South Australia

R. Sutherland and L. Burns

SA TRENDS IN ECSTASY AND RELATED DRUG MARKETS 2013
Findings from the Ecstasy and Related Drugs Reporting System (EDRS)

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SOUTH AUSTRALIAN TRENDS IN ECSTASY AND RELATED DRUG MARKETS 2013

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

Rachel Sutherland and Dr Lucy Burns

National Drug and Alcohol Research Centre

University of New South Wales

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ABBREVIATIONS

1,4B	1, 4 butanediol
2CB	4-bromo-2, 5-dimethoxyphenethylamine
2CE	2, 5-dimethoxy-4-ethylphenethylamine
2CI	2, 5-dimethoxy-4-iodophenethylamine
4-MTA	4-methylthioamphetamine
5MeO-DMT	5-methoxy-dimethyltryptamine
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	Australian Government Department of Health
AIHW	Australian Institute of Health and Welfare
AODTS-NMDS	Alcohol and Other Drug Treatment Services National Minimum Data Set
A&TSI	Aboriginal and/or Torres Strait Island
AQFV	Alcohol Quantity Frequency and Variability Assessment
AUDIT	Alcohol Use Disorders Identification Test
BAC	Blood alcohol concentration
BBVI	Blood-borne viral infection(s)
BMI	Body Mass Index
BZP	Benzylpiperizine(s)
CI	Confidence Intervals
CME-DIS	Client Management Engine-DASC Information System
DASC	Drug and Alcohol Services Council
DASSA	Drug and Alcohol Services South Australia
DOB	2, 5-dimethoxy-4-bromoamphetamine
DOI	2, 5-dimethoxy-4-iodoamphetamine, ‘Death on Impact’
DOM	2, 5-dimethoxy-4-methylamphetamine
DMT	Dimethyltryptamine
DSM-IV-TR	Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, text revision
DXM	Dextromethorphan
ED	Emergency Department
EDRS	Ecstasy and Related Drugs Reporting System
ERD	Ecstasy and related drug(s)
GBL	Gamma-butyrolactone
GHB	Gamma-hydroxybutyrate
GP	General practitioner
HBV	Hepatitis B virus
HCV	Hepatitis C virus
HIV	Human immunodeficiency virus
HPV	Human papillomavirus (genital warts)
HSI	Heavy Smoking Index
ICD-9	International Statistical Classification of Diseases and Related Health Problems, Ninth Revision

ICD-10	International Statistical Classification of Diseases and Related Health Problems, Tenth Revision
IDRS	Illicit Drug Reporting System
IDU	Person(s) who inject(s) drugs; injecting drug user(s)
K10	Kessler Psychological Distress Scale
KE	Key expert(s)
LSA	*d*-lysergic acid amide
LSD	*d*-lysergic acid
MDA	3, 4-methylenedioxyamphetamine
MDEA	3, 4-methylenedioxyethylamphetamine
MDMA	3, 4-methylenedioxymethamphetamine/'ecstasy'
MDPV	Methylenedioxypyrovalerone
Ml	Millilitres
N	(or n) Number of participants
NDARC	National Drug and Alcohol Research Centre
NDLERF	National Drug Law Enforcement Research Fund
NDSHS	National Drug Strategy Household Survey
NHMD	National Hospital Morbidity Database
NNDSS	National Notifiable Diseases Surveillance System
NPS	New Psychoactive Substances
NSP	Needle and syringe program
OCD	Obsessive compulsive disorder
OST	Opioid substitution treatment
OTC	Over the counter
PDI	Party Drugs Initiative
PMA	Para-methoxyamphetamine
PPA	Price, purity and availability
QOL	Quality of life
RAH	Royal Adelaide Hospital
RC	Research chemicals
REU	Regular ecstasy users(s)
ROA	Route of administration
ROL	REM onset latency
RPU	Regular psychostimulant users(s)
SA	South Australia
SAPOL	South Australia Police
SEN	Simple Expiation Notice
SD	Standard deviation
SDS	Severity of Dependence Scale
SPSS	Statistical Package for the Social Sciences
STI	Sexually transmitted infection
TFMPP	3-trifluoromethylphenylpiperazine
WHO	World Health Organization

GLOSSARY OF TERMS

Binge	Use over 48 hours without sleep
Eightball	3.5 grams
Halfweight	0.5 gram
Illicit	Illicit refers to pharmaceuticals obtained from a prescription in someone else's name, e.g. through buying them from a dealer or obtaining them from a friend or partner
Indicator data	Sources of secondary data used in the EDRS (see *Method* section for further details)
Key expert(s)	Also referred to as KE; persons participating in the Key Expert Survey component of the EDRS (see *Method* section for further details)
Licit	Licit refers to pharmaceuticals (e.g. benzodiazepines, antidepressants and opioids such as methadone, buprenorphine, morphine and oxycodone) obtained by a prescription in the user's name. This definition does not take account of 'doctor shopping' practices; however, it differentiates between prescriptions for self as opposed to pharmaceuticals bought on the street or those prescribed to a friend or partner
Lifetime injection	Injection (typically intravenous) on at least one occasion in the participant's lifetime
Lifetime use	Use on at least one occasion in the participant's lifetime via one or more of the following routes of administration: injecting; smoking; snorting shelving/shafting; and/or swallowing
Opiates	Opiates are derived directly from the opium poppy by departing and purifying the various chemicals in the poppy
Opioids	Opioids include all opiates but also include chemicals that have been synthesised in some way e.g. heroin is an opioid but not an opiate, morphine is both an opiate and opioid
Point	0.1 gram although may also be used as a term referring to an amount for one injection
Recent injection	Injection (typically intravenous) in the six months preceding interview
Recent use	Use in the six months preceding interview via one or more of the following routes of administration: injecting; smoking; snorting; and/or swallowing
Shelving/shafting	Use via insertion into vagina (shelving) or the rectum (shafting)
Use	Use via one or more of the following routes of administration: injecting; smoking; snorting; shelving/shafting; and/or swallowing

Guide to days of use/injection

180 days	Daily use/injection* over preceding six months
90 days	Use/injection* every second day
24 days	Weekly use/injection*
12 days	Fortnightly use/injection*
6 days	Monthly use/injection*

* As appropriate

EXECUTIVE SUMMARY

This report presents the findings from the thirteenth year in which data has been collected in South Australia (SA). The Ecstasy and Related Drugs Reporting System (EDRS; formerly the Party Drugs Initiative, or PDI), monitors the price, purity and availability of 'ecstasy' (MDMA) and other drugs such as methamphetamine, cocaine, gamma-hydroxybutyrate (GHB), *d*-lysergic acid (LSD), 3,4-methylendioxyamphetamine (MDA) and ketamine. It also examines the demographic characteristics and patterns of drug use among regular psychostimulant users (RPU), the prevalence of risk-taking and harms related to drug use, as well as the level of criminal involvement among this group. It utilises data from three sources: (a) surveys with regular psychostimulant users (RPU); (b) surveys with key experts (KE) who have contact with RPU through the nature of their work; and (c) the analysis of existing data sources that contain information on ecstasy and related drugs (ERD). The EDRS surveys are not representative of psychostimulant users in the general population. The RPU are a sentinel group that provides information on patterns of drug use and market trends.

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

Drug trends in this publication primarily represent trends in Adelaide, where new drug trends are likely to emerge. Patterns of drug use may vary among other groups of RPU in Adelaide and in regional areas.

Demographic characteristics of regular psychostimulant users

One hundred participants were recruited to the 2013 sample. As in previous years, the RPU interviewed were young, with a median age of 21. Three-quarters (75%) of the participants were male. Almost one-quarter (23%) of the sample reported being in full-time employment with a mean income of $475 per week. Most participants were well educated; about half of the sample had completed some kind of post school qualification, and one-third were current students. The large majority of the sample identified as heterosexual and 2% were currently undergoing treatment for their drug use. The 2013 sample were generally similar to participants in 2012, however, there was a significant increase in the proportion of participants who had completed a university or college degree.

Patterns of drug use among participants

Ecstasy re-emerged as the main drug of choice nominated by participants, closely followed by cannabis and alcohol (compared to 2012, in which alcohol was the most popular drug of choice). Aside from ecstasy, alcohol was the most commonly used drug among RPU, followed by cannabis and tobacco. As in 2012, polydrug use was common among this sample, with participants having tried a median of nine different drugs in their lifetime, and five within the preceding six months. In 2013, there were significant decreases in the lifetime use of tobacco, base methamphetamine, crystal methamphetamine, MDA, GHB and buprenorphine. There was also a significant decline in the recent use of base methamphetamine.

The proportion of participants who reported recent bingeing on ecstasy or other related drugs decreased significantly in 2013. Amongst those who had binged for

over 48 hours, ecstasy emerged as the drug most commonly used in a binge session. There was a significant decline in the use of alcohol in a binge session, whilst the use of tobacco, cannabis and crystal methamphetamine remained relatively stable.

Injecting drug use remained low in 2013, with only six participants reporting that they injected any drug within the preceding six months.

Ecstasy

The ecstasy market appears to have remained stable in 2013; there were few changes in the parameters of ecstasy use, with the reported median age of first use, 'average' or 'most' amount used in a typical session, and median days of use in a six month period all remaining relatively stable. The proportion of participants who reported using more than one pill in a typical session, and who had consumed ecstasy in a binge session, also remained stable in 2013 (at 82% and 33% respectively). Swallowing was the main route of administration (ROA) for ecstasy pills, capsules and crystals, whilst snorting was the main ROA for ecstasy powder. Over two-fifths of the sample reported that the last time they consumed ecstasy they had been at a nightclub.

The proportion of participants who reported using other drugs 'with ecstasy' decreased slightly in 2013, whilst the use of other drugs to 'come-down' from ecstasy increased (although neither of these changes were significant). Cannabis was the most common drug used to come down from ecstasy, whilst alcohol was the most common drug used in combination with ecstasy.

The reported price of ecstasy remained stable in 2013, at $20 for a pill. This was confirmed by over two-thirds of the sample who reported that price had remained stable over the preceding six months. Availability continued to be considered 'easy' or 'very easy' by participants. The largest portion of RPU reported that current purity of ecstasy was medium; however, perceptions regarding changes in the purity of ecstasy over the past six months were mixed. More specifically, there was a significant reduction in the proportion of participants who reported that ecstasy purity had been increasing over the preceding six months. This is in contrast to data from the Australian Crime Commission (ACC), which reported that the median purity of South Australian Police (SAPOL) seizures of phenethylamines increased from 11.8% in 2010/11 to 15.7% in 2011/12.

Ecstasy was generally purchased for both self and others, with two participants reporting purchasing ecstasy for others only. Ecstasy was purchased from a median of four people in the six months prior to interview. The majority of participants purchased ecstasy one to 12 times in that period, with 21% purchasing ecstasy between 13−24 times in that period. RPU obtained a median of four pills on the last occasion of purchase, and mainly purchased ecstasy from friends.

Methamphetamine

In 2013, the proportions of the participant sample reporting recent use of crystal and powder methamphetamine remained relatively stable, whilst there was a significant decrease in the recent use of base methamphetamine. The frequency of use within the preceding six months remained relatively stable, and low (range 2−4 days) for all three forms of methamphetamine. In the six months prior to interview, smoking emerged as the preferred ROA for both base and crystal methamphetamine, whilst snorting was the preferred method for administering methamphetamine powder.

The reported last median price of a point of powder, base and crystal methamphetamine all remained relatively stable in 2013, at $100, $90 and $100 respectively. The majority of participants reported that the price of all three forms of methamphetamine had remained stable in the six months preceding interview.

The purity of all three forms of methamphetamine was largely perceived as high, with base methamphetamine appearing to have the highest purity according to participant reports. In addition, seizures analysed by SAPOL revealed that the median purity of methamphetamine increased slightly, from 31.7% in 2010/11 to 43.3% in 2011/12. All forms of methamphetamine were considered easy to very easy to obtain recently, and participants reported that this had remained stable within the last six months.

Overall, participants mostly reported obtaining all three forms of methamphetamine from friends or known dealers.

Of the illicit drugs, most key experts (KE) considered methamphetamine to be an issue of particular concern at the moment. This was attributed to its high prevalence and the effects (health, mental and social) that it has on both the individual and their family/friends.

Cocaine

Lifetime and recent use of cocaine remained stable in 2013, at 58% and 35% respectively. Among those who had used cocaine in the six months preceding interview, frequency of use remained low and stable at a median of two days.

The median price paid for a gram of cocaine decreased slightly to $325, although the majority of those able to answer perceived that the price had remained stable in the six months preceding interview. The current purity of cocaine was largely perceived as ‘medium’, and the majority of participants believed that purity had remained stable in the six months preceding interview. Interestingly, seizures analysed by SAPOL revealed that the median purity of cocaine in 2011/12 had almost doubled compared to 2010/11. Reports regarding the current availability of cocaine were mixed, with a significant decline in the proportion of participants who reported that it was ‘difficult’ to obtain.

LSD

One-quarter of the participant sample in 2013 reported recent use of LSD, increasing slightly from 2012. Frequency of LSD use was stable and remained consistently low. The amount of LSD used in a typical and heavy session remained stable, and the majority of participants reported being at a private venue (own/friend’s home) at last time of intoxication.

The median price of LSD remained stable in 2013, at $15 for a tab. The purity of LSD was perceived as high, and participants largely believed this had remained stable over the past six months. The availability of LSD remained stable in 2013, with almost equal proportions reporting that LSD was easy or difficult to obtain.

Virtually all of the KE reported that the prevalence of LSD was very low, and that they had seen very little of it among their clientele. One KE noted that 2, 5-dimethoxy-4-iodoamphetamine (Death on Impact − DOI) was being sold as LSD.

Cannabis

The prevalence of cannabis use remained exceptionally high in 2013, with 94% of the sample reporting lifetime use and 85% reporting use within the preceding six months. The frequency of recent cannabis use by participants remained stable in

2013, at a median of 48 days within a six month period. Participants reported spending most of their time, whilst intoxicated, at their own home or at a friend's home.

The reported price for a bag of hydro/bush remained stable in 2013 ($25), as did the availability (with participants reporting that cannabis was easy or very easy to obtain). The purity of hydro was reported as high and bush as medium, with the purity of both types of cannabis perceived as stable in the previous six months.

New psychoactive substances

For the third year running, participants in 2013 were asked about their use of a range of new psychoactive substances (NPS). Those most recently used were 4-bromo-2, 5-dimethoxyphenethylamine (2CB), dimethyltryptamine (DMT), herbal highs, unknown capsules and 2, 5-dimethoxy-4-iodophenethylamine (2CI). Compared to the 2012 data, there were significant decreases in the lifetime use of unknown capsules and herbal highs. In regards to recent use, there was a significant decline in LSA use and an inverse increase in the use of 2CI.

Interestingly, few KE were able to comment on any of the new psychoactive substances listed above; rather, the primary comments related to the presence of NPS in pills sold as ecstasy. It was reported by one KE that the most common drugs detected in seized 'ecstasy' pills over the preceding 12 months (excluding MDMA) were 25I-NBOMe and para-methoxyamphetamine (PMA).

It is also interesting to note that, despite the resurgence of the ecstasy market over the past couple of years, two-fifths of the sample still reported the use of 'any' NPS in the six months preceding interview. This suggests that participants will continue to experiment with a range of different drugs, regardless of what is happening in the ecstasy market.

Other drugs

Ketamine

Over a quarter (28%) of the sample reported lifetime use of ketamine and 6% reported use in the six months preceding interview (both stable from 2012).

GHB

There was a significant decline in the lifetime use of GHB, whilst recent use remained stable at 5% of the sample.

MDA

There was a significant decline in the lifetime use of MDA, whilst recent use remained low and stable at 3% of the sample.

Mushrooms

Nineteen percent of participants reported recent use of 'magic mushrooms', although frequency remained low at a median of one day in the preceding six months.

Alcohol

As in previous years, the large majority of the participant sample reported recent use of alcohol, and frequency remained stable at a median of 48 days in a six month period (approximately twice a week). A number of KE considered alcohol to be a particularly problematic drug due to its widespread prevalence, availability and social acceptability.

Tobacco

Lifetime use of tobacco declined significantly in 2013, whilst recent use remained stable at three-quarters (75%) of the sample. Almost two-thirds of recent smokers reported daily tobacco use, and this continues to far exceed the daily smoking prevalence rate among the general population.

Inhalants

Recent use of nitrous oxide remained stable in 2013, with just under one-fifth of the sample reporting use within the preceding six months. The prevalence of recent amyl nitrate use also remained stable at 14% of the sample. Frequency of use remained low for both inhalants.

Pharmaceutical drugs

Lifetime and recent use of unprescribed medications (i.e. benzodiazepines, antidepressants, pharmaceutical stimulants, OTC codeine and OTC stimulants) all remained stable in 2013.

Opioids

Recent use of heroin and other 'illicit opioids' remained stable in 2013. No participants reported the use of methadone or buprenorphine in the six months preceding interview.

Steroids

No participants reported life time or past six month use of steroids in 2013.

Health-related issues

The prevalence of recent (past 12 month) stimulant and depressant overdose remained stable in 2013. Overall, 48% of RPU reported that they had overdosed on either a stimulant or depressant drug in the 12 months preceding interview. When analysing this data it is important to keep in mind that this is self-report data, with overdose defined as symptoms that occurred "outside your normal drug experience, or where professional assistance would have been helpful".

Nine participants reported having accessed professional help for a drug and alcohol related issue in the six months prior to interview, and an additional thirteen participants reported that they had thought about seeking help for their drug and alcohol use. Eighty-four percent of the sample reported that they had utilised a health service (for any reason) in the preceding six months and this was most commonly a general practitioner.

The proportion of clients attending Drug and Alcohol Services South Australia (DASSA) treatment services, with ecstasy as the primary drug of concern, remained stable in 2013 and accounted for a very small proportion of total attendances. Alcohol dominated as the primary drug of concern for the largest proportion of total clients to DASSA treatment services, followed by amphetamines, cannabis, opioid analgesics and heroin.

Telephone calls made to the SA Alcohol and Drug Information Service (ADIS) remained relatively stable for ecstasy, cannabis and methamphetamine; increased slightly for cocaine; and decreased for alcohol.

In 2013, 28% of the participants were assessed to be 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.

