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**SA TRENDS IN ECSTASY AND RELATED
DRUG MARKETS 2009
Findings from the
Ecstasy and Related Drugs Reporting System
(EDRS)**

Australian Drug Trends Series No. 51

**SOUTH AUSTRALIAN
TRENDS IN ECSTASY AND
RELATED DRUG MARKETS
2009**



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

Nancy White, Robyn Vial and Robert Ali

Drug and Alcohol Services of South Australia¹

Australian Drug Trends Series No. 51

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

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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
AGDH&A	Australian Government Department of Health and Ageing
AIHW	Australian Institute of Health and Welfare
A&TSI	Aboriginal and/or Torres Strait Islander
AQFV	Alcohol Quantity Frequency and Variability Assessment
CME-DIS	Client Management Engine-DASC Information System
DASC	Drug and Alcohol Services Council
DASSA	Drug and Alcohol Services South Australia
DMT	N, N,- dimethyltryptamine
DOI	2,5 -dimethoxy-4-iodoamphetamine
DTEI	Department of Transport, Energy and Infrastructure (SA)
ED	Emergency Department (Royal Adelaide Hospital)
EDRS	Ecstasy and related Drugs Reporting System
GBL	gamma-butyrolactone
GHB	gamma-hydroxy butyrate ('fantasy', GBH, 'liquid E')
GP	general practitioner
HBV	hepatitis B virus
HCV	hepatitis C virus
HIV	human immunodeficiency virus
ICD – 9	International Classification of Diseases, 9th Revision
ICD – 10	International Classification of Diseases, 10th Revision
IDDR	Illicit Drug Data Report
IDRS	Illicit Drug Reporting System
IDU	intravenous drug users
KE	key expert (s)
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
OTC	over the counter codeine
OTS	over the counter stimulants
PDI	Party Drugs Initiative
PDU	party drug users
PMA	para-methoxyamphetamine
PWI	Personal Well-being Index
RAH	Royal Adelaide Hospital
REU	regular ecstasy user
SA	South Australia
SAPOL	South Australian Police
SDS	Severity of Dependence Scale
SF-8	Short Form – 8 Health Survey
SPSS	Statistical Package for the Social Sciences
STI	sexually transmitted infection
1,4-B	1,4-butanediol (1,4-B, BD)
2 CB	4 – bromo – 2,5 – dimethoxyphenethylamine
2 CI	2,5 – dimethoxy – 4 – iodophenethylamine

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. 2009 was the tenth 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 (REU), 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, together with the trends in these drug markets.

Demographic characteristics of regular ecstasy users

In 2009 two-thirds of the participants were male, and aged in their early 20s. They were also generally either employed or full-time students with a third of the sample unemployed. Most participants were well educated and over half had completed some kind of post-school qualification. Very few had a history of imprisonment or were currently undergoing treatment for drug use. In comparison to participants in 2008, the 2009 participant sample was younger, a larger proportion was male, and more reported being unemployed. Key expert (KE) reports of the demographics of ecstasy users were generally consistent with the 2008 REU sample.

Patterns of drug use among participants

Despite some differences in the demographic characteristics of the regular ecstasy users in 2009 compared to previous years, the sample in 2009, overall, had used a similar number of drugs in their lifetime (with the exception of cocaine, lysergic acid diethylamide (LSD), gamma-hydroxy butyrate (GHB) and tobacco) and recently (with the exception of base methamphetamine, amyl nitrate, nitrous oxide, cannabis and tobacco). Participants who had used various drugs recently had done so at a similar frequency, with the exception of cannabis. Moreover, in 2009, as in previous years, the majority of the sample reported recent use of some form of methamphetamine, although this year's use was again not at levels equivalent to ecstasy use. Similar to previous years, participants also used cannabis, alcohol, LSD and tobacco as well as ecstasy. Contrary to previous years, other substances reported as recently used were not used by substantial proportions of participants, with nitrous oxide, ketamine and cocaine used by less than a quarter of the sample. Use of these and other drugs continued to be at a much lower frequency. In 2009, there were no dramatic increases in the proportion of participants reporting recent use of 'any' drug.

A larger proportion of participants in 2009 reported recent bingeing on ecstasy or other related drugs in comparison to participants in 2008 when around a quarter of the sample reported doing so in the six months prior to interview. A larger proportion of participants reported binge use of ecstasy, alcohol and cannabis, whereas fewer participants reported binge use of base methamphetamine in 2009.

The majority of 2009 participants reported use of any drug primarily by swallowing or snorting, with the exception of methamphetamine use where smoking appears to be the primary route of administration of all forms of methamphetamine even surpassing

swallowing as the main route of administration. However, very few participants reported recent injecting, most commonly some form of methamphetamine. No clear long-term trend in prevalence of injecting amongst participants was discernible.

Ecstasy

Over the last ten years there has been little change in parameters of ecstasy use, with the reported median age of first use, median days of use, 'average' or 'most' amount used in a typical session all remaining relatively stable across this period. More participants in 2009 reported using more than one tablet in a typical session, compared to participant reports in 2008. Despite this finding, use of more than one tablet in a typical session was reported by the majority of the sample compared to less than half the sample in 2000 (for more information see previous PDI editions). In addition, although in previous years large proportions of participant samples have consistently reported binge use of ecstasy across this time, with around a half of the sample usually reporting engaging in such behaviour, in 2009 around a third reported bingeing on ecstasy. Participants mainly use ecstasy by swallowing. Ecstasy continued to be used most commonly at private residences (either their own home or friends' homes), or nightclubs.

Fewer participants in 2009 reported typically using at least one other drug 'with ecstasy', or 'at comedown' compared to participants in 2008: most commonly, some form of methamphetamine, tobacco, alcohol, and cannabis.

KE information confirms that REU commonly combine other licit and illicit drug use with ecstasy use, with methamphetamine, benzodiazepine and alcohol particularly common. KE reported an increase in the combined use of alcohol and methamphetamine, with many REU using ecstasy and methamphetamine at home and then using alcohol in public areas only to finish the night with more illicit drug use.

The reported price of ecstasy was lower compared to 2008, although considered stable in the last six months. Availability continued to be considered 'easy' or 'very easy' by participants and most reported usually obtaining their ecstasy from a friend. Participants' opinions of the purity of ecstasy were equivocal with similar numbers reporting the purity as either low, medium or fluctuating in 2009: consistent with reports by participants in 2008. The Australian Crime Commission (ACC) reports that the median purity of South Australian Police (SAPOL) seizures of phenethylamines in 2007/08 was 20%, a decrease compared to that reported in 2006/07.

Ecstasy was generally purchased for both self and others, with no participants reporting purchasing ecstasy for others only. Ecstasy was purchased from a median of five people in the six months prior to interview. The majority of participants purchased ecstasy one to 12 times in that period, with four percent purchasing ecstasy over twenty-five times in that period.

One-in-five participants reported that they 'always' found out about the content of ecstasy, with a third never finding out the content and the majority relying on information from friends or their dealer who had experience with use of the drug concerned. Few participants reported using reagent-based testing kits to find out the content of ecstasy pills. Despite this, two-thirds of the participants reported that the ecstasy they had purchased in the last six months 'sometimes' or more often turned out to have a different content or purity than they expected.

Methamphetamine

In 2009, the proportions of the participant sample reporting recent use of powder and crystal methamphetamine were similar, whereas recent use of base methamphetamine continued to decrease in 2009 to the lowest level recorded in the last 10 years. The frequency of recent methamphetamine use in 2009 was somewhat similar to 2008 for the three forms of methamphetamine, with all forms used at the same frequency in 2009. In the six months prior to interview, smoking of crystal methamphetamine continued to be the preferred route of administration. Smoking as a route of administration has become the primary method of administering of all forms of methamphetamine, with the majority of methamphetamine users reporting use of this method of administration. Fewer participants reported swallowing, snorting and injecting powder and base methamphetamine and more reported smoking compared to participant reports in 2008. For crystal methamphetamine similar numbers reported swallowing, but fewer participants reported snorting and injecting and more reported smoking this substance. This was the fourth year in a row smoking of crystal methamphetamine was reported as the preferred route of administration, with larger proportions of participants in previous years preferring to ingest, although this is the first year smoking is the primary route of administration of the powder and base forms.

Overall, participants mostly reported obtaining all three forms of methamphetamine from friends, and at their friend's home.

The recent purity of all forms of methamphetamine was medium or high according to the majority of participants, with larger proportions of participants reporting powder and ice/crystal methamphetamine purity as stable, and as stable or decreasing for base, in the six months prior to interview. All forms of methamphetamine were considered easy to very easy to obtain recently, with methamphetamine powder appearing to be the easiest to purchase according to participant reports. However, the median purity of methamphetamine seized by SAPOL decreased compared to the previous year. Clandestine laboratory detections suggest that local manufacture of methamphetamine was still a contributor to the SA methamphetamine market, although crystal methamphetamine may be manufactured interstate.

Many KE reported problems associated with the use of methamphetamine and alcohol, including, for example, an increase in aggressive and violent behaviours, family problems, removal of children from the family home, homelessness, and mental health issues.

Cocaine

The same proportion of participants in 2009 reported recently using cocaine in comparison to participant reports of use in 2008. Frequency of use was also the same as in 2008 and remained low among those who reported recent use. Due to small numbers commenting, no price, purity and availability information is provided (see Other Drugs, Chapter 8).

KE report an increase in the number of REU mentioning cocaine and an increase in the use of this drug.

LSD

One-third of the participant sample in 2009 reported recent use of LSD and prevalence of recent use was stable. Frequency of use of LSD was stable and remains consistently low. KE reports suggested that LSD use was not common by REU, and possibly

decreasing, and that use was occasional among those who did use. Participants reported 'usually' obtaining LSD from friends, and the 'usual' location for purchasing LSD was a friend's home.

The price of LSD was slightly higher than the price reported in 2008. The purity of LSD was perceived as high, and LSD was reportedly generally easy to obtain and remained stable in the six months prior to interview.

Cannabis

Eighty-six percent of participants reported recent use of cannabis in 2009. The proportion of participants reporting lifetime use remained stable, but the proportion of participants reporting recent use of cannabis was higher compared to reports in 2008. The frequency of recent cannabis use by participants in 2009 was higher than reported in 2008 and continues to fluctuate. The proportion reporting binge use of cannabis was higher in 2009 compared to 2008. Participants reported 'usually' obtaining cannabis from a friend in the six months prior to interview. The price, purity and availability of hydro, bush and 'generic' cannabis remained stable in 2009 compared to 2008.

Other drugs

As in previous years, the majority of the participant samples 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 suggested that use of these substances was common and that frequency of use of alcohol with ecstasy is increasing.

Fourteen percent of participants reported recent use of illicit benzodiazepines, at the same frequency as participant reports in 2008. A very small proportion of participants reported recent use of illicit anti-depressants

Use of inhalants has also remained fairly stable across the years, with thirty-three percent of the participant sample in 2009 reporting recent use of nitrous oxide, and 16% reporting use of amyl nitrate. This indicates an increase in 2009 compared to participant reports in 2008 in the use of nitrous oxide (from 26% in 2008 to 33%) and amyl nitrate (from 7% to 16%). Frequency of use of both these substances remained consistently low. Recent use of illicit pharmaceutical stimulants remained stable in 2009 compared to 2008, and the frequency of recent use of illicit pharmaceutical stimulants remained low.

Nineteen percent of participants reported having used ketamine in the six months prior to interview. Compared to 2008, recent use and frequency of use remained stable in 2009. Frequency of recent ketamine use remains low, similar to previous years.

The proportion of participants reporting recent use of GHB remained stable and low, with frequency of use also remaining stable and low.

Participants in 2009 were asked about their use of 2, 5-dimethoxy-4-iodoamphetamine (DOI). Twelve percent of participants reported lifetime use of DOI, with 8% reporting recent use of this substance, albeit at a low frequency.

Health-related issues

Few participants reported overdosing on a 'stimulant' drug or 'depressant' drug in the six months prior to interview.

Only ten percent of participants reported having accessed one or more medical or health services in the six months prior to interview, in relation to their use of ecstasy and related drugs. The most commonly accessed service in relation to 'any' drug use, by the few participants able to comment, was a drug and alcohol worker.

The proportion of clients attending Drug and Alcohol Services South Australia (DASSA) treatment services, with ecstasy as the primary drug of concern, has been steadily increasing for the last four years, although remaining relatively low compared to other illicit drugs. The proportion of clients nominating amphetamines as the primary drug of concern decreased again in 2009 compared to 2008. Amphetamines were the second most commonly nominated primary drug of concern by clients of DASSA, after alcohol, and dominated as the most common illicit drug of concern. The proportion of clients nominating cannabis as their primary drug of concern decreased in 2009 compared to the previous year.

In 2009, a larger proportion of participants reported experiencing one or more problems related to their drug use compared to participants in 2008, with a third being at risk of injury, and a quarter experiencing personal/responsibility problems. Use of some form of ecstasy or alcohol was most commonly held responsible, at least in part, for these problems.

It was noteworthy in 2009 that alcohol again accounted for by far the most Royal Adelaide Hospital (RAH) emergency department attendances across all years. Attendances regarding amphetamines have fluctuated somewhat across the years depicted, and accounted for the second most common illicit drug-related attendances, with heroin now the most common illicit drug-related attendances at the RAH. This indicates a change in 2009, with amphetamines the most common illicit drug and heroin second regarding attendances at the RAH in 2008.

In 2009, a quarter of the participants were assessed at high to very high risk of psychological distress as measured by the Kessler Psychological Distress Scale (K10), in the four-weeks prior to the survey.

For the first time in 2009 the Personal Wellbeing Index (PWI) was incorporated into the EDRS survey. Questions asked how satisfied participants were with various aspects of their life. Questions included related to standard of living, health, personal achievement, personal relationships, personal safety, feeling a part of the community, future security and life as a whole. Participants scored lower than the general population on each factor of personal wellbeing, with the exception of personal safety and being part of the community. Moreover, for standard of living, health, and achievements in life participants were below the normal range for each factor, and for safety they were above this range. These findings indicate that participants are less than satisfied with their standard of living, health, and their current achievement to date.

Risk behaviour

Injecting

Twelve participants reported recently injecting any drug in 2009, most commonly some form of methamphetamine, or heroin. With regard to longer-term trends, there was no evidence of an increase in the prevalence of recent injecting amongst participants across the years. Injecting drug use was reported by around a fifth of the participants this year, although 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 2009 there was little reported sharing of needles among recent injectors; however, the majority of those who had recently injected reported sharing other injecting equipment.

Sexual risk behaviour

Evidence of risky sexual behaviour was again apparent among the participants sample in 2009. Of the participants who reported having had penetrative sex with a casual partner in the last six months, most did not use a condom on every occasion, and one-in-five never used a condom with casual partners. In addition, the majority of those who reported recent penetrative sex 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, the majority reported they had not always used a condom with a casual partner.

Driving risk behaviour

Less than half of those who had driven in the six months prior to interview had driven under the influence of alcohol, with the majority reporting driving over the legal alcohol limit a median of four times in that period. Participants reported driving within an hour of consuming an illicit drug a median of five times in the six months prior to interview. Ecstasy, cannabis and methamphetamine were the most commonly used illicit drugs while driving.

Alcohol risk behaviours

In 2009, a new measure of alcohol consumption was included in the EDRS as a way of more accurately measuring the quantity and frequency of alcohol use while taking into account variability of this over the course of the past year. The Alcohol Quantity Frequency and Variability Assessment² (AQFV) is a self-report measure which examines alcohol use over the preceding six months. Almost half of the females drank at high risk levels for 12 days in the past year, with males drinking on 42 days at that same level.

Gambling behaviour

A third of the participants gambled a median of two times in the month prior to interview. Most of those who had gambled in that period reported 'usually' and 'last' using poker machines.

Criminal activity and perception of police activity

² Many thanks to Dr James Lemon, previously of the National Drug and Alcohol Research Centre, for his kind permission to use the AQFV assessment in the 2009 EDRS.

Reports of criminal activity among participants

In 2009, a third of the participants sample reported involvement in some type of crime and one-in-ten participants reported having been arrested in the last 12 months, similar to the previous year. Drug dealing has been 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, driving while under the influence of a drug, and an increase in the number of pills bought when dealing drugs to friends.

Consistent across the last seven years, the majority of participants reported that their ability to obtain drugs had not become more difficult due to police activity in 2009, although increased numbers reported that police activity made it more difficult to obtain drugs recently. Most participants believed that police activity had increased recently.

In 2009, participants were asked if they had seen sniffer dogs at an event in the previous six months, with more than half of the participants reporting that they had, and half reported they had drugs on them when they saw the sniffer dogs. This indicates an increase in the proportion of participants observing sniffer dogs at events compared to participant reports in 2008.

Implications

The findings from the 2009 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 by REU of multiple drugs in combination, and binge use of drugs, warrants continued education regarding the potential risks and harms associated with such behaviour, and continued promotion of harm reduction strategies.
- Given the continued 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 to REU.
- Continued monitoring is required of indicators of use, especially the increase in smoking of all forms of methamphetamine, especially crystal methamphetamine, which is known to have higher 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.
- Given the high prevalence of supply of ecstasy to friends among REU, there is a need for education strategies to remind this group of the illegality of their behaviour and the consequences of such behaviour.
- Continued 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 'safer sex' practices is needed within this population of illicit drug users, especially regarding casual sexual experiences.
- Given the prevalence of drink and drug driving among REU, and the introduction of roadside drug testing in SA, there is a need for development and implementation of a targeted education and harm-reduction programs,

- Considering the prevalence of alcohol-related harm by REU, and daily alcohol consumption by some REU, specific harm reduction information is needed to target this group.
- Considering the prevalence and increase of alcohol and methamphetamine-related harm by REU, specific harm reduction information is needed to target this group.
- Considering the incidence of gambling reported by REU, research needs to be undertaken to further explore the prevalence of this behaviour among other illicit drug users, followed by development and implementation of specific programs directed to this group.
- Development and implementation of strategies are needed to address issues associated with drug misuse and dependence, and mental health co-morbidity, particularly effective concurrent treatment.
- The development and implementation of strategies to cater for those with substance use, mental health and gambling problems appears warranted.
- Considering the relatively high levels of aggression reported by participants strategies to reduce such aggression are needed.

1 INTRODUCTION

The EDRS evolved from the Illicit Drug Reporting System (IDRS), 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 an 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 Council (DASC), now known as 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 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, the Australian Government Department of Health and Ageing and the Ministerial Council on Drug Strategy provided funding, as a project under the cost shared funding arrangement. In 2006, the Australian Government Department of Health and Ageing provided funding. In 2006, the PDI was renamed 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 2009 South Australian EDRS report provides information regarding ecstasy and related drug trends in Adelaide, particularly focusing on the 12 months between May 2008 and May 2009.

1.1 Study aims

The specific aims of the 2009 South Australian EDRS were to:

- describe the characteristics of a sample of ecstasy users surveyed in Adelaide in 2009;
- 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 2009 EDRS with those found in the 2003, 2004, and 2005 PDI (Weekley, Pointer & Ali, 2005a), and the 2006, 2007 and 2008 EDRS (White, Vial & Ali, 2008).

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 (REU) living in the Adelaide metropolitan area;
- a survey of key experts (KE) who work professionally or as volunteers in the drug and alcohol area or a related field, and have knowledge of or 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

The sample consisted of people who had regularly used ecstasy at least once per month in the 6-months prior to interview. A total of 100 regular ecstasy users were interviewed from May to June of 2009. 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, advertisements were 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 & Norcross, 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, on 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 (not incarcerated) 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 \$40 for their time and travel expenses. Interviews took place in varied locations convenient to the participants. Trained research interviewers with experience and understanding of how to administer the survey questionnaire conducted all interviews. 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 2009 EDRS was based on an earlier study of ecstasy users conducted at NDARC (see Topp et al., 1998, 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 has continually been adapted over the years, and was expanded in 2004, 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 introduced with the use of the Alcohol Use Disorders Identification Test (AUDIT) (Babor, et al. 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 participants’ 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 SDS for ecstasy and factors influencing the purchasing of ecstasy were removed in 2006.

Further changes were incorporated into the 2007 survey, with the inclusion of questions relating to the procurement of ice/crystal methamphetamine pipes, the quantity of cannabis used at last use, and participant knowledge of para-methoxyamphetamine (PMA). Questions relating to injecting practices were added, additional questions were

attached to the AUDIT regarding specific gender patterns of alcohol use in the month prior to interview, and questions relating to cannabis were expanded to give participants a third choice of 'generic' cannabis as well as hydro and bush. Aspects of overdose were further examined with questions specifically relating to 'stimulant' and 'depressant' overdose experiences added in 2007. Questions relating to participants knowledge of the law relating to pill possession, and on perceived risks and benefits of ecstasy use, were removed.

In 2008, additional questions regarding physical health were introduced with the inclusion of the Short Form – 8 Health Survey (SF-8) (Le Fante et al. 2005). Questions relating to recent gambling behaviour were asked for the first time. Additional questions relating to participants' sharing of smoking equipment, mixing tobacco with cannabis, availability of crystal methamphetamine pipes, and the purchasing of 'bulk' quantities of ecstasy were also included for the first time. Sexual activity with a regular partner was removed this year, with the focus now specifically on casual partners. Questions relating to 'generic' cannabis and reactions to sniffer dogs were also removed.

In 2009, additional questions regarding the personal well-being of participants were included (PWI), aggression was also examined with the use of the Buss-Perry Aggression Scale, and alcohol use frequency was measured using the Alcohol Quantity Frequency and Variability Assessment (AQFV). Sexual activity with a regular partner was again included, and problem gambling practices were examined with the inclusion the Problem Gambling Severity Index (PGSI). The AUDIT was removed.

2.1.4 Data analysis

Statistical analyses (descriptive and inferential) were performed using the Statistical Package for the Social Sciences (SPSS) for Windows, Version 17.0. (2009). 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). Twenty KE from various metropolitan regions of Adelaide provided information for the 2009 EDRS regarding ecstasy and related drug users, or drug markets in metropolitan 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 August through to October 2009.

The majority of KE worked in the health sector, including in health promotion, community drug and alcohol work, drug treatment services, gambling services, mental health services and emergency treatment. Three KE worked within, or had in-depth knowledge of, the dance scene. There was one KE from law enforcement, and two from forensic science.

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, 2004 and 2007 (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 Roxburgh and Burns (in press) drug-related admissions to the Emergency Department of the Royal Adelaide Hospital (RAH), provided by the Emergency Department (ED);
- drug-related hospital admissions data (state and national) provided by the Australian Institute of Health and Welfare (AIHW) 2009.

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 are also exclusively methamphetamine (Topp & Churchill, 2002). 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 and Degenhardt (2003).

2.4.2 Variability in the number of participants 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 vary 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, participants 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 participant surveys; see White, Vial & Ali, 2008). In 2009, participants were only asked to provide detail of the cost of a particular drug ‘at last purchase’ within the last six months rather than the ‘current’ price.

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’ 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), have been referred to as ‘regular ecstasy users’ (REU) since 2004.

3 OVERVIEW OF REGULAR ECSTASY USERS

Summary

- The sample of 100 regular ecstasy users interviewed in 2009 were typically in their early to mid-twenties, with ages ranging from 16 to 54 years, and were predominantly male.
- The 2009 sample was younger than in 2008.
- Most of the participants were well educated, with the majority having completed year 12 high school level and some form of tertiary qualification (university or trade/technical). The majority were either employed (full-time or part-time/casual) or were currently students.
- Few participants had come into contact with the criminal justice system or drug treatment agencies.

- Polydrug use was the norm among the participants interviewed, with most having used a range of drug classes in the preceding six months. Recent use of alcohol, tobacco, cannabis and/or some form of methamphetamine was most common.

3.1 Demographic characteristics

Table 3.1 summarises the demographic characteristics of the participant sample for 2009 (N=100), with 2008 (N=74) statistics for comparison. The demographic profile of 2009 participants was similar to that of 2008, with a few differences apparent.

The median age of participants was 21 years (range 16 to 54), the majority were heterosexual and spoke English as the main language at home. In 2009, similar to 2008, the majority of the sample was employed on a full-time or part-time/casual basis or were students (both full-time and part-time), with a further 33% currently unemployed. The median number of years participants had spent at school was 11 (range 7 to 12 years). Around half of the participants had completed some form of post-school qualification, with 36% having completed a trade/technical qualification and a further 16% having completed a tertiary qualification through university or college, since leaving school.

In 2009, participants resided in the Southern areas (n=30), and the Northern areas (n=28), followed by Central/Eastern (n=24) or Western areas (Nn17) of Adelaide (data missing for one participant). The majority of the participants resided in either rental accommodation (58%), or their family/parent's home (34%). A further six percent of the sample reported owning his or her own house or flat, with one person residing in a boarding house, and another person having no fixed address.

One participant in 2009 reported currently being in some form of treatment for drug use.

There was an overlap of the 2009 EDRS sample with previous years' samples. Nine of the 2009 participant sample stated that they had participated in the EDRS before – four in 2008, three in 2007, one in 2006, three in 2005, and one in 2004 (note: some participants had previously participated more than once). Two participants also indicated that they had participated in the 2008 and 2005 SA IDRS survey of injecting drug users.

Differences apparent in this year's sample include the younger age of participants in 2009 (median age 21 years) compared to 2008 (median age 24 years), an increase in participants reporting unemployment (from 23% in 2008 to 33% in 2009), and an increase in male participants to around two-thirds compared to around half in 2008.

