sections are summarised in Tables 13.1 and 13.2 below.

The majority of REU stated that they found out about the content and purity of ecstasy, with approximately one fifth reporting they 'always' did so (20% for ecstasy). Whereas, less than half of REU stated that they found out the content and purity of other drugs (52% had never found out about the content). Most REU reported that the source of information, regarding content and purity of ecstasy pills, was a friend who had experienced using them (62%), 45% got information from a website, and 40% reported the source was a drug dealer. Over a quarter (n=27) of REU reported that they found out about the content and purity of the ecstasy they used by using a testing kit, and nearly three-quarters (70%, n=16, data missing for four participants) reported doing so at least half the time. A third of REU that used testing kits to find out the content of their ecstasy pills (33%, n=9) were unaware of any limitations regarding the methodology of testing kits (such as reagent-based testing kits), and half (52%, n=12) stated they would still take a pill that showed no reaction (i.e. no result, indicating that the constituent was not deciphered by the test) on testing. Nearly two-thirds of the REU sample (61%) believed that testing kits would be useful to them if they were available locally, and were the most commonly nominated by REU as a useful information resource (see Table 13.2), followed by a local website (59%), pamphlets (50%) and a venue outreach worker (46%).

Further, almost three-quarters of REU (72%) reported that the ecstasy or other drugs they had purchased in the last six months 'sometimes' or more often turned out to have a different content or purity than they expected.

Table 13.1: Information-seeking about purity & content of ecstasy and other drugs, 2006

	2006 (n=101)
Find out the content of drugs other than ecstasy (%)	
Never	52
Sometimes	13
Half the time	7
Most times	18
Always	11
Find out the content of ecstasy (%)	
Never	23
Sometimes	27
Half the time	7
Most times	24
Always	20
Find out content of ecstasy via (%)*	
Friends' experience	62
Other people's experience	30
Personal experience	21
Dealer	40
Testing kits	35
Information pamphlets	1
Websites	45
Use testing kits (%)**	
Sometimes	30
Half the time	26
Most times	13
Always	30
Are aware of limitations of testing kits (%)**	67
Would still take pill if contained (%)**	
Ecstasy-like substance	100
Amphetamine-type substance	93
Ketamine	56
Opiates	33
No reaction	22
Purchased drug# had different content than expected (%)	
Never	28
Sometimes	62
Half the time	7
Most times	1
Always	2

Source: EDRS REU interviews

***** Of those who find out content (n=87)

****** Of those who used testing kits (n=23)

In last six months

Table 13.2: Drug information and beliefs regarding ecstasy and other drugs, 2006

	2006 (n=101)
Information resources believed to be/would useful (%)*	
Pamphlets	50
Posters	24
Postcards	17
Music CDs	12
Video/DVDs	14
Local website	59
Testing kits	61
Venue outreach worker	46
Logo believed to be a good indication of what pill is like (%)	
Strongly agree	5
Agree	21
Neutral	15
Disagree	21
Strongly disagree	39
Don't care about pill content as long I have a good time (%)	
Strongly agree	10
Agree	28
Neutral	14
Disagree	33
Strongly disagree	16
Using 'ecstasy' should be legal (%)	
Strongly agree	16
Agree	20
Neutral	21
Disagree	33
Strongly disagree	11
Selling 'ecstasy' should be legal (%)	
Strongly agree	7
Agree	13
Neutral	23
Disagree	42
Strongly disagree	16

Source: EDRS REU interviews
***** Multiple responses were possible

With regard to people's beliefs about ecstasy, a quarter (26%) of REU agreed or strongly agreed with the statement that, "*an ecstasy pill logo was a good indication of what the pill would be like*", whereas, nearly two-thirds (60%) of REU disagreed with this statement. Over a third of REU (38%) agreed or strongly agreed with the statement that they, "*did not care what a pill contained, as long as they had a good time*", but it should be noted that 49% of REU disagreed with this statement.

Interestingly for a sample of regular ecstasy users, substantial proportions reported that they disagreed or strongly disagreed with the statement that, "*using ecstasy should be legal*" (44%) and that, "*selling ecstasy should be legal*" (58%).

14 RISK BEHAVIOUR

14.1 Injecting and injecting risk behaviour

Detail on injecting and injecting-related risk behaviour has been included in the EDRS REU survey since 2004. In 2006, 21% of the sample reported ever injecting any drug and 13% reported having injected any drug in the six months prior to interview. The median age of first injecting any drug was 20 years (range 13 - 38 years, n=21). In 2006, participants were asked about their history of use of 20 separate drug types[3], and their injecting of 16 different drug types. For the REU who reported a history of injecting, a median of three drugs (range 1 - 10; n=21) had 'ever' been injected, and a median of three (range 1 - 6; n=13) had been injected in the 'last six months'.

An inspection of previous years' data reveals fluctuation in the proportion of REU reporting ever injecting, or recently injecting, any drug since data collection began. The proportion of REU reporting ever injecting was 20% in 2000, 21% in 2001, 32% in 2002, 14% in 2003 and 25% in 2004, 16% in 2005, compared to 21% for this year. No clear trend with regard to injecting drug use is discernible. The proportion of REU reporting injecting drug use may be subject to a number of influences, the most prominent being the effects of sampling. Employing the snowballing technique may result in over-representation of injecting drug users in some years.

Table 14.1 summarises the injecting drug history and recent injecting patterns of the REU that reported any injecting in 2006. Some form of methamphetamine was the drug most commonly 'ever' injected, as well as the drug most commonly 'first' injected by the sample. Eighty-one percent of those who had ever injected had first injected methamphetamine (n=17) (powder (n=12), base (n=17), or crystal (n=14) and thirty-three percent had first injected heroin (n=7). Methamphetamine was also the drug most commonly 'recently' injected and the drug 'most frequently' injected, in the six months prior to interview. Base methamphetamine was the most frequently injected form of methamphetamine (a median of 40 days), in the last six months, as well as the most commonly 'last' injected drug. Three REU reported injecting ecstasy pills a median of nine days, and three REU reported injecting ecstasy powder a median of six days in the last six months.

Six KE provided comment on injecting in reference to ecstasy use only, and all mentioned that injecting was a route of administration used by some REU. Two KE commented that injecting of ecstasy is on the increase, and that some REU also inject other drugs too, but that at least REU were using pill filters for this.

Seven of the 21 REU who had ever injected had first done so under the influence of another drug or drugs, as follows: alcohol (n=3), cannabis (n=3) or benzodiazepines (n=1).

Eleven of the 21 REU who had ever injected reported that they did not inject themselves, and the remaining REU stated they had learnt to inject from a friend or partner (n=8), from another user (n=1), from an information pamphlet (n=1) or from a dealer (n=1) (note: participants were able to nominate more than one method of learning).

[3] Drug types were: ecstasy (pills & powder), methamphetamine (any form), pharmaceutical stimulants, cocaine, LSD, MDA, 'magic mushrooms', ketamine, GHB (includes 1,4B and GBL), amyl nitrate, nitrous oxide, alcohol, cannabis, anti-depressants, benzodiazepines, tobacco, heroin, methadone, buprenorphine and other opiates

Table 14.1: Injecting drug use history among injectors, 2006

	% Ever injected (n=21)	% First drug injected (n=21)	% Injected in last 6 months (n=13)	Median days injected in last 6 months (Range; n) (n=13)	% Last drug injected (n=13)
Ecstasy – pills	48	5*	62	9 (2-72; 8)	0
Ecstasy – powder	24	0	23	6 (2-6; 3)	0
Meth – powder	57	33	23	40 (6-72; 3)	0
Meth – base	81	38	85	5 (2-180; 11)	62
Meth – crystal	67	10	69	5 (2-180; 9)	39
Pharm. stim.	10	0	0	-	0
Cocaine	19	0	15	1.5 (1-2; 2)	0
LSD	24	0	0	2 (n=1)	0
MDA	10	0	8	2 (n=1)	0
Ketamine	10	0	8		0
GHB	5	0	0	48 (n=1)	0
Heroin	33	14	8	-	0
Other opiates**	19	0	0	-	0
Methadone	24	0	0	180 (n=1)	0
Buprenorphine	5	0	8	-	0
Benzodiazepines	19	0	0	-	0

Source: EDRS REU interviews
***** Ecstasy here relates to pills or powder
****** Includes codeine, morphine, and pethidine

With regard to the frequency of risk behaviour among the thirteen recent injectors of the REU sample, there was little reported sharing of needles, or of other injecting equipment. Only one injector reported using a needle after a close friend, once in the previous month, and twice in the last six months. Two injectors reported that someone else had used a needle following them, one had done so once and the other had done so twice in the last six months. In addition, four injectors reported they had shared equipment other than needles (specifically, the spoon, the filter, tourniquets, or water) during that time, with all four sharing the tourniquets. Most recent injectors reported always injecting themselves (n=11), though two reported that a friend, partner, an acquaintance or a stranger typically injected them. The frequency of injecting any drug (60 times, range 1-600, n=13) in the last six months was skewed by four people, who reported injecting once a day or more, during that period. When these three people were removed from the analysis, the median frequency of injecting was six times (range 2-90, n=9). Eleven recent injectors reported having injected whilst 'under the influence' or 'coming down' from a drug or drugs a median three times in the last six months (range 1-30).