Risk behaviour

Injecting risk behaviour

Twelve percent of the sample reported that they had ever injected any drug. Six participants reported recently injecting any drug in 2013, most commonly methamphetamine. With regard to longer-term trends, there was no evidence of a change in the prevalence of recent injecting amongst participants across the years. Among those who had injected in the past six months, there were no participants who reported that they had shared needles, and only one participant reported sharing spoons/mixing containers.

Sexual risk behaviour

Evidence of risky sexual behaviour was again apparent among the participant sample in 2013. Of the participants who reported having had penetrative sex with a casual partner in the last six months, about half of the sample reported that they did not use protection during their last sexual encounter, regardless of whether they were sober or intoxicated. In addition, the vast majority of those who reported recent penetrative sex had done so whilst under the influence of drugs – most commonly ecstasy, followed by alcohol and cannabis. Thirty-six participants had undergone a sexual health check-up in the preceding year, and of these two had been diagnosed with a sexually transmitted infection (STI).

Driving risk behaviour

Thirty-seven percent of those who had driven in the six months prior to interview reported that they had driven whilst over the legal blood alcohol concentration (BAC), and they had done so on a median of two occasions in that period. Sixty-two percent of recent drivers reported driving after consuming an illicit drug, and these participants had done so on a median of four times in the six months prior to interview. Cannabis and ecstasy were the most commonly used illicit drugs prior to driving.

Alcohol risk behaviour

The Alcohol Use Disorders Identification Test (AUDIT) is a brief screening tool which is used to identify individuals with alcohol problems. Using this test, participants scored a mean of 14.8. Eighty-six percent of the sample scored eight or more; these are levels at which alcohol intake may be considered hazardous.

Law enforcement-related trends

The prevalence of past month criminal activity among RPU declined (albeit not significantly) in 2013. Drug dealing continued to be the most common offence which had been committed, followed by property offences. Fraud and violent crime remained low among RPU. The number of participants reporting past year arrest remained stable.

Special topics of interest

Exposure to injecting

Over two-fifths (44%) of RPU reported knowing a few friends or acquaintances that had injected an illicit drug in their lifetime; amongst these participants 43% reported

that they had been directly exposed to the injecting practice at some stage throughout their life (i.e. in the vicinity of the injecting practice taking place).

Smaller numbers of the whole sample reported being offered drugs to inject (22%) in the preceding 12 months, and 10% reported that they had ever seriously considered injecting a drug. The main reasons nominated for not injecting a drug were: not the preferred route of administration (20%), do not use drugs that are injectable (i.e. cannabis) (14%), fear of needles (12%), and concerns about dependence (12%). The main reasoning for this sample to consider injecting a drug were: curiosity (18%), to have a stronger drug effect (15%), and to get high/have fun (6%); however half the participants (51%) reported that they 'would not consider' injecting a drug. When asked how likely they would be to inject a drug in the future, the majority (75%) reported that it would be 'extremely unlikely'.

NPS health effects

Amongst those who had used 2CB in the preceding six months, the most motivating factors that had influenced their decision to use 2CB were availability, value for money, higher level of purity compared to other drugs and fewer side effects compared to other drugs.

Effects that had *never* been experienced by 2CB users included: anger and aggression, shortness of breath, chest pain and skin rash. The effects that were experienced 'most of the time' by the majority of participants included: urge to move (75%), urge to talk (67%) and increased energy (67%).

In regards to the addictive properties of 2CB, one-quarter of recent 2CB users reported that they had taken 2CB (or another stimulant drug) to relieve drug withdrawals, 17% continued to take 2CB even though they had physical or psychological problems, 17% had given up important activities because of their 2CB use and 17% had been concerned about their use of 2CB.

Ecstasy dependence

Over one-third (38%) of the sample obtained a score of zero on the ecstasy Severity of Dependence Scale (SDS), and 24% obtained a score of 1 on the scale. This indicates that over three-fifths of the sample reported no or few symptoms of dependence in relation to ecstasy use.

Conclusions

The results reported here describe trends in the use of ecstasy & related drugs (ERD) in 2013 in Adelaide, South Australia, and provide comparisons with the findings of the 2012 study. Many characteristics of ERD in the current study were comparable to previous years and remained stable. Indeed, the main findings from the 2013 EDRS seem to be centred on the stabilisation of the ecstasy market. More specifically, after a previous downturn in the ecstasy market, it was noted in 2012 that the market seemed to have re-established itself and this has continued into 2013. Perhaps in response to the stabilisation of the ecstasy market there were significant decreases in the lifetime use of base methamphetamine, crystal methamphetamine, MDA, GHB, unknown capsules and herbal highs; as well as significant decreases in the recent use of base methamphetamine and LSA.

However, despite the decreases noted above, the use of NPS remained common, with 40% of the sample reporting that they had used some form of NPS in the six months preceding interview. This suggests that RPU will continue to experiment with a range of different drugs, regardless of the state of the ecstasy market.

Behaviours such as inconsistent condom use, driving under the influence of alcohol and other drugs, criminal activity and overdose remained stable in 2013, and continue to carry serious public health concerns. On a more positive note, there was a significant decline in the proportion of participants who had binged on stimulants in the preceding six months.

Implications

The findings from the 2013 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.

- Despite the apparent stablisation of the ecstasy market, there remain concerns about whether pills sold as 'ecstasy' actually contain MDMA. This was highlighted in July 2013, when a bad batch of ecstasy sold in Adelaide resulted in 21 people being hospitalised; analysis revealed that virtually all of these ecstasy pills contained 25I-NBOMe. As such, it is essential that harm reduction messages be promoted among RPU. For example, avoid mixing pills with other substances; keep hydrated (but don't consume more than one pint/two cups per hour); look after your friends and seek help if needed.
- Although pills remain the dominant form of ecstasy being used, there has been a diversification in the other forms of ecstasy being used. In particular, a quarter of RPU reported that they had used MDMA crystals in the preceding six months. Anecdotally, there have been reports of MDMA crystals being of higher purity than other forms of ecstasy, which in turn may have different health implications for the consumer. As such, it is important that the price, purity and availability of MDMA crystals be monitored separately to pills, powder and capsules.
- The use of new psychoactive substances remains popular among RPU. Given the unknown health and behavioural consequences of using such drugs, it is essential that we continue to monitor this market and assess the associated risks.
- Alcohol and tobacco use remain highly prevalent amongst this sample, with the majority of RPU consuming alcohol at levels that may be considered hazardous. In regards to tobacco, there was a significant decline in lifetime use, whilst the prevalence of tobacco use within the preceding six months remained stable. This may suggest that although current public health campaigns and policies have been effective in reducing the uptake of smoking amongst RPU, they have been less effective in reducing consumption amongst existing consumers. As such, there is a clear need to focus interventions targeting tobacco use amongst this population.
- Polydrug use remains common amongst RPU, with the large majority of participants reporting that they used other drugs in combination with ecstasy. Simultaneous consumption of different drugs can have harmful and unpredictable consequences, and it is therefore important that there is continued education regarding the harms associated with such behaviour.
- Almost half of the sample reported that they had overdosed on either a stimulant or depressant drug in the twelve months preceding interview. This is a serious public health concern, and it is essential that education and harm reduction be developed to address this issue.
- Increased promotion of 'safe sex' practices, and sexual health testing, is needed within this population of RPU, especially regarding casual sexual experiences.

1 INTRODUCTION

The EDRS evolved from the Illicit Drug Reporting System (IDRS), an ongoing annual project which has been conducted in South Australia (SA) since 1997 and in all states and territories of Australia since 2000. To date, the purpose of the IDRS has been to provide a coordinated approach to monitoring 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) funded a two-year trial in New South Wales and Queensland on the feasibility of monitoring emerging trends in the ecstasy and related drugs (ERD) market using the extant IDRS methodology. In addition, Drug and Alcohol Services 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, 3, 4-methylenedioxyamphetamine (MDA), and gamma-hydroxybutyrate (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 it 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 (AGDH) and the Ministerial Council on Drug Strategy provided funding, as a project under the cost shared funding arrangement. In 2006, the AGDH provided funding. In 2006, the PDI was renamed and is now known as the Ecstasy and Related Drugs Reporting System (EDRS).

1.1 Study aims

The specific aims of the 2013 South Australian EDRS were to:

- describe the characteristics of a sample of psychostimulant users surveyed in Adelaide in 2013;
- 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, occupational, social and legal harms;
- identify emerging trends in the ecstasy and related drug markets that require further investigation; and
- where possible, compare findings of the 2012 EDRS.

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:

- face-to-face interviews with current regular psychostimulant users (RPU) living in the Adelaide metropolitan area;
- telephone interviews with 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 indicator data relating to drug use and drug-related issues.

2.1 Survey of regular psychostimulant users (RPU)

From 2003−2012, the sentinel population chosen to monitor trends in ERD markets has consisted of people who engaged in the regular use of the drug sold as 'ecstasy'. The decision that regular ecstasy use should define the sentinel population of ERD users was underpinned by a couple of important factors. Firstly, ecstasy has historically been the most widely used of the group of drugs referred to as 'party drugs' (White, Breen & Degenhardt, 2003), and is currently the most commonly used illicit drug after cannabis (Australian Institute of Health and Welfare, 2011). Secondly, a growing market for ecstasy, i.e. tablets sold purporting to contain MDMA, has existed in Australia for more than a decade. In contrast, other drugs that fall into the class of ERD have either declined in popularity since the appearance of ecstasy in this country (e.g. LSD), fluctuate widely in availability (e.g. MDA), or are relatively new in the market and are not as widely used as ecstasy (e.g. ketamine and GHB).

However, it has become apparent over the past couple of years that the ecstasy market and the regularity of its consumption may be changing − which in turn, has led to a subsequent expansion of the NPS market (see section 4.8 for more information). In response to such changes, the eligibility criterion was expanded in 2013 to include the use of other illicit psychostimulants including: MDA, methamphetamine, cocaine, ketamine, GHB, LSD, mephedrone or other NPS.

In 2013, a total of 100 RPU were interviewed from April to June. Despite the expansion of the eligibility criteria, there were only a limited number of participants who had not used ecstasy (n=1) or who had not used ecstasy regularly in accordance with REU criteria (n=6). To summarise, only 7% of the 2013 sample were not REU suggesting that the EDRS results still comprise of a large amount of data from REU.

2.1.1 Recruitment

Participants were recruited through a purposive sampling strategy (Kerlinger, 1986), which included advertisements in three entertainment-focused street magazines, one sports-based magazine and on university noticeboards. In addition, advertisements were posted on various websites (including facebook) and verbal advertisements were broadcast on one dance music based radio station. Some participants were also recruited using 'snowball' procedures (Biernacki & Waldorf, 1981). 'Snowballing' is a means of sampling 'hidden' populations that relies on peer referral and is widely used to access illicit drug users both in Australian studies (e.g. Boys, Lenton & Norcoss, 1997; Ovendon & Loxley, 1996; Solowij, Hall & Lee, 1992) and international studies (e.g. Dalgarno & Shewan, 1996; Forsyth, 1996; Peters, Davies & Richardson, 1997). 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.

2.1.2 Procedure

Participants contacted the research 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 or other illicit psychoactive stimulants (i.e. MDA, methamphetamine, cocaine, ketamine, GHB, LSD, mephedrone or other NPS) 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

Participants were administered a structured interview schedule based on a national study of ecstasy users conducted by NDARC in 1997 (Topp et al., 1998; Topp et al., 2000), which incorporated items from a number of previous NDARC studies of users of ecstasy (Solowij, Hall & Lee, 1992) and powder amphetamine/methamphetamine (Darke et al., 1994; Hando & Hall, 1993; Hando, Topp & Hall, 1997). The interview focused primarily on the preceding six months, and assessed:

- demographic characteristics;
- patterns of ERD use, including frequency and quantity of use and routes of administration;
- drug market characteristics: the price; purity; and availability of different ERD;
- risk behaviours (such as injecting, sexual behaviour, driving under the influence of alcohol and other drugs);
- help-seeking behaviour;
- mental and physical health, personal health and wellbeing;
- self-reported criminal activity;
- ecstasy-related problems, including relationship, legal and occupational problems;
- general trends in ERD markets, such as new drug types, new drug users and perceptions of police activity; and
- areas of special interest including exposure to injecting and health issues associated with NPS use.

2.1.4 Data analysis

Statistical analyses (descriptive and inferential) were performed using the Statistical Package for the Social Sciences (SPSS) for Windows, Version 18.0. (PASW, 2009). Continuous, normally distributed variables were analysed using *t*-tests and means reported. Where continuous variables were skewed, medians were reported and the Mann-Whitney *U*-test, a non-parametric analogue of the *t*-test (Siegel & Castellan, 1988), was employed. Confidence intervals (CI) were calculated using an Excel spreadsheet available at http://www.cebm.net/index.aspx?o=1023 (Tandberg). This calculation tool was an implementation of the optimal methods identified by Newcombe (1998).

2.2 Survey of key experts (KE)

The eligibility criterion for KE 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).

The interview schedule was a semi-structured instrument that included sections on drug use patterns, drug availability, criminal behaviour, health issues and police activity. The majority of interviews took approximately 30 minutes to conduct. Notes were taken during the interview and the responses were analysed and sorted for recurring themes. Interviews were conducted via telephone in October 2013. KE were renumerated with a small gift (e.g. box of chocolates) for their time.

There were ten KE from various metropolitan regions of Adelaide. The majority of KE worked in the health sector, including in drug diversion, community drug and alcohol work, drug treatment services, mental health services, health promotion/information and emergency treatment. There were two KE from the law enforcement sector.

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 KE 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, 2007 and 2010 (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);
- data on consumer and provider arrests by drug type provided by the ACC;
- 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).

3 DEMOGRAPHICS

Key Findings

- A total of 100 participants were interviewed for the EDRS survey in 2013.
- Participants were aged in their early-20s (median age of 21 years), predominantly male (75%), with the majority identifying as heterosexual (85%).
- The RPU interviewed were well educated: just under half had gained post-secondary qualifications, while 33% were current students.
- Roughly one-quarter of the sample were currently in full-time employment, with a mean income of $475 per week. The majority were renting/owned (49%) or living in the parental/family home (44%).
- Two participants were currently in drug treatment.
- Demographic characteristics were largely unchanged from 2012, with the only significant change being an increase in the proportion of participants who had completed a university or college degree.

3.1 Overview of the RPU participant sample

3.1.1 Demographic characteristics of the RPU sample

In the 2013 EDRS, 100 participants were interviewed in South Australia. Eighteen percent of the EDRS sample had participated in previous years; 2% in 2008, 2% in 2010, 2% in 2011 and 12% in 2012. No participants had participated in a previous SA IDRS survey of people who inject drugs.

In 2013, three-quarters (75%) of the sample interviewed were male. The mean age of the sample was 23 years (SD=5.1, range=16−44) with a median age of 21 years. The majority of participants reported their sexual identity as heterosexual (85%), and nominated English as their main language (98%). Two participants were of Aboriginal and/or Torres Strait Island (A&TSI) descent.

Three-fifths (59%) of the sample reported that they were of single status, one-third (32%) had a partner and 8% reported to be married or living in a de facto relationship. Half (49%) lived in their own (owned or rented) accommodation and 44% lived in their parents' or family's home.

The median number of years of school education completed by the sample was 12 (range= 10−12), with just under three-quarters (72%) of participants reporting that they had completed year 12. Half (49%) had completed courses after school, with 24% having completed a university degree and 25% a trade/technical qualification. Just under one-quarter (23%) of participants were employed on a full-time basis, a quarter (28%) were employed on a part-time/casual basis, one-third were currently students (6% full-time, 1% part-time, 26% employed & studying) and one-eighth (13%) were currently unemployed. The mean weekly income was $475 (range=$50−1538). Two participants were receiving drug treatment at the time of interview, both of which were receiving counselling.

Table 1, below, presents key demographic characteristics across time. The demographic characteristics of regular psychostimulant users recruited for the EDRS have remained relatively stable between 2009 and 2013. Demographic comparisons between the 2012 sample and 2013 sample showed a significant increase in participants who had completed a university or college degree (p<0.05; 95% CI: -0.23 – -0.01).

Table 1: Demographic characteristics of RPU sample, 2009–2013

Characteristic	2009 (n=100)	2010 (n=92)	2011 (n=76)	2012 (n=92)	**2013 (n=100)**
Age (median in years)	22	24	21	22	**21**
(range)	(16−54)	(18−51)	(17−45)	(17−48)	**(16−44)**
Sex (% male)	65	62	68	73	**75**
Sexual Identity (%)					
Heterosexual	83	87	99	90	**85**
Gay male	5	2	-	3	**1**
Lesbian	1	3	-	0	**6**
Bisexual	10	8	1	7	**7**
Other	1	-	-	0	**1**
English main language spoken at home (%)	99	99	97	98	**98**
A&TSI (%)	4	1	1	1	**2**
Employment (%)					
Not employed	33	20	22	13	**13**
Full-time	29	30	21	30	**23**
Part-time/casual	25	34	36	21	**28**
Full-time student	4	10	8	9	**6**
Part-time student	-	2	-	3	**1**
Both studying & employed[#]	8	1	13	23	**26**
Home duties	-	3	-	0	**0**
Other	1	-	-	1	**3**
School education* (median in years)	11	12	12	12	**12**
(range)	(7−12)	(7−13)	(9−12)	(8−12)	**(10−12)**
Tertiary education (%)					
None	48	47	45	53	**51**
Trade/Technical	36	30	28	35	**25**
University/College	16	23	28	12	**24**
Prison history (%)	8	6	Not asked	7	**3**
Current drug treatment (%)	1	0	4	3	**2**

Source: EDRS participant interviews

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

[#] Response option added to include 'both studying and employed'

4 CONSUMPTION PATTERN RESULTS

Key Findings

- In 2013, ecstasy re-emerged as the primary drug of choice amongst RPU.
- There were significant decreases in the lifetime use of tobacco, base methamphetamine, crystal methamphetamine, MDA, GHB and buprenorphine. There was also a significant decline in the recent use of base methamphetamine.
- Twelve participants reported that they had ever injected a drug, which remained relatively stable from 2012.
- There was a significant decline in the proportion of RPU who had recently binged on ecstasy and/or related drugs. The most commonly used drugs were ecstasy, alcohol, tobacco and cannabis.
- When asked about changes in the drug market, the predominant themes to emerge among RPU were that there had been: an increase in the availability of 'new drugs', an increase in the experimentation of such drugs, and an increase in overall drug use.