Table 3.1: Demographic characteristics of the participant sample, 2008 & 2009

Characteristic	2008 (N=74)	2009 (N=100)
Age (median in years)	24 (17-59)	21 (16-54)
Gender (% male)	53	65
Sexual identity (%)		
Heterosexual	80	83
Gay male	4	5
Lesbian	7	1
Bisexual	6	10
Other	4	1
English main language spoken at home (%)	99	99
A&TSI (%)	3	4
Employment* (%)		
Not employed	23	33
Full-time*	29	29
Part-time/casual	26	25
Full-time student	3	4
Both studying & employed	18	8
School education (median in years)	12	11
Tertiary education (%)		
None	43	48
Trade/technical	31	36
University/college	26	16
Prison history (%)	7	8
Area of Adelaide (%)		
Central/Eastern	33	24
Western	8	17
Southern	29	30
Northern	30	28
No fixed address/missing	1	0

Source: EDRS participant interviews

* Includes 'self-employed'

3.2 Drug use history and current drug use

Regular ecstasy users are often described as polydrug users and the 2009 sample was no exception (see Table 3.2 for a summary of drug use and routes of administration of the different drugs by participants, and Appendix 1 for a summary of lifetime and recent use since 2001). Participants were asked about their history of use of 20 separate drug types³. Participants reported using a median of nine (range 2 to 19; N = 100) drugs in their lifetime and a median of six (range 2 to 13; N = 100) in the last six months. The median number of drugs used by participants in their lifetime, and the median number of drugs used in the last six months, was more than in 2008, with eight drug types reported as used by participants in their lifetime, and five used in the six months prior to interview.

Key expert (KE) information supported the view that polydrug use was common among the REU, with use of 'speed' or other forms of methamphetamine predominating, as well as alcohol, tobacco, benzodiazepines, and cannabis use repeatedly mentioned as prevalent among this group. The majority of KE mentioned that alcohol and methamphetamine use combined was becoming more problematic, especially when combined with ecstasy use. Also, KE mentioned that many REU are using illicit drugs at home and then using lots of alcohol when they go out to venues, finishing off with illicit drugs once they return home. Several KE commented that methamphetamine use with ecstasy was very common, and part of a pattern of use (including increasing use of alcohol) that was routine for many and becoming more normalised.

The main drug of choice nominated by participants was ecstasy (37%), followed by cannabis (27%), some form of methamphetamine (12%), LSD (8%) and alcohol (5%). The remaining participants nominated heroin (4%), cocaine (3%), and DMT, mushrooms and tobacco as their drug of choice (1% each). One participant was unable to specify their drug of choice.

³ 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, benzodiazepines, anti-depressants, tobacco, heroin, methadone, buprenorphine and other opiates.

Table 3.2: Drug use history and routes of administration of the participant sample (% of total; N=100), 2009

Drug class	Ever used (%)	Age First 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	17	6	2	22	9	75	61	100	96	16	10	99	15 (5-72)
Ecstasy powder	27	20	3	0	1	0	20	6	17	6	0	0	9	2 (1-5)
Ecstasy capsules	49	18	1	1	3	1	17	3	47	8	1	0	10	3 (1-8)
Any ecstasy	100	17	7	2									100	16 (5-74)
Methamphetamine - powder	60	17	13	5	33	20	37	6	46	18	0	0	30	6 (1-180)
Methamphetamine - base	46	18	8	5	21	15	6	0	34	9	0	0	21	6 (1-100)
Methamphetamine - crystal	52	18	9	5	45	30	9	2	27	15	0	0	32	6 (1-72)
Any methamphetamine	76		17	8									53	7 (1-180)
Pharm stimulants - licit	4	13	0	0	0	0	0	0	4	2	0	0	2	92 (3-180)
Pharm stimulants - illicit	26	16	2	0	1	0	2	0	26	3	0	0	3	3 (1-5)
Any pharmaceutical stimulants	30		2	0									5	92 (1-180)
Cocaine	45	21	8	1	6	2	38	17	11	4	0	0	20	2 (1-8)
LSD	71	17	2	0	1	1	2	1	69	35	1	1	37	3 (1-20)
MDA	8	20	1	1	0	0	4	1	5	1	0	0	2	2 (1-3)
Ketamine	31	19	1	1	3	2	23	15	11	3	0	0	19	2 (1-12)
GHB/GBL/1,4B	9	24	3	1					7	2	0	0	2	2 (1-3)
Amyl nitrate	30	18											16	7 (1-72)
Nitrous oxide	53	17											33	5 (1-48)
Cannabis	98	14			98	86			79	43			86	96 (1-180)

Source: EDRS participant interviews

* By those reporting use in the previous six months

Table 3.2 continued: Drug use history and routes of administration of the participant sample (% of total; N=100), 2009

Drug class	Ever used (%)	Age First 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)
Alcohol	96	14	1	0					96	93			93	48 (1-180)
Heroin	17	18	11	4	10	2	0	0	2	0	0	0	6	10 (1-24)
Methadone	11	24	2	0					10	1	0	0	1	180
Buprenorphine	4	23	0	0					4	1	0	0	1	1
Other opiates - licit	10	21	5	1	0	0	0	0	6	5	0	0	5	4 (1-8)
Other opiates - illicit	22	19	4	2	6	3	2	1	16	8	1	1	11	6 (1-120)
Any other opiates	30												15	13 (1-120)
OTC codeine	40	17	0	0	0	0	0	0	40	28	0	0	28	6 (1-30)
OTC stimulants	26	16	0	0	0	0	1	0	26	13	0	0	13	4 (1-20)
Anti-depressants - licit	18	25	0	0					17	4	1	0	4	180 (30-180)
Anti-depressants - illicit	10	17	0	0					9	2	1	0	2	6 (1-10)
Any anti-depressants	25		0	0									5	180 (1-180)
Benzodiazepines - licit	12	22	2	1	0	0			12	7	0	0	7	120 (10-180)
Benzodiazepines - illicit	26	18	0	0	1	0			25	14	0	0	14	2 (1-180)
Any benzodiazepines	34		2	1									19	4 (1-180)
Tobacco	90	15											80	180 (2-180)
Mushrooms	45	18	0	0	4	1	0	0	43	17	0	0	18	2 (1-35)
DOI	12	19	0	0					12	8			8	2 (1-10)
Other drug	5	18	0	0	1	1	1	0	4	1	0	0	2	6 (5-7)

Source: EDRS participant interviews

* By those reporting use in the previous six months

A larger proportion of participants (38%) reported recent bingeing on ecstasy or other related drugs in 2009, compared to participants in 2008 when 27% of the sample reported doing so within the six months prior to interview. Bingeing is defined as the use of ecstasy or stimulants for more than 48 hours continuously without sleep (Ovendon & Loxley, 1996). The median number of times participants reported bingeing was four times (range 1 to 48 times). The median longest binge in the last six months was six days (range 1.5 to 12 days). Larger proportions of participants reported binge use of ecstasy, alcohol, and cannabis in 2009 (see Table 3.3).

Table 3.3: Proportion of participants reporting use of various drugs during a ‘binge’* episode in the last six months, 2008 & 2009

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	
	2008 (N=74)	2009 (N=100)	2008 (n=22)	2009 (n=39)
Ecstasy	27	38	91	97
Meth powder	8	10	27	26
Meth base	14	6	46	15
Meth crystal	15	13	50	33
Pharmaceutical stimulants	1	0	5	0
Cocaine	4	3	14	8
LSD	10	5	32	13
MDA	1	0	5	0
Ketamine	7	5	23	13
GHB	1	1	5	3
Amyl nitrate	1	4	5	10
Nitrous oxide	7	7	23	18
Cannabis	14	26	46	67
Alcohol	19	31	64	79
<5 std drinks	-	5	-	13
>5 std drinks	-	26	-	67
Other	5	1	18	3

Source: EDRS participant interviews

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

In 2009, 19% of the sample reported ever injecting any drug and 12% reported having injected any drug in the six months prior to interview. For the participants who reported a history of injecting, a median of three drugs (range 1 to 9; N=20) had ‘ever’ been injected, and a median of one (range 1 to 7; n=12) had been injected in the last six months. Of those who had ever injected, the drug first injected was heroin (42%, n=8), followed by some form of methamphetamine (37%, n=7), and ecstasy, steroids and other opiates (5% each, n=1). The last drug injected, by those participants who had recently

injected, was some form of methamphetamine (50%, n=6), heroin (25%, n=3), and ecstasy, steroids and morphine (8% each, n=1). See Section 10.1 for further detail on injecting and injecting-related risk behaviour.

3.3 Key expert comments

KE reports of the demographic characteristics of ecstasy users were generally consistent with the 2009 participant sample, although there were some differences apparent. Several KE commented that there were different cohorts of users: young and relatively new users to ecstasy use; those with more experience in their late twenties; and an older group in their late thirties and forties who may also be new to ecstasy use. Different age groups or social groups also had generally different patterns of use, with KE reporting that younger users tend to use more ecstasy, and to engage in polydrug use as a means of learning what they like, whereas older users tend to use more drugs in general, and use individual drugs more frequently, due to their level of tolerance. The majority of KE observed that there were more males than females using ecstasy, or that there were equal numbers of males and females using ecstasy.

Most KE able to comment agreed that the majority of ecstasy users were Caucasian-Australian, or of English speaking background, with very few indigenous Australians observed using this drug. As in 2008, most KE also agreed that ecstasy users were generally well-educated (currently completing or having completed a tertiary qualification), though several KE also mentioned that this was not always the case, with the profile of users ranging from university educated, trade educated, to factory workers, and the unemployed. 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. Several KE commented on the widespread use and 'main stream' nature of ecstasy use, and observed that this was becoming more embedded in society in general.

The majority of KE, who commented on the sexual orientation of ecstasy users, stated that they were predominantly heterosexual. 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. KE reported that those who do access treatment services (telephone advice) do so as a result of ongoing adverse acute effects of drugs (anxiety, panic attacks, poor sleep, are taking a 'bad' pill or having a bad reaction to pills), but are not in treatment for these problems and only ask for information. Health KE also commented that ecstasy users attend emergency departments for assistance with psychological symptoms during acute or comedown periods including anxiety, agitation, panic and sleeping problems (asking for benzodiazepines to assist with sleep).

4 ECSTASY

Summary

- The median age of first use was younger than reported by participants in 2008.
- Frequency of recent use was higher in 2009 compared to 2008.
- Larger proportions of participants in 2009 reported using more than one pill in a typical session and including ecstasy in a binge session compared to 2008.
- Larger proportions of the sample reported use of ecstasy by snorting, both across lifetime and in the last six months compared to participant reports in 2008.
- Participants reported an overall decrease in the price of ecstasy, with many reporting the price was stable in the six months prior to interview, although the proportion reporting stability had decreased compared to 2008.
- The current purity of ecstasy according to participant reports in 2009 was low to medium, similar to 2008 reports with recent changes in purity equivocal.
- The majority of participants reported purchasing a median of 5 ecstasy pills for themselves and others in the six months prior to interview.

The median age at which participants in the 2009 survey first used ecstasy was 17 years (range 13 to 40; N = 100) and the median age at which they reported using ecstasy regularly was 19 years (range 14 to 45; N = 100). This is a slightly younger median age of first use reported by participants in 2008 (18 years, range 13 to 47; N=74). The transition from first use to regular use was swift, a pattern which has been consistent over the long term. It is also worth noting that 6% of the participants were 30 years of age or older when they first tried ecstasy. The median length of use by participants in 2009 was four years (range 0-22 years), with four participants using ecstasy for less than one year, and 12% using for 10 years or more.

4.1 Ecstasy use

Table 4.1 summarises the ecstasy use patterns of the participant sample across 2004 to 2009. Ecstasy was the main drug of choice for 37% of the sample in 2009, with less participants reporting ecstasy as their main drug of choice than participants in 2008 (49%).

In 2009, participants were asked to provide information on their use of ecstasy pills, powder and capsules⁴. The median number of days participants reported using any ecstasy (pills, powder or capsules) within the previous six months was 16 (range 5 to 74; N=100). Frequency of ecstasy use reported by participants has remained relatively stable since 2004.

Forty-one percent of the sample reported using ecstasy (any form) on 12 days or less of the previous six months (180 days), which equates to once a fortnight or less on average (51% reported such use in 2008). Thirty-three percent of participants reported using ecstasy between 13 and 24 days, inclusive (30% reported such use in 2008). The proportion of participants reporting use of ecstasy on more than 24 days in the last six

⁴ This is the second year we have distinguished capsules from pills as a form of ecstasy.

months remained stable (26% in 2009 and 19% in 2008). 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 use of more than one ecstasy pill/tablet continues to fluctuate with more participants in 2009 (81%) reporting use of more than one ecstasy tablet in a typical session than participants in 2008 (70%). Participants reported that the median number of ecstasy tablets used in a session was two (range 0.5 to 10; N = 100) and this has remained stable since 2004. There was a slight increase in the median ‘most’ amount typically used in a single session, with a median of five tablets (range 1 to 18; N = 100) reported by participants in 2009. The median number of grams of ecstasy powder used in a session was 2 g (range 0.5 to 2.5; n = 3), the median ‘most’ amount typically used in a single session was also 2 g (range 0.5 to 2.5; n = 3). The median number of capsules used in an ‘average’ session was 1.5 capsules (range 1 to 5; n=10), and the median ‘most’ amount typically used in a session was 2.5 capsules (range 1 to 8, n=10).

Table 4.1 Patterns of ecstasy use among the participants, 2004 – 2009

Variable	2004 (N=100)	2005 (N=100)	2006 (N=101)	2007 (N=100)	2008 (N=74)	2009 (N=100)
Median age first used (years)	19	18	18	18	18	17
Ecstasy as main drug of choice (%)	56	49	54	41	49	37
Median days used in last 6 months* (range)	12 (6-180)	15 (6-96)	12 (6-96)	12 (6-72)	12 (6-96)	16 (5-74)
Average amount used in a single session#: Median number of tablets/pills (range)	2 (0.8-7)	2 (0.25-6)	2 (0.5-10)	2 (1-8)	2 (1-10)	2 (0.5-10)
Most amount used in a single session#: Median number of tablets/pills (range)	4 (1-21)	4 (0.5-13)	4 (0.10-20)	4 (1 – 26)	4 (1-21)	5 (1-18)
Use >1 tablet/pill per ‘typical’ session (%)	84	73	80	80	70	81
Ecstasy included in ‘binge’** episode (%)	47	57	55	59	27	38

Source: EDRS participant interviews

* By those reporting use in the previous six months

a session was defined as a period of continuous drug use

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

The proportion of participants who reported use of ecstasy within a ‘binge’ episode was 38% (or 97% of those who had binged), which is an increase from 2008 where participants reported the lowest engagement in a binge session since data collection began, i.e. 27% (or 91% of those who had binged). No clear long-term trend can be discerned with this parameter as the percentage of participants reporting use of ecstasy in a ‘binge’ has fluctuated over the years the survey has been conducted (see Table 4.1).

As in previous years, there was a wide range of comment from KE with regard to frequency of use among the ecstasy users with whom they had contact. Most stated that there was a variety of use patterns, with a large proportion, especially among younger users, using every weekend (Friday, Saturday and Sunday), while older users 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.). A few KE mentioned noticing an increase in young females and older males using ecstasy in the past 12-months.

Table 4.2a: Routes of administration of ecstasy, 2008 & 2009

Variable	2008 (N=74)			2009 (N=100)		
	Pills	Powder	Capsules	Pills	Powder	Capsules
How ever used in lifetime (%)						
Injected	18	4	3	6	3	1
Smoked	11	1	0	22	1	3
Snorted	62	23	12	75	20	17
Swallowed	100	20	37	100	17	47
Shelved/shafted	10	0	0	16	0	1
How used in last 6 months (%)						
Injected	11	1	0	2	0	1
Smoked	1	0	0	9	0	1
Snorted	47	10	1	61	6	3
Swallowed	100	8	15	96	6	8
Shelved/shafted	5	0	0	10	0	0
How mainly used in last 6 months (%)						
Injected		4			2	
Smoked		0			0	
Snorted		4			11	
Swallowed		92			87	

Source: EDRS participant interviews

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

All KE reported that the predominant form of ecstasy was pills, with several mentioning that powder and capsules were also available, though still less common. Swallowing was considered the main route of administration, though use by snorting was also reported.

Table 4.2b: Routes of administration of ecstasy pills, 2001 – 2007

Variable	2001 (N=70)	2002 (N=68)	2003 (N=101)	2004 (N=100)	2005 (N=100)	2006 (N=101)	2007 (N=100)
How ever used in lifetime (%)							
Injected	11	13	11	18	9	10	14
Smoked	14	19	16	22	14	16	16
Snorted	56	72	83	82	93	84	82
Swallowed	100	100	100	100	100	100	100
How used in last 6 months (%)							
Injected	9	7	3	3	4	8	4
Smoked	6	6	5	5	8	7	5
Snorted	49	62	70	62	81	67	60
Swallowed	100	100	100	99	100	98	98
How mainly used in last 6 months (%)							
Injected	1	2	2	3	2	4	2
Smoked	0	0	0	0	0	0	0
Snorted	4	0	3	6	6	11	4
Swallowed	83	82	95	91	89	84	94

Source: EDRS participant 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 participants report typically using at least one other substance in either case (77% and 60%, respectively). The substances most commonly reported as being typically used ‘with ecstasy’ were alcohol, tobacco, cannabis or some form of methamphetamine. Although reports of typical use of the different substances ‘with ecstasy’ were lower in 2009 when compared to 2008, the proportion of participants reporting typically using the various forms of methamphetamine was higher in 2009 (19% in 2009 vs. 7% in 2008). The substances most commonly reported as being typically used when ‘coming down’ from ecstasy were tobacco, cannabis and alcohol. Reports of typical use of the different substances when ‘coming down’ from ecstasy were lower in 2009 compared to 2008, with the proportion reporting typically using alcohol being lower in 2009 (16% vs. 43% in 2008) when ‘coming down’ from ecstasy.

Table 4.3: Proportion of participants reporting typical* use of other drugs in combination with ecstasy, by drug type, 2008 & 2009

Drug	Typically use with ecstasy (% of participants)		Typically use to come down from ecstasy (% of participants)	
	2008 (N=74)	2009 (N=100)	2008 (N=74)	2009 (N=100)
	Methamphetamine powder	7	7	0
Methamphetamine base	8	4	3	1
Methamphetamine crystal	8	10	0	2
Methamphetamine non-specific	7	19	1	3
Pharmaceutical stimulants	0	0	0	0
Cocaine	5	2	1	0
LSD	14	0	4	0
MDA	0	0	0	0
Ketamine	5	0	3	1
GHB	0	0	0	0
Amyl nitrate	1	1	1	0
Nitrous oxide	8	2	4	2
Cannabis	46	46	50	50
Alcohol:				
Any	81	66	43	16
>5 standard drinks**	70	89	63	81
Anti-depressants	0	0	3	0
Benzodiazepines	1	0	3	0
Tobacco	58	47	45	31
Other	1	2	7	4
% that typically use one or more other drug(s) in combination with ecstasy	99	77	81	60

Source: EDRS participant interviews

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

** Of those who drank alcohol

4.1.1 Locations of use of ecstasy

Some recent studies have suggested that REU be viewed as a heterogeneous group with different patterns of and motivations for drug use (Bogt and Engels, 2005; McCaughan, Carlson et al., 2005) and that groups could be identified according to what sort of party they attended. Comments by key experts in 2008 also supported the idea that different

subcultures exist among ecstasy users in NSW and therefore in other locations. Those most commonly reported by KE were ‘clubbers’, ‘ravers’, ‘festival goers’ and the gay, lesbian, bisexual, transgender and queer (GLBTQ) community. The following definitions were taken from both key expert interviews and information collected by UniMed in Sydney (Reed, 2009):

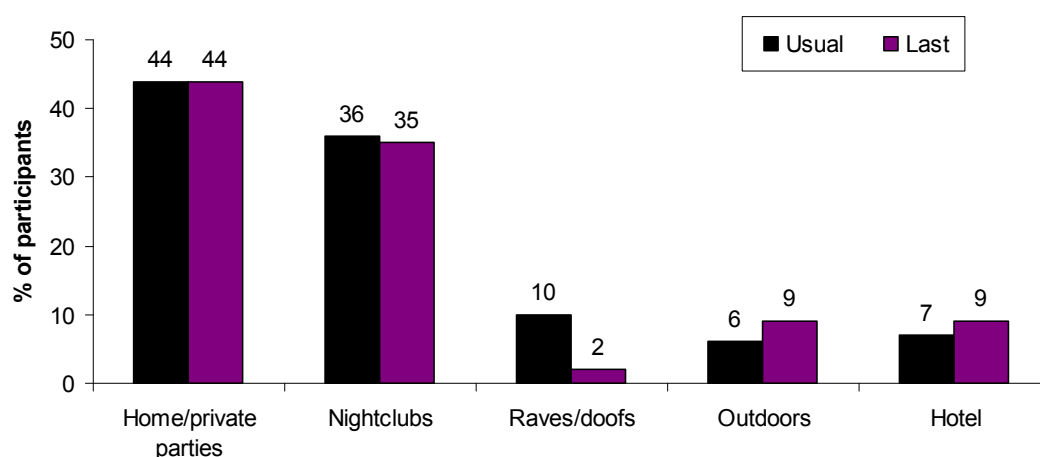
- ‘Clubbers’ are people who primarily socialise in venues (e.g. nightclubs) in party precincts, which are open on a regular basis.
- ‘Ravers’ are people who regularly attend raves (i.e. predominantly indoor events of up to 6000 attendees, which typically occur overnight).
- ‘Festival goers’ are people who predominantly attend festivals (i.e. large, outdoor events with greater than 5000 attendees, occurring over the course of one or multiple days).

Thus, in 2009, participants were asked what sort of partygoer they generally identified as.

Most common location of ecstasy use

Regular ecstasy users were asked which type of location/event they most frequently spent their time at while using ecstasy (usually used), and the last time they used ecstasy (in the past six months), where did they spend the most time while intoxicated (last used), the results of which are presented in Figure 4.1 below.

Figure 4.1: Location of usual and last ecstasy use by participants, 2009



Source: EDRS participant interviews

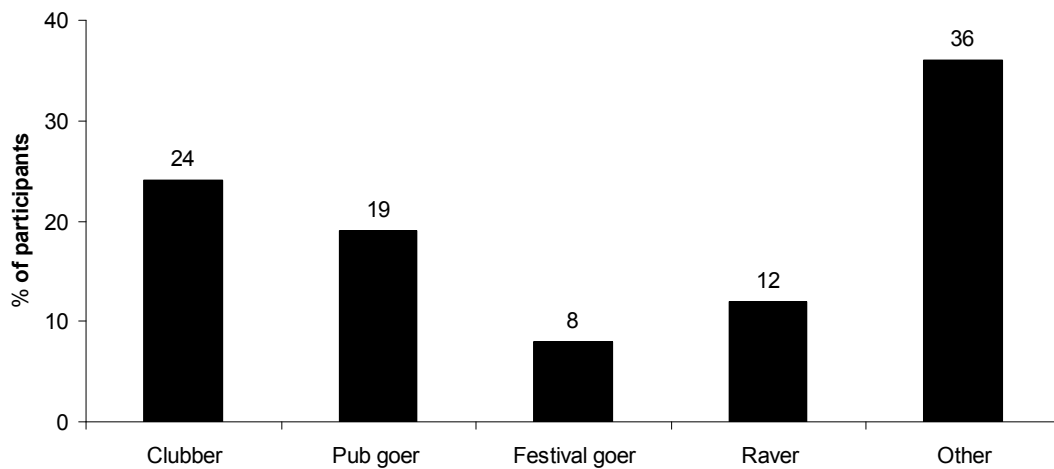
Readers should note that participants were asked to consider where they were for the majority of the time they were ‘under the influence’ of the drug, not where they were when they ‘took [administered] the drug’. As can be seen, the type of venue most frequented by participants (44%) while intoxicated on ecstasy in the six months prior to interview was at a home (own home, a friend’s home or a dealer’s home), followed by a nightclub, raves/doofs/dance parties, with fewer numbers reporting an outdoor event (6%) or a hotel (4%). The last time participants were intoxicated on ecstasy they spent most time at a nightclub (35%), or a home (44%: own home, dealer’s home, or a friend’s home), with fewer numbers reporting doing so at various other venues (see Figure 4.1).

KE in the club and music scene observed that ecstasy use is being used away from the club scene, stating that, “*Unlike before, you would go out, now use is coveted and at home*”. Most KE observed that people who use ecstasy are now going to pubs, private parties, and music events.

Type of partygoer

The largest proportion of participants gave ‘other’ as the type of partygoer and stated that they did not identify as any particular category. Participants who did identify with a category most commonly identified as a ‘clubber’, a ‘person who frequents pubs’, or a ‘raver’ (Figure 4.2).

Figure 4.2: Type of partygoer, 2009



Source: EDRS participant interviews

In 2009, participants were asked what their main reasons were for deciding to use ecstasy at an event; these are presented in Table 4.4. The responses gained were very similar to the perceived benefits of ecstasy use reported in the PDI (subsequently the EDRS) between 2003 and 2006 and the interested reader is directed to the EDRS website where these reports are freely available for comparison (<http://ndarc.med.unsw.edu.au/NDARCWeb.nsf/page/EDRS>).

The four most commonly endorsed reasons for deciding to use ecstasy at an event were ‘to feel great’, for the ‘high/rush/buzz’, ‘enhanced appreciation of music’ and to ‘experience the effects of drugs (e.g. hallucinations, insight and creativity).