Obtaining needles

Twelve recent injectors in the REU sample stated that they had no difficulty obtaining new needles in the six months prior to interview. One REU reported that they had difficulty obtaining needles because fewer pharmacists are supplying them. The most common sources of needles were reported as a Clean Needle Program (n=10), a pharmacist (n=3), a dealer (n=2) or a friend (n=1).

Context of injecting

The majority of recent injectors reported injecting in either their own home (n=11) or a friend's home (n=4), in the last six months. Two people also reported they had injected at a dealer's home during that time. Two REU reported injecting in public toilets, two reported injecting in the street, two in a car and one in a hotel/motel. Regarding the social context of injecting among this group, most reported usually injecting with close friends (n=9) in the six months preceding interview. Two reported usually injecting with a regular sex partner, one with a casual sex partner and one each reported usually injecting with an acquaintance, a casual sex partner or a family member. Three people reported that they had usually injected alone during that period.

14.2 Blood-borne viral infections (BBVI)

Table 14.2 summarises the information regarding blood-borne viral infections (BBVI) - vaccination, testing and status provided by the whole REU sample in 2006. At the time of interview, 44 REU stated that they had completed a hepatitis B virus (HBV) vaccination schedule, nine reported that they had started a schedule but not completed it, 25 reported that they had never been vaccinated, and twenty-three didn't know if they had been vaccinated against HBV or not. The reasons given for being vaccinated against HBV were most often unrelated to risk of infection due to injecting or sexual behaviour, although six REU reported being vaccinated due to risk of infection as a result of their injecting drug use, and two because they were at risk because of sexual behaviour. Most commonly, REU reported having been vaccinated as a child (n=19), because they had been going overseas (n=10), or for a mixture of other reasons (n=7).

Approximately a quarter of the REU sample reported that they had been tested for either hepatitis C virus (HCV) or human immunodeficiency virus (HIV) infection, and the majority stated that their status was negative for both.

Table 14.2: Self-report of BBVI vaccination, testing and current status, 2006

	Number of REU
HBV vaccination, complete	44
If yes, reason:	
Risk (sexual)	2
Risk (IDU)	6
HCV test in last year	24
If yes:	
Positive	1
Negative	23
Don't know	0
HIV test in last year	29
If yes:	
Positive	0
Negative	29
Don't know	0

Source: EDRS REU interviews

14.3 Sexual risk behaviour

For the third year, in 2006 REU were asked to provide detail with regard to their sexual behaviour and the risks associated with it. Participants were given the opportunity to self-administer this section of the questionnaire if they preferred to. 'Sex' was defined as penetrative sex; that is, the penetration with the penis or fist of the vagina or anus.

14.3.1 Patterns of recent sexual activity and sexual risk behaviour

Table 14.3 summarises the self-reports of recent sexual activity and condom use, and Table 14.4 summarises the reports of recent sexual activity and condom use while under the influence of a drug or drugs, in the last six months.

Table 14.3 shows that 90% of the REU sample reported having had penetrative sex in the six months prior to interview, 39% of them with only one person in that time. Of those who had engaged in penetrative sex, 86% reported they had done so with a regular partner (n=63) and 66% reported they had done so with a casual partner (n=43), in that time. Of the REU that reported having had penetrative sex with a casual partner in the last six months, 32% reported that they had always used a condom.

Table 14.3: Recent* sexual activity and condom use, 2006

Have had penetrative sex in the last 6 months (% of REU)	(n= 90)
Of those who had penetrative sex (%):	
Number of sex partners	
One person	39
Two people	23
Three to five people	30
Six to ten people	6
More than ten people	3
Had penetrative sex with	
Regular partner (n=63)	86
Always used a condom#	18
Never used a condom#	27
Casual partner (n=43)	66
Always used a condom#	32
Never used a condom#	6
Number of times had anal sex	
None	78
Monthly or less (1-6 times)	17
More than monthly – once a fortnight (7-12 times)	4
More than fortnightly – three times a week (13-72 times)	1

Source: EDRS REU interviews
***** In the six months preceding interview
# Of those who had sex with a regular/casual partner

Table 14.4 shows that 78% of the REU (87% of those who reported having had penetrative sex) reported that they had had penetrative sex whilst under the influence of a drug or drugs, in the six months prior to interview. Over 85% reported having done so more than once, with 18% reporting that they had done so more than ten times during that period. Most commonly, REU nominated ecstasy as the drug they were under the influence of when engaging in penetrative sex recently (86%, n=67), followed by alcohol, cannabis or some form of methamphetamine (see Table 14.4). Of those who reported having had penetrative sex with a casual partner whilst under the influence of a drug or drugs, 42% reported that they had not always used a condom.

Table 14.4: Recent* sexual activity and condom use under the influence of drugs, 2006

Have had penetrative sex under the influence (% of REU)	(n= 78)
Of those who had sex under the influence (%):	
Number of times had sex under the influence	
Once	12
Twice	14
Three to five times	40
Six to ten times	16
More than ten times	18
Drugs used (n=78)	
Ecstasy	86
Alcohol	44
Cannabis	40
Methamphetamine – powder	23
Methamphetamine – base	27
Methamphetamine – crystal	21
Cocaine	3
LSD	0
Ketamine	0
GHB	4
Nitrous oxide	1
Had penetrative sex with	
Regular partner (n=63)	81
Always used a condom#	22
Never used a condom#	33
Casual partner (n=43)	55
Always used a condom#	58
Never used a condom#	12

Source: EDRS REU interviews
***** In the six months preceding interview
# Of those who had sex with a regular/casual partner
****** Data missing for one participant

In this context, almost half the REU sample (45%) reported they had never undergone a sexual health check-up. Of the remaining REU, 40 reported having had a sexual health check-up in the last year, 15 more than a year ago, and one participant's details were missing.

14.4 Driving risk behaviour

REU were asked whether they had driven within an hour of having taken any drug, in the six months prior to interview, and, if so, which drugs were involved. They were also asked if they had driven whilst over the limit for alcohol. The results are detailed in Table 14.5.

Table 14.5: Recent* occurrence of driving following drug use, 2006

	% of recent* drivers (n=80)
Driven over the limit for alcohol	48
Driven soon after# taking any illicit drug	79
Driven soon after# illicit use of:	
Ecstasy	75
Methamphetamine – powder	41
Methamphetamine – base	37
Methamphetamine – crystal	32
Pharmaceutical stimulants	3
Cannabis	65
Cocaine	6
LSD	10
MDA	2
'Magic mushrooms'	2
Ketamine	0
Nitrous oxide	2
Heroin	0
Other opiates	0
Benzodiazepines	3

Source: EDRS REU interviews
***** In the six months preceding interview
# Within one hour of

Almost half of the REU that had driven a vehicle in the six months prior to interview reported that they had driven whilst over the limit for alcohol, a median five times (range 1 - 180) during that period. The frequency data were skewed by one person reporting they did so on a daily basis.

Nearly 80% of recent drivers also reported that they had driven within an hour of using any illicit drug. The drugs most commonly reported as having been used within an hour prior to driving were ecstasy (75%), cannabis (65%), methamphetamine powder (41%), methamphetamine base (37%), and crystal methamphetamine (32%).

15 HEALTH-RELATED ISSUES

The following sections provide information from REU, KE and, where available, indicator data sources on harm related to ecstasy and related drug use and health.

15.1 Overdose

Participants were asked if they had experienced overdose on ecstasy or related drugs, ever, and in the last six months. 'Overdose' was clarified as having passed out or fallen into a coma following use of a drug.

Twenty-two REU reported that they had 'ever' overdosed on ecstasy or related drugs a median one time (range 1 - 8), and three REU reported that they had overdosed on a drug in the last six months, compared to two in 2005. Ecstasy, alcohol and crystal methamphetamine were the drugs involved in overdose for these three REU. One REU reported the main drug they had overdosed on was ecstasy, and specified that methamphetamine powder and alcohol had been used at the same time. One REU reported the main drug they had overdosed on was alcohol, and that ecstasy was also used, and one REU reported that they had taken a cocktail of drugs including ecstasy, crystal methamphetamine and methamphetamine powder and was unable to specify which of the three drugs was the main drug that contributed to the overdose. The median time since last overdose, for those that reported 'ever' overdosing on any drug, was three months (range 2 -5 months).

15.2 Help-seeking behaviour

In 2006, a total of 25 REU reported having accessed one or more medical or health services in the last six months, in relation to their use of ecstasy and related drugs. The services accessed, and the main drugs involved are reported in Table 15.1, and the main issues surrounding those attendances are summarised in Table 15.2. Most REU who had accessed a service recently (68%, n=17), in relation to their drug use, had accessed one service type, for one drug type. One REU reported that they had utilised four different service types related to their use of ice/crystal methamphetamine and these were an ambulance, a hospital emergency department, a drug and alcohol worker and a social worker. Three REU had accessed three different services, and four REU had accessed two different services related to their use of either ecstasy or base methamphetamine use. Two REU reported that they had accessed two different services for two separate drugs; one REU accessed a GP for opiate use and a counsellor related to their use of alcohol, the other accessed a hospital emergency department for psychosis related to their use of crystal methamphetamine and a GP for other psychological problems related to their use of powder methamphetamine.