4.1 Drug use history and current drug use

In 2013, participants were asked about lifetime (i.e. ever having used) and recent (last six months) use of a broad range of drug types, including alcohol and tobacco. Table 2 presents the proportion of RPU reporting lifetime and recent use of the main drug types investigated by the EDRS across the sampling years (methamphetamine, cocaine, LSD, MDA, GHB and ketamine), as well as the proportion reporting lifetime and recent use of alcohol and tobacco.

Regular psychostimulant users are often described as polydrug users and the 2013 sample was no exception. Participants were asked about their lifetime and recent use of 23 different drug types[1]. Participants reported using a median of nine (range=2−19; n=100) drug types in their lifetime and a median of five (range=1−11; n=100) in the preceding six months. A stable proportion of RPU (40%) reported the use of less commonly used substances, including many of the synthetic analogues known as 'research chemicals' including mephedrone, ivory wave, dimethyltryptamine (DMT − a powerful hallucinogen); synthetic drugs such as 2CI, 2CB and BZP; and naturally occurring drugs, such as kava (data not shown). In 2013, the EDRS included a section investigating the prevalence of use of these substances among this sample. Results can be found in Section 4.8: 'New psychoactive substances (NPS) use'.

Table 2 presents the proportion of RPU reporting lifetime and recent drug use across the past five years. The drugs most likely to have 'ever' been used and to have been used in the preceding six months were alcohol, followed by cannabis and tobacco. This has remained relatively constant over the years.

[1] Drug types were ecstasy (pills, powder & capsules), methamphetamine (powder, base & crystal), pharmaceutical stimulants, cocaine, LSD, MDA, 'magic mushrooms', ketamine, GHB (includes 1,4-butanediol and gamma-butyrolactone (GBL)), amyl nitrate, nitrous oxide, alcohol, cannabis, benzodiazepines, antidepressants, tobacco, heroin, methadone, buprenorphine, over the counter (OTC) stimulants, steroids, OTC codeine and other opiates.

Table 2: Lifetime and recent (last six months) use of drugs amongst RPU, 2009–2013

	2009	2010	2011	2012	**2013**
Alcohol					
Ever used (%)	96	99	99	99	**100**
Used last six months (%)	93	92	99	99	**97**
Cannabis					
Ever used (%)	98	100	97	98	**94**
Used last six months (%)	96	84	92	88	**85**
Tobacco					
Ever used (%)	90	80	93	96	**84***
Used last six months (%)	80	69	86	85	**75**
Meth. powder (speed)					
Ever used (%)	60	71	67	59	**47**
Used last six months (%)	30	38	45	24	**21**
Meth. base					
Ever used (%)	46	49	41	41	**15*****
Used last six months (%)	21	28	24	24	**11***
Crystal meth. (ice/crystal)					
Ever used (%)	52	55	50	53	**37***
Used last six months (%)	32	26	43	32	**28**
Cocaine					
Ever used (%)	45	69	75	66	**58**
Used last six months (%)	20	42	45	37	**35**
LSD					
Ever used (%)	71	66	63	52	**51**
Used last six months (%)	37	35	30	19	**25**
MDA					
Ever used (%)	8	27	32	33	**9*****
Used last six months (%)	2	7	15	9	**3**
Ketamine					
Ever used (%)	31	49	37	37	**28**
Used last six months (%)	19	13	8	10	**6**
GHB/1,4B/GBL					
Ever used (%)	9	24	26	25	**12***
Used last six months (%)	2	8	5	12	**5**

Source: EDRS participant interviews

*p<0.05

****p*<0.001

Table 2: Lifetime and recent (last six months) use of drugs amongst RPU, 2009–2013 (continued)

	2009	2010	2011	2012	**2013**
Amyl nitrate					
Ever used (%)	30	40	45	32	**30**
Used last 6 months (%)	16	8	17	17	**14**
Nitrous oxide					
Ever used (%)	53	59	59	52	**48**
Used last 6 months (%)	33	20	36	20	**17**
Benzodiazepines[#]					
Ever used (%)	34	42	53	47	**59**
Used last 6 months (%)	19	25	42	32	**29**
Antidepressants[#]					
Ever used (%)	25	28	28	27	**20**
Used last 6 months (%)	5	12	13	13	**9**
Pharmaceutical stimulants[#]					
Ever used (%)	30	45	49	52	**43**
Used last 6 months (%)	5	10	24	19	**25**
Mushrooms					
Ever used (%)	45	52	62	69	**54**
Used last 6 months (%)	18	14	24	26	**19**
Heroin					
Ever used (%)	17	12	16	12	**9**
Used last 6 months (%)	6	2	7	8	**3**
Methadone					
Ever used (%)	11	5	11	9	**6**
Used last 6 months (%)	1	0	4	1	**0**
Buprenorphine					
Ever used (%)	4	1	5	10	**2***
Used last 6 months (%)	1	0	5	5	**0**
Other Opiates[#]					
Ever used (%)	30	15	41	29	**35**
Used last 6 months (%)	15	9	20	14	**10**

Source: EDRS interviews
[#] Includes both licit and illicit use
* $p<0.05$

Compared to 2012, there were a number of significant changes in consumption patterns in 2013. These included:

- lower lifetime use of tobacco (96% in 2012 versus 84% in 2013; $p<0.05$; 95% CI: 0.03−0.02);
- lower lifetime (41% in 2012 versus 15% in 2013; $p<0.001$; 95% CI: 0.14−0.38) and recent (24% in 2012 versus 11% in 2013; $p<0.05$; 95% CI: 0.02−0.24) use of base methamphetamine;
- lower lifetime use of crystal methamphetamine (53% in 2012 versus 37% in 2013; $p<0.05$; 95% CI: 0.02−0.29);
- lower lifetime use of MDA (33% in 2012 versus 9% in 2013; $p<0.001$; 95% CI: 0.012−0.35);

- lower lifetime use of GHB (25% in 2012 versus 12% in 2013; $p<0.05$; 95% CI: 0.02−0.24);
- lower lifetime use of buprenorphine (10% in 2012 versus 2% in 2013; $p<0.05$; 0.01−0.16), although due to small numbers (n<10) this finding should be viewed with caution.

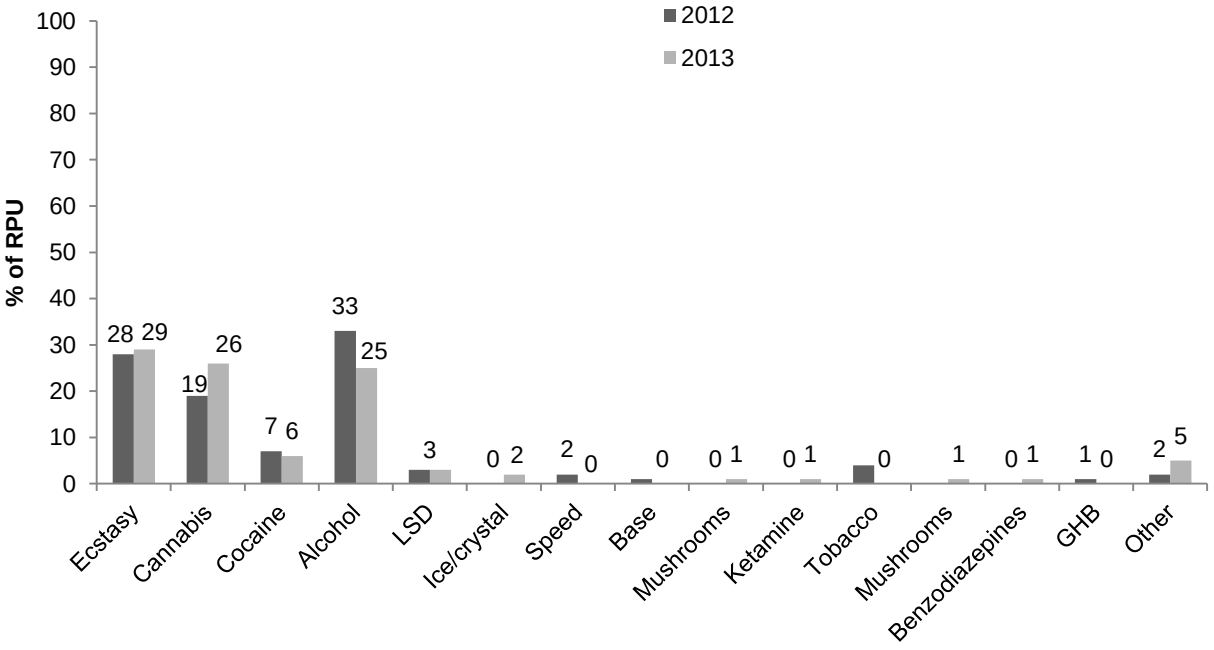
4.1.1 Injecting drug use

In 2013, 12% of the sample (n=12) reported having ever injected any drug, and of those 50% (n=6) reported injecting in the six months prior to interview. This has remained relatively stable from 2012. See Section 7.1 'Injecting risk behaviour' for further analyses on injecting and injecting-related risk behaviour.

4.1.2 Drug of choice and binge drug use

Figure 1 shows the main drug of choice nominated by participants in 2013. Ecstasy was the preferred drug of choice for 29% of the sample, followed by cannabis (26%) and alcohol (25%). There were no significant changes from 2012.

Figure 1: Drug of choice of RPU, 2012 & 2013



Source: EDRS participant interviews

Participants were asked whether they had binged on ERD in the six months preceding interview. Bingeing was defined as using drugs on a continuous basis for more than 48 hours without sleep (Ovendon & Loxley, 1996). The proportion of participants who reported bingeing on ERD within the six months prior to interview was 39%, which was a significant decrease from 2012 (55%; $p<0.05$; 95% CI: 0.02−0.30). Bingeing occurred on a median of two occasions (range=1−48) with the median length of the longest binge being three days (72 hours, range=48−408). The frequency remained stable from 2012, whilst the duration of the binge episode was higher (albeit not significantly) compared to 2012 which reported a median longest binge of 60 hours (range=48−216).

Amongst those who had binged for over 48 hours, ecstasy emerged as the drug most commonly used in a binge session (33%). There was a significant decline in the use of alcohol in a binge session (47% in 2012 versus 28% in 2013; $p<0.001$; 95% CI: 0.06−0.32),

whilst the use of tobacco (25%), cannabis (22%) and crystal methamphetamine (17%) remained relatively stable. Other drugs which were used in a binge session are listed in Table 3, and remain relatively stable from 2012.

Table 3: Proportion of participants reporting use of various drugs during a 'binge'[#] episode in the last six months, 2012-2013

Drug	Percent of whole sample to include drug in 'binge' episode in the last 6 months	
	2012 (n=91)	**2013 (n=100)**
Ecstasy	43	**33**
Meth powder	12	**4**
Meth base	10	**3**
Meth crystal	19	**17**
Pharmaceutical stimulants	1	**2**
Cocaine	8	**5**
LSD	1	**3**
MDA	2	**0**
Ketamine	1	**0**
GHB	2	**0**
Amyl nitrate	1	**1**
Nitrous oxide	3	**1**
Cannabis	30	**22**
Alcohol	47	**28****
<5 std drinks	6	**3**
>5 std drinks	42	**25***
Other	4	**3**
Benzodiazepines	4	**2**
Tobacco	39	**25**
Energy drinks	10	**6**

Source: EDRS participant interviews

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

*p<0.05

**p<0.01

4.1.3 Frequency of use in RPU

In 2013, participants were asked how often they had used ERD in the month preceding interview. The majority of participants reported between monthly and weekly use, and there were no significant changes from 2012. Only a small proportion reported using ecstasy and related drugs on a greater than weekly basis.

Table 4: Frequency of ERD use in the RPU sample, 2012 & 2013

	2012	**2013**
	(n=92) %	**(n=100) %**
Not in the last month	0	**4**
Monthly	16	**19**
Fortnightly	37	**39**
Weekly	30	**30**
More than once a week	13	**8**
Once a day	2	**0**
More than once a day	1	**0**

Source: EDRS interviews

4.1.4 Change in trends of ERD use

EDRS participants were asked to report if they had noticed anything new happening in relation to drug use amongst themselves or their friends over the preceding six months (e.g. new drug types, patterns of use etc.). Forty-seven percent of the sample indicated that there had been some recent changes in drug use, with the two primary themes being:

- an increase in the number of 'new drugs' that were available, and a subsequent increase in the experimentation of such drugs (n=36). In particular, participants noted an increase in the availability and use of DMT, although there were a range of different drugs mentioned including: 2CB, 2CI, MDMA crystals, NBOMe and prescription drugs bought online;
- a general increase in drug use (n=35). This included an increase in the frequency of use amongst friends, as well as an overall increase in the number of people using drugs.

4.2 Ecstasy use

Key Findings

- The median age of first use remained stable at 18 years of age.
- There were no significant gender differences, for either age of first use or age of first regular use.
- Participants reported using ecstasy a median of 12 days in the preceding six months, stable from 2012.
- The proportion of participants who reported using more than one pill in a typical session, and who had consumed ecstasy in a binge session, remained relatively stable in 2013.
- Swallowing was the primary route of administration for ecstasy pills, capsules and crystals, whilst snorting was the main ROA for ecstasy powder.
- Approximately two-fifths (43%) of the sample reported that the last time they consumed ecstasy they had been at a nightclub.

4.2.1 Ecstasy use among RPU

Table 5 summarises the ecstasy use patterns of the participant sample from 2009 to 2013. The median age at which participants first tried ecstasy was 18 years (SD=2.5; range 13−29; n=100), with 76% of the sample being 18 or under. Participants reported that regular (at least monthly) ecstasy use occurred at a mean age of 19 years (SD=2.8) and at the median age of 18 years (range 14−31 years). There were no significant differences in terms of gender, for either age of first use or age of first regular use.

In 2013, participants were asked to provide information on their use of ecstasy pills, powder, capsules and crystal[2]. The median number of days participants reported using any ecstasy (pills, powder, capsules or crystals) within the previous six months was 12 (range 1-78; n=99); this was stable from 2012.

Fifty-six percent of the sample reported using ecstasy (any form) once a fortnight or less (45% reported such use in 2012). Thirty-one percent of participants reported using ecstasy between fortnightly and weekly (40% reported such use in 2012). The proportion of participants who reported use of ecstasy more than weekly was 13% (15% in 2012). Twenty-four days within six months equates to once weekly use on average.

Participants reported that the median number of ecstasy tablets used in a typical session was two tablets (range=1−8; n=98) and this has remained stable since 2004. There was no change in the median 'most' amount typically used in a single session, with a median of five tablets (range=1−19; n=98) reported by participants in 2013. The majority (82%) of RPU reported that they typically used more than one tablet and just under a half (48%) reported using over two tablets per session. Thirty-three percent reported having binged on ecstasy in the preceding six months and, amongst those who had reported bingeing on ecstasy, the longest binge session reported was a median of 72 hours (range=48−168 hours). This was stable from 2012.

[2] This is the first year that we have distinguished MDMA crystals as a form of ecstasy.

Table 5: Patterns of ecstasy use among the participants, 2009–2013

	2009 (n=100)	2010 (n=92)	2011 (n=76)	2012 (n=92)	**2013 (n=99)**
Median age first used ecstasy (years)	17	18	17	17	**18**
Median age first used ecstasy regularly (years)	19	19	19	18	**18**
Median days used ecstasy in the last six months (range)	16 (5−74)	12 (6−120)	12 (6−120)	13 (5−74)	**12 (1−78)**
Median tablets in typical session* (range)	2 (0.5−10)	2 (0.5−24)	2.5 (1−10)	2.5 (0.75−15)	**2 (1−8)**
Typically use >1 tablets (%)	81	81	83	92	**82**
Recently binged on ecstasy (%)**	38	32	40	43	**33**
Ever injected# ecstasy (%)	6	8	7	3	**3**
Use other drugs with ecstasy (%)	77	91	90	98	**91**
Use other drugs to come down from ecstasy (%)	60	54	67	53	**61**

Source: EDRS participant interviews

* 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

Refers to ecstasy 'pills' only; excludes powder, capsules and crystals

Note: Medians rounded to nearest whole number

4.2.2 Other drug use with ecstasy and when coming down from ecstasy

In regards to their last episode of ecstasy use, participants were asked to provide detail on the other substances they had used either 'with ecstasy', or when 'coming down' from ecstasy. The results are presented in Table 6.

The large majority of participants (91%) reported that on their last occasion of use, they had used other drugs in combination with ecstasy. This was a slight (albeit non-significant) decrease from 2012 (98%). The most commonly used drug in this context was alcohol (82%), followed by tobacco (47%), cannabis (45%) and methamphetamine (8%). The use of other drugs in combination with ecstasy was very low. In comparison to 2012, there were no significant changes in the types of drugs that were used in combination with ecstasy.

Just over three-fifths of the sample reported that, on their last episode of ecstasy use, they had used other drugs to come down from ecstasy. This was a slight, although non-significant, increase from 2012. Cannabis was the drug most commonly used by participants

to come down from ecstasy, followed by alcohol, tobacco and benzodiazepines. The use of other drugs to come down from ecstasy was uncommon.

Table 6: Proportion of participants reporting use of other drugs in combination with, and coming down from, ecstasy: by drug type, 2012 & 2013

Drug	Used in combination with ecstasy (% of participants)		Coming down from ecstasy (% of participants)	
	2012 (n=91)	**2013 (n=100)**	2012 (n=91)	**2013 (n=100)**
Methamphetamine powder	3	**4**	0	**0**
Methamphetamine base	6	**0**	1	**0**
Methamphetamine crystal	6	**4**	0	**0**
Pharmaceutical stimulants	1	**0**	0	**0**
Cocaine	7	**6**	0	**0**
LSD	1	**1**	0	**0**
MDA	0	**0**	0	**0**
Mushrooms	0	**-**	0	**-**
Ketamine	1	**0**	0	**0**
GHB	1	**0**	1	**0**
Amyl nitrate	1	**2**	0	**0**
Nitrous oxide	1	**2**	0	**0**
Cannabis	44	**45**	39	**50**
Alcohol	82	**82**	4	**8**
<5 standard drinks	12	**12**	2	**1**
>5 standard drinks	70	**70**	2	**7**
OTC codeine	0	**1**	2	**1**
Benzodiazepines	3	**3**	9	**8**
Tobacco	53	**47**	10	**8**
Energy drinks	6	**4**	0	**1**
Other	4	**2**	7	**4**
Any	98	**91**	53	**61**

Source: EDRS participant interviews

4.2.3 Route of administration

In the six months preceding the interview, 95% of participants had swallowed ecstasy pills (98% in 2012), 43% had snorted them (65% in 2012), 10% had shelved/shafted them (9% in 2012), 2% had smoked them (3% in 2012) and 1% had injected ecstasy pills (1% in 2012). Ecstasy capsules were predominantly swallowed (28% in 2012 versus 25% in 2013), although 8% had snorted them (16% in 2012). No participants had smoked, shelved/shafted

or injected ecstasy capsules in the preceding six months. Ecstasy powder was swallowed by 4% of the sample in the preceding six months (7% in 2012) and snorted by 12% (10% in 2012). No participants reported having smoked, shelved/shafted or injected ecstasy powder during that time. MDMA crystals were swallowed by 14% of the sample in the preceding six months, snorted by 13% and smoked by 1%. No participants reported having shelved/shafted or injected MDMA crystals during that time.