Table 4.4: Reasons for deciding to use ecstasy at an event, 2009

% of participants	2009 (N=100)
To feel great	56
The high/rush/buzz	51
Enhanced appreciation of music	43
Drug effects (e.g. hallucinations/insight/creativity)	42
To be able to dance all night	32
Enhanced closeness/bonding/empathy with others	24
Because it's not fun being sober when your friends are all high	24
To enhance sexual experiences	20
To increase my self-insight	16
To forget hassles/problems or have fewer worries	16
To make it easier to talk/flirt with people	15
Fun	11
Other	16

Source: EDRS participant interviews

4.2 Use of ecstasy in the general population

4.2.1 National prevalence data.

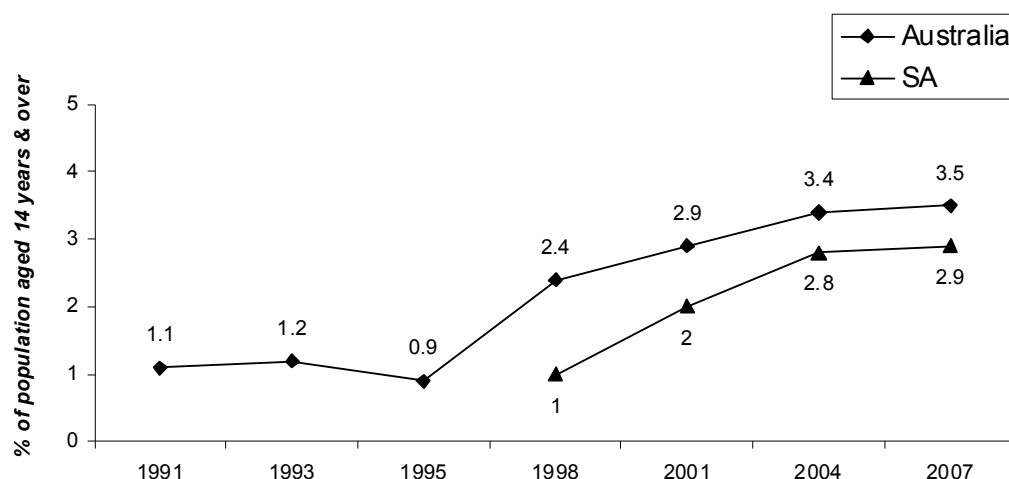
The Australian Institute of Health and Welfare has conducted household surveys over the last decade and collected data on the prevalence of use of various illicit drugs among the general population of Australia (Australian Institute of Health and Welfare, 2008). Figure 4.3 shows the long-term trend in the prevalence of ecstasy/designer drug use in Australia from 1991 to 2007 and in South Australia from 1998 to 2007. 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 to 29 year olds, but a decline in prevalence of recent use was noted in 2007 compared to 2004 (Australian Institute of Health, 2005a). In general, males were more likely to be recent users of ecstasy except among 14 to 19 year olds, where females were more likely to be recent users (6% vs. 4%) and the difference between the number of males and females using recently is widening (Australian Institute of Health, 2008). Of those that had used ecstasy in the last 12 months, half reported using once or twice a year (46%) or every few months (28.9%), with 8.3% reporting daily or weekly use during that period (Australian Institute of Health, 2008).

Figure 4.3 also shows that South Australia had a slightly lower prevalence of recent use of ecstasy than among the national population (2.9% vs. 3.5% in 2007), and the gap between the state and national figures had decreased since 1998 (Drug and Alcohol Services internal document, 2008) and remained stable in 2007. The prevalence of recent

use of ecstasy reported in 2007 was the highest recorded since data collection began for this survey.

In 2007, 8.9% of the Australian population aged 14 years and older had ever used ecstasy, a significant increase from 7.5% in 2004. Again, the highest proportion of the population reporting they had ever used ecstasy was in the 20 to 29 year age group (24%) (Australian Institute of Health, 2008).

Figure 4.3: Prevalence of recent* ecstasy/designer drugs use in Australia and South Australia, 1991 – 2007



Sources: National Campaign Against Drug Abuse Household Survey 1991, 1993; National Drug Strategy Household Survey 1995, 1998, 2001, 2004, 2007 (Australian Institute of Health, 2005a, 2005b, 2008); Drug and Alcohol Services internal document 2008

* 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 2007 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 (85.4%), cannabis (49.2%) or some form of amphetamine (28.7%) (Australian Institute of Health, 2008).

4.3 Other trends and features of ecstasy use

Ecstasy use was common among the social networks of the regular ecstasy users who participated in the study. Slightly over half of the participants interviewed (53%) indicated that ‘most to all’ of their friends used ecstasy and 31% indicated that about half of their friends used ecstasy. Fifteen percent indicated that only a few of their friends used ecstasy. Forty-six percent of the participants indicated that there had been some recent change in drug use among themselves or friends. KE were asked to comment on any changes or trends in ecstasy and other drug use among the group of users they were familiar with. The comments of both participants and KE in relation to recent changes and trends in ecstasy use are discussed below.

While the present study is not designed to provide indications of the prevalence of ecstasy use among the population, there is anecdotal evidence from both participants and

KE for changes in the types of drugs, and the number of people who use ecstasy in Adelaide. Sixty-two percent of those who commented (n=28 of 45) noted that there had been a general increase in the use of various drugs – specifically, in the use of ecstasy (n=15), methamphetamine (n=3), cocaine (n=2), and in the regular use of ketamine (n=3) by their friends. A number of participants (n=8) also mentioned their friends have been experimenting with other drugs including DMT (N, N, - dimethyl tryptamine), 2CI (2, 5–dimethoxy-4-iodophenethylamine), 2CB (4-bromo-2, 5 - dimethoxy phenethylamine), datura and mushrooms. KE noted an increase in the frequency of use of ecstasy in combination with an increase in the frequency of alcohol use by users in the past 12-months.

4.4 Price

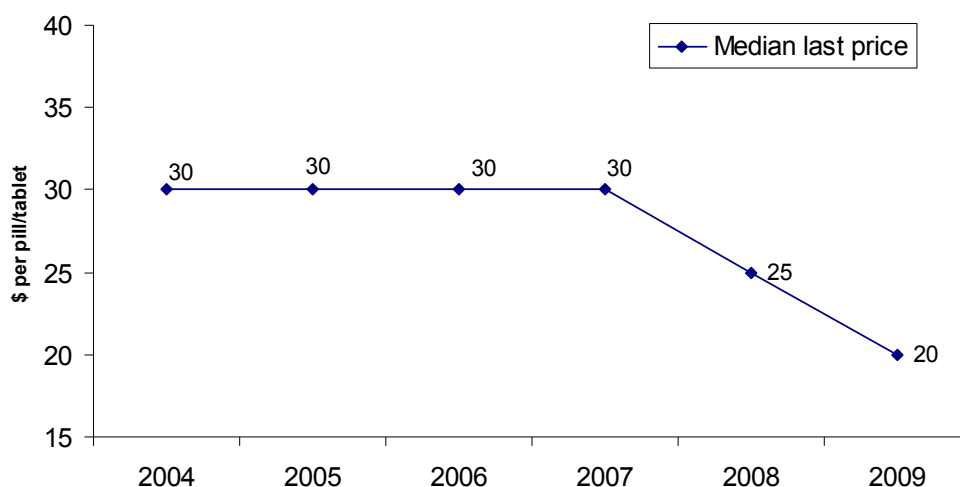
In past years participants have been asked ‘How much does ecstasy cost at the moment?’ to enable us to report an estimation of the ‘current’ price of ecstasy. In 2009 participants were only asked about the cost of ecstasy ‘at last purchase’ (this data has been collected for the previous 5 years). In 2009, most participants were able to provide an estimate of the price of ecstasy ‘at last purchase’, as detailed in Table 4.5. The median ‘last’ price of a tablet/pill of ecstasy reported by users in 2009 was \$20 (range \$10 to \$30; n = 98). This is a lower price than in 2008 (\$25, range \$13 to \$50, n=72), which was the lowest reported price since 2000 (see Figure 4.4). Nearly half of participants reported that the price of ecstasy had been stable (47%) or had decreased (27%) in the preceding six months.

Table 4.5: Last price of ecstasy and change in price over the last six months, 2008 & 2009

	2008	2009
Tablet/pill		
Median price of last purchase (range; n)	\$25 (\$13-\$50; 72)	\$20 (\$10-\$30; 98)
Price change in last 6 months (%)	N=74	N=100
Increasing	1	10
Stable	62	47
Decreasing	19	27
Fluctuating	10	11
Don't know	8	5

Source: EDRS participant interviews

Figure 4.4: Trend in the ‘last purchase price’ of ecstasy per tablet/pill, 2004 – 2009



Source: EDRS participant interviews

In 2009, participants were asked specifically about the median ‘current’ price of ecstasy ‘bulk’ purchases, where ‘bulk’ referred to ten or more tablets/pills (see Table 4.6). It was generally considered that purchasing in bulk resulted in lower prices, and as can be seen in Table 4.6, as participants purchase increased amounts of ecstasy in bulk the price decreases accordingly, with a purchase of ‘100’ pills costing \$12 per pill compared to \$18 per pill when bought in a 10-pack.

No participants were able to provide information pertaining to the price of ecstasy powder.

Table 4.6: Current median price of ecstasy bought in bulk amounts, 2009

Qty of pills	Median price per pill (range; N)	Median price total (range; N)
10	\$18 (\$10-\$25; 67)	\$180 (\$100-\$250; 68)
20	\$15 (\$7.50-\$25; 27)	\$300 (\$120-\$500; 28)
50	\$12 (\$7-\$18; 13)	\$580 (\$140-\$900; 12)
100	\$12 (\$7-\$18; 21)	\$1,200 (\$700-\$12,500; 20)

Source: EDRS participant interviews

Of the four KE who provided information on the cost of ecstasy, estimates ranged from \$20 to \$30 with an average price \$25 being most common, similar to that reported by the users themselves. Also, in accord with the users, two KE believed that the price of ecstasy per pill was stable but decreased when ‘buying in bulk’; that is, when buying ten or more tablets at a time. According to one KE most buy in 10-packs now and purchase pills at \$15 per pill. No KE provided information on the price of ecstasy powder. Although, the ACC Illicit Drug Data Report (IDDR) reported prices of \$17 to \$20 per tablet respectively for purchases in South Australia from 100 to 1000 tablets.

4.5 Purity

Table 4.7 summarises the current purity of ecstasy and the changes in purity in the last six months, as perceived by the participants. The proportions of participants reporting that current purity of ecstasy was low (26%), medium (33%) and fluctuating (25%) in 2009 were unchanged. It is difficult to gauge the actual quality of the ecstasy that users are consuming, as participant opinions are based on many factors, the least of which is the actual purity of the ecstasy they are using. Factors such as length of use, frequency of use, quality of previous ecstasy and the physical and psychological status of the user also impact on impressions of quality, and as such the figures presented are purely perceptions of the participants. Participants' opinion of recent change in purity was also somewhat equivocal, with the largest proportions reporting purity had been stable (34%), or fluctuating (31%), and smaller proportions reporting purity to be decreasing (20%), or increasing (9%) in the last six months. There was little difference between participants' opinions of recent changes in ecstasy purity in 2008 and 2009, with slightly more participants in 2009 reporting the purity was decreasing (20%) compared to the 2008 participants (14%).

Table 4.7: Perceived purity of ecstasy tablets/pills and change in purity over the last six months, 2008 & 2009

	2008 (N=71)	2009 (N=100)
Current purity (%)*		
Low	28	26
Medium	32	33
High	14	17
Fluctuates	25	25
Recent change in purity (%)	(N=74)	(N=100)
Increasing	11	9
Stable	34	34
Decreasing	14	20
Fluctuating	31	31
Don't know	11	6

Source: EDRS participant interviews

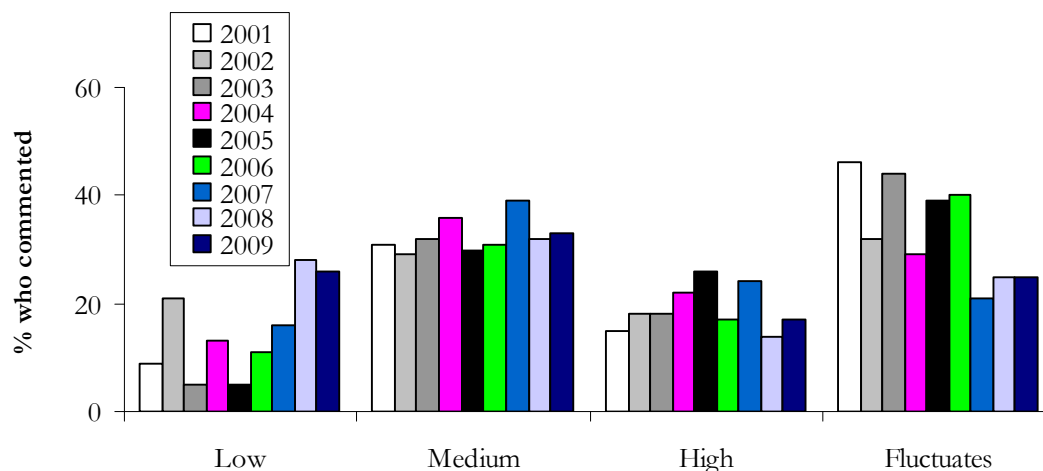
* Three participants answered 'do not know'

KE reports reflect REU perception of ecstasy purity with three KE stating that the current purity was fluctuating. Regarding recent change in purity, three KE reported that purity had been fluctuating in the last six months. Forensic KE reported that there had been an increase in 'bunk' pills, containing pharmaceuticals (e.g. paracetamol, caffeine, ibuprofen, codeine, tramadol etc.), and also seeing a variety of designs and colours in several different seizures and constituents.

The purity of ecstasy, as perceived by participants, has remained relatively stable over the nine years of the survey (as depicted in Figure 4.5, 2000 figures not included), and no clear trend of increasing or decreasing purity can be discerned over this time period. The

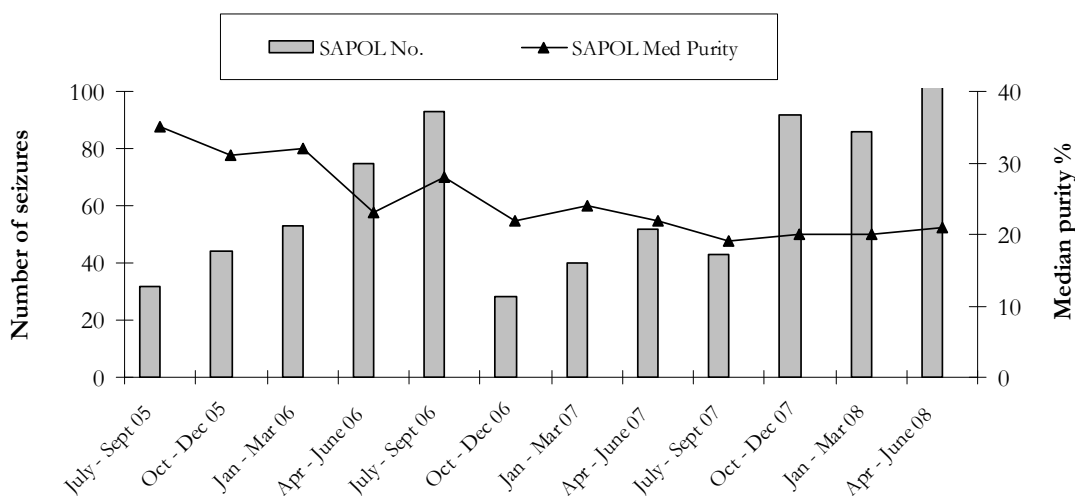
greatest variation can be seen in the proportions reporting purity as low or that it fluctuates.

Figure 4.5: Trend in the perceived purity of ecstasy in the last six months, 2001 – 2009



Source: EDRS participant interviews

Figure 4.6: Number of phenethylamine* seizures analysed and median purity, 2005/06 – 2007/08



Source: Australian Crime Commission 2006, 2007, 2008, 2009

* Phenethylamines include MDMA (‘ecstasy’), MDEA, MDA, PMA and others (see Australian Crime Commission, 2009)

The Australian Crime Commission (ACC) data were unavailable for 2008/09 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 2007/2008 (Australian Crime Commission, 2009). Figure 4.6 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 2005/06 to 2007/08. The total number of SAPOL phenethylamines seizures analysed for July 2007 to June 2008 was 435 and the median purity was 20.3%. These parameters indicate that the number of seizures increased compared to the previous year (213 seizures in 2006/07 to 435 in 2007/08), whereas the median purity had decreased slightly (from 23.3% in

2006/07 to 20.3% in 2007/08). No seizures by the Australian Federal Police (AFP) in SA were analysed in 2007/08. No comparison to previous years was possible, as no AFP seizures have been analysed since 2001/02.

A 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 & 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 contained substances other than MDMA, including methamphetamine and ketamine, in both single-drug and multi-drug combinations, with varying drug content or purity (Quinn, Breen & White, 2004).

4.5.1 Drug information-seeking behaviour

For the fifth time, in 2009 participants were asked questions about whether they obtained information about the ecstasy they used (including information about content and purity), and, if so, from what sources or by what methods they obtained such information (see Table 4.8).

Two-thirds of the participants (66%) stated that they found out about the content and purity of ecstasy, with 20% reporting they 'always' did, and 34% reporting they never did so. Participants reported that the source of information, regarding content and purity of ecstasy pills, was a drug dealer (46%), a friend who had experienced using them (42%), other people who had previously taken it (24%), or personal experience (27%). Participants also sourced information from a website (39%), either the Pill Reports website (91%) (www.pillreports.com), or the Blue Light website (4%). Eleven percent of participants reported that they found out about the content and purity of the ecstasy they used by using a testing kit.

Table 4.8: Information-seeking about purity & content of ecstasy and other drugs in six months prior to interview, 2008 & 2009

	2008 (N=74)	2009 (N=100)
Find out the content of ecstasy (%)		
Never	37	34
Sometimes	32	25
Half the time	1	8
Most times	15	13
Always	15	20
Find out content of ecstasy via (%)*		
Friends' experience	74	42
Other people's experience	15	24
Personal experience	4	27
Dealer	39	46
Testing kits	13	11
Information pamphlets	0	0
Websites**	26	39
Pill Reports	26	91
Blue Light	-	4
Purchased drug had different content than expected (%)		
Never	23	31
Sometimes	52	50
Half the time	12	10
Most times	11	3
Always	1	6
Suspected substance ecstasy contained^ (%)	(n=39)	(n=74)
Caffeine	19	10
Methamphetamine	72	60
MDA	19	8
Ketamine	25	16
Opiates	32	16
2CI/2CB	9	4
PMA	19	4
Other	13	30

Source: EDRS participant interviews

* Of those who find out content (n=66)

** Of those who find out content from websites

^ Of those who had purchased drug with content different to expected

Further, around two-thirds of the participants (69%) reported that the ecstasy they had purchased in the last six months 'sometimes' or more often turned out to have a different content or purity than they expected, with participants suspecting methamphetamine (60%) as most likely to be a contaminant.

4.6 Availability

Table 4.9 summarises the current availability of ecstasy and the changes in availability in the last six months, as perceived by the participants. The majority of participants reported that ecstasy was 'very easy' or 'easy' to obtain in 2009, and that this availability had been stable, although 20% of participants reported it had become more difficult to

purchase in the previous six months. A graphical depiction of the long-term trend of ecstasy availability (Figure 4.7) also shows that, despite fluctuating proportions within the 'easy' categories, ecstasy has consistently been perceived as easy to obtain in SA across this time period.

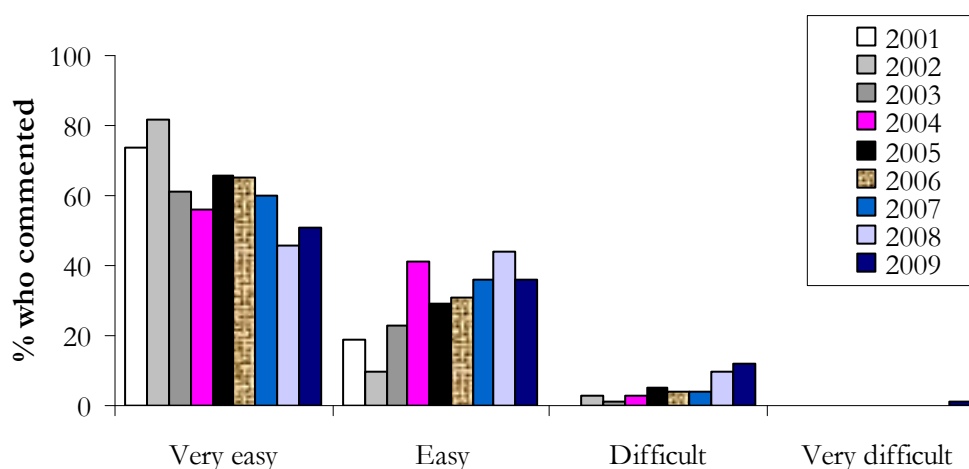
All KE able to comment also considered ecstasy is getting harder to obtain and that availability had recently decreased. One KE commented that they considered that ecstasy use was becoming more normalised. Forensic KE report an increase in the number of ecstasy seizures in the previous 12-months.

Table 4.9: Availability of ecstasy and change in availability over the last six months, 2008 & 2009

	2008 (N=70)	2009 (N=100)
Current availability* (%)		
Very easy	46	51
Easy	44	36
Difficult	10	12
Very difficult	0	1
Change in availability in last 6 months (%)	(N=74)	(N=100)
More difficult	3	20
Stable	73	66
Easier	12	8
Fluctuates	5	4
Don't know	7	2

Source: EDRS participant interviews

Figure 4.7: Trend in availability of ecstasy in the preceding six months, 2001 – 2009



Source: EDRS participant 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 4.10.

In 2009, participants reported most commonly that they had bought ecstasy from friends (60%), from acquaintances (20%), or from known dealers (11%) in the last six months. Smaller proportions reported buying from strangers (3%), workmates (3%), street dealers (1%), or family members (2%). An analysis of the location where participants obtained ecstasy indicated that participants most commonly obtained (or ‘scored’) ecstasy from a friend’s home (25%), or their own home (24%), at nightclubs (12%), at an agreed (pre-arranged) public location (8%), at a dealer’s home (7%), or at raves/doofs/dance parties (1%).

Table 4.10: Trend in the source and venue of purchase of ecstasy for participants in the last 6 months, 2004 – 2009

Variable	2004 N = 99	2005 N = 98	2006 N = 101	2007 N=100	2008 N=74	2009 N=100
Bought ecstasy from:						
Friends	84	89	88	76	68	60
Known dealers	46	48	56	33	31	11
Workmates	8	10	20	14	14	3
Acquaintances	29	36	39	32	24	20
Strangers/unknown*	14	10	25	16	10	3
Street dealers	-	-	-	-	-	1
Other	-	-	-	4	1	2
Venues normally scored [ecstasy] at?						
Own home	40	31	38	27	26	24
Dealer’s home	32	36	37	27	27	7
Friend’s home	63	70	69	58	51	25
Raves/dance parties**	27	26	29	21	18	1
Nightclubs	33	33	41	33	28	12
Pubs	13	19	24	20	14	9
Agreed public location	44	48	42	35	27	8
Private party	–	29	36	22	15	2
Street	0	4	8	8	8	4
Work	–	–	–	–	11	1
Acquaintance’s home	–	–	–	–	8	3

Source: EDRS participant interviews

* Includes ‘unknown dealer’ category from 2004

** Combined categories in 2004

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

Note: participants were allowed to nominate more than one response

It is clear from the data across the years, depicted in Table 4.10, that users consistently purchased their ecstasy most commonly from friends and scoring from strangers or at entertainment venues was less common. One KE observed that there had been a slight increase in middle class females who obtain pills for friends/peers (buying ecstasy pills in

bulk), and there had also been an increase in females higher up in the ecstasy scene, often as dealers – “*due to suspicion [of males] and [because] females are easier to coerce and more naïve.*”

4.7 Ecstasy markets and patterns of purchasing ecstasy

Participants were asked to provide information pertaining to the recent purchase of ecstasy and other drugs. The results of those providing information (N=100) are presented in Table 4.11. Ecstasy was generally purchased both for self (33% of participants), or self and others (by 67% of participants) and purchased from a median of three people (range 1 to 30), in the six months prior to interview. Participants reported purchasing a median of five ecstasy tablets (range 1 to 200) in that period. Participants reported the type of location/event most frequented while intoxicated on ecstasy was their own home or at private parties (44%), followed by nightclubs (36%) and various other music events.

Table 4.11: Patterns of purchasing ecstasy in the last six months, 2008 & 2009

	2008	2009
	(N=71)	(N=100)
Median no. of people purchased from (range)	3 (1-10)	3 (1-30)
Purchased for (%)		
Self only	38	33
Self and others	61	67
Others only	0	0
No. of times purchased in the last 6 months (%)		
1 - 6	34	35
7 - 12	44	36
13 - 24	18	24
25 +	3	4
Median no. of ecstasy tablets purchased (range)	5 (1-200)	5 (1-200)
Type of location/event most frequented while using ecstasy (%)		
Nightclubs	-	36
Raves/doofs/dance parties	-	10
Outdoor music events/festivals	-	6
GLBTQ events	-	1
Home/private parties	-	44
Hotels	-	3

Source: EDRS participant interviews

- Not asked in 2008

5 METHAMPHETAMINE

Summary

- Participant reports of recent use of ‘any’ methamphetamine are the lowest recorded since commencement of data collection.
- Median age of first use for all forms of methamphetamine is younger than age of first use reported in 2008.
- Smoking as a route of administration for all forms of methamphetamine has surpassed swallowing and snorting.
- Decrease in frequency of recent use of base methamphetamine.
- Price of all forms of methamphetamine stable.
- Purity of the powder and crystal forms of methamphetamine stable, whereas purity of base methamphetamine reported as stable or decreasing.
- Availability of all forms of methamphetamine easy to very easy and stable.