The most commonly accessed service, in relation to 'any' drug use, was a GP (attended by 13 REU). In addition, six REU reported having accessed a hospital emergency department, four accessed a drug and alcohol worker, three accessed a psychologist, two accessed an ambulance, two each accessed a psychiatrist or a counsellor, one REU reported having accessed first aid, and another REU reported having accessed a social worker.

Table 15.1: Services accessed by REU*, by main drug/s, 2006

Service	Accessed %	Ecstasy %	Speed %	Base %	Crystal %	Cannabis %	Alcohol %	Other %
First Aid	4	100	-	-	-	-	-	-
Ambulance	8	-	-	-	50	-	50	-
Emergency	24	33	-	-	33	-	33	-
Hospital	0	-	-	-	-	-	-	-
GP	52	20	20	20	-	20	-	20
Counsellor	8	50	-	-	-	-	50	-
Drug/Alcohol worker	16	33	-	33	33	-	-	-
Social worker	4	-	-	-	-	-	-	100
Psychologist	12	-	-	50	50	-	-	-
Psychiatrist	8	50	-	50	-	-	-	-
Telephone counselling	8	50	-	-	-	50	-	-

Source: EDRS REU interviews
***** In the first six months prior to interview

Reasons for accessing these services most commonly involved acute psychological problems, and also included drug dependence, depression and anxiety. The drugs most commonly involved in seeking these services were ecstasy and cannabis, and, less commonly, some form of methamphetamine and GHB.

Table 15.2: Services accessed by REU*, by main issue/s, 2006

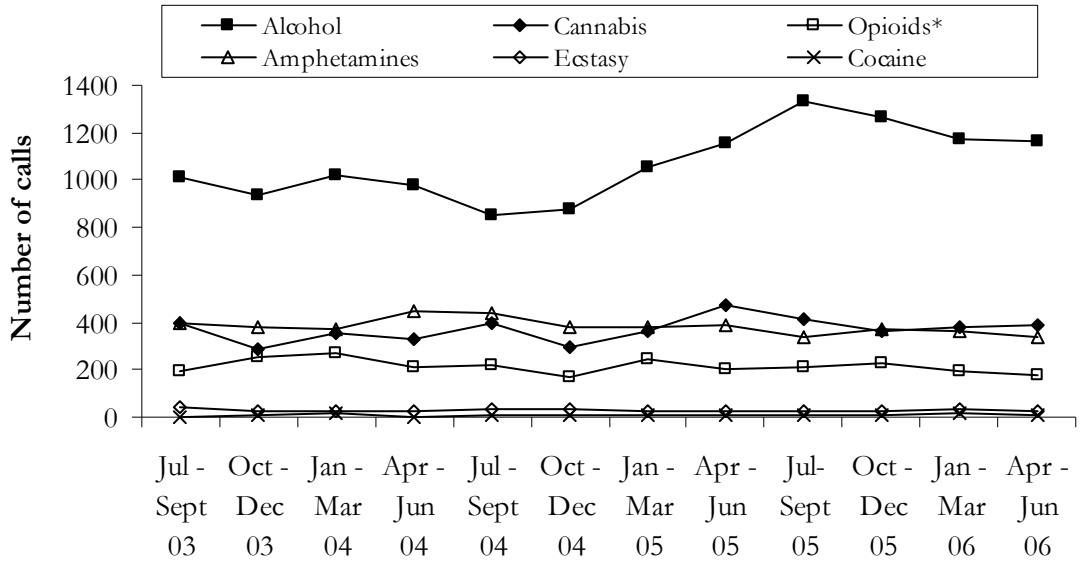
Service (%)	Depression	Anxiety	Overdose	Depend-ence	Psychosis	Other Psych problems	Acute physical problems
First Aid	-	-	100	-	-	-	-
Ambulance	-	-	50	-	-	-	50
Emergency	-	-	33	-	17	-	33
Hospital	-	-	-	-	-	-	-
GP	31	8	-	8	-	15	8
Counsellor	50	-	-	50	-	-	-
Drug/ alcohol worker	25					25	
Social worker	-	-	-	-	-	-	-
Psychologist	-	50	-	-	-	50	-
Psychiatrist	50	-	-	-	-	50	-
Telephone counselling	-	-	-	50	-	-	-

Source: EDRS REU interviews
***** In the six months prior to interview

Treatment services – ADIS

Figure 15.1 shows the number of telephone calls to the SA Alcohol and Drug Information Service (ADIS) from the general public, regarding six different substance types across the financial years 2003/04 and 2005/06. It can be seen that the drug most enquired about was alcohol, followed by cannabis and amphetamines, then opioids. Calls related to ecstasy and cocaine constituted only a small fraction of total calls to ADIS. Please refer to individual drug-related harm sections for more detail on ecstasy – methamphetamine - and cocaine-related calls to ADIS.

Figure 15.1: Number of drug-related calls to ADIS per quarter, by selected drug type, Jul 2003 - June 2006



Source: SA ADIS

* 'Opioids' includes all calls coded under the categories heroin, methadone, buprenorphine, naltrexone, opioid pharmacotherapies and other opioids

Treatment services – DASSA

As can be seen in Table 15.3, in 2006 alcohol dominated as the primary drug of concern for the largest proportion of total clients to DASSA treatment services, followed by amphetamines, cannabis and heroin. Both ecstasy and cocaine accounted for only a very small fraction (<2%) of the total attendances, though the proportion of total clients nominating ecstasy as the primary drug of concern has steadily increased since 2000/01. Please refer to individual drug-related harm sections for more detail on ecstasy – methamphetamine - and cocaine-related clients of DASSA treatment services.

Table 15.3: Primary drug of concern nominated by clients of Drug and Alcohol Services South Australia, as a percentage of total number of clients*, 2000/01 - 2005/06

Drug type	2000/01	2001/02	2002/03#	2003/04	2004/05	2005/06
Alcohol	40.2	42.0	44.6	47.7	48.3	**51.8**
Amphetamines	11.2	14.5	19.3	18.5	20.0	**18.8**
Heroin	16.4	10.3	18.5	14.3	12.3	**9.7**
Opioid analgesics	7.6	7.1	7.6	8.0	7.5	**6.7**
Cannabis	8.5	10.7	10.6	13.1	12.8	**13.2**
Benzodiazepines	2.0	1.9	2.6	2.3	2.4	**2.3**
Ecstasy	0.04	0.12	0.38	0.74	0.63	**1.1**
Cocaine	0.2	0.3	0.3	0.1	0.4	**0.4**
Tobacco	0.1	0.2	0	0.2	0.2	**0.3**
Unknown	5.9	6.1	0	0.1	0.2	**0.2**
Other	7.9	6.8	1.6	1.5	1.8	**1.3**

Source: Drug and Alcohol Services South Australia
***** Total number of clients = total number of individuals
# During this period a new data collection system (CME-DIS) was employed to meet the requirements of the National Minimum Data Set for Alcohol and Other Drug Treatment Services (NMDS-AODTS).
Note: total percentages for each year may not equal 100% as clients may have presented with more than one primary drug of concern within that time.

Emergency department admissions

Information on drug-related attendances to the emergency department was provided by the Royal Adelaide Hospital (RAH), the largest central public hospital in Adelaide, and is presented in Table 15.4. Readers are warned that these are 'uncleaned' data and should be interpreted with caution; however, they are included here to give a picture of trends over time, rather than to provide precise numbers. It is noteworthy that alcohol accounted for by far the most attendances across all years. Ecstasy-related attendances are not specifically coded. However, of interest in the context of ecstasy and related drug use is the trend in the number of presentations for GHB, amphetamines and cannabis. The number of GHB-related attendances decreased slightly in 2005/06, after increasing in 2004/05, following two years of stability. It can be seen that attendances regarding amphetamines have fluctuated somewhat across the years depicted, and in 2005/06 account for the second most common illicit drug-related attendances, with other opioids being the most common illicit drug-related attendances at the RAH. This suggests a decrease in the number of methamphetamine related attendances since the EDRS survey began data collection. This result is further reinforced, when the diagnosis 'drug-induced psychosis' (which includes amphetamine-induced psychosis) is examined. It can be seen that a dramatic decrease occurred in 2005/06, after a doubling of attendances was seen in 2004/05 compared to the previous year. Amphetamine use over time has been demonstrated to lead to drug-induced psychotic episodes (see, for example, Davis & Schlemmer, 1980); however, readers are reminded that no detail on the primary or causal drug for a particular drug-induced psychosis attendance was available in this data set. The number of attendances in relation to cannabis have remained relatively stable and low across the years depicted.