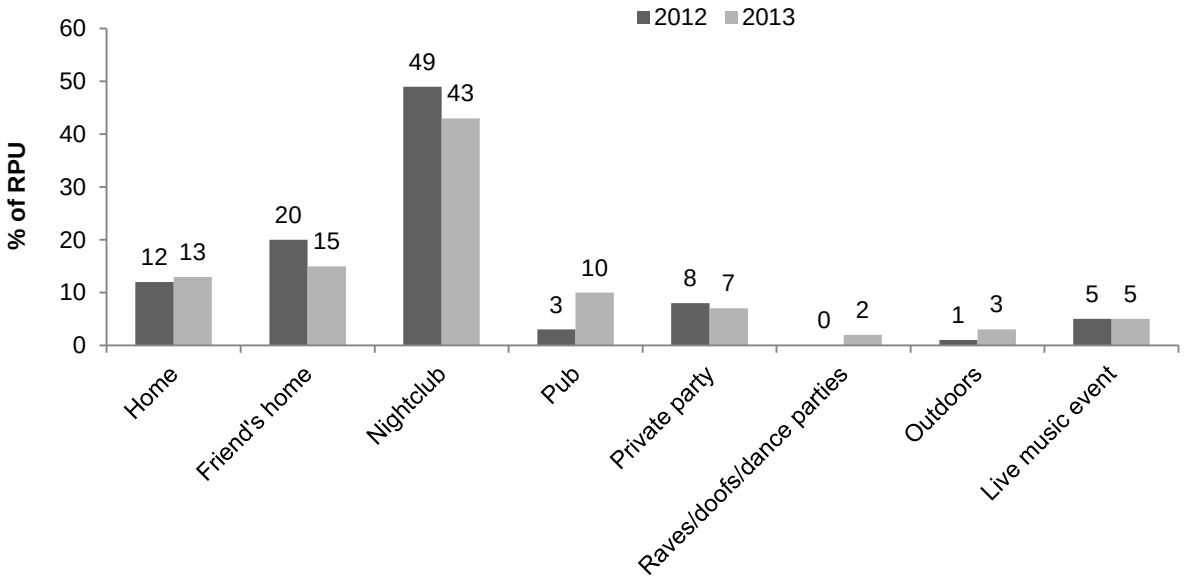
The vast majority of participants (91%) nominated oral ingestion as their main route of ecstasy administration, which remained stable from 2012 (94%). Six participants reported snorting as their main ROA, whilst one reported shelving/shafting as their main ROA. No participants reported smoking or injecting as their main ROA.

There were a number of changes in the reported routes of administration for lifetime use of ecstasy. In relation to snorting as a ROA, there was a significant reduction in the proportion of RPU who reported having snorted pills (86% in 2012 versus 64% in 2013; $p<0.001$; 95% CI: 0.10−0.33) and capsules (42% in 2012 versus 14% in 2012; $p<0.001$; 95% CI: 0.16−0.40) in their lifetime. Similarly, there were significant declines in the proportion of RPU who had swallowed ecstasy powder (23% in 2012 versus 11% in 2013; $p<0.05$; 95% CI: 0.01−0.23) and capsules (65% in 2012 versus 49% in 2013; $p<0.05$; 95% CI: 0.02−0.29) in their lifetime. In addition, there was a significant decline in the life prevalence of smoking ecstasy pills (15% in 2012 versus 2% in 2013; $p<0.01$; 95% CI: 0.05−0.22). Prevalence of lifetime use by other routes of administration (injecting or shelving) remains low.

As mentioned previously, this was the first year that participants were asked about the use of MDMA crystals. In regards to lifetime prevalence, about a quarter of the sample (24%) reported that they had swallowed it and a fifth (20%) reported that they had snorted MDMA crystals. The lifetime prevalence of smoking (3%) and injecting (2%) were low; no participants reported that they had shelved/shafted MDMA crystals in their lifetime.

Figure 2 presents the types of locations that participants ‘last used’ ecstasy. It should be noted 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’. The location of last ecstasy use by participants while intoxicated in the six months prior to interview was at a nightclub (43%), followed by home (28%) (own home or a friend’s home), with fewer numbers reporting a pub (10%), private party (7%) or live music event (5%).

Figure 2: Location of last ecstasy use by participants, 2012 & 2013



Source: EDRS participant interviews

4.2.5 Use of ecstasy in the general population

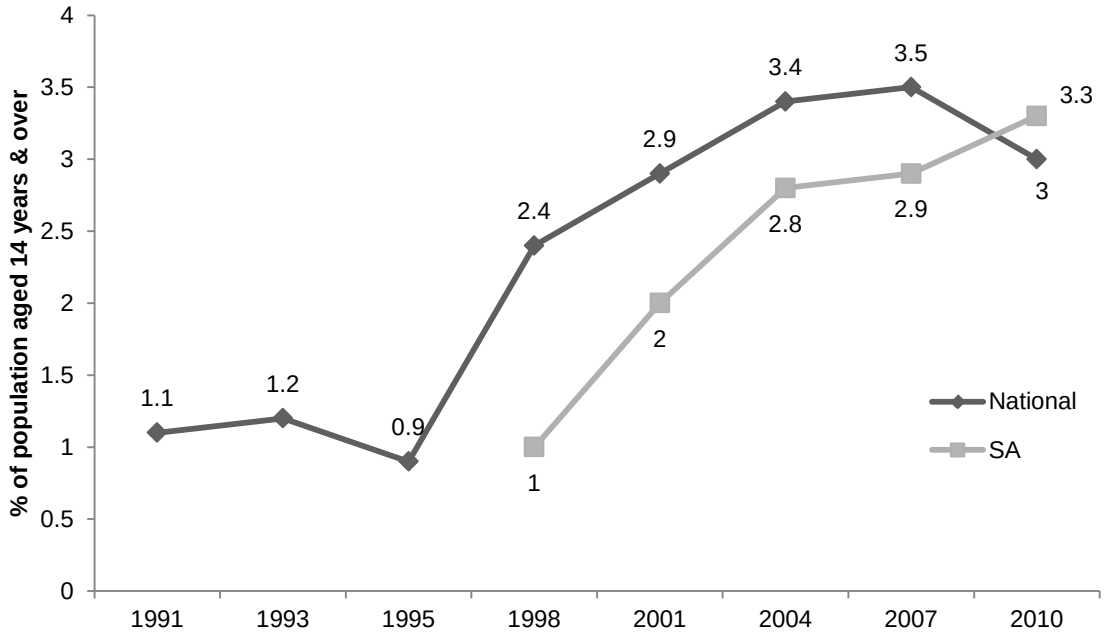
The Australian Institute of Health and Welfare (AIHW) has conducted household surveys over the last decade and collected data on the prevalence of use of various illicit drugs among the general population of Australia (Australian Institute of Health and Welfare, 2008).

Figure 3 shows the long-term trend in the prevalence of ecstasy use in Australia from 1991 to 2010 and in South Australia from 1998 to 2010. As can be seen, from 1995−2007 there was a rapid increase in the prevalence of ecstasy use in the previous 12 months. However, in 2010 (for the first time since 1995) there was a statistically significant decline in recent ecstasy use. This decrease was seen among males and those aged between 14−19 years (Australian Institute of Health and Welfare, 2011). Recent use of ecstasy remained most prevalent among 20 to 29 year olds, with one in ten (9.9%) having used ecstasy in the previous 12 months. In general, males were more likely to be recent users of ecstasy except among 12 to 17 year olds, where the rates were virtually equal (males 0.7% versus females 0.8%) (Australian Institute of Health and Welfare, 2011). Of those that had used ecstasy in the last 12 months, half (53.1%) reported using once or twice a year, almost a third (31.4%) reported using every few months, 12.2% reported monthly use and 3.3% reported daily or weekly use during that period (Australian Institute of Health and Welfare, 2011).

Figure 3 also shows that in 2010, for the first time, South Australia had a slightly higher prevalence of recent use of ecstasy than among the national population (3.3% versus 3.0%). The prevalence of recent use of ecstasy reported in 2010 (SA) was the highest recorded since data collection began for this survey.

In 2010, 10.3% of the Australian population aged 14 years and older had ever used ecstasy, an increase from 8.9% in 2007. Again, lifetime use of ecstasy was highest amongst those in the 20 to 29 year age group (24%) (Australian Institute of Health and Welfare, 2011).

Figure 3: Prevalence of recent* ecstasy use in Australia and South Australia, 1991–2010



Sources: National Campaign Against Drug Abuse Household Survey 1991, 1993; National Drug Strategy Household Survey 1995, 1998, 2001, 2004, 2007, 2010 (Australian Institute of Health and Welfare, 2005, 2008, 2011); Drug and Alcohol Services internal document 2008

* Used at least once in the last 12 months

Note: In the 2001 and earlier surveys, ecstasy was analysed as ecstasy/designer drugs, the term 'designer drugs' not being defined in the survey. The 2004 survey separated out ecstasy, ketamine and GHB and did not cover any other 'designer drugs'

Similar to the EDRS sample, the majority of recent users of ecstasy surveyed by the National Drug Strategy Household Survey (NDSHS) in 2010 reported that they had typically obtained ecstasy from a friend or acquaintance (68%), although there was a statistically significant increase in those obtaining ecstasy from a dealer (21.6% in 2007 versus 28.3% in 2010). The most common place to use ecstasy was at raves/dance parties (61.7%), with large proportions also using at public establishments (55%) and private parties (52.9%) (Australian Institute of Health and Welfare, 2011). This has remained relatively stable from 2007.

4.3 Methamphetamine use

Key Findings

- Lifetime and recent use of 'any' methamphetamine remained stable at 64% and 46% respectively.
- Lifetime use of base and ice declined significantly in 2013 (to 15% and 37% respectively), as did recent use of base methamphetamine (11% in 2013 versus 24% in 2012).
- Frequency of use, for all three forms of methamphetamine, remained relatively stable in 2013.
- Median age of first use remained stable for base and crystal methamphetamine, whilst increasing significantly for methamphetamine powder.
- Smoking emerged as the most common ROA for ice and base, whilst snorting was the main route of administration for methamphetamine powder.

4.3.1 Methamphetamine use among RPU

The majority (64%) of participants reported having used one or more forms of methamphetamine (speed, base and/or ice/crystal) at some stage during their lifetime, whilst just under half (46%) reported the use of these drugs within the six months preceding interview (both stable from 2012). Eight participants reported having ever injected methamphetamine. The median number of days used was 4 (range 1−120).

The distinction between three forms of methamphetamine continued in the 2013 survey. For a detailed commentary on the reasons for the differentiation into three distinct types, see White, Breen & Degenhardt (2003). The three forms of methamphetamine discussed are powder, base and ice/crystal methamphetamine.

4.3.2 Methamphetamine powder (speed)

Table 7 summarises the patterns of use of methamphetamine powder among the participants in 2013, with 2012 data for comparison. In 2013, participants reported having first used powder at a median of 19 years (range 16−30 years). Forty-seven percent of participants reported lifetime use, and 21% of participants reported using methamphetamine powder in the six months prior to interview (both stable from 2012). A closer analysis of frequency of use revealed that 86% (n=18) of methamphetamine powder users had used once a month or less. Two participants (10%) reported using between monthly and fortnightly, and one participant (5%) reported using on a weekly basis.

With respect to the 'average' and 'most' amounts used in a single session of use, the majority of participants provided information in terms of grams or points. The median amount of grams used in a session was 0.5 (range 0.1−1), and the median amount of points was 1 (range 0.5−3). The 'most' amount of powder methamphetamine used in a single session reported by participants was also a median of 0.5 grams (range 0.1−2) and the median number of points was 1.75 (range 0.5−10). Compared to 2012, the 'average' and 'most' 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 snorting (52%) as a route of administration in the six months prior to interview. Thirty-eight percent reported having smoked, 24% reported having swallowed and 5% reported having injected powder, in that same time period. There were no significant changes from 2012. The proportion of participants reporting bingeing on powder methamphetamine declined slightly in 2013 (4% versus 12% in 2012).

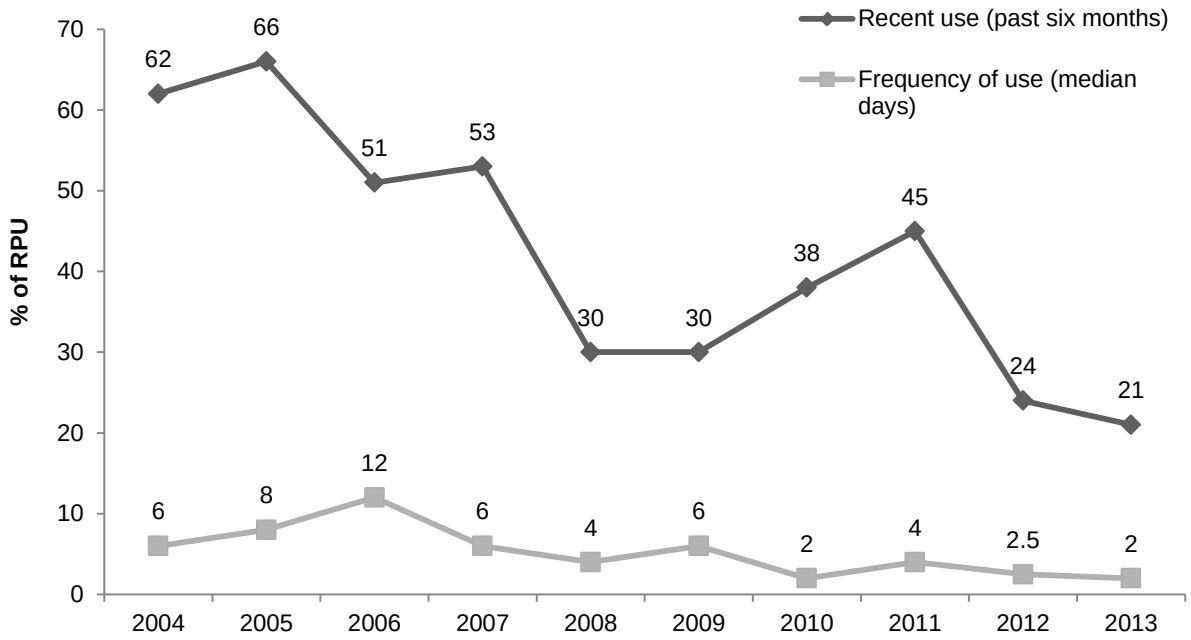
Table 7: Patterns of methamphetamine powder use and route of administration of methamphetamine powder among the participant sample, 2012 & 2013

	2012 (n=92)	**2013 (n=100)**
Age first used: median in years (range)	18 (14−23)	**19 (16−30)***
Ever used (lifetime) (%)	59	**47**
Used in last 6 months (%)	24	**21**
Days used in last 6 months[#]: median (range)	2.5 (1−90)	**2 (1−24)**
Average amount used in a single session[^]:		
Grams: median (range; n)	1 (0.2−2.0; 15)	**0.5 (0.1−1; 9)**
Points: median (range; n)	2 (1−2; 5)	**1 (0.5−3; 7)**
Lines: median (range; n)	-	**1 (no range; 4)**
Most amount used in a single session[^]:		
Grams: median (range; n)	1 (0.5−5.5; 16)	**0.5 (0.1−2; 10)**
Points: median (range; n)	1.5 (1−4; 4)	**1.75 (0.5−10; 6)**
Lines: median (range; n)	-	**1 (no range; 4)**
Routes of administration recent use[#] (%):	(n=22)	**(n=21)**
Swallowing	46	**24**
Snorting	55	**52**
Smoking	55	**38**
Injecting	14	**5**

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
* $p<0.05$

An analysis of trends over time (see Figure 4) revealed that between 2005 and 2008 there was a steady decline in the proportion of participants reporting recent use of powder methamphetamine. From 2009−11, it appeared that the use of methamphetamine powder may be on the rise again; however, this upward trend has reversed over the past couple of years with 21% of RPU reporting recent use of methamphetamine powder in 2013 (the lowest prevalence of recent methamphetamine powder use in the history of the SA EDRS). The median number of days used in the last six months has remained relatively stable at two days.

Figure 4: Methamphetamine powder – trends in recent use and median days used, 2004–2013



Source: EDRS participant interviews

4.3.3 Methamphetamine base

Table 8 summarises the patterns of use of methamphetamine base reported by participants in 2013. The median age of first use was 19 years (range 15-30). There were significant declines in both lifetime and recent use of methamphetamine base: 15% of the sample had used in their lifetime (versus 41% in 2012; $p<0.001$; 95% CI: 0.14−0.38), and 11% had used in the six months prior to interview (versus 24% in 2012; $p<0.05$; 95% CI: 0.02−0.24). Analysis of the frequency of use over the previous 6 months revealed that 73% (n=8) of base users had used once a month or less, 9% (n=1) reported using greater than monthly and up to once per fortnight, and one participant (9%) reported using weekly.

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 participants commenting on the use of grams. The 'average' amount of base methamphetamine used in a session reported by participants was a median of one point (range 0.5−2). The median 'most' amount of powder methamphetamine used in a session was also one point (range 0.5−4). Compared to 2012, there has been little change in the 'average' or 'most' amounts of points or grams consumed.

Participants who had used methamphetamine base in the last six months reported having used by smoking (64%), swallowing (27%), snorting (9%), and/or injecting (9%). Readers should note that smoking base methamphetamine overtook snorting in 2007 and remained the second most popular ROA until 2010. In 2011, smoking equalled swallowing as the main ROA for methamphetamine base, and in 2012−2013 smoking emerged as the most dominant ROA. The proportion of participants reporting bingeing on base methamphetamine in 2013 was 3%.