The distinction between three forms of methamphetamine continued in the 2009 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

In 2009, participants reported having first used powder at a median 17 years (range 14 to 42 years), base at 18 years (range 14 to 42 years) and crystal at 18 years (range 14 to 42 years). The age of first use of crystal methamphetamine was lower than in 2008 when the median age of first use was 20 years (range 15 to 40 years). The proportion of participants reporting lifetime use of methamphetamine differed slightly between the three forms, with a slightly higher proportion reporting use of powder (60%), followed by use of crystal methamphetamine (52%) and base (46%) in their lifetime. The proportions of the participant sample reporting recent use of the powder (30%) and crystal (32%) forms of methamphetamine in 2009 remained stable, whereas the proportion of the sample reporting recent use of the base (21%) form of methamphetamine continues to decrease in 2009 (see below).

5.1.1 Methamphetamine powder (speed)

Table 5.1 summarises the patterns of use of methamphetamine powder among the participants in 2009, with 2008 data for comparison. In 2009, thirty percent of participants reported using methamphetamine powder a median of six days (range 1 to 180), in the six months prior to interview. A closer analysis of frequency of use revealed that 53% (n=16) of methamphetamine powder 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 20% (n=6) reported using greater than monthly and up to once per fortnight (7 to 12 days inclusive); and eight participants (27%) reported using greater than weekly (25 to 120 days inclusive) on average in the last six months. This sees an increase in the number of participants reporting greater than weekly use of powder methamphetamine from one participant in 2008 to eight in 2009.

With respect to the 'average' and 'most' amounts used in a single session of use, similar numbers of participants provided information in terms of grams and 'points'. The median amount of grams used in a session was 0.5, compared to a median of two points. The 'most' amount of powder methamphetamine used in a single session reported by participants was a median of 0.5 grams, or 1 point. Compared to 2008, the 'average' 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 smoking (67%) or swallowing (60%) as a route of administration in the six months prior to interview. Twenty percent reported having snorted and 17% reported having injected powder, in that time. In comparison to 2008, in 2009 there was a shift in the various routes of administration, with smoking of powder methamphetamine surpassing swallowing and snorting as a route of administration of this form of methamphetamine for the first time. In 2008, a third of participants reported smoking as a route of administration (32%) compared to 67% in 2009. There was also a decrease in the proportion of participants reporting snorting as a route of administration in 2009 from 50% in 2008 to 20% in 2009. The proportion of participants reporting bingeing on powder methamphetamine in 2009 (10%; or 30% of those who had used methamphetamine powder in the last 6 months) remained stable compared to 2008 (8%; or 27% of those who had used).

Table 5.1: Patterns of methamphetamine powder use and route of administration of methamphetamine powder among the participant sample, 2008 & 2009

Variable	2008 (N=74)	2009 (N=100)
Age first used: median in years (range)	18 (13-48)	17 (14-42)
Ever used (lifetime) (%)	55	60
Used in last 6 months (%)	30	30
Meth powder as main drug of choice (%)	1	5
Days used in last 6 months#: median (range)	4 (1-90)	6 (1-180)
Average amount used in a single session*:		
grams: median (range; n)	0.35 (0.10-1; 8)	0.5 (0.1-3; 14)
points: median (range; n)	2 (1-7; 9)	2 (1-5; 10)
lines: median (range; n)	2 (1-5; 5)	-
Most amount used in a single session*:		
grams: median (range; n)	1 (0.2-2; 13)	0.5 (0.1-5; 17)
points: median (range; n)	2 (2-4; 3)	1 (0.5-1; 3)
lines: median (range; n)	2 (1-5; 5)	-
Meth powder included in 'binge' episode (%)	8	10
Routes of Administration recent use (%) #	(n=22)	(n=30)
Swallowing	77	60
Snorting	50	20
Smoking	32	67
Injecting	27	17

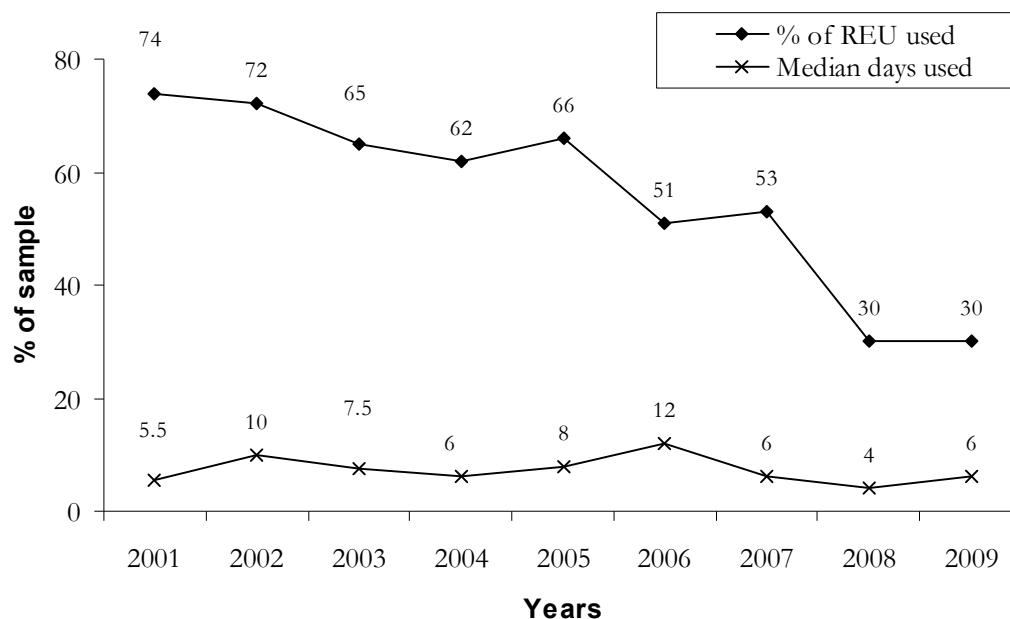
Source: EDRS participant interviews

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) revealed that between 2001 and 2009 there has been a steady decline in the proportion of participants reporting recent use of powder methamphetamine, from a high of 74% in 2001 to a low of 30% in 2008 and 2009. The proportion of participants in 2008 reporting recent use of powder methamphetamine was markedly less, at 30%, than the 53% use reported by participants in 2007, and this continued in 2009.

Figure 5.1: Methamphetamine powder – Trends in recent use* and median days used#, 2001 – 2009



Source: EDRS participant 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 participants in 2009, with 2008 data for comparison. In 2009, twenty-one percent of participants reported using methamphetamine base for a median of six days (range 1 to 100), in the six months prior to interview. A closer analysis of the frequency of use revealed that 67% (n=14) 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 10% (n=2) reported using greater than monthly and up to once per fortnight (7 to 12 days inclusive), 10% (n=2) reported using greater than fortnightly and up to once per week (13 to 24 days inclusive), and the remaining 14% (n=3) reported using greater than weekly (25 to 96 days inclusive) on average in the last six months.

With respect to the ‘average’ and ‘most’ amounts used in a session of use, most participants provided information in terms of ‘points’ of base, with considerably fewer commenting on the use of grams. The ‘average’ amount of base methamphetamine used in a session reported by participants was a median of two-points. The median ‘most’ amount of points and grams of powder methamphetamine used in a session were four and 0.5 respectively. Compared to 2008, there has been little change in the ‘average’ or ‘most’ amounts of points or grams reported as consumed.

Participants who had used methamphetamine base in the last six months reported having used by smoking (71%), swallowing (43%), and/or injecting (24%). Readers should note that smoking base methamphetamine overtook snorting in 2007 and this pattern continued in 2008 and 2009. Of interest in 2009 is that smoking of base methamphetamine has also overtaken swallowing as a route of administration and no participant reported snorting this substance in the six months prior to interview. Smoking of base methamphetamine has become the main route of administration by the majority of participants in 2009. Fewer participants reported bingeing on

methamphetamine base in 2009 (6%) compared to participant reports in 2008 (14%) and 2007(33%).

Table 5.2: Patterns of methamphetamine base use and route of administration of methamphetamine base among the participant sample, 2008 & 2009

Variable	2008 (N=74)	2009 (N=100)
Age first used: median in years (range)	19 (13-39)	18 (14-42)
Ever used (lifetime) (%)	46	46
Used in last 6 months (%)	34	21
Methamphetamine base as main drug of choice (%)	6	2
Days used in last 6 months#: median (range)	10 (1-170)	6 (1-100)
Average amount used in a single session*:		
Grams: median (range; n)	0.75 (0.5-2; 4)	-
Points: median (range; n)	1 (0-30; 21)	2 (0.25-5; 17)
Most amount used in a single session*:		
Grams: median (range; n)	1 (0.5-3; 5)	0.5 (0.5-3; 3)
Points: median (range; n)	2 (0.20-40; 18)	4 (0.25-13; 15)
Methamphetamine base included in 'binge' episode (%)	14	6
Routes of Administration recent use (%) #	(n=25)	(n=21)
Swallowing	72	43
Snorting	24	0
Smoking	32	71
Injecting	44	24

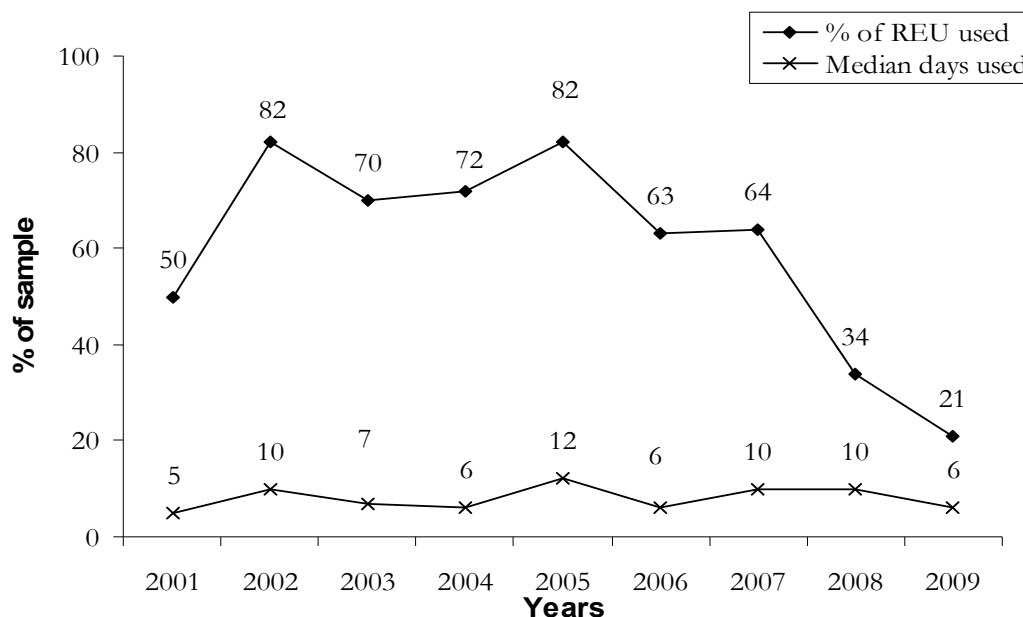
Source: EDRS participant interviews

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 six months prior to interview

An analysis of trends over time (see Figure 5.2) reveals that the recent use of base methamphetamine has continued to fluctuate since 2001, although it has continued to decrease since 2005 when 82% of participants reported recent use of base methamphetamine. The use of base methamphetamine reported by participants in the six months prior to interview in 2009 was the lowest since data collection commenced.

Figure 5.2: Methamphetamine base – Trends in recent use* and median days used#, 2001 – 2009



Source: EDRS participant 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 participants in 2009, with 2008 data for comparison. In 2009, thirty-two percent of participants reported using crystal methamphetamine for a median of six days (range 1 to 72) in the six months prior to interview. Recent use of ice/crystal methamphetamine remained stable in 2009. A closer analysis of frequency of use revealed that 66% (n=21) of crystal users had used six days or less in the six months prior to interview, which equates to using an average of once a month or less during this period. A further 6% (n=2) reported using greater than monthly and up to once per fortnight (7 to 12 days inclusive), 16% (n=5) reported using greater than fortnightly and up to once per week (13 to 24 days inclusive), and the remaining 12% (n=4) reported using greater than weekly (25 to 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 participants 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 0.5 respectively, and the median ‘most’ amount used in a single session was also two points or 0.5 grams. Compared to 2008, participant reports in 2009 of ‘average’ and ‘most’ amounts used in a sessions of use remained stable.

Participants who had used ice/crystal methamphetamine in the previous six months reported smoking (94%), swallowing (47%), snorting (6%) and/or injecting (16%) as the route of administration in that time. Participants in 2009 reported less use of crystal methamphetamine by injection (from 40% in 2008 to 16% in 2009), and by snorting (from 20% in 2008 to 6% in 2009) compared to participants in 2008. Smoking of crystal

methamphetamine continued to be the preferred route of administration by participants. Binge use of crystal methamphetamine remained stable.

Table 5.3: Patterns of crystal methamphetamine use and route of administration of crystal methamphetamine among the participant sample, 2008 & 2009

Variable	2008 (N=74)	2009 (N=100)
Age first used: median in years (range)	20 (15-40)	18 (14-42)
Ever used (lifetime) (%)	47	52
Used in last 6 months (%)	34	32
Crystal meth as main drug of choice (%)	1	5
Days used in last 6 months#: median (range)	8 (1-90)	6 (1-72)
Average amount used in a single session*:		
Grams: median (range; n)	0.5 (0.5-1; 3)	0.5 (0.5-5; 4)
Points: median (range; n)	2 (0.1-4; 21)	2 (0.1-4; 24)
Most amount used in a single session*:		
Grams: median (range; n)	0.5 (0.5-3; 5)	0.5 (0.5-6; 7)
Points: median (range; n)	2 (0.2-10; 18)	2 (0.1-10; 21)
Crystal meth included in 'binge' episode (%)	15	13
Routes of Administration recent use# (%):	(n=25)	(n=32)
Swallowing	44	47
Snorting	20	6
Smoking	76	94
Injecting	40	16

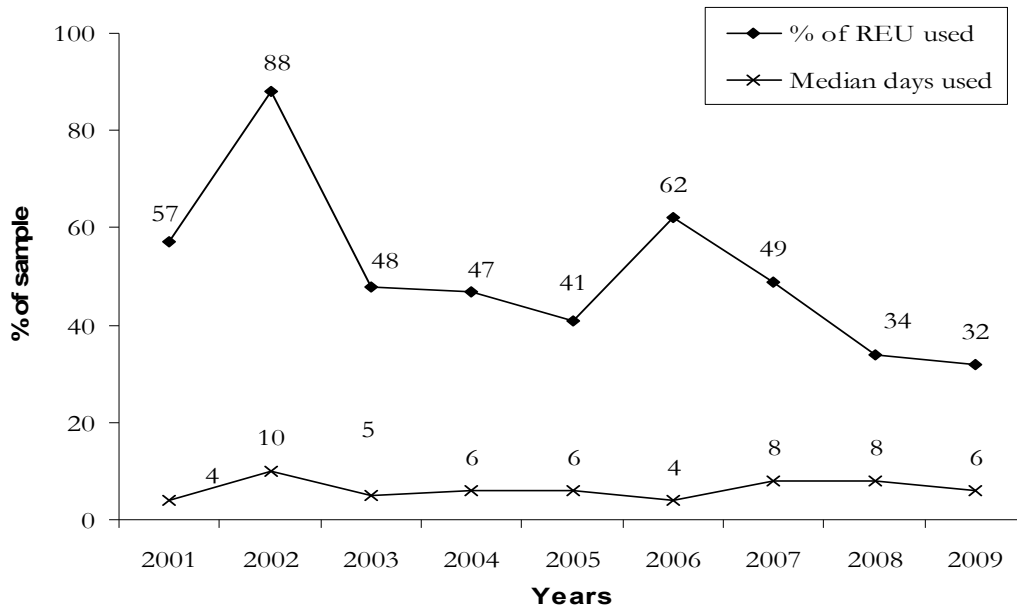
Source: EDRS participant interviews

Of those who reported use in the 6 months prior to interview

* 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 participants reporting recent use of crystal methamphetamine and the median number of days used in the last four years, reports of recent use of ice/crystal methamphetamine by participants have been lower for the past three years, with use reported by participants in 2009 the lowest recorded to date.

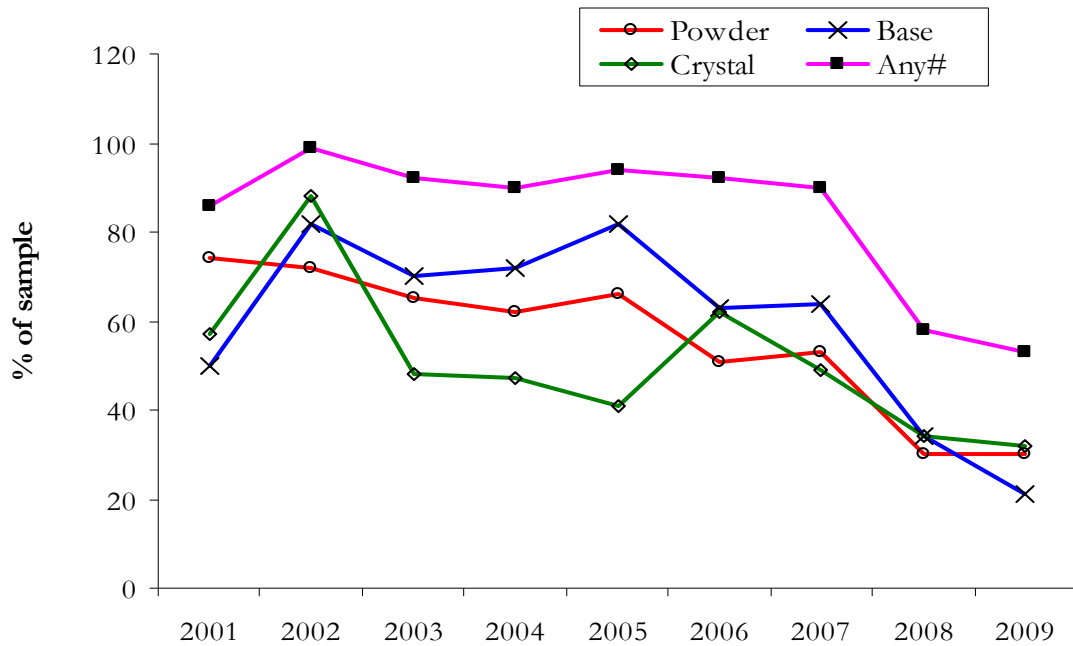
Figure 5.3: Methamphetamine crystal – Trends in recent use* and median days used#, 2001 – 2009



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

Figure 5.4 presents trends in recent methamphetamine (all forms) use from 2001 to 2009. Overall, prevalence of recent use of ‘any’ methamphetamine (collapsed data) by participants has remained high and relatively stable across the years. The most interesting aspect is the decline and stabilisation of the prevalence of use since 2007. Furthermore, participant reports of recent use of ‘any’ methamphetamine in 2009 is the lowest recorded since commencement of data collection.

Figure 5.4: Trends in recent use* of the main forms of methamphetamine, 2001 – 2009



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

In 2009, the majority of KE who commented on the use of methamphetamine by REU stated that the use of a combination of methamphetamine and alcohol had increased in the previous 12 months. Whereas the use of crystal methamphetamine had decreased, and occurred among a small percentage of REU, it was considered desirable and was sought after by some, though it was considered difficult to obtain. Forensic KE reports substantiate such beliefs with reports that they are seeing huge amounts of experimentation with precursors, using benzaldehyde, P2P and indications of extraction from natural products to produce methamphetamine.

Information about where participants last used the various forms of methamphetamine is presented in Table 5.4. An analysis of the 'last' location used indicates the most common venues participants 'last' used methamphetamine powder, base and crystal was in a private residence, either their home or a friend's home.

Table 5.4: Last venue where methamphetamine was used by participants in the six months prior to interview 2009

% of participants	Where did you last use methamphetamine?		
	Powder	Base	Crystal
	(n=18)	(n=8)	(n=20)
Own home	22	75	40
Friend's home	33	25	35
Nightclub	11	0	5
Hotel	17	0	5
Private party	6	0	5
Outdoors	11	0	5
Live music event	0	0	5

Source: EDRS participant interviews

5.2 Price

Not all participants 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 participants who were able to comment (sample sizes given per category). When compared to 2008, in 2009 the last median price of a point of powder, base, and crystal methamphetamine was stable at \$50.

The reported last median price of a gram of powder methamphetamine was higher in 2009 compared to participant reports in 2008, from \$200 (range \$25 to \$450) in 2008 to \$400 (range \$100 to \$500) in 2009, although readers should note the small numbers of participants who commented. The majority of participants reported the price of all forms of methamphetamine as stable in the six months prior to interview in 2009.

In 2009, four KE reported that the price of all forms of methamphetamine had increased.

Table 5.5: Median price of last purchase of the main forms of methamphetamine and change in price over the last six months, 2008* & 2009

Amount	Median price per amount \$ (range; n)					
	Powder		Base		Crystal	
Point						
Price at last purchase	50 (1-100; 13) <i>50 (50-100; 5)</i>		50 (40-80; 9) <i>50 (20-375; 22)</i>		50 (25-100; 18) <i>50 (25-50; 16)</i>	
Gram						
Price at last purchase	400 (100-500; 5) <i>200 (25-450; 7)</i>		-		-	
Price change in last 6 months (%)	2008 (n=12)	2009 (n=21)	2008 (n=23)	2009 (n=10)	2008 (n=25)	2009 (n=22)
Increasing	25	19	13	40	16	23
Stable	50	57	74	50	72	59
Decreasing	8	10	4	10	0	5
Fluctuating	0	0	4	0	8	9
Don't know	17	14	4	0	4	5

Source: EDERS participant interviews

* 2008 data in italics

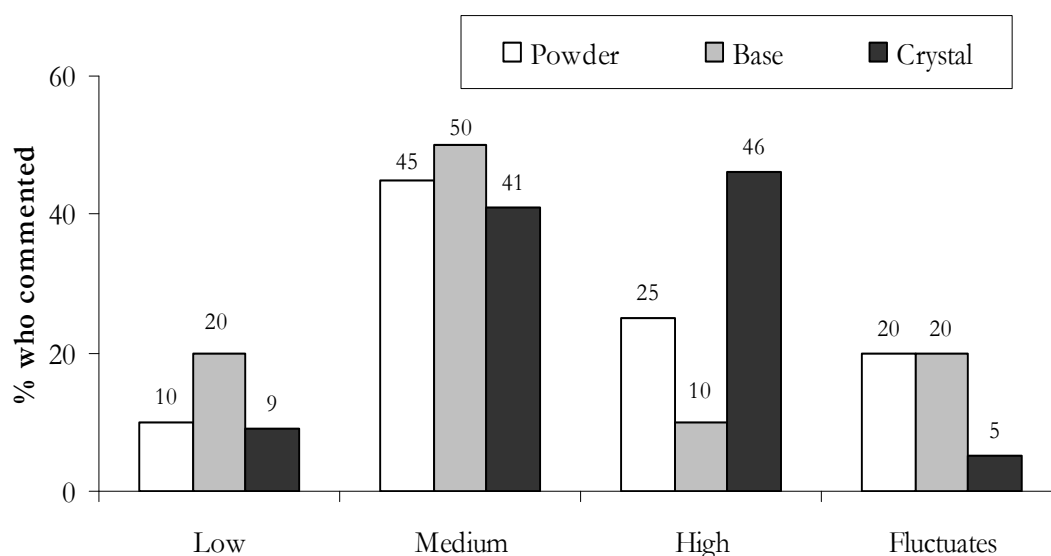
- Small numbers reported (n<5)

5.3 Purity

In 2009, the reported purity of all the forms of methamphetamine appears relatively similar according to participants able to answer (see Table 5.6 and Figure 5.5). Readers should note that only 10 participants in 2009 commented on the purity of base methamphetamine compared to 23 participants in 2008. The majority of participants reported the purity of all forms of methamphetamine as being of medium or high purity with 87% of participants reporting crystal methamphetamine as medium/high, followed by powder (70%) and base methamphetamine (60%). With regard to recent changes in purity, larger proportions of participants reported purity as stable for powder and ice/crystal methamphetamine, with the reported purity of base described as stable or decreasing (note small numbers commenting on base).

Few KE (n=4) provided information on the purity of methamphetamine, three commented that the purity of methamphetamine was fluctuating and one KE observed that the purity had decreased. All KE commented that the purity of methamphetamine was fluctuating due to experimentation with new precursors resulting from the ban on pseudoephedrine.