Table 15.4: Number of attendances* to the emergency department at the Royal Adelaide Hospital, SA, from 2000/01 - 2005/06 (per drug or diagnosis)

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Amphetamines	88	76	65	81	91	**61**
Cocaine	2	2	0	1	4	**6**
LSD	1	2	1	2	6	**3**
GHB	0	48	28	28	48	**38**
Alcohol	1,066	1,118	994	1,106	1,465	**1,409**
Cannabis	12	16	9	11	15	**13**
Heroin	121	30	38	25	30	**32**
Other opioids**	79	45	64	57	70	**68**
Benzodiazepines	201	170	138	138	141	**122**
Anti-depressants	117	104	79	80	87	**55**
Drug addiction#	32	27	38	20	37	**28**
Drug-induced psychosis#	34	67	52	44	89	**31**
Drug withdrawal#	35	35	26	24	26	**19**
Other##	640	533	434	442	434	**360**
TOTAL	*2,428*	*2,273*	*1,966*	*2,059*	*2,543*	***2,245***

Source: Royal Adelaide Hospital Emergency Department
***** Coded as drug- or poisoning-related
****** Includes opium, methadone, other narcotics (morphine, codeine, pethidine etc), and opioid withdrawal
# Not otherwise specified, excluding alcohol
Includes all other poisonings related to food, drug (medical & non-medical), chemical and other toxins

Hospital admissions

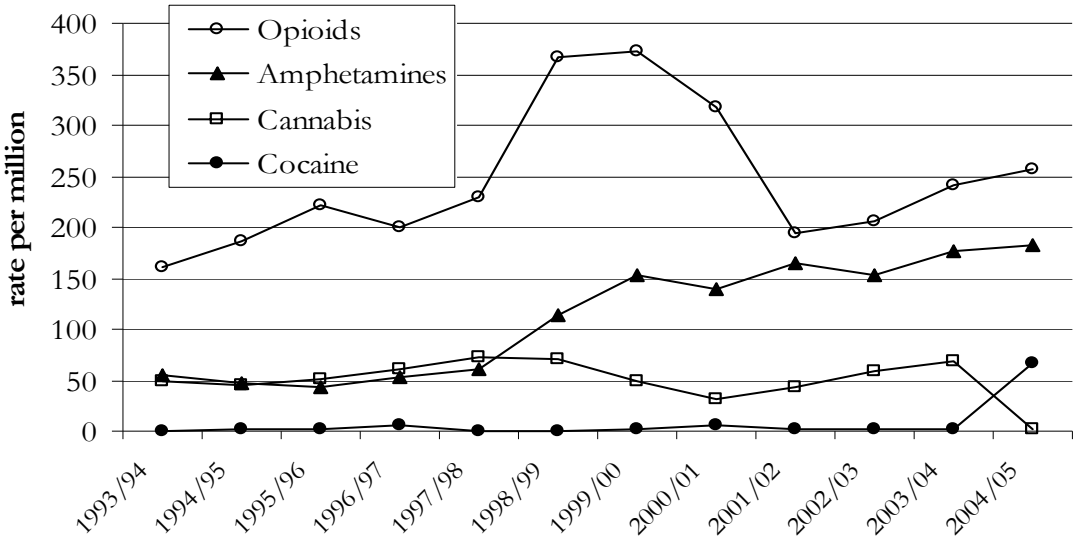
An analysis of data, provided by the Australian Institute of Health and Welfare from the National Hospital Morbidity Dataset, for the period 1993/1994 to 2004/05 (financial years) was undertaken by NDARC. These data report on both state-specific and national drug-related hospital admissions[4] (for the four main illicit drug classes), adjusted so that all years reflect ICD-9 classifications for comparability across this time period. Readers should note that the major impact of this adjustment is the exclusion of admissions for drug-related psychosis and withdrawal, due to incomparability between ICD-9 and ICD-10 coding for these conditions[5]. It should also be noted that these data lag behind other indicators by one year.

The illicit substances most commonly involved in a primary diagnosis for South Australian drug-related hospital admissions were opioids (heroin, morphine, methadone etc), followed by amphetamines, cannabis and cocaine (see Figure 15.2). Ecstasy-related

[4] The National Hospital Morbidity Dataset includes admissions data from public and private hospitals across metropolitan, regional and remote locations.
[5] ICD-9 coding for drug-related psychosis and withdrawal was non-specific for drug type, where ICD-10 coding is specific for drug type.

admissions are not specifically coded. South Australian data followed a similar pattern to national data (see Appendix), but differed in the proportions of admissions per drug type. In particular, SA had a smaller percentage of opioid- and cocaine- related admissions (51% v. 58%, and 0.2% v. 3%, respectively), and a larger percentage of amphetamine-related admissions (35% v. 22%)(as a proportion of the total number of admissions for all four drug types) than nationally. Please also refer to individual drug-related harm sections for more detail on methamphetamine- and cocaine-related admissions to hospitals in SA.

Figure 15.2: Rate of substance-related admissions* (primary diagnosis) to hospital in South Australia, 1993/1994 - 2004/05



Source: Australian Institute of Health and Welfare
***** For persons aged between 15 and 54 years
Note: 'Primary diagnosis' was given to those admissions where the substance was considered the primary reason for the patient's episode of care

15.3 Psychological Distress

In 2006, the Kessler Psychological Distress Scale (K10) (Kessler & Mroczek, 1994) was incorporated into the REU survey, and used to give a measure of levels of psychological distress among the REU sample.

The Kessler Psychological Distress Scale was developed as a screening instrument to measure for negative emotional states, referred to as psychological distress. It is described as a simple, brief, valid and reliable instrument used to detect mental health conditions in the population. The scale consists of 10 questions on non-specific psychological distress and measures the level of anxiety and depressive symptoms a person may have experienced in the past four-weeks, so it asks specifically about recent levels of distress.

The cut-off scores for the K10 are taken from the method developed by the Clinical Research Unit for Anxiety and Depression (CRUFAD) at the school of Psychiatry University of NSW. The items are totalled to give scores that range from eight to 50, with 50 indicating that the person has a high risk of having an anxiety or depressive disorder.

The cut-off scores range from 10-15 for low or no risk, 16-29 for medium risk and 30-50 for high risk.

Thirty-five REU had scores between ten and 15 on the K10 (low risk), 61 REU scored between 16 and 29 (medium risk), and four REU scored from 30 to 33 (high risk). The median total score for REU was 18 (10-33) indicating that the majority of REU were at medium risk of psychological distress as measured by the K10. Four percent of REU were at high risk of psychological distress as measured by the K10, in the four-weeks prior to the survey.

15.4 Other problems

The REU survey also asked users about their experience of other problems related to their ecstasy or other drug use during the last six months, in the categories of work/study, financial, legal/police and social/relationship. Two-thirds of REU (68%) reported having experienced one or more problems related to their drug use in that time, similar to previous years (70% in 2005, 75% in 2004). The majority of problems experienced by REU related to some aspect of their relationships or social life, followed by financial problems and work or study problems (see Table 15.5). The most common social or relationship problems attributed to drug use were having arguments (n=21) and feeling mistrust or anxiety in relation to others (n=9). The most common work or study problems experienced were feeling unmotivated (n=11), having a reduced work performance (n=9), or having trouble concentrating (n=8). The most common financial problems attributed to drug use were having no money for recreation or luxuries (n=19) or in debt/owing money (n=11). Very few (n=6) reported legal or police problems related to ecstasy or other drug use, and 50% of those REU who reported legal or police problems attributed this to being cautioned by police (n=3).

REU were also asked to nominate which drug or drugs they attributed the problem to. A summary of these data is given in Table 15.5. As can be seen, and similar to previous years, ecstasy or some form of methamphetamine were most commonly held responsible, at least in part, for work or study, financial and social problems, followed by cannabis.

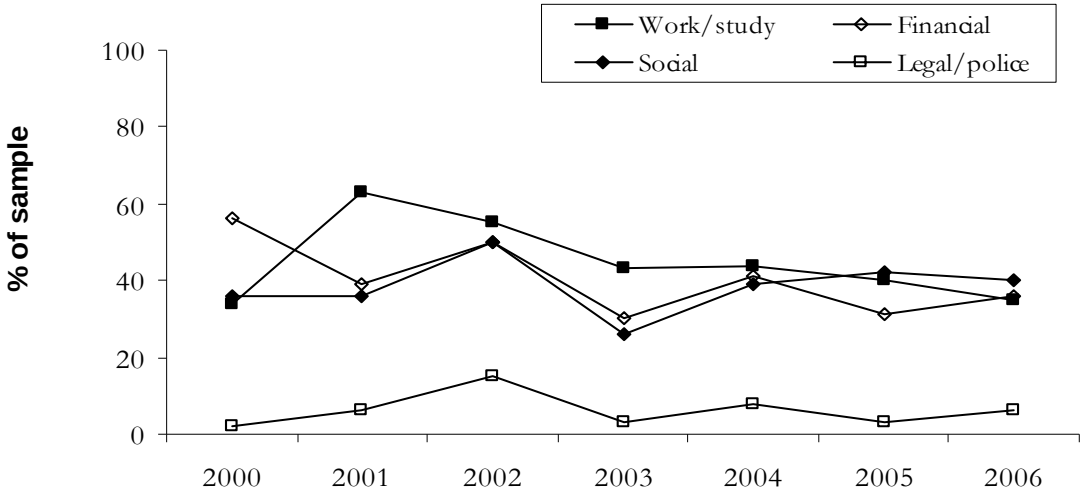
Table 15.5: Percentage of REU reporting other harms associated with main drug attributed to this use in the last six months, by drug type, 2006

Problem experienced	Any drug (n=101)	Ecstasy (n=101)	Any meth-amphetamine (n=92)	Cannabis (n=83)	Alcohol (n=97)
Social/relationship	40	17	14	3	1
Financial	36	18	13	2	1
Legal/police	6	1	0	3	1
Work/study	35	17	8	8	2

Source: EDRS REU interviews

Figure15.3 shows the trend in the prevalence of the problems experienced in relation to ecstasy and related drugs among REU, across the last five years. It can be seen that work or study, financial and social problems have been consistently prevalent across this time, well above legal or police problems.