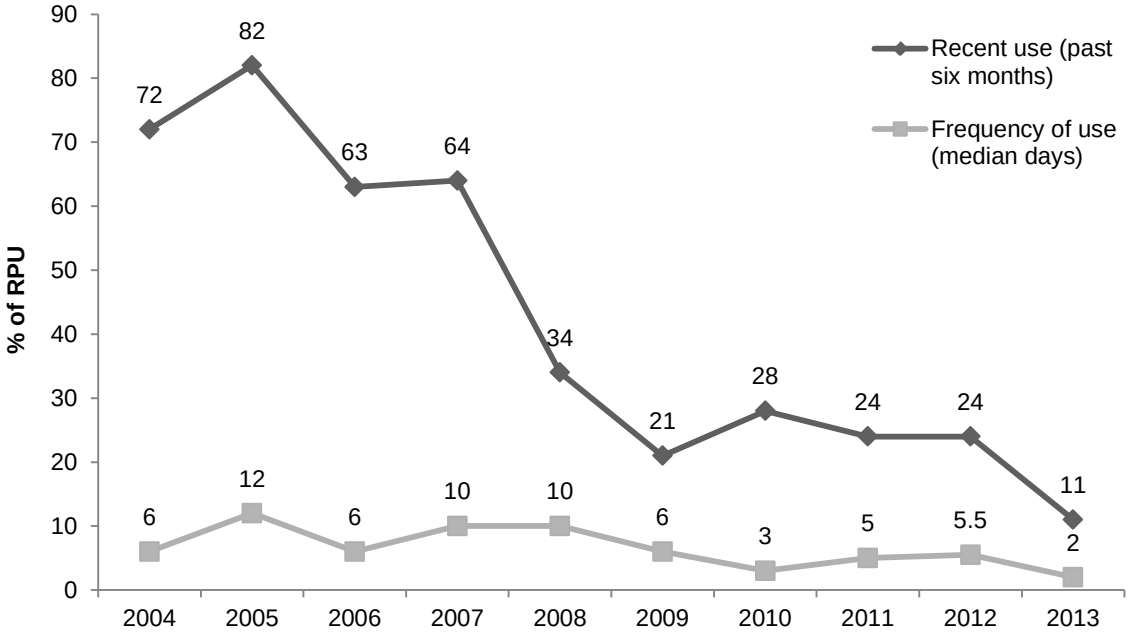
Table 8: Patterns of methamphetamine base use and route of administration of methamphetamine base among the participant sample, 2012 & 2013

	2012 (n=92)	**2013 (n=100)**
Age first used: median in years (range)	19 (14−42)	**19 (15−30)**
Ever used (lifetime) (%)	41	**15*** **
Used in last 6 months (%)	24	**11***
Days used in last 6 months[#]: median (range)	5.5 (1−120)	**2 (1−24)**
Average amount used in a single session[^]:		
Grams: median (range; n)	1 (n=1)	**0.5 (no range; 2)**
Points: median (range; n)	2 (0.5−14; 20)	**1 (0.5−2; 7)**
Most amount used in a single session[^]:		
Grams: median (range; n)	1 (0.5−2;5)	**1.5 (1−2; 2)**
Points: median (range; n)	2.2 (0.5−30; 16)	**1 (0.5−4.5; 7)**
Routes of administration recent use[#] (%):	(n=22)	**(n=11)**
Swallowing	64	**27**
Snorting	32	**9**
Smoking	73	**64**
Injecting	14	**9**

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
* $p<0.05$
*** $p<0.001$

An analysis of trends over time (see Figure 5) reveals that the recent use of base methamphetamine has fluctuated over time, with a steady decline being noted from 2005−09. From 2009−12, the prevalence of recent use plateaued, before a significant decline was observed in 2013. In 2013, the median number of days used in the last six months also declined (albeit not significantly) to two days.

Figure 5: Methamphetamine base – trends in recent use and median days used, 2004–2013



Source: EDRS participant interviews

4.3.4 Crystal methamphetamine

Table 9 presents the patterns of use of ice/crystal methamphetamine by participants in 2013, with 2012 data for comparison. In 2013, the median age of first use was 20 years (range 15−32 years). Thirty-seven percent of participants had used ice/crystal in their lifetime, which was a significant decline from 2012 (p<0.05; 95% CI: 0.02−0.29). Twenty-eight percent of participants reported using crystal methamphetamine in the preceding six months, for a median of four days (range 1−96).

Sixty-seven percent (n=18) of crystal users had used once a month or less, 15% (n=4) reported using greater than monthly and up to once per fortnight, and 19% (n=5) reported using weekly or more.

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 used in an 'average' single session was one (range 0.5−5) and the median 'most' amount used in a single session was two points (range 0.5−5). Compared to 2012, participant reports in 2013 of 'average' and 'most' amounts used in a session remained relatively stable.

Participants who had used ice/crystal methamphetamine in the previous six months reported smoking (93%), swallowing (19%), snorting (7%) and/or injecting (7%) as the route of administration in that time. Smoking continued to be the preferred ROA, and there was a significant decline in the proportion of participants who had swallowed crystal methamphetamine in the past six months (19% in 2013 versus 52% in 2012; p<0.05; 95% CI: 0.09−0.53). The proportion of participants reporting bingeing on crystal methamphetamine in 2013 was 17%.

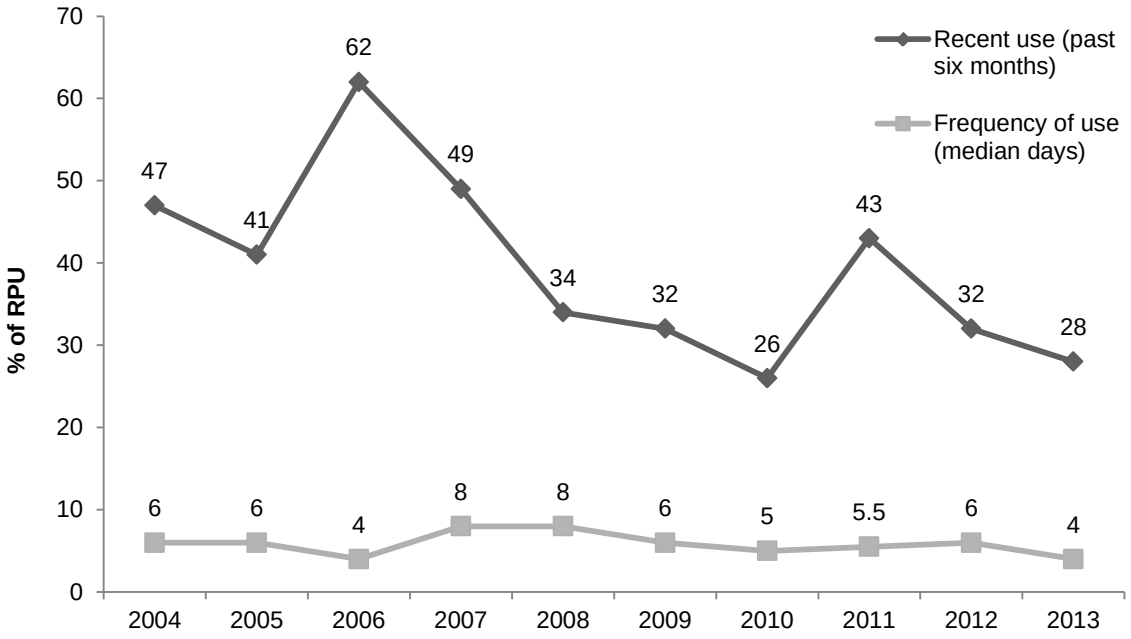
Table 9: Patterns of crystal methamphetamine use and route of administration of crystal methamphetamine among the participant sample, 2012 & 2013

	2012 (n=92)	**2013 (n=100)**
Age first used: median in years (range)	19 (14−42)	**20 (15−32)**
Ever used (lifetime) (%)	53	**37***
Used in last 6 months (%)	32	**28**
Days used in last 6 months[#]: median (range)	6 (1−48)	**4 (1−96)**
Average amount used in a single session[*]:		
Grams: median (range; n)	1 (0.5−1; 3)	**0.5 (0.5−1; 3)**
Points: median (range; n)	1 (0.25−7; 25)	**1 (0.5−5; 22)**
Most amount used in a single session^:		
Grams: median (range; n)	1 (0.5−1; 3)	**2 (0.5−3; 3)**
Points: median (range; n)	2.25 (0.25−30; 24)	**2 (0.5−5; 22)**
Routes of administration recent use[#] (%):	(n=29)	**(n=28)**
Swallowing	52	**19***
Snorting	14	**7**
Smoking	90	**93**
Injecting	10	**7**

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
* $p<0.05$

An analysis of trends over time (see Figure 6) reveals that, after a steady decline of recent use of crystal methamphetamine from 2006−2010, there was a significant increase in 2011 ($p<0.05$; 95% CI: -0.029 − -0.31) and a subsequent decrease (albeit non-significant) in 2012−2013. The median number of days used in the preceding six months has remained stable.

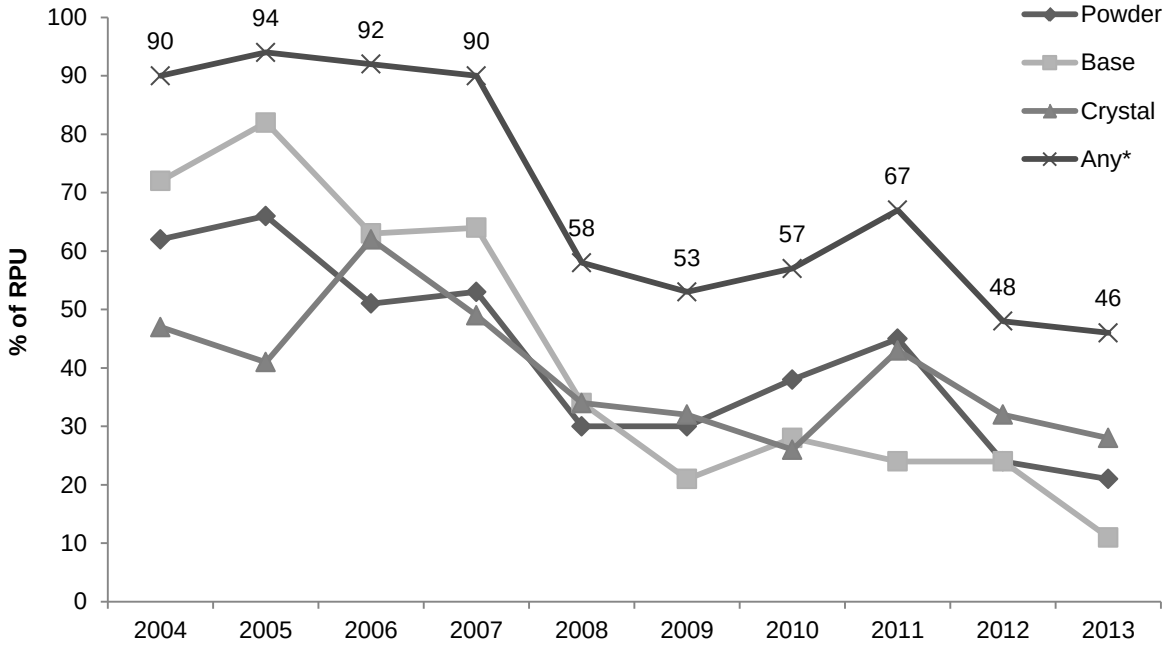
Figure 6: Methamphetamine crystal – trends in recent use and median days used, 2004–2013



Source: EDRS participant interviews

Figure 7 presents trends in recent methamphetamine (main forms) use from 2004 to 2013. In 2013, just under half of the sample reported recent use of 'any' methamphetamine (collapsed data), which was stable from 2012. With respect to the individual categories of methamphetamine, recent use of speed and crystal remained relatively stable in 2013, whilst there was a significant decline in recent use of base methamphetamine (p<0.05; 95% CI: 0.02−0.24).

Figure 7: Trends in recent use of the main forms of methamphetamine, 2004–2013



Source: EDRS participant interviews
* Collapsed powder, base and crystal categories

Information about where methamphetamine users spent the most time whilst they were intoxicated is presented in Table 10. The most common venue for all forms of methamphetamine was at a private home (own or friend's home).

Table 10: Venue where participants spent the most time whilst intoxicated on methamphetamine, 2013

	Where did spend the most time while intoxicated?		
	Powder (%) (n=14)	Base (%) (n=9)	Crystal (%) (n=25)
Home	**14**	**33**	**20**
Friend's home	**29**	**22**	**28**
Dealer's home	**0**	**0**	**0**
Nightclub	**14**	**11**	**32**
Private party	**14**	**11**	**4**
Pub	**7**	**0**	**0**
Rave	**0**	**0**	**0**
Live music event	**0**	**0**	**0**
Outdoors	**0**	**0**	**4**

Source: EDRS participant interviews

Key Expert Comments

- The majority of KE noted that their clientele didn't distinguish between speed, base and ice; rather, they just referred to methamphetamines more generally. However, it was generally agreed that crystal is the most popular form of methamphetamine being used, with powder and base considered 'second rate'.
- There were mixed reports regarding the prevalence of methamphetamine use: several KE reported that there was a continuing increase in methamphetamine use, whilst others reported that prevalence remained high, but stable.
- Several KE noted changes in the ROA of methamphetamine. More specifically, it was reported that there had been an increase in smoking as a ROA (which allows clients to distinguish themselves from 'junkies'), whilst another KE reported that people were snorting and drinking methamphetamine.
- It was noted by one KE that methamphetamine is starting to be viewed more as a recreational drug, in much the same way that ecstasy is. Inversely, there were concerns that after initiation of methamphetamine use, people are becoming regular users – and subsequently dependent – much more quickly than has been observed in the past.
- When asked what drug they considered to be most problematic at the moment, virtually all KE nominated methamphetamine. The reasons for this were varied and ranged from the fact that it was highly prevalent and addictive, to the physical, mental (e.g. aggression; psychosis) and social impacts (e.g. financial problems; relationship problems; criminal activity) it can have on the individual and their family/friends.

4.4 Cocaine use

Key Findings

- The median age of first use was 19 years.
- Recent use of cocaine remained relatively stable at 35%.
- Frequency of use remained low and stable.
- Snorting continued to be the main route of administration.

4.4.1 Cocaine use among RPU

The median age of first use of cocaine by participants was 19 years (range=15−35 years). In 2013, 58% of the sample reported having ever used cocaine, and 35% had used in the preceding six months (stable from 2012). The frequency of use also remained stable with a median of two days (range=1−48 days) in the six months prior to interview. The majority of recent cocaine users (80%) had used less than monthly (74% in 2012); 9% had used between monthly and fortnightly (21% in 2012); 9% reported using between fortnightly and weekly (6% in 2012); and one participant reported greater than weekly use. No participants reported daily use of cocaine.

The median amount of cocaine used in a typical or average session in the preceding six months was half of a gram (range=0.25−4 grams) and 2 lines (range=1−7 lines). The 'most' amount of cocaine used in a single session was a median of one gram (range=0.25−4) and 2.5 lines (range=1−12). The reported 'average' and 'most' amount of grams used in a session was similar to that reported in 2012.

The majority of cocaine users (n=33) reported recent use of cocaine by snorting (94%), followed by swallowing (9%), smoking (3%) and injecting (3%). No participants in 2013 reported recent use by shelving/shafting. Five participants reported that they had binged on cocaine in the preceding six months.

Table 11: Patterns of cocaine use and route of administration among the participant sample, 2012 & 2013

	2012 (n=92)	**2013 (n=100)**
Age first used: median in years (range)	20 (15−46)	**19 (15−35)**
Ever used (lifetime) (%)	66	**58**
Used in last 6 months (%)	37	**35**
Days used in last 6 months*: median (range)	2 (1−14)	**2 (1−48)**
Average amount used in a single session:**		
Grams: median (range; n)	0.5 (0.2−2; 26)	**0.5 (0.25−4; 21)**
Lines: median (range; n)	2 (1−8; 6)	**2 (1−7; 10)**

Source: EDRS interviews, 2012-2013

* 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

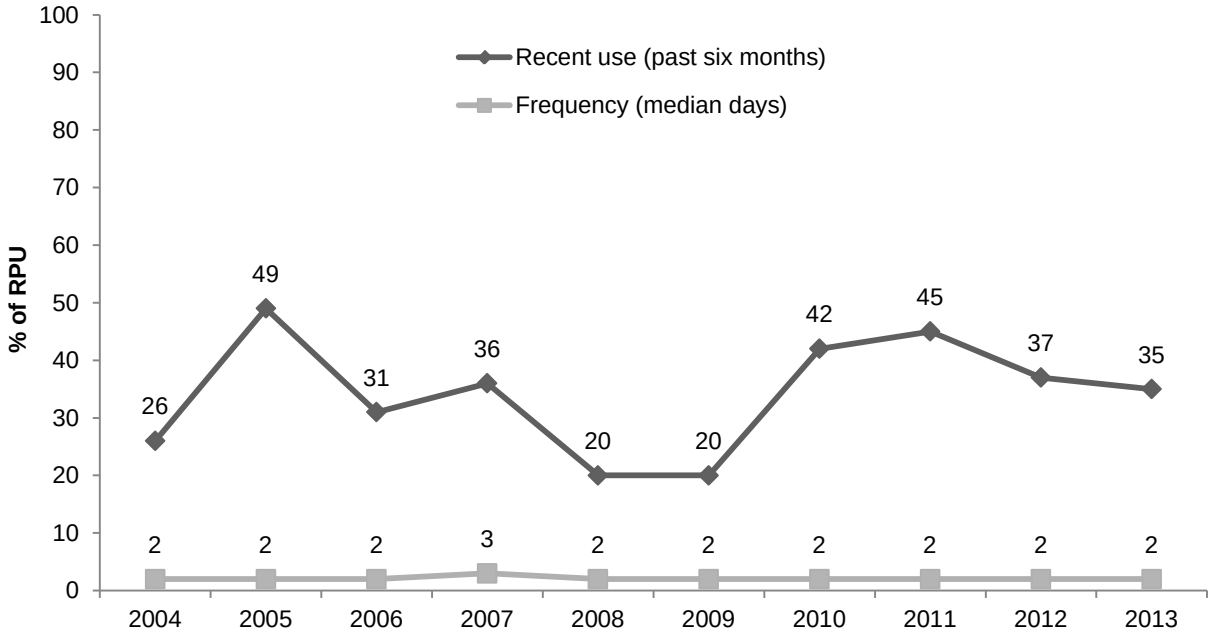
Table 11: Patterns of cocaine use and route of administration among the participant sample, 2012 & 2013 (continued)

	2012 (n=92)	**2013 (n=100)**
Most amount used in a single session[**]:		
Grams: median (range; n)	1 (0.25−4; 27)	**1 (0.25−4; 21)**
Lines: median (range; n)	2 (1−6; 5)	**2.5 (1−12; 9)**
Routes of administration recent use[*] (%):	(n=34)	**(n=35)**
Swallowed	21	**9**
Snorted	100	**94**
Smoked	0	**3**
Injected	0	**3**
Shelved/shafted	3	**0**

Source: EDRS interviews, 2012-2013
[*] 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

As can be seen in Figure 8, recent use of cocaine has fluctuated considerably over the past decade. More recently, cocaine use doubled from 20% in 2009 to 42% in 2010, and has remained relatively stable from 2010−13. The frequency of use has remained low and stable across the years.