Figure 5.5: Trend in the perceived purity of methamphetamine in the last six months, 2009



Source: EDRS participant interviews

Table 5.6: Purity of the main forms of methamphetamine and change in purity over the last six months, 2008 & 2009

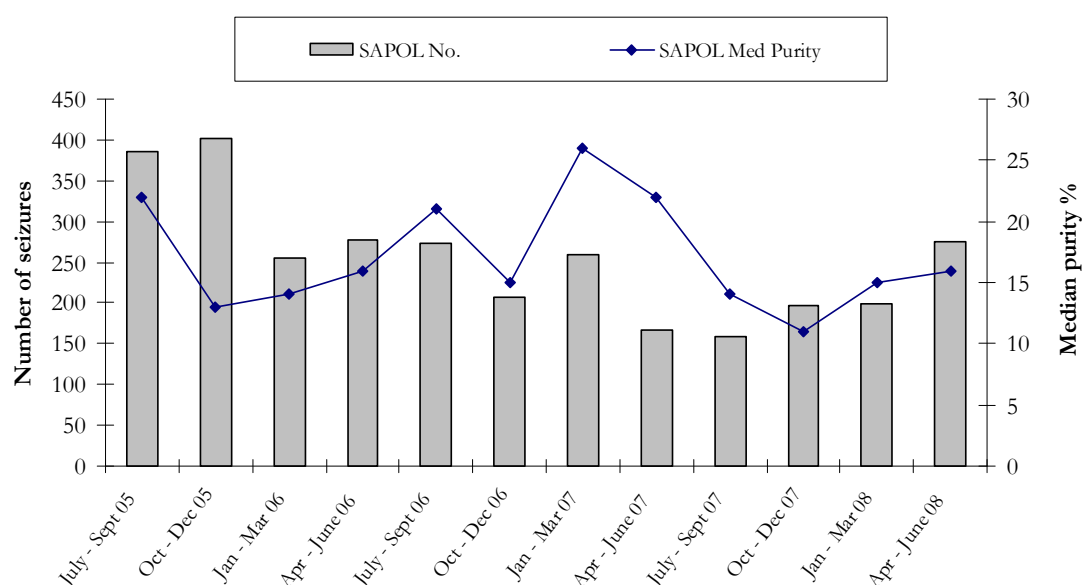
	Powder		Base		Crystal	
	2008 (n=11)	2009 (n=20)	2008 (n=23)	2009 (n=10)	2008 (n=24)	2009 (n=22)
Current purity (%)						
Low	18	10	17	20	17	9
Medium	36	45	39	50	29	41
High	27	25	44	10	38	46
Fluctuates	18	20	0	20	17	5
Change in purity in last 6 months (%)	(n=12)	(n=21)	(n=23)	(n=10)	(n=25)	(n=22)
Increasing	8	5	0	0	8	14
Stable	50	52	26	40	44	50
Decreasing	8	24	13	40	8	14
Fluctuating	17	10	57	20	32	18
Don't know	17	10	4	0	8	5

Source: EDRS participant interviews

The Australian Crime Commission (ACC) data were unavailable for 2008/09 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 2007/08 (Australian Crime

Commission, 2009). Figure 5.6 shows the number of methamphetamine seizures received and analysed by the state forensic laboratory (within the quarter depicted) and the median purity per quarter of those seizures from 2005/06 to 2007/08. The total number of SAPOL methamphetamine seizures analysed from July 2007 to June 2008 was 829 and the median purity was 14.7%. The majority of seizures analysed (N=651) 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 2007/08 decreased compared to the previous year. Specifically, median purity decreased from 21.6% in 2006/07 to 14.7% in 2007/08, and the number of seizures decreased in 2007/08 (829 seizures) compared to 2006/07 (907 seizures). No methamphetamine seizures were reported as analysed by the Australian Federal Police across this timeframe.

Figure 5.6: Number of methamphetamine seizures analysed and median methamphetamine purity in SA, 2005/06 – 2007/08



Source: Australian Crime Commission, 2006, 2007, 2008, 2009

5.4 Availability

Overall, all three forms were considered to be ‘easy’ or ‘very easy’ to obtain by the majority of participants (see Table 5.7). However, a larger proportion of participants reported powder (100%) as ‘very easy’ or ‘easy’ to obtain than ice/crystal (86%) and base methamphetamine (80%). The majority of participants reported the availability of all forms of methamphetamine as stable in the last six months.

KE, able to provide information on methamphetamine availability, commented that in general methamphetamine availability is decreasing. Another KE also commented that the purer crystal form had almost disappeared with powder methamphetamine more readily available than 12 months ago.

Table 5.7: Availability of the main forms of methamphetamine and change in availability over the last six months, 2008 & 2009

	Powder		Base		Crystal	
	2008 (n=21)	2009 (n=12)	2008 (n=23)	2009 (n=10)	2008 (n=34)	2009 (n=21)
Current availability (%)						
Very Easy	50	48	26	30	32	48
Easy	42	52	35	50	46	38
Difficult	8	0	39	20	23	14
Very difficult	0	0	0	0	0	0
Change in availability in last 6 months (%)	(n=21)	(n=21)	(n=23)	(n=10)	(n=25)	(n=22)
More difficult	17	5	13	20	8	5
Stable	67	71	52	70	56	64
Easier	8	19	4	0	4	18
Fluctuates	8	5	26	0	16	9
Don't know	0	0	4	10	16	5

Source: EDRS participant interviews

When asked where they had bought the different forms of methamphetamine, participants provided similar profiles for each of the three forms (see Table 5.8). The majority of participants able to comment reported that they purchased all forms of methamphetamine from friends.

An analysis of the location at which methamphetamine was reportedly purchased reveals that participants most commonly obtained all three forms of methamphetamine from their friends' homes (powder – 39%; base – 50%; crystal – 65%), although similar numbers of participants reported purchasing powder (33%) and base (50%) methamphetamine at their own home (42%).

Information supplied by the South Australian Police indicates that the detection of clandestine laboratories in South Australia has remained relatively stable in 2009 at sixty-six laboratories detected, after an increase in 2008 to 71 from fifty-one laboratories detected in 2007 (South Australia Police Annual Report, 2010).

Table 5.8: Last person and source venue where participants purchased methamphetamine, 2009

% commented	Powder (n=21)	Base (n=10)	Crystal (n=22)
Used, not scored	5	20	9
Who have you bought [meth] from in the last 6 months?			
Friends	62	60	68
Known dealers	14	0	9
Workmates	0	10	0
Acquaintances	19	10	14
Strangers/unknown	0	0	0
What venues do you normally score [meth] at?			
Own home	33	50	15
Dealer's home	11	0	10
Friend's home	39	50	65
Acquaintance's home	0	0	5
Nightclub	6	0	0
Hotel	6	0	0
Agreed public location	6	0	5

Source: EDRS participant interviews

6 LSD

Summary

- Median age of first use younger than reported in 2008.
- Slight increase in the reported price at last purchase, but the majority of participants report the price has been stable in the six months prior to interview.
- Participant reports of purity and availability are equivocal.

The median age of first use of lysergic acid diethyl amide (LSD) by participants was 17 years (range 13 to 25 years), 71% of participants reported having used LSD in their lifetime, and eight percent nominated LSD as their drug of choice in 2009 (see Table 6.1). These parameters remained largely unchanged compared to 2008, with the exception of participants reporting first using LSD at a younger age in 2009 compared to 2008 (from 18 years in 2008 to 17 years in 2009).

6.1 LSD use

Table 6.1 summarises the patterns of use of LSD by participants in 2009, with 2008 data for comparison. In 2009, thirty-seven percent of participants reported having used LSD a median of three days (range 1 to 20) in the six months prior to interview.

An analysis of trends over time (see Figure 6.1) reveals that between 2006 and 2009 the proportion of participants who reported recent use of LSD has remained stable. There has been no change in the frequency of use, with this parameter remaining consistently stable and low across the years (see Figure 6.1).

Table 6.1: Patterns of LSD use among the participant sample, 2008 & 2009

Variable	2008 (N=74)	2009 (N=100)
Age first used: median in years (range)	18 (13-23)	17 (13-25)
Ever used (lifetime) (%)	64	71
Used in last 6 months (%)	35	37
LSD as main drug of choice (%)	7	8
Days used in last 6 months:* median (range)	3 (1-48)	3 (1-20)
Average amount used in a single session:**		
Tabs: median (range; n)	1 (1-6; 25)	1 (0.25-4; 35)
Most amount used in a single session:*		
Tabs: median (range; n)	2 (1-12; 25)	2 (0.25-5; 35)
LSD included in 'binge' episode (%)	10	5

Source: EDRS participant interviews

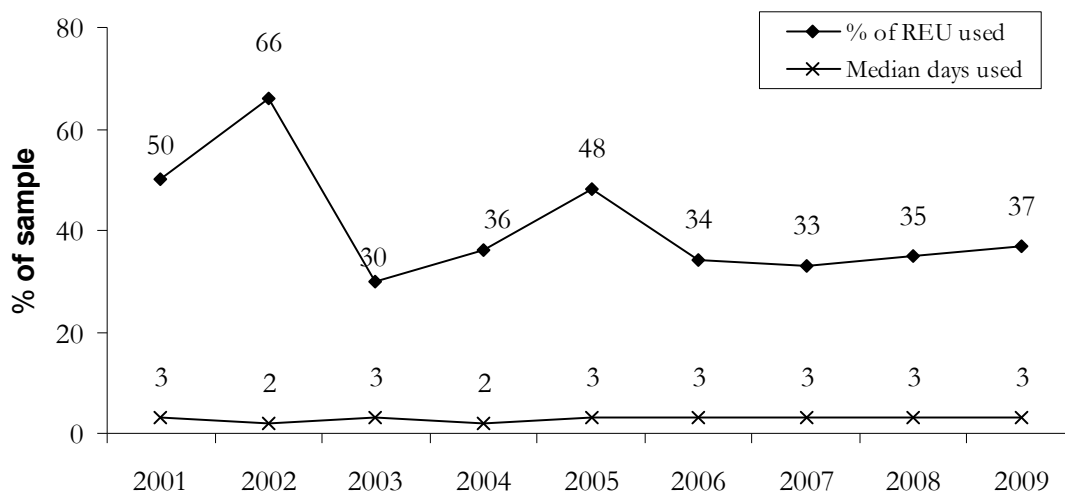
* Of those who reported use in the last six months

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

The ‘average’ 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 two tabs/trips used at ‘most’ (see Table 6.1). Compared to 2008, the reported ‘average’ and ‘most’ amounts remained the same.

The majority of LSD users reported recent use by swallowing (95%, n=35), with one participant also reporting use by injecting, one by snorting, and one by shelving/shafting (refers to vaginal/anal administration) in the six months prior to interview. Five percent of participants reported having recently binged on LSD.

Figure 6.1: LSD – Trends in recent use* and median days used#, 2001 – 2009



Source: EDRS participant interviews

* Use in the previous six months

By those reporting use in the previous six months

Those providing information about where LSD was ‘last’ used reported use of LSD across a wide range of locations. The most commonly reported locations of ‘last’ use of LSD were their own home (30%, n=6) or a friend’s home (35%, n=7), followed by a private party (15%, n=3), outdoors (15%, n=3) or a ‘day club’ (5%, n=1).

Only one KE was able to comment on REU LSD use, and commented that LSD is making a comeback with younger users often using this substance.

6.2 Price

Table 6.2 presents a summary of information regarding the last price paid, by those able to comment, for LSD and the recent changes in price as provided by participants in 2009, with 2008 data for comparison. The median last price paid for a tab of LSD was \$15 (range \$10 to \$20; n=23) in 2009, slightly higher than the median reported price at ‘last’ purchase in 2008 at \$11 (range \$7 to \$30; n=26). The majority of those participants able to comment reported that the price of LSD had been stable recently.

Table 6.2: Median price of last LSD purchase and change of price over the last six months, 2008 & 2009

	2008	2009
Median price per tab (range; n)		
Price at last purchase \$	11 (7-30; 26)	15 (10-20; 23)
Price change in last 6 months (%)	(n=25)	(n=23)
Increasing	10	22
Stable	59	57
Decreasing	7	0
Fluctuating	10	13
Don't know	14	9

Source: EDRS participant interviews

6.3 Purity

Table 6.3 summarises the current purity of LSD and the changes in purity in the last six months, as perceived by the participants in 2009, with 2008 data for comparison. Nearly half of the participants, who were able to comment on the purity of LSD, perceived that current purity was high (46%), although fewer participants reported the purity was high compared to 2008 (62%). With regard to recent changes in purity, results indicate that of those able to comment thirty-five percent reported the purity as stable, followed by increasing (22%), in the six months prior to interview.

Table 6.3: Purity of LSD and change in purity over the last six months, 2008 & 2009

	2008 (n=26)	2009 (n=22)
Current purity* (%)		
Low	4	18
Medium	19	27
High	62	46
Fluctuates	15	9
Change purity in last 6 months (%)	(n=29)	(n=22)
Increasing	28	22
Stable	17	35
Decreasing	0	9
Fluctuating	28	9
Don't know	28	26

Source: EDRS participant interviews

6.4 Availability

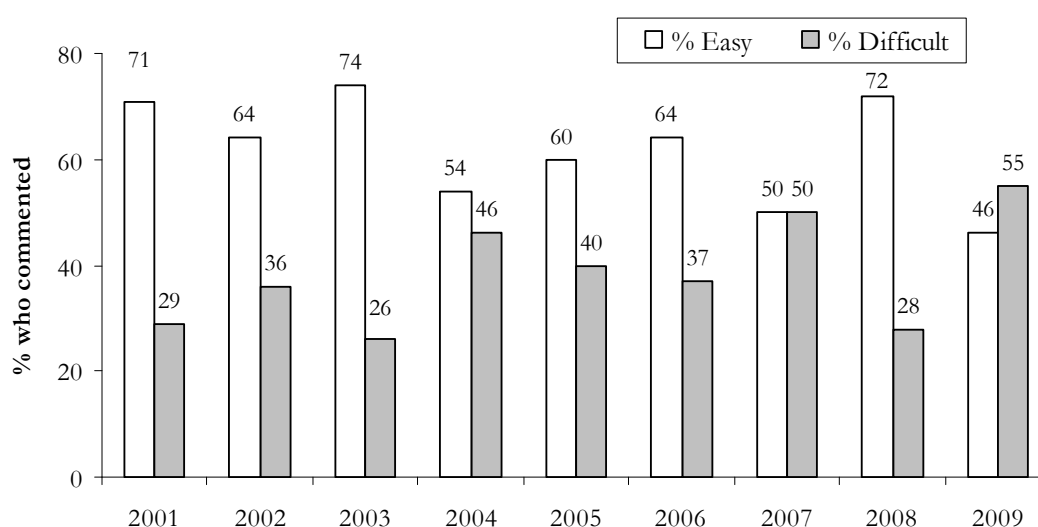
Table 6.4 summarises the current availability of LSD and the recent changes in availability, as perceived by the participants in 2009, with 2008 data for comparison. Similar proportions of participants reported that it was ‘easy’ or ‘very easy’ (46%) or difficult (46%) to purchase LSD, in the six months prior to interview. Nearly half of the participants (48%) reported that the availability of LSD had been stable in the previous six months.

Table 6.4: Availability of LSD and change in availability over the last six months, 2008 & 2009

	2008 (n=29)	2009 (n=22)
Current availability (%)		
Very easy	31	14
Easy	41	32
Difficult	21	46
Very difficult	7	9
Change in availability in last 6 months (%)	(n=29)	(n=23)
More difficult	7	26
Stable	69	48
Easier	7	9
Fluctuates	7	13
Don't know	10	4

Source: EDRS participant interviews

Figure 6.2: Trend in availability of LSD, 2001 – 2009



Source: EDRS participant 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

Figure 6.2 shows clearly that participants' perception regarding the availability of LSD in 2009 has changed since the previous year, with fewer participants reporting it was easy to get LSD in the six months prior to interview.

The participants able to provide information reported that they had bought LSD most commonly from friends and at their friend's home (see Table 6.5).

Table 6.5: Usual person and source venue where participants purchased LSD, 2009

Source	% of participants (n= 21)
Used, not scored	9
<i>Who have you got LSD from in the last 6 months?</i>	
Friends	70
Known dealers	13
Acquaintances	4
Strangers/unknown dealers	4
<i>What venues do you normally score LSD at?</i>	
Own home	15
Dealer's home	15
Friend's home	45
Hotels	5
Private party	10
Agreed public location	5
Outdoors	5

Source: EDRS participant interviews

7 CANNABIS

Summary

- Median age of first use was younger than reported by participants in 2008, with the majority of participants having tried cannabis prior to 18 years of age.
- A larger proportion of the sample reported recent use of cannabis and greater frequency of use compared to participant reports in 2008.
- Participants reported an increase in the price of an ounce of hydro cannabis compared to participant reports in 2008.
- According to participant reports of purity and availability there have been no changes in these parameters compared to participant reports in 2008.

The current legal approach to cannabis use in South Australia is one of ‘prohibition with civil penalties’. Under this approach, the production, possession or use of cannabis is illegal in South Australia. Any cultivation of a cannabis plant by hydroponic means will result in the accused being arrested/reported and required to attend court. A single cannabis plant grown in the ground, i.e. not grown hydroponically, will attract an expiation fee. If a person (the accused) has grown more than one cannabis plant grown in the ground (bush cannabis) this results in the accused being arrested and required to attend court. There are varying penalties for possession of cannabis offences and these penalties are dependant on the amount the person is located with. Under the Cannabis Expiation Notice Scheme, police issue the offender with an, ‘on-the-spot’ fine notice. If the offender disagrees with any aspect of the charge, they can elect to go to court and defend the case rather than pay the expiation fee. Failure to pay the prescribed fee within the expiation period results in a summons being issued for the offender to appear in court. The original expiation fee becomes the fine, with the additional court costs. Changes to the legislation were introduced in 2007 codifying trafficking offences.

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). Participants 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 participants (injecting drug users) 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 participants 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 participants first used cannabis was 14 years (range 6 to 21 years) in 2009, slightly younger than reported in 2008 (15 years, range 11 to 27). Further examination of the age at which participants first used cannabis reveals that: 53%

reported use by the age of 14 years; 83% by 16 years; and 94% by 18 years. Ninety-eight percent reported having used cannabis in their lifetime, and 27% nominated cannabis as their drug of choice in 2009 (see Table 7.1).

7.1 Cannabis use

Table 7.1 summarises the patterns of use of cannabis by participants in 2009, with 2008 figures for comparison.

In 2009, the proportion of participants reporting recent cannabis use was 86% indicating a higher prevalence of recent cannabis use compared to participant reports of such use in 2008 (74%). The frequency of use of cannabis reported by participants in 2008 was a median 96 days (range 1 to 180 days); this was higher compared to the frequency of use reported by participants in 2008 (48 days, range 1 to 180 days). However, frequency of use of cannabis has fluctuated widely across the ten years the EDRS has been conducted. A closer examination of frequency of use revealed that 15% (n=13) of cannabis users had used on 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 8% (n=7) reported using greater than monthly and up to once per fortnight (7 to 12 days inclusive), 7% (n=6) reported using greater than fortnightly and up to once per week (13 to 24 days inclusive), and the remaining 70% (n=60) reported using greater than weekly (25 to 90 days inclusive), on average, in the last six months. In the six months prior to interview 42% (n=36) of participants reported daily use of cannabis.

Participants who had used cannabis in the six months prior to interview were asked to report the number of cones or joints they used on the last day they smoked. The majority of participants (77%, n=66) reported smoking a median of four 'cones' (range 0.1 to 50 cones) in a smoking implement the last day they had used. Nineteen participants (22%) reported use of joints (median = 1 joint, range 0.25 to 10 joints), and one participant reported they smoked a 'bag' of cannabis but not how this was smoked.

Table 7.1: Patterns of hydroponic and bush cannabis use among the participant sample, 2008 & 2009

Variable	2008 (N=74)	2009 (N=100)
Age first used: median in years (range)	15 (11-27)	14 (6-21)
Ever used (lifetime) (%)	95	98
Used in last 6 months (%)	74	86
Cannabis as main drug of choice (%)	9	27
Days used in last 6 months#: median (range)	48 (1-180)	96 (1-180)
Cannabis included in 'binge' episode* (%)	14	26

Source: EDRS participant interviews

Of those who reported use in the last six months

* Bingeing was defined as a period of 48-hours continuous drug use without sleep, in the last six months

Twenty-six percent of participants reported bingeing on cannabis in 2009. In the six months prior to interview, 44% percent of participants reported typically using cannabis

with ecstasy and 47% reported typically using cannabis at ecstasy comedown. In comparison to 2008, more participants reported engaging in bingeing (14% in 2008 vs. 26% in 2009), whereas similar numbers reported typically using cannabis with ecstasy (46% in 2008 vs. 44% in 2009), and typically using cannabis at ecstasy comedown (50% in 2008 vs. 47% in 2009).

All of those who had used cannabis reported recent use by smoking (n=86), and 50% (n=43) also reported use by swallowing.

Most KE reports regarding REU cannabis use stated use was common and ranged from casual to regular use, with daily use by some. Five KE commented that REU cannabis use was common and stable. However, eight KE commented that there had been an increase in long-term cannabis-only users approaching health services to give up the use of this drug – a most unusual situation.

Table 7.2 summarises information from participants on the usual source (both person and venue) from which they had ‘usually’ obtained the cannabis they had recently used. In 2009, participants able to comment reported that they had ‘usually’ obtained cannabis from a friend (67% for hydro, 60% for bush), an acquaintance (12% for hydro, 10% for bush), or a known dealer (13% for hydro, 17% for bush), in the six months prior to interview. The majority of participants able to comment reported that the venue they had ‘usually’ obtained cannabis from was a friend’s home (hydro 47%; bush 35%), home delivery (hydro 29%; bush 38%), a dealer’s home (hydro 10%; bush 8%), or an agreed public location (hydro 9%; bush 6%). Three percent (n=1) of participants reported they had produced their own hydro, with 4% reporting they had grown their own bush cannabis.

Table 7.2: Usual person and source venue where participants purchased hydro and bush cannabis, 2009

	Hydro (n=58)	Bush (n=48)
Person (%)		
Friends	67	60
Known dealer	13	17
Workmates	2	2
Street dealer	2	2
Acquaintances	12	10
Unknown dealer/strangers	0	2
Grew own	3	4
Family member	0	2
Venue (%)		
Home delivery	29	38
Dealers' home	10	8
Friends' home	47	35
Acquaintance's home	5	6
Agreed public location	9	6
Other	0	6

Source: EDRS participant interviews

7.2 Price

The reported last median purchase price (by those able to comment) for a 'bag' of hydro (n=40) and bush cannabis (n=31) was \$25 (range \$20 to \$30 for hydro and bush). The last median purchase price reported for an ounce of hydro was \$220 (range \$180 to \$275, n=38) and bush cannabis was \$200 (range \$150 to \$250, n=28). The majority of participants who were able to comment reported that the price of hydro (53%, by 32 of 60 participants) had remained stable or had increased (38%, by 23 of 60 participants) in the six months prior to interview, and results for bush cannabis were similar with the majority of participants reporting that the price had remained stable (60%, by 30 of 50 participants) or increased (26%, by 13 of 50 participants) in the last six months.

7.3 Purity

Tables 7.3 and 7.4 summarise the current purity of hydro and bush cannabis and the changes in the purity of cannabis over the last six months, according to participant reports.

Table 7.3: Purity of hydro and bush cannabis and change in purity over the last six months, 2008 & 2009

	% Able to answer			
	2008		2009	
	Hydro (n=30)	Bush (n=24)	Hydro (n=60)	Bush (n=49)
High	50	50	57	37
Medium	30	42	30	43
Low	10	4	5	8
Fluctuates	10	4	8	12

Source: EDRS participant interviews

Table 7.4: Change in potency/strength of cannabis in last six months, 2008 & 2009

	% Able to answer			
	2008		2009	
	Hydro (n=30)	Bush (n=24)	Hydro (n=60)	Bush (n=50)
Don't know	3	4	3	10
Increasing	7	13	13	8
Stable	57	67	53	54
Decreasing	7	8	10	12
Fluctuating	27	8	20	16

Source: EDRS participant interviews

In 2009, the purity of hydro and bush cannabis was reported as high or medium by 80% or more of the participants able to comment (hydro 87%, or 52% of entire sample; bush 80%, or 39% of entire sample). The majority of participants able to comment reported that the purity of hydro (53%) and bush cannabis (54%) was stable in the last six months. There were no changes in these parameters in 2009 compared to 2008.

7.4 Availability

Tables 7.5 and 7.6 summarise the current availability of hydro and bush cannabis and the changes in the availability of cannabis over the last six months, according to participant reports. In 2009, the majority of participants able to comment reported hydro and bush cannabis as easy or very easy to obtain, with 80% (47% of entire sample) for hydro, and 64% (31% of entire sample) for bush. Large proportions of those able to comment reported that the availability of hydro (53%, or 32% of the entire sample) and bush (48%, or 24% of the entire sample) had remained stable in the last six months.

Table 7.5: Availability of cannabis currently, 2008 & 2009

How easy is it to get cannabis at the moment?	% Able to answer			
	2008		2009	
	Hydro (n=29)	Bush (n=24)	Hydro (n=59)	Bush (n=49)
Very easy	45	54	46	27
Easy	31	17	34	37
Difficult	24	21	17	35
Very difficult	0	8	3	2

Source: EDRS participant interviews

Table 7.6: Change in availability of cannabis over the last 6 months, 2008 & 2009

Has [availability] changed in the last 6 months?	% Able to answer			
	2008		2009	
	Hydro (n=30)	Bush (n=24)	Hydro (n=60)	Bush (n=50)
Don't know	0	0	3	6
More difficult	17	8	20	22
Stable	60	50	53	48
Easier	7	25	17	14
Fluctuates	17	17	7	10

Source: EDRS participant interviews

8 OTHER DRUGS

8.1 Cocaine use

The median age of first use of cocaine by participants was 21 years (range 16 to 34 years), with three percent nominating cocaine as their drug of choice in 2009. In 2009, fewer participants reported lifetime use (45%) than in 2008 (53%). Recent use of cocaine remained stable at 20% of participants having used cocaine a median of two days (range 1 to 8 days) in the six months prior to interview (see Table 3.2).

The 'average' amount of cocaine used in a single session was generally reported in grams, or lines, with 0.8 grams, or one line reported as median amount used on average. The 'most' amount of cocaine used in a single session was a median of one gram or line. The reported 'average' amount of grams used in 2009 was higher at 1.8 grams of cocaine used in a single session in comparison to the half a gram reported by participants in 2008.