Figure 15.3: Trend in experience of problems related to ecstasy & related drug use in the previous six months, 2000 - 2006



Source: EDRS REU interviews

16 CRIMINAL ACTIVITY AND PERCEPTIONS OF POLICING

16.1 Reports of criminal activity among REU

Table 16.1 summarises REU reports of criminal activity in the month prior to interview, for the six years that the EDRS has been undertaken. In 2006, 30% of REU reported involvement in some type of crime, which was similar to that reported in the previous year (27%). Drug dealing was the most commonly reported crime again across all years of the survey. In 2006, 11% of REU reported that they had been arrested within the last 12 months, similar to previous years. Of those, four REU had been arrested for alcohol and driving offences, two for use/possession, two for some form of property offence, and of the remaining four REU two had been arrested for breach of bail, one for loitering and one for unpaid traffic fines. .

With regard to how REU reported paying for ecstasy in the last six months, REU were asked to differentiate between whether they gained an 'ecstasy profit' through drug dealing or made a 'cash profit' which then paid for ecstasy. In 2006, a similar proportion of REU reported that they dealt drugs for a 'cash profit' (n=26) compared to 2005 (n=28).

Table 16.1: Criminal activity in the month prior to interview, as reported by REU, 2000 - 2006

	% of REU						
	2006	**2005**	**2004**	**2003**	**2002**	**2001**	**2000**
	(n=101)	**(n=100)**	**(n=100)**	**(n=101)**	**(n=68)**	**(n=70)**	**(n=50)**
Criminal activity in last month:							
Property crime	**3**	3	6	3	12	13	2
Drug dealing	**26**	25	21	35	46	44	24
Fraud	**4**	3	1	1	6	9	-
Violent crime	**3**	2	0	3	3	4	2
Any crime	**30**	27	25	37	53	53	24
Arrested in last 12 months	**11**	8	5	10	7	3	0

Source: EDRS REU interviews

As in previous years, KE reports reiterated that criminal activity (apart from illicit drug use) was rare among REU generally, and that contact with the criminal justice system was uncommon among this group. Exceptions to this were reports that on-supply or dealing of drugs to friends had increased in the previous 12 months (which may not be perceived as 'drug dealing' by those engaged in it), and was a regular occurrence and the most prevalent method of obtaining ecstasy and related drugs.

16.2 Beliefs about ecstasy and the law

For the first time, in 2006, REU were asked about their beliefs about ecstasy and the law. Seventy-six percent of REU purchased ecstasy in the last six months for themselves and others, and as such were engaged in 'supply' of an illicit drug to others. Of those REU who

had purchased ecstasy for themselves and others 51% (n=39) reported that they had purchased ecstasy monthly or less, 26 % (n=20) fortnightly or less, 18% (n=14) weekly or less, with four percent (n=3) purchasing ecstasy at least three times per week. Those REU who had purchased ecstasy for themselves and others reported that they had obtained a median of six (range 1-50) pills when purchasing ecstasy, with 42% (n=32) reporting that they usually obtained 10 or more pills when purchasing ecstasy..

Only 29% of REU believed they knew how much ecstasy they needed to be in possession of to be charged with supply if caught by police. However, of those, only 17% (n=5) actually knew that the prescribed amount for supply is currently five tablets (median five, range 0.5 - 30). When asked if they knew what this amount was for, 62% (n=18) reported this was for pills sold as ecstasy, three percent (n=1) reported it was pure MDMA, and 35% (n=10) reported that they did not know.

Only 27% (n=28) of REU reported that they knew what the consequences were for being convicted with supplying ecstasy. Of those who believed they knew the consequences (note: multiple responses allowed), 71% (n=20) reported that they would receive a prison sentence, 46% (n=13) reported that they would receive a fine, 11% (n=3) believed the consequence would be community service and seven percent (n=2) believed that they would receive a police caution, with four REU reporting that they would receive a criminal record (n=1), home detention (n=1) or a suspended sentence (n=2).

Forty-three percent of REU believed that there is a difference between getting tablets for personal use or for their friends in the eyes of the law. Eighty-five percent of those who believed that there is a difference between getting tablets for personal use or for their friends in the eyes of the law, a large majority (85%, n=33) reported that they would receive a heavier penalty, 3% (n=1) less of a penalty, 3% (n=1) believed they would receive the same penalty, and 10% (n=4) said they did not know (data missing for four participants).

16.3 Perception of police activity towards REU

Table 16.2 presents data on the REU perceptions of police activity in the six months leading up to the survey, for the last five years. In 2006, the majority of REU (44%) reported that police activity had been stable. A further 34% reported that they believed police activity had been increasing. A much smaller proportion than in previous years was unable to comment, with 22% reporting that they didn't know whether police activity had changed recently. As has been consistent across the three years depicted, the majority of REU (95%) reported that their ability to obtain drugs had not become more difficult due to police activity in 2006.

Table 16.2: Perceptions of police activity in the six months prior to interview, as reported by REU, 2002 - 2006

	% of REU				
	2006 (n=101)	**2005 (n=100)**	**2004 (n=100)**	**2003 (n=101)**	**2002 (n=68)**
Perception of police activity in last 6 months					
More activity	**34**	26	27	22	43
Stable	**44**	55	27	37	47
Less activity	**1**	3	3	1	9
Don't know	**22**	16	43	41	1
More difficult to obtain drugs recently?					
Yes	**5**	3	14	13	9
No	**95**	97	86	87	91

Source: EDRS REU interviews

16.4 Interactions with sniffer dogs

For the first time, in 2006 REU were asked if they had seen sniffer dogs at an event in the previous six months, with 27 REU reporting that they had. Of those 70% (n=19) had seen a sniffer dog once, 22% (n=6) had seen a sniffer dog twice, with one each seeing sniffer dogs three and four times respectively. Forty-four percent (n=12) of those who had seen sniffer dogs reported that they had drugs on them at the event when they saw the sniffer dogs, with two REU reporting they took the drugs to avoid detection, three REU reported that they did nothing and the remainder making no comment.

REU were also asked what their reaction would be if they saw sniffer dogs at an event and they had drugs on them, to which 20% (n=17) reported they would dispose of the drugs, 45% (n=39) would take their drugs to avoid detection, but the majority (49%, n=42) gave other reactions, including hiding the drugs better, removing themselves from the scene and running.

17 SUMMARY

The 2006 survey presented an opportunity to not only build on past survey results, but also to explore new aspects of ecstasy and related drug use and associated harms. The EDRS was expanded in 2006 to incorporate new questions regarding: REU practices and knowledge of supply of illicit drugs to others, and actual and imagined reactions of REU to sniffer dogs at events where they have or would have drugs on them. In 2006, additional questions were added pertaining to measures of REU levels of psychological distress (Kessler Psychological Distress Scale), and problematic alcohol practices (AUDIT). Furthermore, in order to gain a more in depth knowledge of REU cannabis use, information regarding this was expanded, and subsequently a new section on cannabis was added.

The following sections provide a summary of each of the main areas covered in the survey and bring together the three sources of information to form an overall picture of the ecstasy and related drug use, harms associated with such use, and of drug markets in Adelaide, during 2006.

17.1 Demographic characteristics of regular ecstasy users (REU)

Similar to previous years, the majority of REU were male, and on average, aged in their early 20s. They were also generally either employed or full-time students with less than a fifth of the sample unemployed. Most REU were well educated and half had completed some kind of post-school qualification. Very few had a history of imprisonment or were currently undergoing treatment for drug use. Key expert (KE) reports of the demographics of ecstasy users were generally consistent with the 2006 REU sample.

17.2 Patterns of polydrug use among REU

Regular ecstasy users have been consistently described as polydrug users and the EDRS samples continue to verify this. In 2006, as in previous years, most of the sample reported recent use of some form of methamphetamine (at levels equivalent to ecstasy use), as well as cannabis, alcohol and tobacco. Other substances reported as recently used by substantial proportions of REU were nitrous oxide, LSD and cocaine, though use of these and other drugs was at a much lower frequency. Compared to 2005, there was an increase in the proportion of REU reporting recent use of crystal methamphetamine, and benzodiazepines, and a decrease in the proportions of REU reporting recent use of powder and base methamphetamines, cocaine, ketamine, amyl nitrate, GHB and tobacco.

The trend in binge behaviour stabilised in 2006 with 57% reporting having binged at least once in the preceding six months. There was an increase in binge use of crystal methamphetamine and methamphetamine powder, compared to 2005, with a decrease in binge use of base methamphetamine.