Figure 8: Cocaine – trends in recent use and median days used, 2004–2013



Source: EDRS participant interviews

Twenty-four participants commented on the location of last use (i.e. where they spent the most time whilst intoxicated). The most common venues reported were: nightclub (n=8); friend's home (n=6); pub/bar (n=5); and private party (n=2).

Key Expert Comments

- The majority of KE reported that they had had little contact with cocaine users. It was agreed that although there were 'pockets' of cocaine use in SA, its overall prevalence remained low and stable. However, one KE did report that there had been an increase in "the number of cases containing cocaine encountered in the laboratory".

4.5 LSD use

Key Findings

- The median age of first use was 18, stable from 2012.
- There was a slight (non-significant) increase in recent LSD use. Frequency remained stable in 2013, with the majority of participants using less than monthly.
- The amount used in a typical and heavy session remained relatively stable.
- All participants reported swallowing LSD, with no other routes of administration reported.

4.5.1 LSD use among RPU

The median age of first LSD use was 18 years (range=13−31 years). Fifty-one percent of participants reported having used LSD in their lifetime and 25% had used it in the last six months. Recent users reported having used LSD on a median of two days (range=1−25 days) in the six months prior to interview. The majority (84%) of recent LSD users had used less than monthly (77% in 2012); 12% used between monthly and fortnightly (12% in 2012); and one participant reported weekly use.

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 (range=1−5) used on 'average' and two tabs/trips (range=1−5) used in the heaviest recent session. All LSD users reported recent use by swallowing (100%, n=25), with no other ROA reported. Three participants reported bingeing on LSD in the preceding six months.

Table 12: Patterns of LSD use among the participant sample, 2012 & 2013

	2012 (n=91)	**2013 (n=100)**
Age first used: median in years (range)	18 (13−27)	**18 (13−31)**
Ever used (lifetime) (%)	52	**51**
Used in last 6 months (%)	19	**25**
Days used in last 6 months:[*] median (range)	2 (1−15; 17)	**2 (1−25; 25)**
Average amount used in a single session:[**] Tabs: median (range; n)	1 (0.5−4; 16)	**1 (1−5; 25)**
Most amount used in a single session:[**] Tabs: median (range; n)	1 (1−4; 16)	**2 (1−5; 25)**

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

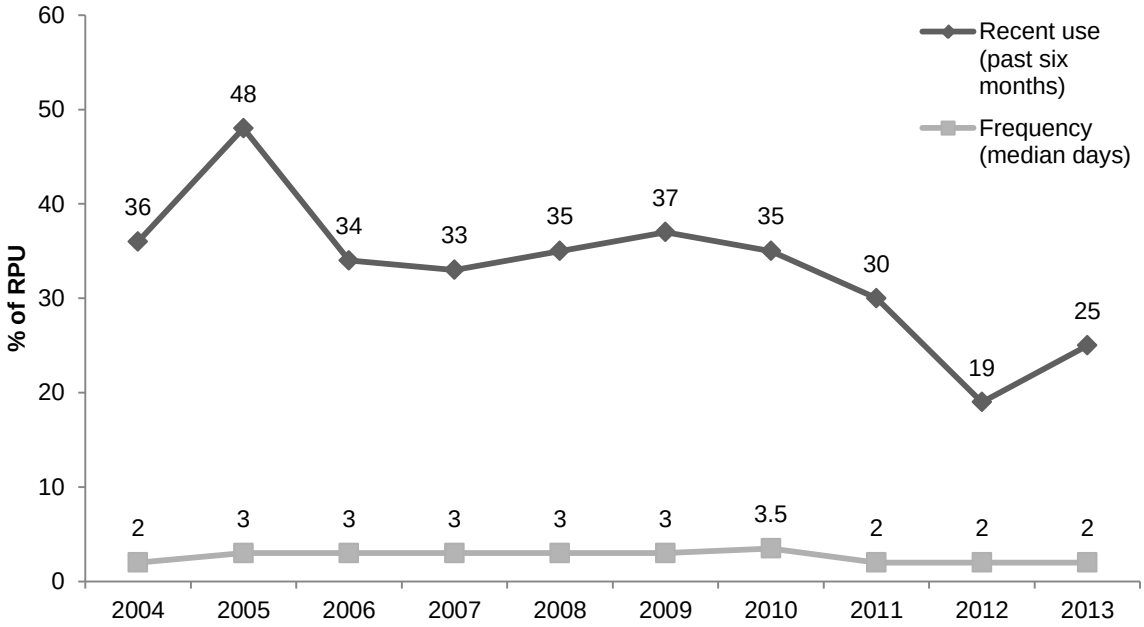
Table 12: Patterns of LSD use among the participant sample, 2012 & 2013 (continued)

	2012 (n=91)	**2013 (n=100)**
Routes of Administration* (%):	(n=17)	**(n=25)**
Swallowed	94	**100**
Snorted	6	**0**
Smoked	0	**0**
Shelved/Shafted	6	**0**
Injected	0	**0**

Source: EDRS participant interviews
* Of those who reported use in the last six months

An analysis of trends over time (see Figure 9) reveals that from 2006−11, there was relative stability in the proportion of participants who reported recent use of LSD. The prevalence of recent LSD use declined sharply in 2012 (albeit not significantly), before rebounding in 2013. There has been little change in the frequency of use, with this parameter remaining consistently stable and low across the years.

Figure 9: LSD – trends in recent use and median days used, 2004–2013



Source: EDRS participant interviews

Of those who were able to comment (n=19), the majority reported that whilst intoxicated they spent the majority of their time at a private home (n=9) or outdoors (n=6).

Key Expert Comments

- Virtually all of the KE reported that the prevalence of LSD was very low and stable. Amongst clients who had used LSD, frequency was reported to be low (i.e. 1−2 times a year), and one KE noted that clients who use LSD generally report very positive experiences.
- It was reported by one KE that 'Death on Impact' (DOI) was being sold as LSD.

4.6 Cannabis use

Key Findings

- Median age of first use was stable in 2013, with the majority of participants having first used cannabis at 15 years of age.
- Prevalence of cannabis use remained exceptionally high, with 94% of RPU reporting lifetime use and 85% reporting use in the preceding six months.
- Frequency of use remained stable in 2013, at a median of 48 days (approximately twice a week).
- On the last occasion of use, cannabis users reported using a median of 3.5 cones or one joint. This was relatively stable from 2012.
- The majority of cannabis users reported using in their own home, or at a friend's home.

To ensure more detailed information was collected on the different forms of cannabis, Section 5.5 was separated into 'hydro' (hydroponically grown) and 'bush' (grown outdoors) cannabis (Breen et al., 2004; Stafford et al., 2005). However, the use patterns reported below refer to any form of cannabis.

It should also be noted that the use of hashish (hash) and hash oil was rarely reported by RPU participants (n<10); therefore, further details are not reported.

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 SA. 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 and the plant will be confiscated and destroyed. More than one cannabis plant grown in the ground (bush cannabis), results in the accused being arrested and required to attend court. There are varying penalties for possession of cannabis offences and these penalties are dependent 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.

4.6.1 Cannabis use among RPU

In 2013, the median age at which participants first used cannabis was 15 years (range=11−20 years), stable from 2012. Further examination of the age at which participants first used cannabis reveals that 23% reported use by the age of 14 years, 83% by 16 years, and 97% by 18 years. Ninety-four percent of the sample reported having used cannabis in their lifetime, and 85% had used in the preceding six months.

The frequency of cannabis use reported by participants in 2013 was a median 48 days (range=2−180 days); this was stable from 2012. Amongst recent cannabis users, 18% (n=15) had used once a month or less, 6% (n=5) reported using between monthly and

fortnightly, 14% (n=12) reported using between fortnightly and weekly, 39% (n=33) reported using greater than weekly and 24% (n=20) reported daily use.

Recent cannabis users were asked how much cannabis they had smoked on the last day of use, as measured by the number of cones or joints used on that occasion. Cannabis had been predominantly smoked in cones (62%) as opposed to joints (32%). Among those who had smoked in cones, the median number used on the last day was 3.5 'cones' (range=0.5−30 cones), while the median number of joints smoked was 1 (range=0.5−5 joints). Daily users of cannabis had smoked a median of five cones (range=1−30 cones) or 3 joints (range=1−5) on the last day of use.

All of those who had used cannabis reported recent use by smoking (n=85), and 35% (n=30) also reported use by swallowing. Twenty-two percent of recent cannabis users reported bingeing on cannabis in the preceding six months.

Table 13: Patterns of hydroponic and bush cannabis use among the participant sample, 2012 & 2013

	2012 (n=92)	**2013 (n=100)**
Age first used: median in years (range)	15 (11−20)	**15 (11−20)**
Ever used (lifetime) (%)	98	**94**
Used in last 6 months (%)	88	**85**
Days used in last 6 months: median (range)	48 (1−180)	**48 (2−180)**
Smoked*	100	**100**
Swallowed*	37	**35**
Cones used last time (range)*	3 (1−30)	**3.5 (0.5−30)**
Joints used last time (range)*	2 (1−12)	**1 (0.5−5)**

Source: EDRS participant interviews
* Of those who reported use in the last six months

Among the participants who commented on hydro, the majority reported spending most of their time (whilst intoxicated) in their own home (63%) followed by a friend's home (23%). This was a similar pattern for those who commented on bush cannabis: whilst intoxicated, participants spent most of their time at their own home (54%) or at a friend's home (26%).

Key Expert Comments

- There was a general consensus among KE that cannabis remains popular and is still widely used among their clientele (and amongst the general population).
- One KE felt that there had been a decline in the negative perceptions surrounding cannabis use, particularly amongst the younger generation. More specifically, it was reported that young people recognise the risks of using cannabis if there is a family history of schizophrenia, but otherwise think there is "nothing to worry about" and consider it to be much safer than other illicit drugs.
- Interestingly, when asked what drug they considered to be most problematic at the moment, no KE nominated cannabis.

4.7 Other drug use

Key Findings

- There were no significant changes in the use of ketamine in 2013, whilst lifetime use of GHB and MDA both declined significantly.
- Virtually the entire sample (97%) reported consuming alcohol in the six months preceding interview, and they had done so a median of 48 days. Among these participants, four percent reported drinking on a daily basis.
- Lifetime use of tobacco declined significantly in 2013, whilst recent use remained stable at 75%.
- Lifetime and recent use of nitrous oxide and amyl nitrate remained stable in 2013.
- Lifetime and recent use of unprescribed medications (benzodiazepines, antidepressants, pharmaceutical stimulants, OTC codeine and OTC stimulants) also remained stable in 2013.

4.7.1 Ketamine

The median age of first ketamine use was 20 years (range=16−34 years). Over a quarter of the sample reported lifetime use of ketamine (28%) and 6% reported use in the six months preceding interview (both stable from 2012). The frequency of use remained low at a median of one day (range=1−2 days) in the six months prior to interview.

Ketamine use was commonly reported in 'bumps'. The median amount of ketamine used in an average session was 1 bump (no range); recent ketamine users also reported using a median of one bump (no range) during the heaviest recent use episode. Ketamine use was also quantified in grams (n=1), lines (n=1) and pills/tablets (n=1).

Recent use of ketamine was reported to be either snorted (50%, n= 3) or swallowed (50%, n=3). No participants reported binging on ketamine within the past six months.

4.7.2 GHB

The median age at which participants reported first using gamma-hydroxybutyrate (GHB) was 20 years (range=16−40 years). There was a significant decline in lifetime use of GHB (12% in 2013 versus 25% in 2012; $p<0.05$; 95% CI: 0.02−0.24), whilst recent use remained stable at 5% of the sample. Frequency of use was low, at a median of one day within the preceding six months (range=1−3).

GHB use was typically quantified in millilitres (ml). The median amount used in a typical or average episode in the preceding six months was 4.5 ml (range=2−8 ml), whilst the 'most' amount used in a session was 6.5 ml (range=2−8 ml).

All GHB users (n=5) reported swallowing GHB in the preceding six months, with no other routes of administration reported. No participants reported including GHB in a binge session in 2013.

4.7.3 MDA

In 2013, the median age at which participants reported first use of 3,4-methylenedioxyamphetamine (MDA) was 18 years (range=13−35 years). There was a significant decline in the lifetime use of MDA (9% in 2013 versus 33% in 2012; $p<0.001$; 95% CI: 0.012−0.35), whilst recent use remained stable at 3% of the sample. Frequency of use was low, with participants reporting using on a median of 2 days (range=1−5).

A median of 2.5 capsules (range=2−3 capsules) were used in a typical session, and a median of three capsules (range=2−4) were used in the heaviest session of use over the preceding six months. Swallowing was the most popular route of administration (n=3), and one participant reported that they had snorted MDA in the preceding six months. No participants reported including MDA in a binge session.

4.7.4 Alcohol

In 2013, the median age at which participants reported first using alcohol was 15 years (range=8−19 years). The entire sample reported lifetime use of alcohol, and recent use remained high at 97%. Among those who had used alcohol, use had occurred on a median of 48 days (approximately twice a week) in the past six months (range=1−180); this remained stable from 2012. Fifty-nine percent of recent alcohol users reported using alcohol more than once per week (54% in 2012), and four percent reported drinking on a daily basis (7% in 2012).

Twenty-eight percent of participants reported including alcohol in a binge session in 2013, which was significantly lower than the proportion in 2012 (47%; $p<0.01$; 95% CI: 0.06−0.32); however, the proportion of participants who reported typically using alcohol (>5 standard drinks) with ecstasy was stable (70% in 2012 and 2013). The proportion of participants who reported using alcohol to come down from ecstasy remained stable (8% in 2013 versus 4% in 2012).

In 2013, the Alcohol Use Disorders Identification Test (AUDIT) was administered to participants. Detailed information regarding the AUDIT in the 2013 EDRS can be found in Section 7.4: The Alcohol Use Disorders Identification Test (AUDIT).

4.7.5 Tobacco

The median reported age of first use of tobacco was stable from 2012, at 15 years (range=8−20 years). There was a significant decline in the lifetime use of tobacco (96% in 2012 versus 84% in 2013; $p<0.05$; 95% CI: 0.03−0.02), whilst recent use remained stable at 75%. The frequency of participants' tobacco use has remained at peak levels across the eleven years of the survey at a median of 180 days in the previous six months (equivalent to daily use), with 64% of recent users reporting daily use. This greatly exceeds the 2010 daily smoking prevalence rate in the general South Australian population aged 14 years and over, of 15.1% (Australian Institute of Health & Welfare, 2011).

4.7.6 Benzodiazepines

Since 2007, participants have been asked to distinguish between their use of licit and illicit benzodiazepines.

The median age of first use of illicit benzodiazepines was 19 years (range=15−42 years), which is stable from 2012. In 2013, 51% of RPU reported lifetime use of illicit benzodiazepines, and 25% had used these substances within the preceding six months. Recent users of illicit benzodiazepines reported using on a median of 3.5 days (range=1−72).

4.7.7 Antidepressants

Since 2007, participants have been asked to distinguish between their use of licit and illicit antidepressants.

The median age of first use of illicit antidepressants was 23 years (range=18−28 years). Only two participants reported lifetime use of illicit antidepressants, and there were no participants who reported using illicit antidepressants in the preceding six months.

4.7.8 Inhalants use

4.7.8.1 Nitrous oxide

The median age of first use of nitrous oxide was 18.5 years (range=14−38 years). In 2013, 48% of participants reported that they had ever used nitrous oxide, and 17% reported recent use (both stable from 2012). Recent nitrous oxide users reported using on a median of two days (range=1−15), and reported using a median of six bulbs in a typical session (range 2-150 bulbs), and a median of ten bulbs (range=2−150) in the heaviest session of use over the preceding six months. One participant reported having binged on nitrous oxide, two participants reported having typically used nitrous oxide 'with' ecstasy and no participants reported using nitrous oxide during an ecstasy 'comedown' in the last six months.

4.7.8.2 Amyl nitrate

The median age of first use of amyl nitrate was 19 years (range=14−24 years). Almost one-third of the sample (30%) reported lifetime use of amyl nitrate and 14% had used in the preceding six months. Recent users of amyl nitrate reported using for a median of four days (range=1−15). One participant reported having binged on amyl nitrate, two participants reported typically using amyl nitrate 'with' ecstasy, and no participants reported use of amyl nitrate during an ecstasy 'comedown' in the last six months. This remained unchanged from 2012.

4.7.9 Mushrooms

Participants were asked about their use of 'magic mushrooms' (hallucinogenic mushrooms). The median reported age of first use of 'magic mushrooms' was 18 years (range=13−30 years) and 54% of participants reported having used them in their lifetime. Nineteen percent of participants reported recent use of 'magic mushrooms', and had used on a median of one day (range=1−5).

4.7.10 Heroin

The median age of first heroin use was 18 years (range=14−35 years), with 9% of the 2013 RPU sample reporting that they had ever used heroin. Consistent with the low levels of recent use among the RPU cohorts in previous years, only three participants had used heroin during the six months preceding the interview and they used heroin on a median of 10 days (range=1−18). Injecting was the most common ROA (n=2), followed by smoking (n=1).

4.7.11 Other opioids

The median age of first use of illicit other opiates was 20 years (range=16−27 years). Twenty- seven percent of the sample reported lifetime use and 7% had used other illicit opiates in the six months prior to interview. The median days of illicit opiate use was three days (range=1−24 days). The main ROA by those who had recently used was swallowing (86%, n=6), followed by snorting (n=4) and injecting (n=1). No participants reported smoking or shelving/shafting.