The majority of cocaine users (n=20) reported recent use of cocaine by snorting (85%), a fifth also reported having used by swallowing (20%), followed by smoking (10%) and injecting (5%) in the six months prior to interview. The proportion of participants reporting having recently binged on cocaine was stable in 2009.

KE report that there has been an increase in the availability of cocaine in the past 12-months, with some noting that more users are mentioning this drug than in the past. The quality of cocaine is also reported to have increased.

8.2 Ketamine

The median age of first use of ketamine among the participants was 19 years (range 16 to 32 years), with around a third (31%) reporting use of ketamine in their lifetime (see Table 3.2). No participant nominated ketamine as their drug of choice in 2009. These parameters remained largely unchanged compared to 2008, with the exception of the age of first use at 19 years compared to 21 years (range 16 to 50 years) in 2008.

In 2009, nineteen percent of participants reported having used ketamine a median of two days (range 1 to 12), in the six months prior to interview. When compared to 2008 this indicates that recent use and frequency of use remained stable in 2009. Frequency of recent ketamine use remains low, similar to previous years.

Most ketamine users reported recent use of ketamine by snorting (79%, n=15), followed by swallowing (16%, n=3), in the six months prior to interview. Two participants reported use by smoking, and one participant reported use by injecting. Five participants reported having recently binged on ketamine (5%).

8.3 Alcohol

The median age at which participants reported first using alcohol was 14 years (range 6 to 28 years) in 2009, the same as reported in 2008 (see Table 3.2). Forty-one percent of participants (n=28) had used alcohol prior to 14 years of age. The proportion of participants reporting recent use of alcohol remains high in 2009 at 93%. The median frequency of recent alcohol use remained stable in 2009 at 48 days. A closer analysis of frequency of recent use in 2009 revealed that 9% (n=8) of alcohol 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 6% (n=6) reported using greater than monthly and up to once per fortnight (7 to 12 days inclusive); 19% (n=18) reported using greater than fortnightly and up to once per week (13 to 24 days inclusive); and the remaining 66% (n=61) reported using greater than weekly (25 to 120 days inclusive), on average, in the last six months. Five participants had used alcohol on a daily basis in 2009.

Thirty-one percent of participants reported including alcohol in a binge session in 2009, with the majority (84%) of these reporting typically consuming more than five standard drinks when they did so. Sixty-six percent of participants reported typically using alcohol with ecstasy, with the majority (84%) of these reporting typically consuming more than five standard drinks when they did so. Fifteen percent of participants also reported using alcohol at comedown from ecstasy, with 80% of these drinking more than five standard drinks when they did so. More participants reported including alcohol in a binge session in 2009 compared to 2008 participant reports (31% compared to 19% in 2008); however, the proportion of participants who reported typically using alcohol with ecstasy and at comedown was lower compared to participants reports in 2008 (81% compared to 66% in 2009 and 43% compared to 15% in 2009 respectively).

The majority of KE able to comment reported REU alcohol use was common (11 of 20 KE). All commented that REU alcohol use had increased in the previous 12 months, with many more REU drinking alcohol with ecstasy and at comedown from ecstasy. Moreover, KE expressed concern with the increase in alcohol use being combined with REU consuming methamphetamines. The majority of KE reported that binge levels of drinking increased when methamphetamines were being used. This supports participant reports of combined use of alcohol and ecstasy (see section 4.1). Moreover, the majority of KE noted that the combined use of alcohol and methamphetamines had resulted in increases in aggression, domestic violence issues, removal of children from the family home, mental health issues, behavioural problems and legal issues to name a few.

8.4 Tobacco

The median reported age of first use of tobacco was slightly older than that for alcohol and cannabis at 15-years (range 5 to 20 years) (see Table 3.2).

The proportion of participants reporting recent use of tobacco was higher than 2008, with over three-quarters of the sample (80%) reporting recent use in 2009 compared to 2008 (70%). The frequency of participants' tobacco use has remained at peak levels across the ten years of the survey at a median of 180 days in the previous six months (equivalent to daily use), with 67% reporting daily use. This far exceeds the 2007 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, 2008). Sixty-two percent of EDRS participants who reported using other drugs 'with ecstasy' or 'at comedown' reported typically smoking either 'with ecstasy' or 'at comedown' (51%) in 2009.

8.5 Benzodiazepines

Since 2007, participants have been asked to distinguish between their use of licit and illicit use of benzodiazepines (see Table 3.2).

The median age of first use of illicit benzodiazepines was 18 years (range 14 to 25 years), which is lower than the median age of first use reported by participants in 2008 (22 years, range 16 to 40). In 2009, 14% of participants reported use of illicit benzodiazepines for a median of two days (range 1 to 180), with a similar proportion reporting such use in 2008 (12%) at the same frequency.

8.6 Anti-depressants

Since 2007, participants have been asked to distinguish between their use of licit and illicit use of anti-depressants (see Table 3.2).

The median age of first use of illicit antidepressants was 17 years (range 14 to 31 years), which is lower than the median age of first use reported by participants in 2008 (21 years, range 17 to 39). In 2009, two percent of participants reported recent use of illicit antidepressants on a median 6 days (range 1 to 10). In 2008, four percent of participants reported recent use on a median of two days (range 1 to 30), but due to such small numbers no conclusions may be drawn.

8.7 Inhalants

The participants were asked about the use of the inhalants amyl nitrate and nitrous oxide (see Table 3.2). The median age of first use of amyl nitrate was 18 years (range 12 to 33 years), and the median age of first use of nitrous oxide was 17 years (range 13 to 43 years). Participants in 2009 reported commencing amyl nitrate use at a younger age than participants in 2008 (20 years).

In 2009, 16% of participants reported recent use of amyl nitrate for a median of seven days (range 1 to 72), which is a higher proportion than reported in 2008 (7%). Four participants reported having binged on amyl nitrate, one participant reported typically using amyl nitrate 'with' ecstasy, and no participants reported use of amyl nitrate 'at comedown' from ecstasy, in the last six months. The proportion of participants using amyl nitrate either 'with' ecstasy or 'at comedown' from ecstasy in the last six months was also unchanged.

In 2009, 33% of participants reported recent use of nitrous oxide for a median of five days (range 1 to 48). Frequency of nitrous oxide use remained stable in 2009 at five days (3 days in 2008). Seven percent of participants reported having binged on nitrous oxide,

two percent reported having typically used nitrous oxide ‘with’ ecstasy and using nitrous oxide during an ecstasy ‘comedown’ in the last six months.

8.8 Pharmaceutical stimulants

For the past five years, participants have been asked about their use of pharmaceutical stimulants, such as dexamphetamine, pseudoephedrine and methylphenidate (Ritalin®) (see Table 3.2), and in 2007 participants were asked to distinguish between licit and illicit use.

In 2009, the median reported age of first use of illicit pharmaceutical stimulants was 16 years (range 12 to 35 years), slightly younger than the median age reported in 2008 (at 18 years). Twenty-six percent of the sample reported use of illicit pharmaceutical stimulants in their lifetime. Three percent of participants reported recent use of illicit pharmaceutical stimulants on a median of three days (range 1 to 5 days). Recent use of illicit pharmaceutical stimulants remained stable in 2009 compared to 2008 (3%), and the frequency of participants’ recent use of illicit pharmaceutical stimulants remained low.

8.9 Magic mushrooms

Participants 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 18 years (range 14 to 30 years) and 45% of participants reported having used them in their lifetime. Eighteen percent of participants reported use of ‘magic mushrooms’ a median of two days (range 1 to 35 days) in the last six months. These use parameters were higher in comparison to those reported by participants in 2008, with more participants reporting recent use (from 5% in 2008 to 18% in 2009), whereas lifetime use in 2009 remained stable (from 47% in 2008 to 45% in 2009).

8.10 GHB

The median age at which participants reported first using gamma-hydroxy butyrate (GHB) was 24 years (range 18 to 30 years) in 2009, and remains stable in 2009. The proportion of participants reporting recent use of GHB remains low in 2009 at 2%, with the median number of days used also low at two days (see Table 3.2).

One participant reported including GHB in a binge session in 2009, and no participants reported typically using GHB with ecstasy, or at comedown from ecstasy.

8.11 MDA

In 2009, the median age at which participants reported first use of 3,4-methylenedioxymphetamine (MDA) was 20 years (range 15 to 33 years), and remained relatively stable compared to 2008 (21 years) (see Table 3.2). The proportion of participants reporting recent use of MDA remains low in 2009 with two participants reporting recent use at a median number of 2 days (range 1 to 3).

No participants reported including MDA in a binge session, typically using MDA with ecstasy or at comedown from ecstasy in 2009.

8.12 DOI

In 2009, participants were asked about their use of 4-iodo-2, 5-dimethoxyamphetamine (DOI), a lesser-known psychedelic drug which has appeared on the illicit drug market in South Australia. DOI has been identified in tabs/tickets (sold locally as 'trips') and street names for this drug include 'Dr Eye' and 'DOI' or 'dead on impact'.

Participants reported the median age of first use of DOI was 19 years (range 17 to 24). Twelve percent of participants reported ever using DOI, with 8% reporting recent use for a median of 2 days (range 1 to 10 days) (see Table 3.2).

8.13 Over the counter codeine

In 2009, participants were asked about their use of over the counter codeine (OTC). The median age at which participants reported first using OTC was 17 years (range 2 to 38), with 57% reporting use of this substance prior to 18 years. Forty percent of participants reported ever using OTC, with 28% reporting recent use for a median of 6 days (range 1 to 30 days) (see Table 3.2). All participants reported swallowing as the only route of administration of OTC.

8.14 Over the counter stimulants

In 2009, participants were asked about their use of over the counter stimulants (OTS). The median age at which participants reported first using OTS was 16 years (range 10 to 25), with 56% reporting use of this substance prior to 18 years. Twenty-six percent of participants reported ever using OTS, with 13% reporting recent use for a median of 4 days (range 1 to 20 days) (see Table 3.2). All participants reported swallowing as the only route of administration of OTS.

9 HEALTH-RELATED ISSUES

Summary

- The proportion of participants who reported recent experience of overdose was stable in 2009 compared to reports in 2008.
- Telephone calls to ADIS decreased for methamphetamine and cannabis, whereas cocaine remained stable, and increased for ecstasy.
- 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 of the total attendances, though the proportion of total clients nominating ecstasy as the primary drug of concern has steadily increased since 2000/01. Amphetamines were the second most commonly nominated primary drug of concern by clients of DASSA after alcohol, and dominated as the most common illicit drug of concern.
- There was an increase in the number of participants reporting experience of one or more problems related to their drug use in 2009. The majority of problems experienced by participants related to some aspect of personal responsibility.
- It is noteworthy that alcohol accounted for by far the most emergency department attendances across all years followed by benzodiazepines and anti-depressants. Attendances regarding amphetamines have fluctuated somewhat across the years depicted, and accounted for the second most common illicit drug-related attendances, with heroin now the most common illicit drug-related attendances at the RAH.
- A quarter of the participants were assessed as having high to very high levels of psychological distress in 2009, with twenty-one percent of the participant sample reported experiencing a mental health problem (other than drug dependence) in the six months preceding interview.
- Personal well-being was measured in 2009 and findings indicate that participants are less than satisfied with their standard of living, health, and their current achievement to date.
- Aggression was measured using the Buss-Perry Aggression Scale and findings indicate that half of the participants rated the motor component of 'verbal aggression' as characteristic descriptor of their behaviour, followed by emotional component of 'anger', then physical aggression and finally the cognitive component of 'hostility' as descriptive of their behaviour.

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

9.1 Overdose and drug-related fatalities

In 2009, participants' experience of overdose was examined in more detail than in previous years, with participants asked about 'stimulant' and 'depressant' drug overdose experiences separately. Stimulant drugs include ecstasy, methamphetamine base, powder or crystal, pharmaceutical stimulants, cocaine, MDA and PMA. Depressant drugs include alcohol, GHB, heroin, methadone, benzodiazepines and other opiates. Participants were asked if they had experienced overdose on a 'stimulant' and/or 'depressant' drug ever and in the last six months. The location where participants had overdosed was also investigated, as was the main drug participants believed was involved. 'Overdose' was

clarified as having passed out or fallen into a coma following use of a drug. Overall, when recent (in the 12 months prior to interview) ‘stimulant’ and ‘depressant’ overdoses are combined, the proportion of participants who reported recent experience of overdose was stable in 2009 (n=16).

9.1.1 Stimulant overdose

Eight participants reported that they had ‘ever’ overdosed on ‘stimulant’ drugs a median of once (range 1 to 2), and three participants reported that they had overdosed on a ‘stimulant’ drug in the last twelve months: two at their friend’s home and one at a nightclub. Of those who had recently overdosed, one reported the main drug involved was ecstasy, another reported powder methamphetamine as the main drug and the other reported LSD was the main drug involved. The median time since last overdose, for those who reported ‘ever’ overdosing on a ‘stimulant’ drug, was 22 months (range 2 to 84 months).

9.1.2 Depressant Overdose

Nineteen participants reported they had ‘ever’ overdosed on ‘depressant’ drugs a median of 10 times (range 1 to 250), three reported having done so 100 or more times. Fifteen participants reported overdosing on a ‘depressant’ drug a median of three times (range 1 to 16), in the last twelve months. Alcohol (n=2) and ketamine (n=1) were the main drugs involved in the overdose experience of these three participants. Participants reported recently overdosing at their friend’s home (n=7), at their own home (n=2), with one each reporting doing so at a pub, dealer’s home, a private party, in the street, as a passenger in a car and outdoors. The median time since last overdose, for those who reported ‘ever’ overdosing on a ‘depressant’ drug, was three months (range 3 weeks to 120 months).

9.1.3 Methamphetamine-related deaths

The following findings relate to numbers of drug-related deaths recorded at the closure of the 2007 ABS deaths data file. These figures may not be complete due to changes in methodology.

At the time of printing data regarding methamphetamine-related deaths in Australia up to 2008 were unavailable; 2007 data are presented below. The data includes deaths where methamphetamine was determined to be either the underlying cause (Nn20) – 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.

The total number of deaths Australia-wide in which methamphetamine was mentioned was relatively stable in 2007 (from 2006, n = 66 to 2007, n= 69).

9.1.4 Cocaine-related deaths

The following findings relate to numbers of drug-related deaths recorded at the time of closure of the 2007 ABS deaths data file. These figures may not be complete due to changes in methodology.

At the time of printing, data regarding cocaine-related deaths in Australia up to 2008 were unavailable; 2007 data are presented below. The data includes deaths where cocaine was determined to be either the underlying cause (n=7) – 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.

The total number of deaths Australia-wide in which cocaine was mentioned was relatively stable in 2007 (from 2006, n = 13 to 2007, n= 18).

9.2 Help-seeking behaviour

In 2009, a total of 10 participants reported having accessed one or more medical or other health services in the last six months, in relation to their use of ecstasy and related drugs. One participant reported utilising four different service types related to ecstasy use (first aid, ambulance, counselling and the emergency services), and one participant utilised a drug and alcohol counsellor and a GP for methadone and benzodiazepines.

The most commonly accessed services, in relation to 'any' drug use, was a drug and alcohol worker (attended by 3 participants), a GP (n=2), first aid (n=2), ambulance (n=2) and a counsellor (n=2). The main issue for which participants accessed services was overdose (n=3) relating to ecstasy use.

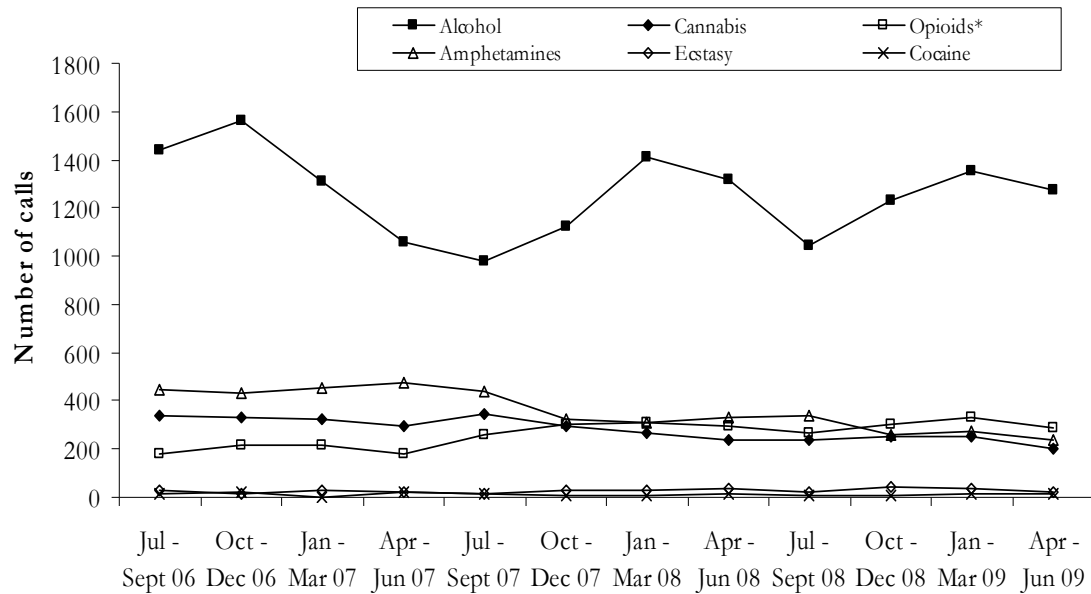
9.3 Drug treatment services

The following drug treatment data for South Australia comes from two sources: Telephone calls to the SA Alcohol and Drug Information Service (ADIS), and Drug and Alcohol Services South Australia (DASSA). This and further 'Treatment Services DASSA' sections below will present data in terms of clients (per drug type) to these services, to provide a clearer picture of the trends in the number of individuals seeking treatment for the various illicit substances. For information in terms of episodes of treatment (per drug type) – that gives a more accurate measure of demand, or total load, on treatment services – the reader is directed to the Report on the National Minimum Data Set (Australian Institute of Health and Welfare, 2009), which details findings from DASSA and other non-government treatment agencies in SA.

9.3.1 Treatment services ADIS

Figure 9.1 shows the number of drug-related telephone calls to the SA Alcohol and Drug Information Service (ADIS) from the general public, regarding six different substance types across the financial years 2006/07 and 2008/09. It can be seen that the majority of drug-related calls to SA ADIS across the time period depicted have been alcohol-related (36.64%, or 4901 of 13,375 calls), followed by opioids and amphetamines (in approximately equal numbers), then cannabis. In 2008/2009 opioid-related calls surpassed amphetamine-related calls. Calls relating to ecstasy or cocaine have constituted less than one percent of the total coded calls to SA ADIS across all years depicted.

Figure 9.1: Number of drug-related calls to ADIS per quarter, by selected drug type, July 2006 – June 2009



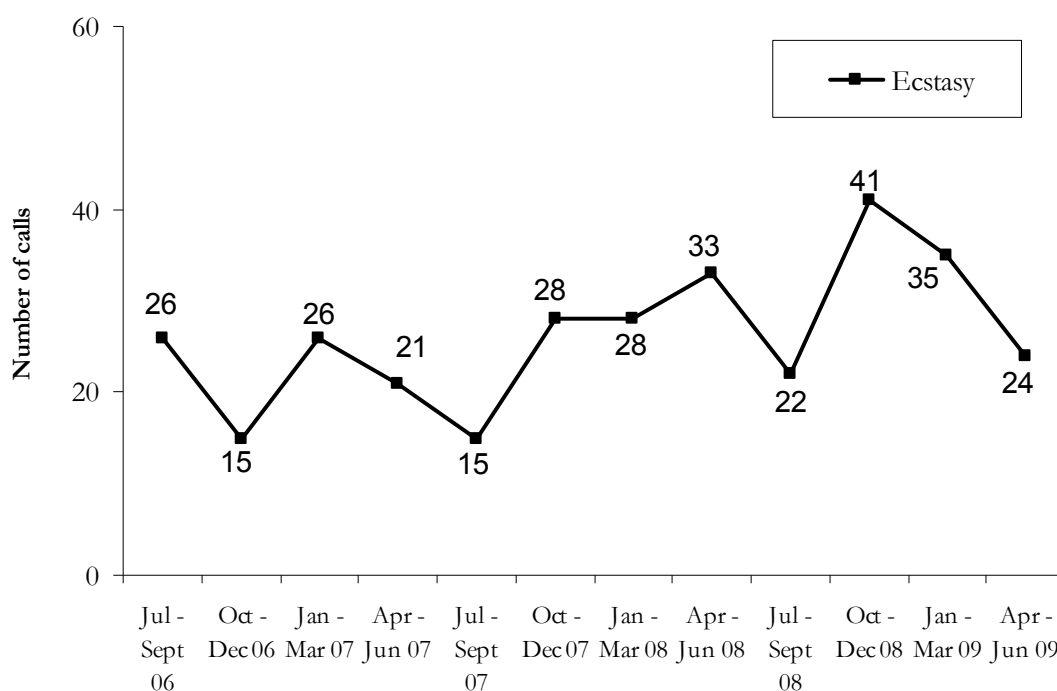
Source: SA ADIS

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

Ecstasy-related calls

Telephone calls to ADIS regarding ecstasy accounted for 0.91% (n=122) of the total coded telephone contacts (drug-related), in the 2008/09 financial years (N=13,375), similar to the previous six years. Figure 9.2 depicts the number of ecstasy-related calls per quarter for the last three financial years, and Figure 9.1 compares the frequency of ecstasy-related calls to calls related to other drug types.

Figure 9.2: Number of inquiries to ADIS regarding ecstasy July 2006 – June 2009



Source: SA ADIS

Methamphetamine-related calls

Telephone calls to ADIS regarding amphetamines accounted for 8.27% (n=1,107) of the 13,375 total coded telephone contacts (drug-related) in the 2008/09 financial year, lower than that for previous years: 9.5% in 2007/08 (of a total 14,068); 12.69 in 2006/07 (of a total 14,349); 10.7% in 2005/06 (of a total 13,231); 12.5% in 2004/05 (of a total 12,639); 12% in 2003/04 (of a total 13,336); and, 11.6% in 2002/03 (of a total 13,825). Figure 9.1 depicts the number of amphetamine-related calls per quarter for the last three financial years compared to calls related to other drug types. As can be seen, calls related to methamphetamine have overtaken those for cannabis.

Cocaine-related calls

Telephone calls to ADIS regarding cocaine accounted for only 0.28% (n=38) of the total coded telephone contacts (drug-related) in the 2008/09 financial years. Numbers of calls to SA ADIS concerning cocaine have been consistently low across the past few years, and remained stable in 2008/09; specifically, 0.24% (n=35) of coded drug-related calls in the 2007/08 financial year; 0.45% (n=64) in 2006/07; 0.32% (n=43) in 2005/06; 0.32% (n=41) in 2004/05; 0.20% (n=27) 2003/04; 0.25% (n=35) in 2002/03; and, 0.4% (n=50) in 2001/02. Figure 9.1 depicts the number of cocaine-related calls per quarter for the last three financial years compared to calls related to other drug types.

Cannabis-related calls

Telephone calls to ADIS regarding cannabis accounted for 7.03% (n=940) of the total coded telephone contacts (drug-related) in the 2008/09 financial years, and this is a decrease compared to previous years. Specifically, 7.03% (n=940) of the total coded telephone contacts (drug-related) in the 2008/09 financial year were cannabis related, compared to 8.13% (n=1,145) in 2007/08, 9% in 2006/07, 11.7% in 2005/06, 12% in 2004/05, 10.3% in 2003/04, 12% in 2002/03 and 14% in 2001/02. In 2008/09, the

number of enquiries regarding cannabis (7.03% of total) was lower than for amphetamines (8.27% of total) and less than a quarter of the number of enquiries regarding alcohol (36.64% of total, or n=4,901 calls). Figure 9.1 depicts the number of cannabis-related calls per quarter for the last three financial years compared to calls related to other drug types.

9.3.2 Treatment services DASSA

As can be seen in Table 9.1, in 2008/09 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 (<2.5%) of the total attendances, though the proportion of total clients nominating ecstasy as the primary drug of concern has steadily increased since 2001/02.

Table 9.1: Primary drug of concern nominated by clients of Drug and Alcohol Services South Australia, as a percentage of total number of clients*, 2001/02 – 2008/09

Drug type (%)	2001/ 02	2002/ 03#	2003/ 04	2004/ 05	2005/ 06	2006/ 07	2007/ 08	2008/ 09
Alcohol	42.0	44.6	47.7	48.3	51.8	52.09	55.91	57.46
Amphetamines	14.5	19.3	18.5	20.0	18.8	21.71	16.28	15.15
Heroin	10.3	18.5	14.3	12.3	9.7	7.58	8.20	7.79
Opioid analgesics	7.1	7.6	8.0	7.5	6.7	6.23	7.02	7.31
Cannabis	10.7	10.6	13.1	12.8	13.2	11.28	11.48	10.30
Benzodiazepines	1.9	2.6	2.3	2.4	2.3	2.02	2.25	2.01
Ecstasy	0.12	0.38	0.74	0.63	1.1	0.94	1.33	1.98
Cocaine	0.3	0.3	0.1	0.4	0.4	0.41	0.35	0.48
Tobacco	0.2	0	0.2	0.2	0.3	0.31	0.53	0.43
Unknown	6.1	0	0.1	0.2	0.2	0.39	0.30	0.17
Buprenorphine	-	0.4	1.2	1.0	1.06	1.21	1.34	1.10
Other	6.8	1.6	1.5	1.8	1.3	2.46	2.20	1.70

Source: Drug and Alcohol Services South Australia

* Total number of clients = total number of individuals who started one or more new episodes of treatment during the period

During this period a new data collection system (Client Management Engine-DASC Information System or 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.