The majority of REU report use of any drug primarily by swallowing or snorting in 2006. However, 13% of REU reported recent injecting, most commonly some form of methamphetamine. No clear long-term trend in prevalence of injecting among REU was discernible, but it must be noted that there was an increase in REU injecting of ecstasy in 2006. In reference to route of ecstasy administration, KE comments indicated that injecting was uncommon, but increasing, among this group of drug users.

17.3 Ecstasy

Over the last six years there has been little change in parameters of ecstasy use, with the reported mean age of first use, median days of use, 'average' or 'most' amount used in a typical session all remaining relatively stable across this period. There has, however, been a gradual increase in the proportion using more than one tablet in a typical session, to the point that in 2006 this was reported by the majority of the sample (80%) compared to less than half the sample in 2000 (44%). In addition, a large proportion of the sample has consistently reported binge use of ecstasy across this time, with over half the sample having done so in 2006. REU mainly use ecstasy by swallowing, with substantial proportions also reporting recent use by snorting. Ecstasy continued to be used most commonly at nightclubs, friends' homes, raves/doofs/dance parties, private parties or at their own homes.

Most REU report typically using at least one other drug either 'with ecstasy' or 'at comedown' – with tobacco, alcohol, cannabis and some form of methamphetamine most common. There was an increase in the proportion of REU reporting typically using crystal methamphetamine 'with ecstasy', and increases in the proportion of REU reporting use of benzodiazepines, and anti-depressants during the comedown period.

KE information confirms that REU commonly combine other licit and illicit drug use with ecstasy use, with methamphetamine and alcohol particularly common, and that there was a wide range of frequency of ecstasy and related drug use, from every weekend (particularly among younger users) to less frequent or 'special occasion' use.

The reported price of ecstasy was stable (at $30/tablet) compared to 2005, and considered to be stable in the last six months. Availability continued to be considered 'easy' or 'very easy' by REU, and most reported usually obtaining their ecstasy from a friend. Almost two-thirds (64%) of REU were able to obtain drugs other than ecstasy from their main ecstasy dealer, the most common being some form of methamphetamine, cannabis, LSD and cocaine. The majority of REU believed that the purity of ecstasy was either medium or fluctuating in 2006, similar to previous years. The ACC reports that the median purity of SAPOL seizures of phenethylamines in 2004/05 was 29%, the same as that reported in 2003/04.

Ecstasy was generally purchased for both self and others, and purchased from a median of four people in the last six months. The majority of REU purchased ecstasy one to six times in the previous six months, with three percent purchasing ecstasy over twenty-five times in that period.

The most commonly perceived benefits of ecstasy use among REU were enhanced communication and sociability, enhanced closeness and empathy toward others, that it added more fun or enjoyment to an occasion, and enhanced mood. The most commonly perceived risks associated with taking ecstasy were some kind of physical, psychological or neuropsychological harm, or risk associated with the unknown content of ecstasy pills.

17.4 Methamphetamine

In 2006, more REU reported recent use of crystal methamphetamine (62% from 41% in 2005), but recent use of powder (51% from 66% in 2005) and base (63% from 82% in 2005) forms of methamphetamine decreased, compared to 2005. The frequency of recent methamphetamine use was somewhat different for the three forms of methamphetamine (a median of 12 days for powder, 6 days for base and 4 days for crystal). This level of use decreased for base and crystal, but frequency of powder use increased compared to 2005. Despite a decrease in the frequency of recent crystal use, an increase in the percentage of REU reporting recent use of crystal by smoking continued in 2006 (from 14% in 2004, 27% in 2005 and 47% in 2006). Of note was that there was a decrease in the proportion reporting recent use of crystal by swallowing, from 71% in 2005 to 55% in 2006. This was the first time that smoking as a route of administration of crystal methamphetamine has been used as the preferred method of administration by REU, with larger proportions of REU usually swallowing in previous years. There was some support of increased smoking of crystal among REU from KE reports, including reports that glass pipes (for smoking) were more frequently seen by police.

Overall, the locations at which REU reportedly scored all three forms of methamphetamine were from their friends' homes, with substantial proportions also reporting scoring at a dealer's home, their own home or at an agreed public place and to a lesser extent, private parties.

There were some changes in price, with a slight decrease in the price of a point of base methamphetamine (from $25 - $22.50), and for a gram of methamphetamine powder (from $65 - $50). Increases were seen for both points (from $25 - $50) and grams (from $200 - $400) of crystal. There was little change in the purity (medium to high for powder, high for base and crystal), and availability (easy to very easy) of methamphetamines. However, ACC data indicate that the median purity of methamphetamine seized by SAPOL in SA for 2004/05 had decreased (to 11.6%) compared to the previous year, and the lowest seen in the past four years. SAPOL data on clandestine laboratory detections suggest that local manufacture of methamphetamine was still a contributor to the SA methamphetamine market.

17.5 Cocaine

There was a decrease in the proportion of REU reporting recent use of cocaine in 2006 (31% in 2006 from 49% in 2005), though no change in the frequency of cocaine use, which remains low among those that had used recently. The most commonly reported locations of both 'usual' and 'last' use were a friend's home and nightclubs.

Though the number of REU able to comment on these parameters was small, reports indicated that the 'current' price of cocaine was stable (at $300/gram), and the perception was that purity was stable (high), and availability had decreased, compared to 2005. Data from the ACC show an increase in the number of cocaine seizures by SAPOL in 2004/05, while the median purity was relatively stable at 31%. As in previous years, KE suggested that the cocaine market in Adelaide was mostly restricted to a small subset of users.

17.6 Ketamine

Eleven percent of REU reported recent use of ketamine in 2006, though frequency of use remained low. The prevalence of recent use of ketamine among REU had decreased for the second year, following a steady increase in use from 2001 to 2004. The most commonly reported locations of both 'usual' and 'last' use of ketamine was a friend's home. KE comments suggest use of ketamine is either 'accidental' (in ecstasy pills) or restricted to a subset of users, and supports REU reports of use at private venues.

Though the number of REU able to comment on these parameters was very small, reports indicated that the current estimated price of ketamine had increased to $300/gram (from $200 in 2005), and it was considered to be of good quality, though difficult to obtain.

17.7 GHB

Less than ten percent of REU (7%) reported recent use of GHB, a small decrease compared to 2005 (18%). The frequency of recent use was low, consistent with previous years.

Price, purity and availability data for GHB in 2006 were based on a very small sample of REU and are, therefore, of limited value. Data suggest that the price of GHB had decreased slightly and that it remained more difficult to obtain GHB in general compared to earlier years (2001 and 2002)

KE information suggested that GHB use was not common among REU generally, but evidence of harm associated with its use was evident in emergency department attendances.

17.8 LSD

Approximately one-third (34%) of the REU sample reported recent use of LSD, and prevalence of recent use decreased in 2006. Frequency of use of LSD remains consistently low. KE reports suggest that LSD use was not common among REU, and used only occasionally among those that did use.

The price of LSD was stable (at $10 per tab) and low, perceived purity had increased, and availability remained stable and generally easy, compared to 2005.

17.9 MDA

Nine percent of REU reported recent use of MDA in 2006. The proportion of REU reporting recent use of MDA was stable compared to 2005, but the frequency of use was relatively increased but has remained consistently low across the six years of the EDRS survey. KE information suggests that MDA was not commonly used by REU, except as a (suspected) constituent of pills sold as ecstasy.

Price, purity and availability data for MDA in 2006 were based on a very small sample of REU and are, therefore, of limited value. Data suggest that the price and purity of MDA was stable, and that it had become easier to obtain.

17.10 Cannabis

Eighty-three percent of REU reported recent use of cannabis in 2006. The proportions of REU reporting both lifetime and recent use of cannabis remained stable compared to 2005, but the frequency of recent cannabis decreased (70 days in 2006 from 85 days in 2005). Binge use of cannabis decreased in 2006 from 32% in 2005 to 24% in 2006. The price, purity and availability of both hydro and bush cannabis remained stable in 2006 compared to 2005.

The number of cannabis possession (from 316 in 2005 to 351 in 2006) and provision offences (from 1,576 in 2005 to 1,612 in 2006) recorded by SAPOL increased in 2006. However, the total number of illicit drug possession and provision offences in 2005/06 decreased (60%), compared to 68% in 2004/05. Telephone calls to the SA Alcohol and Drug Information Service (ADIS) regarding cannabis remained stable. The SA rate of admissions to hospital for cannabis (primary diagnosis) remained stable, however the national rate increased in 2005/06 compared to 2004/05.

17.11 Other drugs

As in previous years, the majority of the REU sample reported recent use of alcohol and tobacco and, although the frequency of use of both these drugs has fluctuated somewhat across the years, it has remained relatively high. In 2006, seventeen percent of the REU sample were found to be in need of an evaluation for alcohol dependence, according to the alcohol AUDIT. KE information also suggests that use of these substances was common, but that frequency of use varied widely.