4.7.12 OST medications

4.7.12.1 Methadone

The median age of first use of methadone was 20.5 years (range=17−29 years). In 2013, 6% of participants reported that they had ever used methadone, although no participants reported use of this drug within the preceding six months.

4.7.12.2 Buprenorphine

The median age of first use of buprenorphine was 29 years (range=28−30 years). Two participants reported lifetime use of buprenorphine and none had used in the preceding six months.

4.7.13 Pharmaceutical stimulants

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

In 2013, the median reported age of first use of illicit pharmaceutical stimulants was 19 years (range=15−25 years). Forty percent of the sample reported use of illicit pharmaceutical stimulants in their lifetime, and 23% reported use within the preceding six months (both stable from 2012). Frequency also remained relatively stable at a median of three days (range=1−180). The ROA of recent use was mainly swallowing (n=17), followed by snorting (n=10).

4.7.14 Over the counter (OTC) codeine

The median age at which participants reported first using OTC codeine was 19 years (range=14−30 years). Thirty-one percent of participants reported ever using OTC codeine (versus 23% in 2012) and 21% reported use in the preceding six months (versus 14% in 2012). Frequency also remained relatively stable at a median of four days (range=1−48). Swallowing was reported by all participants, with one participant reporting that they had snorted OTC codeine in the preceding six months.

4.7.15 Over the counter (OTC) stimulants

The median age at which participants reported first using OTC stimulants was 21.5 years (range=13−25 years), stable from 2012. Four percent of participants reported ever using OTC stimulants (versus 15% in 2012; $p<0.005$; 95% CI: 0.03–0.20), and only one participant reported use of this substance within the preceding six months.

4.7.16 Antipsychotics

The median age at which participants reported first using illicit antipsychotics was 19.5 years (range=17−20 years). Four percent of participants reported ever using illicit antipsychotics, and three participants reported use of this substance on a median of three days (range=3−10) within the preceding six months.

4.7.17 Steroid use

No participants reported life time or past six month use of steroids in 2013.

Key Expert Comments

- The majority of KE noted that they had seen very little ketamine or GHB within the preceding twelve months. There was one KE, however, who reported an increase in GHB-related ambulance call-outs and another who reported several GHB seizures over the preceding twelve months (the largest of which was 85 litres – an industrial seize laboratory). GHB was said to cost $4-5 for 1ml.

- Alcohol use was generally reported as stable, with no real changes over the preceding twelve months. However, one KE did report that there had been an increase in ambulance call-outs to young alcohol affected persons (aged 12−25), as well as a sharp spike in call-outs to house parties.

- One KE noted that there had been a shift towards wine, rather than other forms of alcohol. This was largely thought to be due to the price of wine, with a 5 litre cask costing $10-12.

- Three KE nominated alcohol as the drug they considered most problematic at the time of interview, with alcohol-related violence raised as a particular concern. The social acceptability of alcohol consumption was also considered problematic, with one KE noting that individuals who don't drink alcohol are often given a hard time by their peers.

- It was reported by one KE that there had been an increase in steroids, whilst another reported that the use of alprazolam and OTC codeine formulations remained problematic.

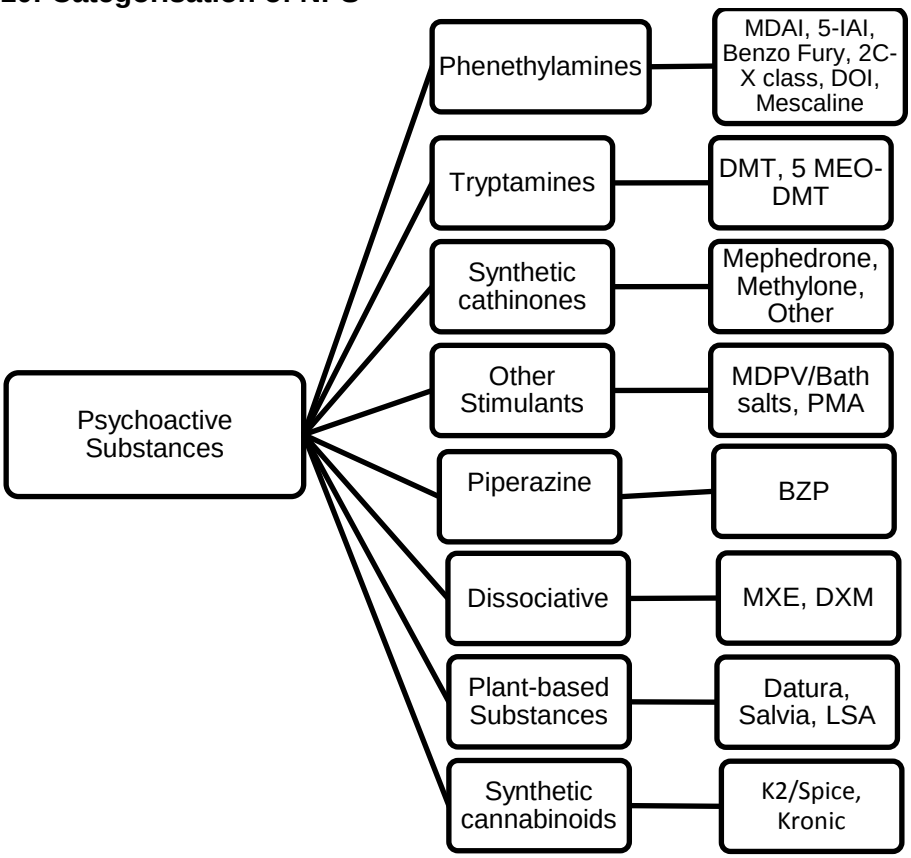
4.8 New psychoactive substances (NPS) use

Key Findings

- Two-fifths of RPU reported using 'any' NPS in the six months preceding interview.
- The most commonly reported NPS recently used were 2CB, DMT, herbal highs, unknown capsules and 2CI.
- In 2013, there were significant decreases in the lifetime use of unknown capsules and herbal highs. In regards to recent use, there was a significant decline in LSA use and an inverse increase in the use of 2CI.

From 2010 onward, the EDRS has attempted to systematically investigate a group of new or emerging drugs known as 'psychoactive substances' (also known as research chemicals, analogues, legal highs, herbal highs, party pills). These drugs can be classified as outlined in Figure 10.

Figure 10: Categorisation of NPS



Source: See UNODC, World Drug Report 2013 (United Nations publication, Sales No. E.13.XI.6 page 49)

Table 14 provides a very brief introduction to these drugs to provide a rough guide for interpreting trends data. Interested readers are directed toward online sources such as Erowid (http://www.erowid.org/splash.php) and Drugscope (http://www.drugscope.org.uk/) for more comprehensive information on these drugs.

Table 14: New Psychoactive Substances

Street name	Chemical name	Information on drug	Information on use and effects
Phenethylamines			
2CI	2,5-dimethoxy-4-iodophenethylamine	A psychedelic drug with stimulant effects	Recent reports suggest that 2CI is slightly more potent than the closely related 2CB.
2CB	4-bromo-2,5-dimethoxyphenethylamine	A psychedelic drug with stimulant effects	2CB is sold as a white powder sometimes pressed in tablets or gel caps. Commonly taken orally but can also be snorted.
2CE	2,5-dimethoxy-4-ethylphenethyl-amine	A psychedelic drug with stimulant effects	Commonly taken orally and highly dose-sensitive.
DOI (death on impact)	2,5-dimethoxy-4-iodoamphetamine	A psychedelic phenethylamine	Requires only very small doses to produce full effects. Has been found on blotting paper and may be sold as LSD[3].
Mescaline	3,4,5-trimethoxyphene-thylamine	A hallucinogenic alkaloid	First isolated in 1896 from the peyote cactus of northern Mexico.
Tryptamines			
DMT	Dimethyltryptamine	A hallucinogenic drug in the tryptamine family	Similar to LSD though its effects are said to be more powerful. Pure DMT is usually found in crystal form but has been reportedly sold in powder form[4].
5-MeO-DMT	5-methoxy-N,N-dimethyltryptamine	A naturally occurring psychedelic tryptamine present in numerous plants and in the venom of the *Bufo alvarius* toad	5-MeO-DMT is comparable in effects to DMT, however, it is substantially more potent. 5-MeO-DMT is mostly seen in crystalline form[5] but has been as reportedly sold in powder form.
Synthetic cathinones			
Mephedrone	4-methyl-methcathin-one	A stimulant which is closely chemically related to amphetamines	Reportedly produces a similar experience to drugs like amphetamines, ecstasy or cocaine. Mephedrone is a white, off-white or yellowish powder although it may also appear in pill or capsule form.
Methylone	3,4-methylenedioxy-*N*-methylcathinone	An entactogen and stimulant of the phenethylamine, amphetamine, and cathinone classes	Effects are primarily psychostimulant in nature.
Other stimulants			
PMA	Paramethoxyamphetamine ; 4-methoxy-amphetamine	A synthetic hallucinogen that has stimulant effects	Ingesting a dose of <50mg (usually one pill or capsule) without other drugs or alcohol induces symptoms reminiscent of MDMA, although PMA is more toxic than MDMA. Doses >50mg are considered potentially lethal (due to the risk of overheating).

[3] Erowid: http://www.erowid.org/chemicals/doi/doi.shtml
[4] Drugscope: http://www.drugscope.org.uk/resources/drugsearch/drugsearchpages/dmt
[5] Erowid: http://www.erowid.org/chemicals/5meo_dmt/5meo_dmt.shtml

Table 14: New Psychoactive Substances (continued)

Street name	Chemical name	Information on drug	Information on use and effects
Other stimulants (continued)			
Ivory wave/MDPV	Methylenedioxypyrovalerone (3,4-methylenedioxy)	A cathinone derivative	More potent than other cathinones. Lidocaine (a common local anesthetic) is frequently used as a cutting agent, to give users the numbing sensation in the mouth or nose which is associated with drugs of high purity (e.g. high-purity cocaine)[6].
Piperazines			
BZP	Benzylpiperazine	A piperazine; a CNS stimulant	Gained popularity in some countries in the early 2000's as a legal alternative to amphetamines and ecstasy. One of the more common piperazines, providing stimulant effects which people describe as noticeably different than those of amphetamines. Not particularly popular as many people find that it has more unpleasant side effects than amphetamines.
Dissociative			
DXM	Dextromethorphan	A semisynthetic opiate derivative which is legally available over the counter in the US	Commonly found in cough suppressants, especially those with 'DM' or 'Tuss' in their names. It is a dissociative drug that is almost always used orally, although pure DXM powder is occasionally snorted.
Naturally Occurring Substances			
Datura	Commonly *Datura inoxia* and *Datura strammonium.* Contains Atropine and Scopolamine. Also known as Angel's Trumpet	Atropine is a potent anticholinergic agent. Scopolamine is a CNS depressant and has antimuscarinic properties	The plant's effects make the user feel drowsy, drunk-like and detached from things around them. They can also bring on hallucinations. Doses are difficult to judge and can cause unconsciousness and death[7].
Salvia	*Salvia divinorum* (contains Salvinorin A)	Salvia is derived from the American plant *Salvia divinorum*, a member of the mint family	At low doses (200-500mcg) salvia produces profound hallucinations that last from 30 minutes to an hour or so. In higher doses the hallucinations last longer and are more intense[8].
LSA	*d*-lysergic acid amide	A naturally occurring psychedelic found in plants such as Morning Glory and Hawaiian Baby Woodrose seeds	LSA has some similarities in effect to LSD, but is generally considered much less stimulating and can be sedating in larger doses.
Synthetic cannabis			
K2/Spice	Synthetic cannabinoid	Usually sold as loose, generic plant material with a mix of chemicals on it (containing synthetic cannabinoids)	A psychoactive herbal and chemical product that, when consumed, mimics the effects of cannabis.

[6] Drugscope: http://www.drugscope.org.uk/Media/Press+office/pressreleases/ivory_wave_MDPV
[7] Drugscope: http://www.drugscope.org.uk/resources/drugsearch/drugsearchpages/datura
[8] Drugscope: http://www.drugscope.org.uk/resources/drugsearch/drugsearchpages/salvia

Amongst the 2013 SA EDRS sample, 40% reported having used an NPS in the six months preceding interview (including synthetic cannabinoids). Excluding the use of synthetic cannabinoids, it was found that 37% of the sample had recently used some form of NPS. This was stable from 2012.

The most common psychoactive substances ever used among Adelaide RPU were DMT (28%), 2CB (27%), herbal highs (21%), unknown capsules (12%), kronic (12%) and LSA (12%). The proportions of participants who had used psychoactive substances in the last six months were considerably lower: those most commonly used were 2CB (14%), DMT (14%), herbal highs (10%), unknown capsules (8%) and 2CI (6%) (see Table 15).

Table 15 presents the proportion of RPU reporting lifetime and recent NPS use across time. Significant changes that were reported in NPS use from 2012 to 2013 included:

- a significant decline in the proportion reporting lifetime use of unknown capsules (p<0.05; 95% CI: 0.03−0.25) and herbal highs (p<0.05; 95% CI: 0.04−0.29);
- a significant decline in the proportion reporting past six month use of LSA (p<0.05; 95% CI: 0.01−0.16);
- a significant increase in the proportion reporting past six month use of 2CI (p<0.05; 95% CI: -0.12 − -0.01); although due to small numbers this finding should be viewed with caution.

Table 15: Proportion of participants reporting lifetime and recent use of new psychoactive substances, 2012−2013

Research chemicals	**Ever used (%)**		**Used last six months (%)**	
	2012 (n=92)	**2013 (n=100)**	2012 (n=92)	**2013 (n=100)**
Phenethylamines				
2CB	26	**27**	10	**14**
2CE	5	**3**	0	**1**
2CI	13	**8**	0	**6***
MDAI	2	**2**	2	**1**
Benzo Fury (6-APB)	0	**0**	0	**0**
Mescaline	9	**6**	2	**1**
DOI	6	**5**	0	**3**
Trytamine				
5MEO-DMT	2	**1**	1	**1**
DMT	22	**28**	5	**14**
Synthetic cathinones				
Mephedrone	16	**11**	4	**4**
Methylone/bk MDMA	5	**2**	4	**1**
Other stimulants				
Ivory wave/MDPV	5	**2**	4	**1**
PMA	15	**4**	7	**3**
Piperazines				
BZP	7	**2**	3	**0**

Table 15: Proportion of participants reporting lifetime and recent use of new psychoactive substances, 2012−2013 (continued)

Research chemicals	Ever used (%)		Used last six months (%)	
	2012 (n=92)	**2013 (n=100)**	2012 (n=92)	**2013 (n=100)**
Dissociative				
DXM	12	**10**	1	**5**
Plant-based substances				
Salvia divinorium	9	**7**	1	**4**
LSA	14	**12**	10	**2***
Datura	12	**3**	0	**1**
Synthetic cannabis[#]				
Kronic	-	**12**	-	**5**
K2/Spice	-	**2**	-	**0**
Other	-	**5**	-	**3**
Unknown capsule	26	**12***	16	**8**
Herbal high	38	**21***	17	**10**

Source: EDRS participant interviews
In 2012, participants were asked about synthetic cannabinoids as a whole (rather than individual brands). In 2012, 19% of the sample reported lifetime use of these drugs and 11% reported recent use
* p<0.05

In 2013, participants who had used an NPS in the six months preceding interview were asked to rate their experience of the drug and how likely they would be to take it again, on a scale of 0−10. They were also asked to rate their most recent experience of ecstasy, cocaine and LSD to allow comparison. Table 16 shows the results of these ratings (data is only presented for NPS which had been used by at least 10% of RPU in the past six months).

It was found that, of the most commonly used NPS, DMT produced the most pleasurable effects during the high, whilst 2CB produced the worst negative and hangover effects. Interestingly, DMT was the only NPS that matched the established drugs (i.e. ecstasy, cocaine or LSD) in terms of pleasurable effects or in terms of the likelihood to take it again if offered.

Table 16: Effects of NPS compared to ecstasy, cocaine and LSD, 2013

	Median score			
	Pleasurable effects* 0=no effect 10=best drug ever	**Negative effects*** 0=no effect 10=best drug ever	**Hangover rating*** 0=no effect 10=worst drug ever	**Likelihood of taking again** 0=definitely not 10=definitely yes
2CB	7	3.5	2.5	6.5
DMT	9	0.5	0	9
Herbal highs	5.5	0	0	6
Ecstasy	8	2	4	10
Cocaine	8	0	1	10
LSD	9	3	4	5

Source: EDRS participant interviews
*on last occasion of use

Key Expert Comments

- Interestingly, few KE were able to comment on any of the new psychoactive substances listed. The primary comments related to the presence of NPS in pills sold as ecstasy (see section 5.1). One KE did report a very slight increase in the use of synthetic cannabinoids (whilst noting that, overall, it remains unpopular), and another reported an increase “in the submission of NBOMe compounds in the laboratory”.

- It was also reported that, in regards to analogue drugs and synthetic cannabinoids, South Australia “has nowhere near the problem that NSW and QLD do”.

- More generally, it was noted that the ease of buying drugs online had resulted in a subsequent increase in the postal imports of both analogue drugs and traditional illicit drugs. It was suggested that this had increased the ease of obtaining drugs in rural areas.

5 Drug Market: Price, Purity, Availability and Purchasing Patterns

5.1 Ecstasy

Key Findings

- The price of ecstasy remained stable at $20 for a pill.
- The majority of the sample reported that the price of ecstasy had remained stable in the six months prior to interview.
- The current purity of ecstasy was perceived as medium in 2013. Perceptions regarding changes in the purity of ecstasy over the past six months were mixed; however there was a significant reduction in the proportion of participants who reported that ecstasy purity had been increasing over the preceding six months.
- Ecstasy remained easy or very easy to obtain.
- The median number of ecstasy tablets purchased in the six months prior to interview remained stable in 2013, with the majority of RPU purchasing for themselves or others.
- Most participants reported scoring from a friend.