Ecstasy-related attendances

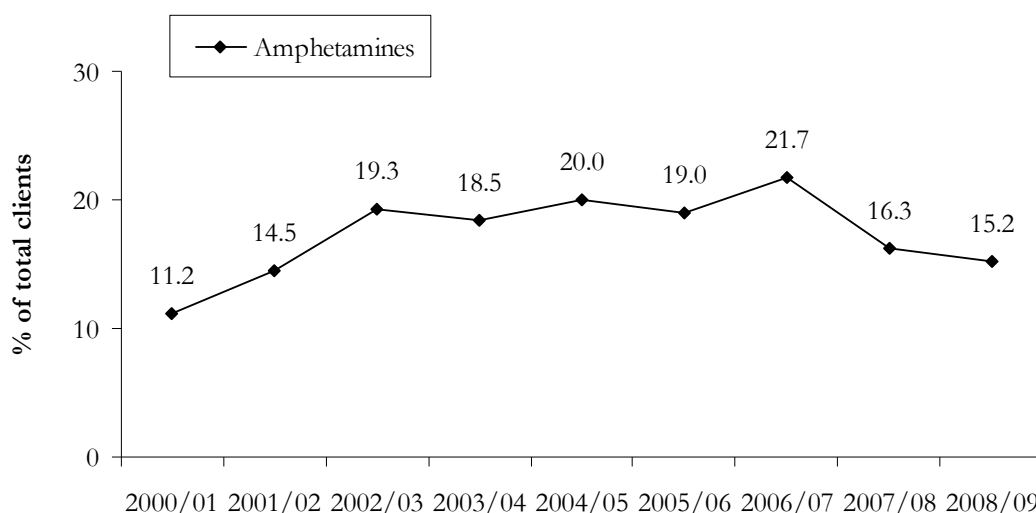
DASSA treatment data revealed that in 2008/09 there were 115 clients (individuals) to all DASSA treatment services who nominated ecstasy as the primary drug of concern. This constitutes 1.98% of total clients for that year and indicates an increase from 2007/08). Although the number of clients with ecstasy as the primary drug of concern remains 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 9.1 for a comparison of ecstasy to other primary drugs of concern among clients of DASSA treatment services.

Methamphetamine-related attendances

The proportion of clients nominating amphetamines as their primary drug of concern, had remained relatively stable for the last four years (see Table 9.1 and Figure 9.3), but decreased in 2008/09 to 15.15% (n=881 of 5816 individuals) from 16.28% (n=983 of 6037 individuals). This follows three consecutive years of increase in the proportion of clients nominating amphetamine as their primary drug of concern from 2000/01 to 2002/03. In 2008/09, amphetamines were the second most commonly nominated primary drug of concern by clients of DASSA after alcohol (57.46%), and dominated as the most common illicit drug of concern, well above heroin (7.79%).

Figure 9.3: Percentage of total DASSA clients with amphetamines as the primary drug of concern, 2001/02 – 2008/09*



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)

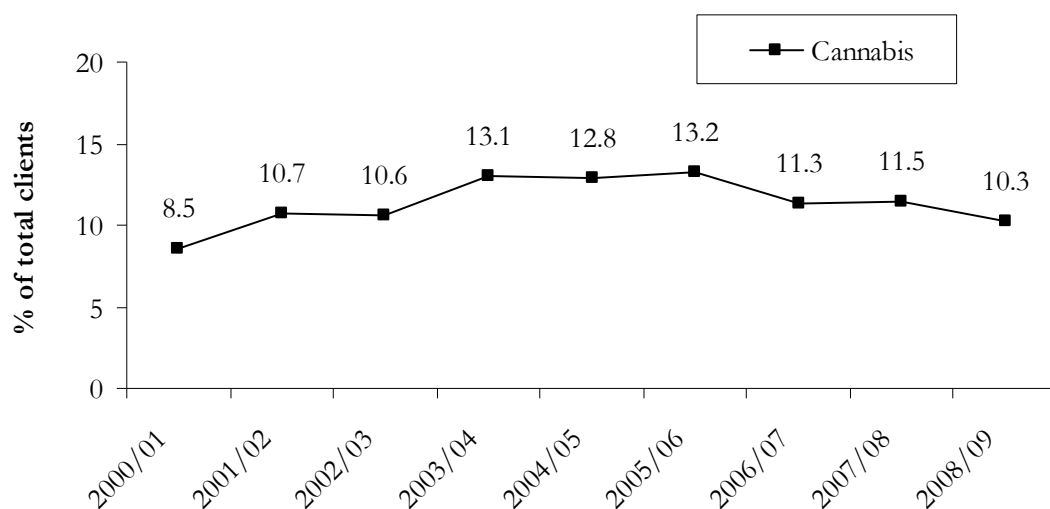
Cocaine-related attendances

The proportion of clients nominating cocaine as their primary drug of concern has remained relatively stable and low across all years reported (see Table 9.1). In 2008/09, 0.48% of clients to all DASSA treatment services (n=28 of 5816 individuals) nominated cocaine as their primary drug of concern.

Cannabis-related attendances

The proportion of clients nominating cannabis as their primary drug of concern decreased in 2008/09 compared to the previous year (10.30% and 11.48%, respectively) (see Table 9.1 and Figure 9.4). However, the long-term trend shows a gradual increase since 2000/01, when 8.5% of all clients nominated cannabis as their primary drug of concern. In 2008/09, cannabis was the third most commonly nominated primary drug of concern (10.30% of all clients), behind alcohol (57.46%) and amphetamines (15.15%), but higher than for heroin (7.79%).

Figure 9.4: Percentage of total DASSA clients with cannabis as the primary drug of concern, 2001/02 – 2008/09*



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)

9.4 Other problems

The participant 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 social/relationship; risk/injury; legal/police; and responsibility (see Table 9.2). Over half of the participants (54%) reported having experienced one or more problems related to their drug use in that time, this is a larger proportion of participants than in 2008 (32%). In 2009, more participants reported experiencing problems related to risk/injury problems (where participants could have been hurt or others hurt – for example, driving or operating machinery while intoxicated), followed by some aspect of their personal responsibility (either at work, home or school – for example, neglect of household/children, repeated absences from work/school/university etc), then relationship or social life problems. Few participants reported having legal/police problems related to their ecstasy and related drug use.

Participants were also asked to nominate which drug or drugs they attributed the problem to. A summary of these data is given in Table 9.2. As can be seen, ecstasy was most commonly held responsible for all problems with the exception of legal/police problems to which cannabis (n=3) and alcohol use (n=2) contributed. Alcohol use also contributed to the risk/injury problems of participants.

Table 9.2: Number of participants reporting other harms associated with main drug attributed to this use in the last six months, by drug type, 2009

Problem experienced	Any drug (N=100)	Ecstasy (N=100)	Meth- amphetamine (n=53)	Cannabis (n=86)	Alcohol (n=93)
Social/relationship	22	11	3	4	3
Responsibility	27	11	3	7	4
Legal/police	5	0	0	3	2
Risk/injury	30	11	2	3	12

Source: EDRS participant interviews

9.5 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 9.3. 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, benzodiazepines and anti-depressants accounted for the most attendances by far 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 remained stable in 2008/09, following a decrease seen in 2006/07. It can be seen that attendances regarding heroin have continued to rise somewhat across the years depicted, and in 2008/09 attendances for heroin-related issues increased from 44 to 66 attendances. Heroin accounts for the most common illicit drug-related attendances, with amphetamines now the second most common illicit drug-related attendances at the RAH. In addition, if the diagnosis ‘drug-induced psychosis’ (which includes amphetamine-induced psychosis) is examined, it can be seen that the number of attendances with this diagnosis had decreased in 2005/2006 (from 89 to 31), increased slightly in 2006/07 to 37, and again decreased in 2007/08 with no attendances recorded for 2008/09. The number of attendances in relation to cannabis have remained stable and low across the years depicted.

Table 9.3: Number of attendances* to the emergency department at the Royal Adelaide Hospital, SA, from 2001/02 – 2008/09 (per drug or diagnosis)

	2001/ 2002	2002/ 2003	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009
Amphetamines	76	65	81	91	61	82	67	58
Cocaine	2	0	1	4	6	4	1	4
LSD	2	1	2	6	3	2	3	7
GHB	48	28	28	48	38	14	15	15
Alcohol	1,118	994	1,106	1,465	1,409	1,559	1,554	1,585
Cannabis	16	9	11	15	13	15	15	13
Heroin	30	38	25	30	32	39	44	66
Other opioid**	45	64	57	70	68	59	28	38
Benzodiazepines	170	138	138	141	122	174	145	151
Anti-depressants	104	79	80	87	55	74	78	67
Drug addiction#	27	38	20	37	28	17	8	1
Drug-induced psychosis#	67	52	44	89	31	37	28	0
Drug withdrawal#	35	26	24	26	19	20	0	0
Other##	533	434	442	434	360	579	528	464
TOTAL	<i>2,273</i>	<i>1,966</i>	<i>2,059</i>	<i>2,543</i>	<i>2,245</i>	<i>2,675</i>	<i>2,514</i>	2,469

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

9.6 Hospital admissions

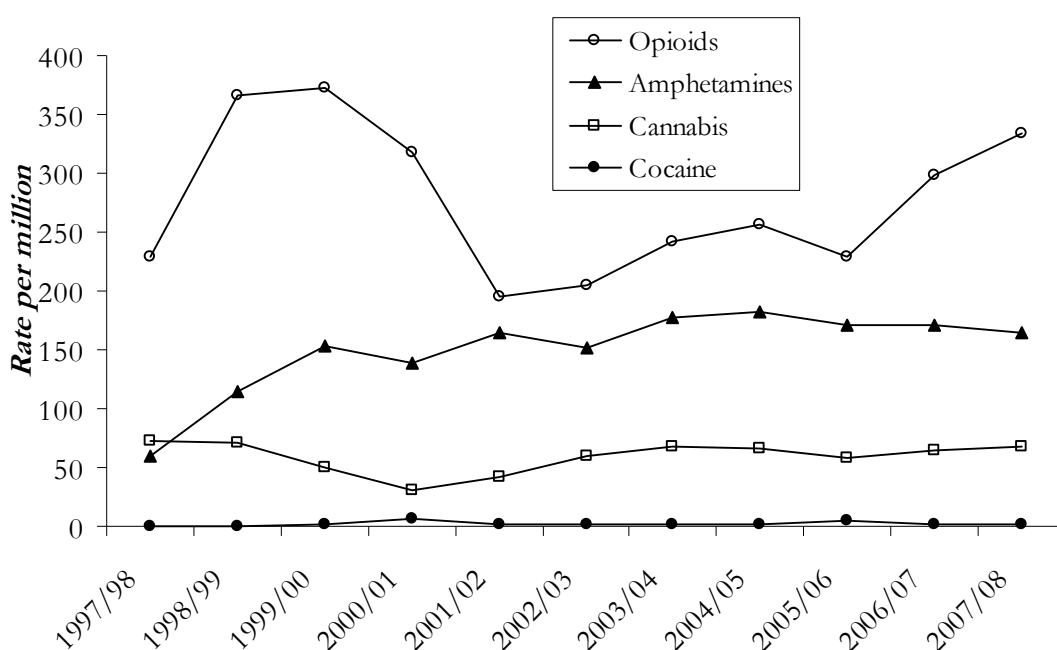
An analysis of data, provided by the Australian Institute of Health and Welfare from the National Hospital Morbidity Dataset, for the period 1997/98 to 2007/08 (financial years) was undertaken by NDARC. These data report on both state-specific and national drug-related hospital admissions⁵ (for the four main illicit drug classes; see Appendix 2 for national data), adjusted so that all years reflect International Classification of Diseases, 9th Revision (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 International Classification of Diseases, 10th Revision (ICD-10) coding for these

⁵ The National Hospital Morbidity Dataset includes admissions data from public and private hospitals across metropolitan, regional and remote locations.

conditions⁶. It should also be noted that these data lag behind other indicators by one year.

The 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 9.5). Ecstasy-related admissions are not specifically coded. South Australian data followed a similar pattern to national data (see Appendix 1), but differed in the rates of admissions per drug type. In particular, SA, in comparison to the national figure, had a lower rate per million for opioid-related admissions (SA: 333.92 v. national 440.73), cocaine-related admissions (SA: 1.14 v. national: 15.34), and cannabis-related admissions (SA: 67.47 v. national: 134.89). Amphetamine-related admissions were at a similar rate per million (SA: 164.67 v. national: 161.09).

Figure 9.5: Rate per million people of substance-related admissions* (primary diagnosis) to hospital in South Australia, 1997/98 – 2007/08



Source: Australian Institute of Health and Welfare

* For persons aged between 15 and 54 years

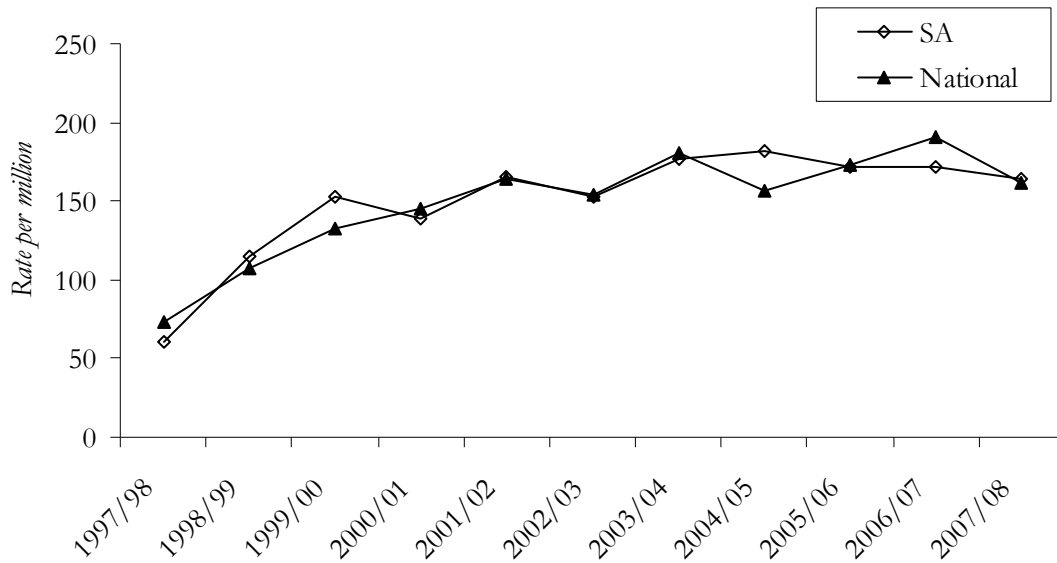
Note: 'Primary diagnosis' was given to those admissions where the substance was considered the primary reason for the patient's episode of care

Amphetamine-related hospital admissions

Figure 9.6 (includes rates from 1997/98 onwards) shows the long-term trend and indicates that the rates of admissions to hospital for amphetamines (primary diagnosis) per million people in SA have been increasing. However, it should be noted that there has been some stabilisation in the rates of admission in SA since 2004/05 onwards (182 per million), 2005/06 (172 per million), 2006/07 (172 per million), which continued in 2007/08 (165 per million), whereas nationally these figures increased in the same period, with a decrease in 2007/08. Readers are reminded that this figure does not include amphetamine-related psychosis or withdrawal admissions.

⁶ ICD-9 coding for drug-related psychosis and withdrawal was non-specific for drug type, where ICD-10 coding is specific for drug type.

Figure 9.6: Rate of amphetamine-related admissions* (primary diagnosis) to hospital in South Australia and nationally, per million people, 1997/98 – 2007/08



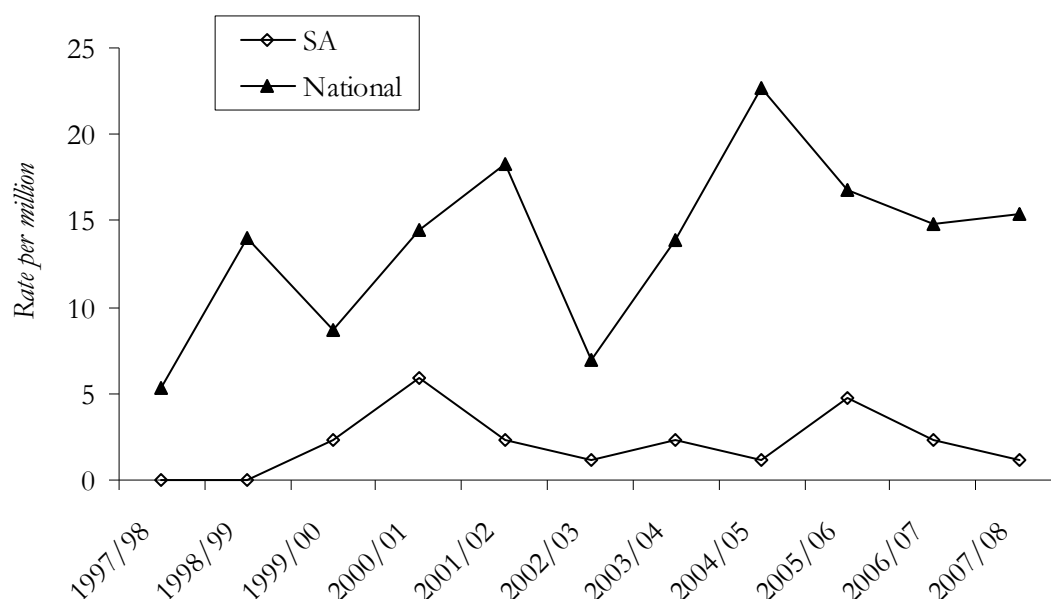
Source: Australian Institute of Health and Welfare

* 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

Cocaine-related hospital admissions

Figure 9.7 (includes rates from 1997/98 onwards) 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 1997/1998. In SA the rate of admissions to hospital per million people with a cocaine-related primary diagnosis were recorded over the time period depicted and in 2007/08 this rate per million was 1.14.

Figure 9.7: Rate of cocaine-related admissions* (primary diagnosis) to hospital in South Australia and nationally, per million people, 1997/98 – 2007/08



Source: Australian Institute of Health and Welfare

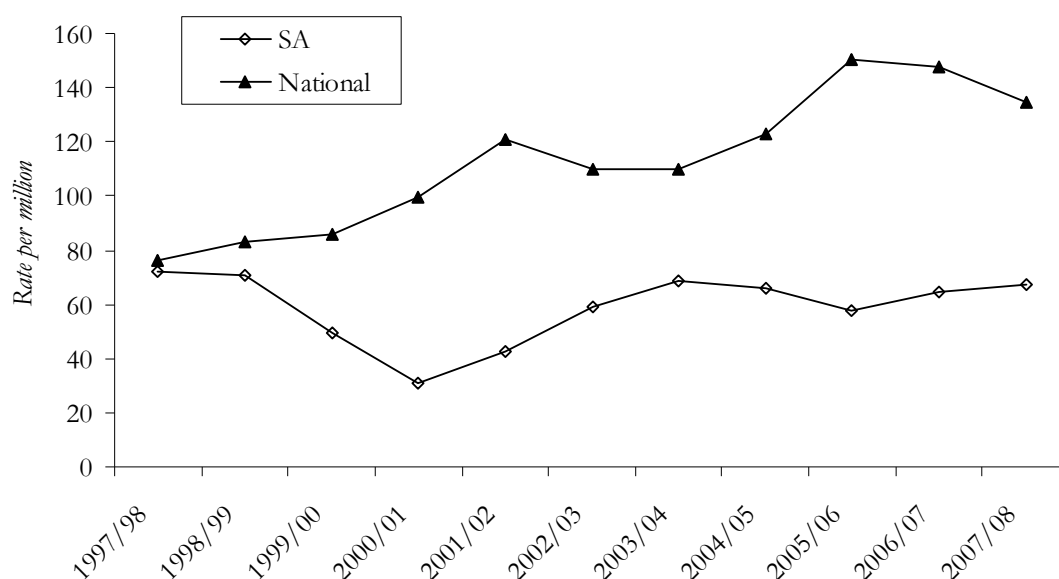
* For persons aged between 15 and 54 years, excluding cocaine withdrawal and psychosis admissions

Note: A 'primary diagnosis' was given when cocaine was considered chiefly responsible for the patient's episode of care in hospital

Cannabis-related hospital admissions

Data in Figure 9.8 (includes rates from 1997/98 onwards) shows the long-term trend in rate of cannabis-related admissions (primary diagnosis) to hospitals in SA differs from the national trend over the years from 1997/98 to 2007/08. Both SA and national rates were similar until a divergence in 1999/00, with the national rate continuing to rise and the SA rate declining for two years. However, the SA rate of cannabis-related admissions per million people to hospital increased for the three years to 2003/04, but has remained relatively stable since that period. The admission rate per million was sixty-seven to SA hospitals with a cannabis-related primary diagnosis in 2007/08 in comparison to 2003/04 (68 per million). Readers are reminded that this figure does not include cannabis-related psychosis or withdrawal admissions.

Figure 9.8: Rate of cannabis-related admissions* (primary diagnosis) to hospital in South Australia and nationally, per million people, 1997/98 – 2007/08



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

9.7 Mental and physical health problems and psychological distress

9.7.1 Psychological distress

In 2009, the Kessler Psychological Distress Scale (K10) (Kessler & Mroczek, 1994) was used to give a measure of levels of psychological distress among the participant 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.

Forty-six percent of the participants had scores between 10 and 15 on the K10 (low risk), 30% of participants scored between 16 and 21 (moderate distress), 20% of participants scored from 22 to 29 (high distress), and 4% scored from 30-50 or very high distress. The median total score for participants was 17 (10 to 40) indicating that slightly over half of the sample was at moderate or high/very high risk of psychological distress as measured by the K10.

The 2007 National Drug Strategy Household Survey (Australian Institute of Health and Welfare, 2008) provided the most recent Australian population norms available for the K10, and used four categories to describe degree of distress: scores from 10-15 were considered to be low; 16-21 as 'moderate'; 22-29 as high; and 30-50 as 'very high'. Using these categories, the proportion of EDRS participants reporting 'high' (20%) or 'very

high' (4%) distress was higher (24%) compared to those in the National Drug Strategy Household Survey (10%, i.e. high = 8%; very high = 2%).

9.7.2 Self-reported mental health problems

In 2009, twenty-one percent of the participant sample reported experiencing a mental health problem (other than drug dependence) in the six months preceding interview. The majority of participants reported experiencing depression (57%, n=12), anxiety (33%, n=7), or paranoia (29%, n=6) in the six months prior to interview. The proportion of the sample who reported actually attending a professional (10%, or 48% of those experiencing a mental health problem) was lower than the proportion reporting having experienced a problem (21%).

9.8 Personal Wellbeing Index (PWI)

In 2009, the Personal Wellbeing Index (PWI) was incorporated into the EDRS survey. Questions asked how satisfied participants were with various aspects of their life. Questions included related to: standard of living; health; personal achievement; personal relationships; safety (personal); feeling a part of the community; future security; and, life as a whole. Participants were asked to respond on a scale of 0-10 where 0 was 'very unsatisfied' and 10 was 'very satisfied'.

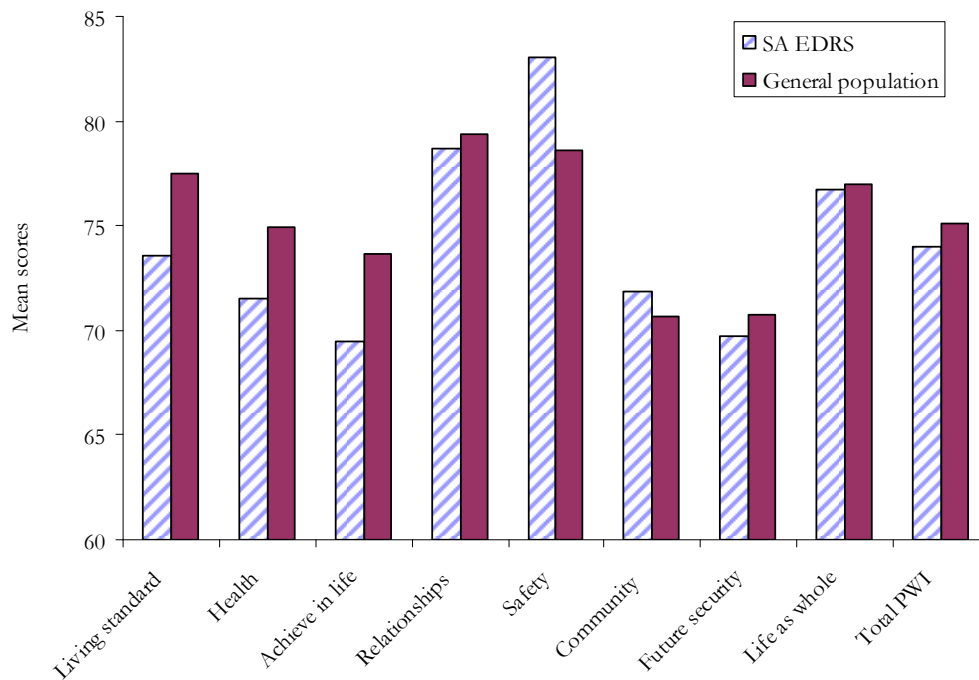
Table 9.4: Mean EDRS participant and Australian general population scores, with normative range scores for comparison on the PWI 2009

Mean scores	EDRS (N=100)	Population Norms
Standard of living	73.6	77.51
Health	71.5	74.89
Achievements in life	69.5	73.65
Personal relationships	78.7	79.35
Safety	83	78.57
Part of community	71.9	70.64
Future security	69.7	70.79
Total PWI score	73.99	75.08

Source: EDRS participant interviews, Cummins et al., 2009 (in press)

Table 9.4 (and Figure 9.9) shows the mean participant scores compared to the Australian general population. Participants scored lower than the general population on each factor of personal wellbeing, with the exception of personal safety and being part of the community. Moreover, for standard of living, health, and achievements in life, participants were below the normal range for each factor, and for safety they were above this range. These findings indicate that participants are less than satisfied with their standard of living, health, and their current achievement to date. Personal wellbeing will continue to be monitored in future EDRS surveys.