Substantial proportions of the samples have also consistently reported recent use of benzodiazepines, though frequency of use was generally low. However, the use of benzodiazepines is steadily increasing with a third of REU reporting recent use in 2006 compared to only 26% in 2005. The majority of KE reports suggest that use of benzodiazepines was increasing among REU, although commenting that such use is generally low level use associated with getting sleep after being up for long periods, or to help with 'comedown' from drug use.

Anti-depressants were recently used by a small proportion of REU, and KE reports suggest use was primarily as prescribed among this group. Use of inhalants has also remained fairly stable across the years, with almost half the REU sample in 2006 reporting recent use of nitrous oxide, and approximately one-tenth reporting use of amyl nitrate, with frequency of use of both substances remaining consistently low. One-fifth of REU reported recent use of some type of pharmaceutical stimulant (e.g. dexamphetamine), and 18% reported recent use of 'magic mushrooms, both at low frequency.

17.12 Drug information-seeking behaviour

Twenty percent of the REU sample reported that they 'always' found out about the content of ecstasy, but only 11% always found out about the content of other drugs before taking them, the majority relying on information from friends that had experience with use of the drug concerned. Over a third (35%) reported that they used reagent-based testing kits to find out the content of ecstasy pills, with a third of these unaware of any limitations

regarding use of such kits, and twenty-two percent stating they would still take the pill if no reaction occurred on testing (meaning the content was not fully elucidated).

17.13 Risk behaviour

Injecting

Thirteen REU reported recently injecting any drug in 2006, most commonly some form of methamphetamine (particularly base and crystal) or ecstasy. With regard to longer-term trends, there was no evidence of an increase in the prevalence of recent injecting among REU across the years. Injecting drug use was considered generally rare, and still taboo, among this illicit drug-using group, and more likely to occur among primarily methamphetamine users, rather than primarily ecstasy users.

As was seen last year, in 2006 there was little reported sharing of needles, or sharing of other injecting equipment, among recent injectors, and most reported usually injecting themselves, in the company of close friends, in private homes.

Blood-borne viral infections

At the time of interview, 44 REU stated that they had completed a hepatitis B virus (HBV) vaccination schedule, mostly unrelated to susceptibility due to any risk factor. Approximately a quarter of the REU sample reported that they had been tested for either hepatitis C virus (HCV) infection or for human immunodeficiency virus (HIV) infection, with almost all, in both cases, reporting that their status was negative.

Sexual risk behaviour

Evidence of risky sexual behaviour was again apparent among the REU sample in 2006. Of the REU that reported having had penetrative sex with a casual partner in the last six months, 68% reported that they had not always used a condom. In addition, 78% of those who reported having had penetrative sex recently, reported having done so whilst under the influence of a drug or drugs – most commonly ecstasy, followed by alcohol, cannabis or some form of methamphetamine – and, of those, 42% reported that they had not always used a condom with a casual partner. In this context, almost half the REU sample reported they had never undergone a sexual health check-up.

Driving risk behaviour

Almost half of the REU that had driven a vehicle recently reported that they had driven over the limit for alcohol, a median five times, in the last six months. Further, 79% of recent drivers reported having driven within an hour of use of 'any' illicit drug, most commonly ecstasy, methamphetamine and cannabis.

17.14 Ecstasy and related drug harms

Health

In 2006, 17% of recent methamphetamine users were found to fit the criteria of clinically significant dependence, according to the Severity of Dependence Scale. Four percent of REU were found to be at high risk of psychological distress, 61% at medium risk and 35% at low risk of psychological distress, according to the Kessler Psychological Distress Scale.

Twenty-two REU reported that they had 'ever' overdosed on a 'party drug', most commonly involving ecstasy, alcohol and ice/crystal methamphetamine. Only three REU reported recent experience of overdose; the main drugs believed responsible were ecstasy, alcohol and ice/crystal methamphetamine, respectively, though multiple drugs were involved in each case.

The proportion of clients attending DASSA treatment services with ecstasy as the primary drug of concern has been stable for the last two years, and relatively low compared to other illicit drugs (one percent of total clients). The proportion of clients nominating amphetamines as the primary drug of concern has remained relatively stable over the last four years, and was 19% in 2005/06. As such, amphetamines were the second most commonly nominated primary drug of concern by clients of DASSA, after alcohol (52%), and dominated as the most common illicit drug of concern.

As in previous years, two-thirds of the REU sample reported having experienced one or more problems related to their drug use in 2006; the majority of which related to some aspect of their social life or relationships, followed by financial, work or study problems. Use of ecstasy or some form of methamphetamine was most commonly held responsible, at least in part, for these problems.

Criminal activity and perception of police activity

In 2006, thirty percent of REU reported involvement in some type of crime, and 11 REU reported having been arrested in the last 12 months, similar to the previous year. Drug dealing was the most commonly reported crime across all years of the survey. KE agreed that criminal activity was uncommon among this group, with the exception their illicit drug use, and there was an increase in dealing drugs to friends.

Three-quarters of the REU sample purchased ecstasy for themselves and others in the previous six months, and as such were engaged in 'supply' of an illicit drug to others. Over half of those who had 'supplied' ecstasy to others had purchased ecstasy monthly or less, with four percent purchasing at least three times per week. Nearly half of those who had purchased ecstasy for themselves and others usually obtained 10 or more pills when purchasing ecstasy. A third of the REU sample believed they knew how much ecstasy they needed to be in possession of to be charged with supply if caught by police. The consequences of being convicted of supplying ecstasy were unknown by the majority of the REU sample, with over half of the REU sample believing there is no difference between getting tablets for personal use or for their friends in the eyes of the law.

As has been consistent across the last five years, the majority of REU reported that their ability to obtain drugs had not become more difficult due to police activity in 2006. The majority of REU believed that police activity had been stable recently.

In 2006, REU were asked if they had seen sniffer dogs at an event in the previous six months, with 27% reporting that they had. Twelve of those who had seen sniffer dogs reported that they had drugs on them when they saw the sniffer dogs, with two reporting they took the drugs to avoid detection, three did nothing, and the remainder making no comment.

REFERENCES

Andrews, G. & Slade, T. (2001). Interpreting scores on the Kessler Psychological Distress Scale (K10). *Australian and New Zealand Journal of Public Health*, 25: 6, 494 - 7.

Australian Crime Commission (2003). *Australian Illicit Drug Report 2001-2002*. Canberra: Australian Crime Commission.

Australian Crime Commission (2004). *Australian Illicit Drug Report 2002-2003*. Canberra: Australian Crime Commission.

Australian Crime Commission (2005). *Australian Illicit Drug Report 2003-2004*. Canberra: Australian Crime Commission.

Australian Crime Commission (*in press*). *Australian Illicit Drug Report 2004-2005*. Canberra: Australian Crime Commission.

Australian Institute of Health and Welfare (2005a). *2004 National Drug Strategy Household Survey: First Results*. AIHW cat. no. PHE 57. (Drug Statistics Series No.13). Canberra: AIHW.

Australian Institute of Health and Welfare (2005b). *2004 National Drug Strategy Household Survey: Detailed findings*. AIHW cat. no. PHE 66. (Drug Statistics Series No.16). Canberra: AIHW.

Australian Institute of Health and Welfare (2005c). *2004 National Drug Strategy Household Survey: State and territory supplement*. AIHW cat. no. PHE 61. Canberra: AIHW.

Babor, T., Higgins-Biddle, J., Saunders, J., & Monteiro, M. (2001*). The Alcohol Use Disorders Identification Test: Guidelines for use in primary care*. World Health Organisation. Geneva: Department of Mental Health and substance dependence. Published document WHO/MSD/MSB/01.6a.

Biernacki, P. & Waldorf, D. (1981) Snowball sampling: Problems, techniques and chain referral sampling. *Sociological Methods and Research,* 10*,* 141 - 63.

Boys, A., Lenton, S. & Norcoss, K. (1997) Polydrug use at raves by a Western Australian sample. *Drug and Alcohol Review,* 16, 227 - 34.

Breen, C., Topp, L. & Longo, M. (2002). *Adapting the IDRS methodology to monitor trends in party drug markets: Findings of a two year feasibility trial*. NDARC Technical Report Number 142. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.

Camilleri, A. & Caldicott, D. (2005). Underground pill testing, down under. *Forensic Science International,* 151: 53 - 8.

Chesher, G.B. (1993) Pharmacology of the sympathomimetic psychostimulants. In: D. Burrows, B. Flaherty & M. MacAvoy (Eds.), *Illicit Psychostimulant Use in Australia* (pp. 9 - 30). Canberra: Australian Government Publishing Service.

Dalgarno, P.J. & Shewan, D. (1996) Illicit use of ketamine in Scotland. *Journal of Psychoactive Drugs,* 28*,* 191 - 99.

Darke, S., Cohen, J., Ross, J., Hando, J., & Hall, W. (1994) Transitions between routes of administration of regular amphetamine users. *Addiction,* 89, 1077 - 83.

Degenhardt, L., Roxburgh, A. & Black, E. (2004). *Cocaine and amphetamine mentions in accidental drug-induced deaths in Australia 1997 - 2003*. Sydney: National Drug and Alcohol Research Centre. University of New South Wales.

Degenhardt, L., Roxburgh, A. and Black, E. (2004a). *2003 Australian Bureau of Statistics data on accidental opioid induced deaths*. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.

Forsyth, A.J.M. (1996). Places and patterns of drug use in the Scottish dance scene. *Addiction,* 91*,* 511 -21.

Gossop, M., Darke, S., Griffiths, P., Hando, J., Powis, B., Hall, W. & Strang, J. (1995) The Severity of Dependence Scale (SDS): psychometric properties of the SDS in English and Australian samples of heroin, cocaine and amphetamine users. *Addiction,* 90, 607 - 14.

Kerlinger, F.N. (1986) *Foundations of Behavioural Research (third edition)*. Japan: CBS Publishing Limited.

Kessler, R., Price, R., & Wortman, C., (1985). Social factors in psychopathology: Stress, social support, and coping processes. *Annual Review Psychology*, 36, 531 - 72.

Kessler, R., & Mroczek, D. (1994). Final version of our non-specific Psychological Distress Scale. Michigan: Survey Research Center if the Institute for Social Research, University of Michigan.

Longo, M., Humeniuk, R., Paul, C., & Ali, R. (2003). *South Australian drug trends 2002: findings from the illicit drug reporting system (IDRS)*. Drug and Alcohol Services Council, South Australia. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.

Ovendon, C. & Loxley, W. (1996). Bingeing on psycho stimulants in Australia: Do we know what it means (and does it matter)? *Addiction Research,* 4*,* 33 - 43.

Quinn, C., Breen, C. & White, B. (2004). Illicit Tablet Market in Victoria. *PDI Drug Trends Bulletin, June 2004*. Available at:
http://ndarc.med.unsw.edu.au/ndarc.nsf/website/IDRS.erds

Peters, A., Davies, T. & Richardson, A. (1997) Increasing popularity of injection as the route of administration of amphetamine in Edinburgh. *Drug and Alcohol Dependence,* 48*,* 227 - 37.

Reinert, D.F., & Allen, J.P. (2002). The Alcohol Use Disorders Identification Test (AUDIT): A review of recent research. *Alcoholism: Clinical and Experimental Research*, 26 (2) 272 - 79.

Saunders, J.B., Aasland, O.G., Babor, T.F., de la Fuente, J.R. & Grant, M. (1993). Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO collaborative project on early detection of persons with harmful alcohol consumption. *Addiction*, 88, 793 - 804.

Solowij, N., Hall, W. & Lee, N. (1992) Recreational MDMA use in Sydney: A profile of 'Ecstasy' users and their experiences with the drug. *British Journal of Addiction,* 87, 1161 - 72.

South Australia Police (2001). South Australian Police Annual Report 2000/2001. Adelaide: South Australian Police.

South Australia Police (2002). South Australian Police Annual Report 2001/2002. Adelaide: South Australian Police.

South Australia Police (2003). South Australian Police Annual Report 2002/2003. Adelaide: South Australian Police.

South Australia Police (2004). South Australian Police Annual Report 2003/2004. Adelaide: South Australian Police.

South Australia Police (2005). South Australian Police Annual Report 2004/2005. Adelaide: South Australian Police.

South Australia Police (2006). South Australian Police Annual Report 2005/2006. Adelaide: South Australian Police.

SPSS Version 14. for Windows (December 2006). SPSS Inc

Topp, L. & Churchill, A. (2002). Australia's dynamic methamphetamine market. *Drug Trends Bulletin, June 2002;* available at: http://ndarc.med.unsw.edu.au/ndarc.nsf/website/IDRS.bulletins

Topp, L., Hando, J., Degenhardt, L., Dillon, P., Roche, A., & Solowij, N. (1998). *Ecstasy use in Australia.* NDARC Monograph Number 39. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.

Topp, L., Hando, J., Dillon, P., Roche, A. & Solowij, N. (2000). Ecstasy use in Australia: Patterns of use and associated harms. *Drug and Alcohol Dependence*, 55, 105 - 115.

Topp, L. & Mattick, R. (1997). Choosing a cut-off on the Severity of Dependence Scale (SDS) for amphetamine users. *Addiction*, 92 (7), 839 - 45.

Weekley, J., Pointer, S. & Ali, R. (2005a). *South Australian Trends in Ecstasy and Related Drug Markets 2004: Findings from the Party Drugs Initiative (PDI).* NDARC Technical Report No. 224. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.

Weekley, J., Pointer, S. and Ali, R. (2005b). *South Australian Drug Trends 2004: Findings from the Illicit Drug Reporting System (IDRS).* NDARC Technical Report No. 213. Sydney: National Drug and Alcohol Research Centre.

White, B., Breen, C. & Degenhardt, L. (2003). *NSW Party Drug Trends 2002: Findings from the Illicit Drug Reporting System (IDRS)* Party Drugs Module. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.

Zvosec, D., Smith, S., McCutcheon, B., Spillane, J., Hall, B. & Peacock, E. (2001). Adverse events, including death, associated with the use of 1,4-Butanediol. *New England Journal of Medicine*, 344 (2), 87 - 94.

APPENDIX 1: LIFETIME AND RECENT DRUG USE OF REU, 2000 – 2006

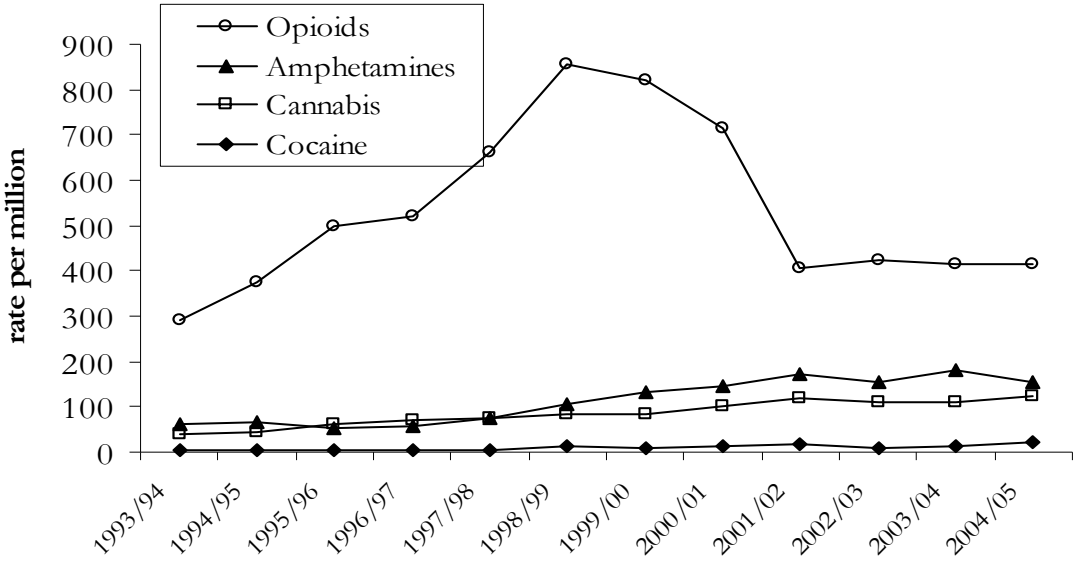
Variable	2006 (n=101)	2005 (n=100)	2004 (n=100)	2003 (n=101)	2002 (n=68)	2001 (n=70)	2000 (n=50)
Alcohol							
Ever used (%)	**99**	100	100	100	99	100	100
Used last 6 months (%)	**97**	99	96	98	90	94	92
Cannabis							
Ever used (%)	**98**	97	97	100	99	96	96
Used last 6 months (%)	**83**	87	81	87	82	89	88
Tobacco							
Ever used (%)	**87**	90	76	81	79	73	82
Used last 6 months (%)	**73**	78	65	72	71	67	52
Methamphetamine powder (speed)							
Ever used (%)	**75**	83	86	82	94	94*	98*
Used last 6 months (%)	**51**	66	62	65	72	74*	65*
Methamphetamine base							
Ever used (%)	**72**	88	84	75	85	81*	92*
Used last 6 months (%)	**63**	82	72	70	82	70*	70*
Crystal methamphetamine							
Ever used (%)	**73**	62	60	60	91	-	-
Used last 6 months (%)	**62**	41	47	48	88	-	-
Pharmaceutical stimulants							
Ever used (%)	**49**	60	54	-	-	-	-
Used last 6 months (%)	**20**	24	21	-	-	-	-
Cocaine							
Ever used (%)	**49**	67	59	58	59	51	54
Used last 6 months (%)	**31**	49	26	37	49	34	32
LSD							
Ever used %	**71**	82	77	73	91	79	94
Used last 6 months %	**34**	48	36	30	66	50	50

Source: EDRS REU interviews

***** In 2000 and 2001, methamphetamine was categorised as 'powder' and 'non-powder', listed here as powder and base

- Indicates the data were not collected for the variable in that year

APPENDIX 2: RATE OF SUBSTANCE-RELATED ADMISSIONS* (PRIMARY DIAGNOSIS) TO HOSPITAL IN AUSTRALIA, 1993/1994 - 2004/05



Source: Australian Institute of Health and Welfare

***** For persons aged between 15 and 54 years

Note: 'primary diagnosis' was given to those admissions where the substance was considered the primary reason for the patient's episode of care