Figure 9.9: Mean SA EDRS participant and Australian general population scores on the Personal Wellbeing Index



Source: EDRS participant interviews, Cummins et al., 2007⁷

9.9. Aggression

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

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

The following results are based on participants choosing the alternative of ‘4, 5 or 6’ (very characteristic of me) for all three questions in each component and therefore

⁷ Thanks to Robert Cummings for his personal communication regarding the PWI.

indicating that the particular component is descriptive of their behaviour. Half of the participants (51%) rated the motor component of 'verbal aggression' as characteristic descriptor of their behaviour, followed by emotional component of 'anger' (48%) and 'physical aggression' (43%), with 38% rating the cognitive component of 'hostility' as descriptive of their behaviour.

Forty-four percent of participants (n=43) indicated that their answer would be different if they were under the influence of a drug. A third of the participants (n=16) indicated that the use of ecstasy would make a difference to their answer, with the majority (63%) indicating their level of aggression would be lower and 25% indicating it would be higher. The use of alcohol was nominated as increasing the level of participants' (85%, n=11) level of aggression, with two participants indicating that the use of alcohol would lower their level of aggression.

10 RISK BEHAVIOUR

Summary

- One in five participants reported ever having injected a median of three drugs, with 12% reporting recent injecting a median of one drug in the previous six months.
- Some form of methamphetamine was the drug most commonly ‘ever’ injected, last injected, recently injected and the drug most frequently injected.
- No participants reported sharing of needles, although the majority of recent injectors reported sharing equipment.
- The most common source of needles was a Clean Needle Program.
- Over half of the participants, when having sexual activity with a casual partner, did not always use a condom.
- The majority of participants were involved in sexual activity while under the influence of a drug or drugs in the previous six months.
- Fewer participants who had driven in the six months prior to interview had driven under the influence of alcohol, or over the legal alcohol limit compared to 2008. Similar numbers reported driving within an hour of consuming an illicit drug in the six months prior to interview in comparison to participant reports in 2008. Ecstasy, cannabis and some form of methamphetamine were the most commonly used drugs while driving.
- Half of those females and three-quarters of males who had consumed alcohol in the six months prior to interview were assessed as consuming alcohol at high-risk levels.
- A third of participants had gambled twice in the month prior to interview.

10.1 Injecting and injecting risk behaviour

Detail on injecting and injecting-related risk behaviour has been included in the EDRS survey since 2004. In 2009, 19% of the sample reported ever injecting any drug and 12%, or 63% of those who had ever injected, reported having injected any drug in the six months prior to interview. The median age of first injecting any drug was 18 years (range 12 to 35 years, n=19). In 2009, participants were asked about their history of use of 20 separate drug types⁸, and their injecting of 16 different drug types. For participants who reported a history of injecting, a median of three drugs (range: 1 to 9; n=19) had ‘ever’ been injected and a median of one drug (range: 1 to 7; n=12) had been injected in the ‘last six months’.

An examination of previous years’ data reveals fluctuation in the proportion of participants reporting ever injecting or recently injecting any drug since data collection began. The proportion of participants reporting ever injecting was 20% in 2000, 21% in 2001, 32% in 2002, 14% in 2003, 25% in 2004, 16% in 2005, 21% in 2006, 26% in 2007, and 27% in 2008 compared to 19% for this year. No clear trend with regard to injecting drug use is discernible. The proportion of participants reporting injecting drug use may be subject to a number of influences, the most prominent being the effects of sampling.

⁸ 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

Employing the snowballing technique may result in over-representation of injecting drug users in some years.

Table 10.1 summarises the injecting drug history and recent injecting patterns of the participants who reported any injecting drug in 2009. Some form of methamphetamine was the drug most commonly ‘ever’ injected, recently injected, as well as the drug most commonly ‘last’ injected by the sample. Thirty-seven percent of those who had ever injected had first injected ‘any’ methamphetamine (n=7), powder (n=4), base (n=1), or crystal (n=2) and 42% had first injected heroin (n=8), with one participant ‘first’ injecting ecstasy. Methamphetamine was also the drug most commonly ‘recently’ injected and the drug ‘most frequently’ injected, in the six months prior to interview. Powder methamphetamine was the drug ‘most frequently’ injected, followed by base methamphetamine, in the six months prior to interview. Two participants reported injecting ecstasy pills a median of seven days in the last six months.

Table 10.1: Injecting drug use history among injectors, 2009

	% Ever injected (n=19)	% First drug injected (n=19)	% Injected in last 6 months (n=12)	Median days injected in last 6 months (Range; N) (n=12)	% Last drug injected (n=12)
Ecstasy – pills	32	5	17	7 (6-8; 2)	8
Meth – powder	69	21	42	48 (2-180; 5)	25
Meth – base	42	5	42	20 (1-90; 5)	25
Meth – crystal	47	11	42	10 (3-30; 5)	25
Pharm. stim*	11	0	0	0	0
Cocaine	42	0	8	2	0
LSD	11	5	0	0	0
MDA	5	0	8	1	0
Ketamine	5	0	8	2	0
GHB	16	0	8	1	0
Heroin	58	42	33	10 (2-24; 4)	25
Alcohol	5	0	0	0	0
Other opiates**	21	5	17	2	0
Methadone*	11	0	0	0	0
Buprenorphine*	0	0	0	0	0
Other	0	5	0	0	17

Source: EDRS participant interviews

** Includes codeine, morphine, and pethidine

* Illicit use only

With regard to the frequency of risk behaviour among the 12 recent injectors of the participant sample, there was no reported sharing of needles. Nine (75% of those who had recently injected) injectors reported they had shared equipment other than needles

(specifically the spoon, filter, tourniquet or water) during that time, with two each sharing the tourniquet and spoon, and one sharing the water. Participants reported injecting any drug a median 27 times (range 2 to 500, n=12), in the six months prior to interview. Three recent injectors reported having injected whilst 'under the influence', and two had injected both while 'under the influence' and 'coming down' from a drug or drugs a median of three times in the last six months (range 2 to 15).

Obtaining needles

The most common sources of needles were reported as a Clean Needle Program (n=6) or a pharmacist (n=3), with participants able to nominate more than one source.

10.2 Sexual risk behaviour

In 2009 participants 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 of the vagina or anus with the penis or hand

10.2.1 Patterns of recent sexual activity and sexual risk behaviour

Seventy-one percent of participants reported having penetrative sex with a regular partner in the six months prior to interview with 19% reporting they always used a condom and 34% reporting they never used a condom. Eighteen percent reported always using a condom with a regular partner while under the influence of drugs or alcohol, and 53% reported they never used a condom.

Table 10.2 summarises the reports of recent sexual activity and condom use with casual partners, and Table 10.3 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 10.2 shows that 56% of the participants sample reported having had penetrative sex with a casual partner in the six months prior to interview, 14% of them with only one person in that time, 23% with two people, 18% with three to 10 people, and 2% with more than 10 casual partners. Of the participants who reported having had penetrative sex with a casual partner in the last six months, 41% reported that they had always used a condom, with 27% reporting they never use a condom.

Table 10.2: Recent* sexual activity and condom use with casual partner, 2009

Have had penetrative sex in the last 6 months	2009 (n=56)
Of those who had penetrative sex (%):	
Number of sex partners	
One person	14
Two people	23
Three to five people	15
Six to ten people	3
More than ten people	2
Always used a condom [#]	41
Never used a condom [#]	27

Source: EDRS participant interviews

* In the six months preceding interview

Of those who had sex with a casual partner

Around half of the participants sample (48%, or 86% of those who reported having had penetrative sex with a casual partner) reported that they had had penetrative sex with a casual partner whilst under the influence of a drug or drugs, in the six months prior to interview. Eighty-one percent of participants reported having done so more than once, with 31% reporting that they had done so more than ten times during that period. Most commonly, participants nominated ecstasy as the drug they were under the influence of when engaging in penetrative sex with a casual sex partner recently (81%, n=39), followed by alcohol, some form of methamphetamine or cannabis (see Table 10.3).

Table 10.3: Recent* sexual activity and condom use under the influence of drugs, 2009

Have had penetrative sex under the influence (% of participants)	2009 (n=48)
Of those who had sex under the influence (%):	
Number of times had sex under the influence	
Once	19
Twice	13
Three to five times	33
Six to ten times	4
More than ten times	31
Drugs used **	
Ecstasy	(n=48) 81
Alcohol	69
Cannabis	42
Methamphetamine – powder	17
Methamphetamine – base	10
Methamphetamine – crystal	21
Cocaine	8
LSD	6
Ketamine	4
GHB	2
Amyl nitrate	8
Nitrous oxide	6
Always used a condom [#]	42
Never used a condom [#]	23

Source: EDRS participant interviews

* In the six months preceding interview

Of those who had sex with a casual partner

** Data missing for one participant

10.3 Driving risk behaviour

Participants 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 under the influence of alcohol and over the limit for alcohol. The results are detailed in Table 10.4.

Table 10.4: Recent* occurrence of driving following drug use, 2008 & 2009

% of recent* drivers	2008 (n=59)	2009 (n=74)
Driven under the influence of alcohol	63	43
Driven over the limit for alcohol	46	26
Driven soon after# taking any illicit drug	73	70
Driven soon after# illicit use of:		
Ecstasy	65	65
Methamphetamine – powder	14	14
Methamphetamine – base	26	8
Methamphetamine – crystal	23	21
Pharmaceutical stimulants	0	0
Cannabis	51	65
Cocaine	7	0
LSD	7	8
MDA	2	0
‘Magic mushrooms’	2	2
Ketamine	2	6
Nitrous oxide	5	4
Heroin	5	2
Other opiates	5	0
Benzodiazepines	0	2

Source: EDRS participant interviews

* In the six months preceding interview

Within one hour of driving

Less than half of the participants (43%, n=32) who had driven a vehicle in the six months prior to interview reported that they had driven under the influence of alcohol, and a quarter (26%, or n=19; or 59% of those who reported driving under the influence of alcohol) of the participants who had driven a vehicle in the six months prior to interview reported that they had driven whilst over the limit for alcohol, a median four times (range 1 to 100) during that period. Nearly half of the drivers (41%, n=30) had been random breath tested (for alcohol) in the six months prior to interview, with 10% (n=3) registering a positive result for being over the legal limit.

Three-quarters of recent drivers also reported that they had driven within an hour of using any illicit drug (74%), a median of five times (range: 1 to 180; n=52). The drugs most commonly reported as having been used within an hour prior to driving, in the previous six months, were ecstasy (65%), cannabis (65%), ice/crystal methamphetamine (21%), and powder methamphetamine (14%). The ‘last’ time participants drove they did so under the influence of cannabis (52%), ecstasy (44%), powder methamphetamine (12%), and ice/crystal methamphetamine (12%). Participants reported driving within a median of two hours after taking any illicit drug (range: 0.10/hr- to 12 hours; n=37), with 27% reporting driving almost immediately (within one hour). Many participants (46%)

reported that the drugs they had consumed had no impact on their driving ability, with lesser numbers reporting their driving was slightly impaired (31%), slightly improved (10%), quite impaired (6%), or quite improved (8%). Seven participants had been tested for drug driving in the six months prior to interview, and all reported testing negative for drugs.

10.4 The Alcohol Quantity Frequency and Variability Assessment (AQFV)

In 2009, a new measure of alcohol consumption was included in the EDRS as a way of more accurately measuring the quantity and frequency of alcohol use while taking into account variability of this over the course of the past year. The Alcohol Quantity Frequency and Variability Assessment⁹ (AQFV) is a self-report measure, which examines alcohol use over the preceding six months. It has three categories: a) typical drinking; b) regular changes, e.g. weekends; and c) occasional changes, e.g. festivals, parties. Respondents are able to indicate a range for the number of drinks they consume for each section and then indicate on how many days per week, month or year they drink this amount. For example, a participant may report for the 'typical drinking' section that they consume '2-3 standard drinks, 3 days per week' or '5-6 standard drinks, 2 days per month' etc.

Using the information gleaned from the AQFV assessment, the number of days that each participant consumed alcohol over the course of a year and the amount of alcohol consumed on each drinking day was computed. Each drinking day was then defined as either: a) low risk (up to 6 drinks for males or 4 for females); b) risky (from 7 to 10 drinks for males or 5 to 6 for females); or c) high risk (11 drinks and above for males or 7 and above for females) (National Health and Medical Research Council, 2001).

Table 10.5 presents the frequency and quantity of alcohol consumption for male and female participants in 2009, who had consumed alcohol in the six months prior to interview. It can be seen that the majority of females (74%, n=26) spent more days consuming alcohol at low risk levels, doing so on a median of 52 days (range 1 to 208 days), than at risky (median 21 days, range 1 to 104) or high risk levels (median 49 days, range 1 to 329). Whereas 80% of males reported drinking at low risk levels on a median of 72 days (1 to 331 days, n=52), with 66% drinking at risky levels on a median of 17 days/per year (range 1 to 139). When examining those assessed as consuming alcohol at high-risk levels, over three-quarters of the females who had consumed alcohol (77%, n=27) consumed alcohol on a median of 49 days (range 1 to 365), and for males (74%, n=48) this was a median of 42 days (range 1 to 260). Overall, it appears that female participants in the 2009 sample consumed alcohol at high-risk levels more often than their male counterparts.

⁹ Many thanks to Dr James Lemon, previously of the National Drug and Alcohol Research Centre, for his kind permission to use the AQFV assessment in the 2009 EDRS.

Table 10.5: Frequency and quantity of alcohol consumption in the past year among participants who had consumed alcohol in last six months, 2009

Median number of drinking days/year (range; number of participants)	Men (n=65)	Women (n=35)
Low risk	72 (1-330; 52)	52 (1-208; 26)
Risky	17 (1-139; 43)	21 (1-104; 24)
High risk	42 (1-260; 48)	49 (1-365; 27)
Average no. drinks per session	7 (2-23; 58)	6 (2-21; 32)
Average no. drinks per day	3 (1-13; 58)	2 (1-21; 32)

Source: EDRS interviews 2009

10.5 Gambling practices

In 2009, for the second year, participants were asked about their gambling practices in the month prior to interview. To further investigate this topic, in 2009, those participants who had gambled four or more times in the month prior to interview were administered the Problem Gambling Severity Index (PGSI) to evaluate the proportion of participants gambling at problematic levels. Participants were also asked if they had been under the influence of alcohol the 'last' time they gambled, whether they continued to consume alcohol, and whether they had gambled under the influence of illicit drugs the 'last' time and the drugs involved.

Thirty-four percent of the participants (n=34) reported gambling a median of twice (range 1 to 24 times) in the month prior to interview, with the majority reporting 'usually' using poker/gaming machines to gamble (74%, n=25). Fewer participants reported gambling on keno/lotteries (18%, n=6), horse/dog racing (9%, n=3), or gambling at the casino (18%, n=6). The majority of participants reported that the number of days they reported gambling in the month prior to interview was the number of days they 'usually' gambled in a month (56%, n=19), whereas 24% (n=8) reported the number of days reported were less than usual, with 21% (n=7) reporting that this was more than usual.

The form of gambling participants engaged in 'last' time they gambled follows a similar pattern, with the majority reporting 'last' gambling on poker/gaming machines (74%, n=25), followed by keno/lotteries (12%, n=4), horse/dog racing (6%, n=2) and at the casino (9%, n=3). Sixty-two percent of participants (n=21) reported gambling under the influence of alcohol the 'last' time they gambled, with the majority of those (81%, n=17) reporting that they continued to consume alcohol while gambling. Twenty-seven percent of participants reported gambling under the influence of illicit drugs the 'last' time they gambled (n=9), with most reporting use of cannabis (56%, n=5), ecstasy (44%, n=4), or some form of methamphetamine (33%, n=3). The median amount spent by participants 'last' time they gambled was \$20 (range \$1 to \$230).

Twenty-seven percent of those who had gambled in the month prior to interview completed the PGSI, with 44% (n=4) assessed as engaging in recreational gambling only, 22% (n=2) assessed as gambling at a level of low risk, and 33% (n=32) assessed as gambling at moderate level of risk.

11 CRIMINAL ACTIVITY AND PERCEPTIONS OF POLICING

Summary

- The proportion of participants who had engaged in a criminal offence in the month prior to interview increased compared to 2008.
- More participants reported perceiving an increase in police activity in the six months prior to interview compared to 2008.
- The proportion of participants reporting witnessing a sniffer dog at an event in the six months prior to interview also increased in 2009 compared to 2008.

The following sections provide information from participants, KE and, where available, indicator data sources on criminal activity and perception of policing.

11.1 Reports of criminal activity among participants

Table 11.1 summarises participants' reports of criminal activity in the month prior to interview, and arrests in the 12 months prior to interview, since 2004. In 2009, thirty-eight percent of participants reported involvement in some type of crime in the month prior to interview, which was higher than the proportion of participants doing so in 2008 (23%). Drug dealing was the most commonly reported crime again across all years of the survey. Larger proportions of participants also reported involvement in a property, fraud or violent crime in the month prior to interview in comparison to 2008. Thirteen percent of participants reported that they had been arrested within the last 12 months, similar to previous years. Of those, five participants had been arrested for some form of property offence, two for breach apprehended violence order, two for a driving offence and other offences included trespass (n=2), use/possess drugs (n=1), offence involving violence (n=1).

With regard to how participants reported paying for ecstasy in the last six months, participants 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 2009, a larger proportion of participants reported that they dealt drugs for a 'cash profit' (29%) compared to 2008 (19%). Further examination of participants' dealing patterns indicate that fourteen participants did so less than once per week; six participants did so once per week, six dealt more than once per week and two participants dealt for cash profit on a daily basis.

Table 11.1: Criminal activity in the month prior to interview, as reported by participants, 2004 – 2009

	2004 (N=100)	2005 (N=100)	2006 (N=101)	2007 (N=100)	2008 (N=74)	2009 (N=100)
Criminal activity in last month:						
Property crime	6	3	3	10	7	19
Drug dealing	21	25	26	23	19	29
Fraud	1	3	4	3	1	2
Violent crime	0	2	3	4	0	5
Any crime	25	27	30	29	23	38
Arrested in last 12 months	5	8	11	8	11	13
Ever in prison	5	1	5	10	7	8

Source: EDRS participant interviews

As in previous years, KE reports reiterated that criminal activity (apart from illicit drug use) was rare by REU generally, and that contact with the criminal justice system was uncommon among this group. Exceptions to this were reports of on supply or dealing of drugs to friends. According to some KE, this activity 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. One KE stated that, “[It is] *more acceptable to buy in bulk and sell to peers (10 to 30 pills the maximum, above this amount people think it is too risky). People are using more pills in a session, so dealers need access to and to obtain greater quantities*”. A forensic KE report further highlights the seriousness involved in ecstasy dealing with the type of people dealing ecstasy in last 12 months being more ‘high level’ dealers. As ecstasy users are more frequently purchasing larger quantities (e.g. 10 packs, 100 packs) they are purchasing it from the higher-level dealers who tend to be more violent people. Ecstasy is the only expanding market, with the largest and continually increasing profits. Australia is the fourth largest producer of ecstasy in the world. Forensic KE also report that in the last 12-months there has been an increase in number and size of MDMA seizures, with the number of MDMA seizures beginning to get close in number to methamphetamine seizures.

11.2 Perception of police activity towards participants

Table 11.2 presents data on participant perceptions of police activity in the six months leading up to the survey, since 2004. In 2009, nearly half of the participants (46%) reported that police activity had been increasing. A further 26% reported that they believed police activity had been stable. A quarter of the participants reported that they didn’t know whether police activity had changed recently, and three participants suggested that police activity had decreased. The proportion of participants reporting that their ability to obtain drugs had become more difficult due to police activity in 2009 remained stable compared to 2008, indicating no change in those who reported that they were finding it more difficult to obtain drugs recently, in comparison to 2008 (21%).

Table 11.2: Perceptions of police activity in the six months prior to interview, as reported by participants, 2004 – 2009

% of participants	2004 (N=100)	2005 (N=100)	2006 (N=101)	2007 (N=100)	2008 (N=74)	2009 (N=100)
Perception of police activity in last 6 months.						
More activity	27	26	34	27	26	46
Stable	27	55	44	35	32	26
Less activity	3	3	1	3	1	3
Don't know	43	16	22	35	41	25
More difficult to obtain drugs recently?						
Yes	14	3	5	13	21	22
No	86	97	95	87	80	78

Source: EDRS participant interviews

Seventeen participants commented on changes in police activity in the six months prior to interview, with drug testing (n=6), increasing police presence at events, raves and nightclubs (n=8), and general increase in police activity (n=2) all mentioned by participants as contributing to the increase in police activity.

11.3 Interactions with sniffer dogs

For the fourth year, in 2009 participants were asked if they had seen sniffer dogs at an event (excludes airports) in the six months prior to interview, with 59% (n=58) of the participants reporting that they had witnessed a sniffer dog in that period. Compared to participant reports in 2008, this indicates a major increase in the proportion of participants observing sniffer dogs at events compared to the participants in 2008 (18%). The median number of times participants reported witnessing sniffer dogs was twice (1 to 24), with 21% (n=12) of those who had seen sniffer dogs doing so once, 33% (n=19) doing so twice, and the remainder having done so three or more times (46%, n=28). Although the median number of times participants had witnessed sniffer dogs remained stable compared to 2008, there was a change in the frequency of such observations, with the majority of participants in 2008 reporting observing a sniffer dog at an event once and no participants reporting such observations more than twice. Half (50%, n=29) of those who had seen sniffer dogs in 2009 reported that they had drugs on them at the event when they saw the sniffer dogs, with all but one participant reporting they were not searched as a result of a positive notification from a sniffer dog.

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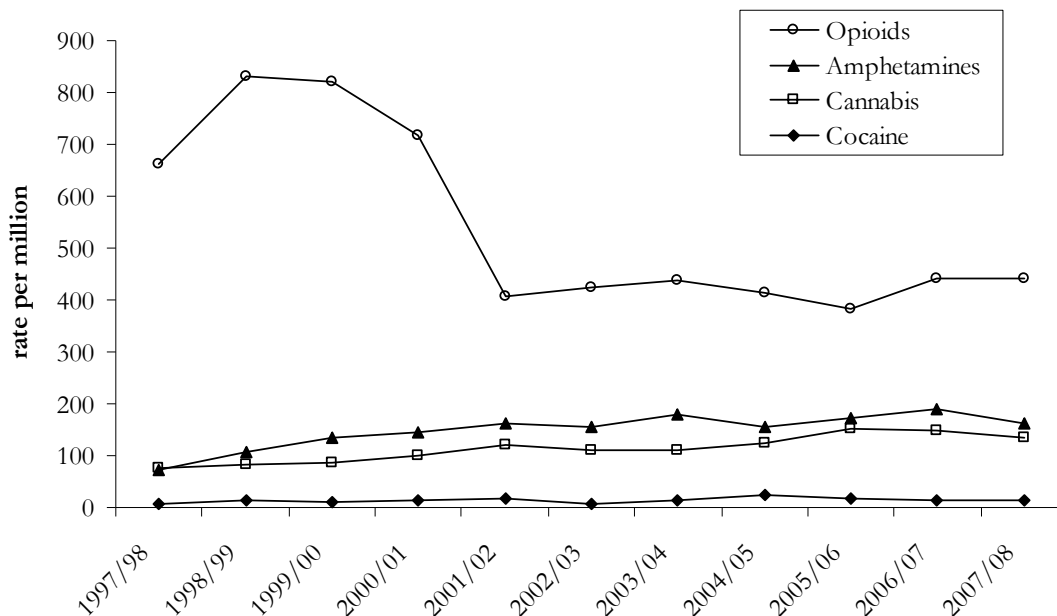
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APPENDIX 1: Lifetime and recent drug use of participants, 2003 – 2009

Variable	2003 (N=101)	2004 (N=100)	2005 (N=100)	2006 (N=101)	2007 (N=100)	2008 (N=74)	2009 (N=100)
Alcohol							
Ever used (%)	100	100	100	99	98	99	96
Used last 6 months (%)	98	96	99	97	94	97	93
Cannabis							
Ever used (%)	100	97	97	98	97	95	98
Used last 6 months (%)	87	81	87	83	80	74	86
Tobacco							
Ever used (%)	81	76	90	87	86	84	90
Used last 6 months (%)	72	65	78	73	73	70	80
Methamphetamine powder							
Ever used (%)	82	86	83	75	81	55	60
Used last 6 months (%)	65	62	66	51	53	30	30
Methamphetamine base							
Ever used (%)	75	84	88	72	81	46	46
Used last 6 months (%)	70	72	82	63	64	34	21
Crystal methamphetamine							
Ever used (%)	60	60	62	73	66	47	52
Used last 6 months (%)	48	47	41	62	49	34	32
Pharmaceutical stimulants							
Ever used (%)	-	54	60	49	46	28	30
Used last 6 months (%)	-	21	24	20	15	4	2
Cocaine							
Ever used (%)	58	59	67	49	71	53	45
Used last 6 months (%)	37	26	49	31	36	20	20
LSD							
Ever used %	73	77	82	71	75	64	71
Used last 6 months %	30	36	48	34	33	35	37

Source: EDRS participant interviews

APPENDIX 2: RATE OF SUBSTANCE-RELATED ADMISSIONS* (PRIMARY DIAGNOSIS) TO HOSPITAL IN AUSTRALIA, 1997/1998 – 2007/08



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