5.1.1 Price

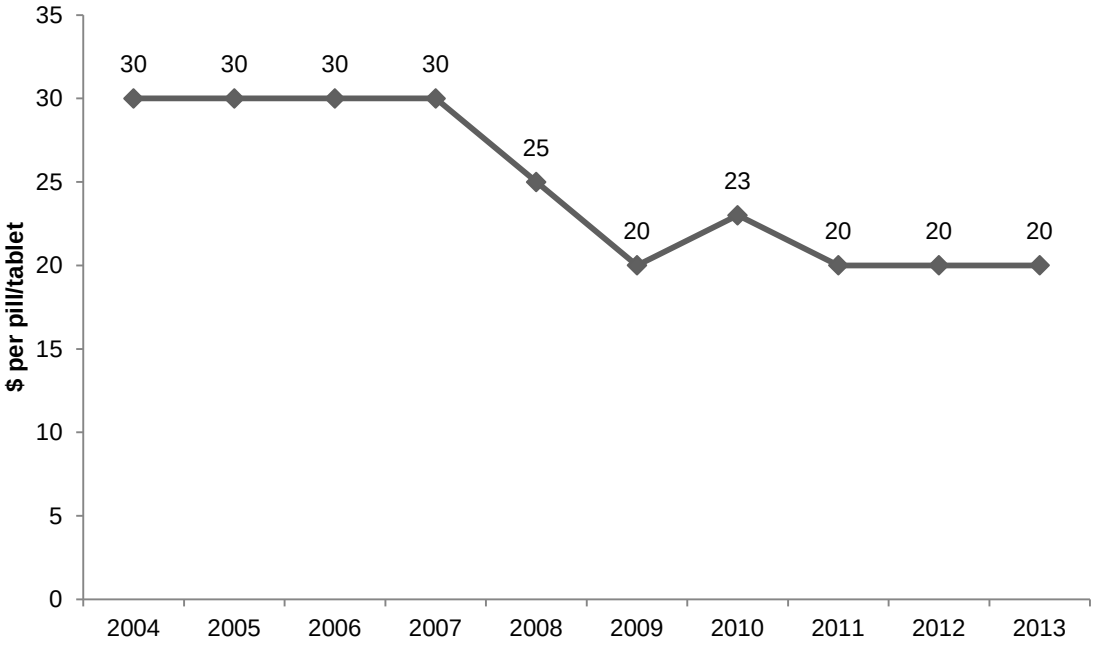
In 2013, participants were asked about the cost of ecstasy 'at last purchase'. The majority of participants were able to provide an estimate of the price of ecstasy pills at last purchase, with the median 'last' price of a tablet/pill being $20 (range=$5−30; n=95). This was stable from 2012 (Table 17). Eleven participants were also able to answer about the price of a 'cap', with the median price being $25 (range=$15−40). Two-thirds of the sample (67%) reported that the price of ecstasy had been stable over the preceding six months, whilst one-fifth reported that it had decreased (both stable from 2012). There was a significant decline in the proportion of participants who reported that the price of ecstasy had fluctuated over the past six months (14% in 2012 versus 4% in 2013; $p<0.05$; 95% CI: 0.01−0.19).

Table 17: Last price of ecstasy and change in price over the last six months, 2012 & 2013

	2012	**2013**
Median price of last purchase (range; n)		
Tablet/pill	$20 ($10−30; 88)	**$20 ($5−30; 95)**
Cap	$25 ($20−30; 5)	**$25 ($15−40; 11)**
Powder (gram)	-	**$100 ($30−180; 4)**
Crystal (gram)	-	**$180 ($30−250; 3)**
Price change in last 6 months (%)	(n=91)	**(n=91)**
Increasing	11	**8**
Stable	60	**67**
Decreasing	14	**21**
Fluctuating	14	**4***

Source: EDRS participant interviews
Note: 'Don't know' excluded from 2009 onwards
* $p<0.05$

Figure 11: Trends in the 'last purchase price' of ecstasy per tablet/pill, 2004–2013



Source: EDRS participant interviews

In 2013, participants were asked specifically about the 'current' price of ecstasy 'bulk' purchases, where 'bulk' referred to ten or more tablets/pills (see Table 18). It was generally reported that purchasing in bulk results in lower prices, with the price per pill starting to decrease when bought in quantities of 10 or more. A purchase of '100' pills costed $13 per pill compared to $18 per pill when bought in a 10 pack.

Table 18: Current median price of ecstasy bought in bulk amounts, 2012−2013

	Median price total (range; n)	
Qty of pills	2012	**2013**
1	25 (12−75; 81)	**20 (12−45; 98)**
10	200 (100−600;57)	**180 (20−400;83)**
20	365 (180−1200;26)	**320 (220−720;29)**
50	750 (450−2400; 16)	**650 (500−1800; 17)**
100	1300 (900−1800;15)	**1300 (700−3000;19)**

Source: EDRS participant interviews

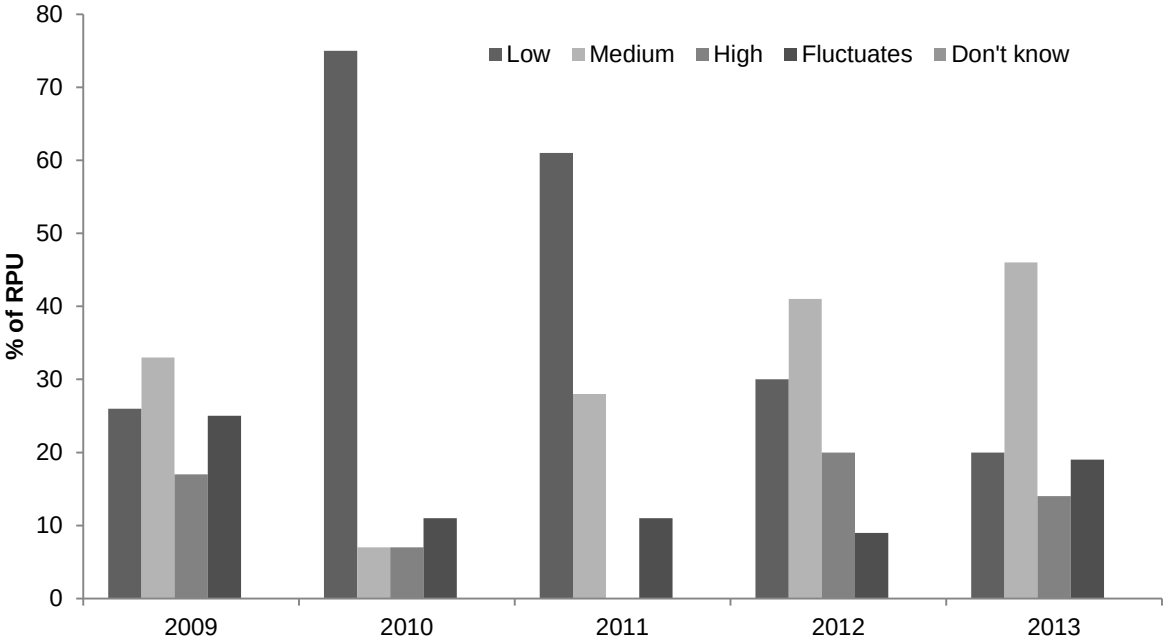
5.1.2 Purity

Figure 12 presents the current purity of ecstasy and Table 19 summarises the changes in purity in the last six months, as perceived by the participants. It is important to bear in mind that it is difficult to gauge the actual quality of the ecstasy that is being consumed, as participant opinions are based on many factors other than 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 all impact upon impressions of quality, and, as such, the figures presented are purely perceptions of the participants.

In 2013, perceptions regarding the current purity of ecstasy remained stable from 2012. More specifically, the greatest proportion of RPU reported that the current purity of ecstasy

was medium (46%), one-fifth reported that it was low or fluctuating (20% and 19% respectively), and 14% reported it as high (Figure 12). The largest proportion of participants reported that the purity of ecstasy had remained stable over the preceding six months (38%), over a quarter reported that it had fluctuated (29%) and one-fifth (20%) reported that it had decreased. There was a significant decrease in the proportion of participants who reported that the purity of ecstasy had increased in the past six months (31% in 2012 versus 13% in 2013; $p<0.01$; 95% CI: 0.06−0.30) (Table 19).

Figure 12: Trends in the perceived purity of ecstasy in the last six months, 2009–2013



Source: EDRS participant interviews
Note: Don't know not included from 2009 onwards

Table 19: Perceived purity of ecstasy tablets/pills and change in purity over the last six months, 2012 & 2013

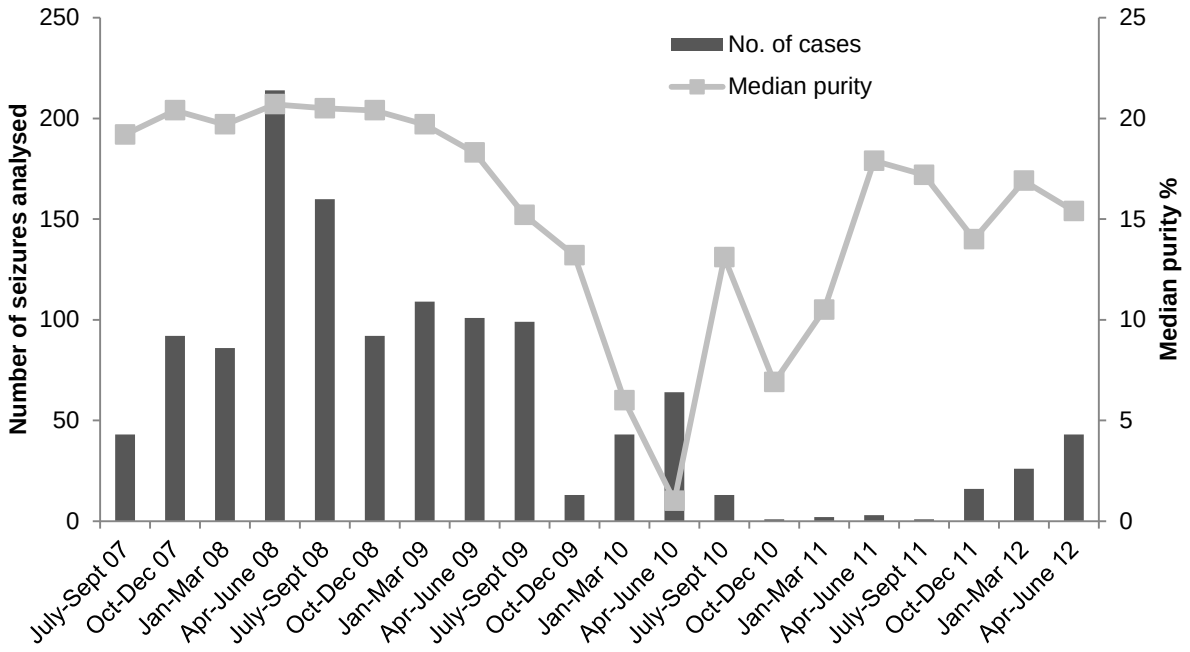
	2012 (n=92)	**2013 (n=100)**
Recent change in purity (%)	(n=90)	**(n=93)**
Increasing	31	**13****
Stable	28	**38**
Decreasing	22	**20**
Fluctuating	19	**29**

Source: EDRS participant interviews
Note: 'Don't know' not included
** $p<0.01$

The purity data presented in this report are provided by the Australian Crime Commission (ACC). The ACC provided data on state/territory police and Australian Federal Police (AFP) seizure data, including the number and weight of seizures. Since 2000/01, ecstasy seizures have been reported under 'phenethylamines'. Ecstasy belongs to the phenethylamine family of drugs. Other drugs such as 2,5-dimethoxy-4-bromoamphetamine (DOB), MDA, 2,5-dimethoxy-4-methylamphetamine (DOM), 3,4-methylenedioxyethylamphetamine (MDEA), paramethoxyamphetamine (PMA), and 4-methylthioamphetamine (4-MTA) also belong to the phenethylamine family, and seizures of these drugs are included in the seizure data.

The ACC data were unavailable for 2012/13 at the time of publication. As a consequence, the data provided by the ACC relates to the purity data on phenethylamines (including MDMA) seized in SA during the last financial year, 2011/12 (Australian Crime Commission, 2013). Figure 13 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 2007/08 to 2011/12. The total number of SAPOL phenethylamines seizures analysed for July 2011 to June 2012 was 86, which is an four-fold increase from the number reported in 2010/11 (19) – however, it remains substantially lower than the total number of seizures analysed in 2009/10 (219). The median purity increased slightly from 11.8% in 2010/11 to 15.7% in 2011/12.

Figure 13: Number of phenethylamine* seizures analysed and median purity, 2007/08–2011/12



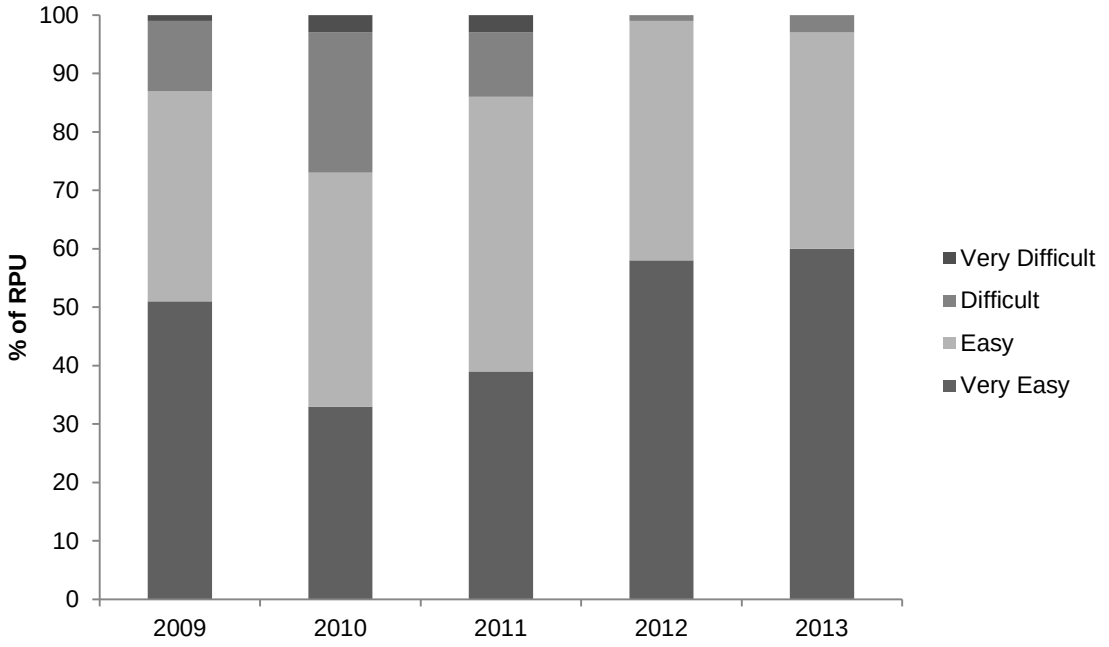
Source: Australian Crime Commission 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013

*Phenethylamines include MDMA ('ecstasy'), MDEA, MDA, PMA and others (see Australian Crime Commission, 2012)

5.1.3 Availability

Figure 14 presents the current availability of ecstasy and Table 20 summarises 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 (60% and 37% respectively), with only three participants reporting that it was 'difficult' to obtain. In addition, the majority of the sample believed that availability of ecstasy had remained stable over the preceding six months (62%), whilst 23% reported that it had become easier to obtain (both stable from 2012).

Figure 14: Trends in availability of ecstasy in the preceding six months, 2009–2013



Source: EDRS participant interviews
Note: 'Don't know' not included from 2009 onwards

Table 20: Availability of ecstasy and change in availability over the last six months, 2012 & 2013

	2012 (n=88)	**2013 (n=95)**
Change in availability in last 6 months (%)		
More difficult	8	**6**
Stable	61	**62**
Easier	22	**23**
Fluctuates	9	**9**

Source: EDRS participant interviews
Note: 'Don't know' not included

5.1.4 Supply: purchasing patterns and locations of use

Participants were asked to provide information pertaining to the recent purchase of ecstasy and other drugs. The results of those providing information are presented in Table 21. The majority of RPU purchased ecstasy for themselves and others (55%), whilst 40% purchased ecstasy for themselves only. This remained stable from 2012. The median number of people that ecstasy was purchased from also remained stable, as did the median number of tablets purchased. Just under half of those who answered reported purchasing ecstasy monthly or less in the preceding six months (48%), and one-fifth (21%) reported purchasing ecstasy between 13−24 times in that time frame: both of which were non-significant increases from 2012. Inversely, there was a significant decline in the proportion of participants who reported purchasing ecstasy between monthly and fortnightly (46% in 2012 versus 28% in 2013; $p<0.05$; 95% CI: 0.04−0.31).

Table 21: Patterns of purchasing ecstasy in the last six months, 2012 & 2013

	2012 (n=92)	**2013 (n=100)**
Median no. of people purchased from (range)	3.5 (0−20)	**4 (0−17)**
Purchased for (%)		
Self only	40	**40**
Self and others	55	**55**
Others only	3	**2**
Did not purchase in last 6 months	1	**3**
No. of times purchased in the last 6 months (%)	(n=91)	**(n=95)**
1−6	37	**48**
7−12	46	**28***
13−24	11	**21**
25 +	6	**2**
Median no. of ecstasy tablets purchased (range)	5 (1−200)	**4 (0.5−60)**

Source: EDRS participant interviews
*$p<0.05$

Ecstasy was purchased from a range of sources and from a variety of public and private locations, with the most common being from friends (69%) followed by known dealers (14%). Smaller proportions reported purchasing from known acquaintances (7%), strangers (3%) and workmates (2%) (see Table 22).

Just over a third (36%) of participants reported scoring at a friend's home, followed by a nightclub (18%), their own home (11%) or at their dealer's home (9%). Smaller proportions nominated a number of other venues (see Table 22).

Table 22: Trend in the source and venue of purchase of ecstasy for participants in the last 6 months, 2009–2013

	2009 (n=100)	2010 (n=92)	2011 (n=76)	2012 (n=92)	**2013 (n=99)**
Bought ecstasy from:					
Friends	60	53	53	66	**69**
Known dealers	11	12	21	16	**14**
Workmates	3	5	1	0	**2**
Acquaintances	20	26	17	12	**7**
Strangers/unknown	3	1	1	2	**3**
Street dealers	1	0	1	1	**0**
Online	-	-	-	0	**1**
Other	2	3	1	2	**3**
Venues normally scored [ecstasy] at?					
Own home	24	16	13	8	**11**
Dealer's home	7	11	13	5	**9**
Friend's home	25	21	31	28	**36**
Raves/dance parties	1	1	0	0	**1**
Nightclubs	12	11	17	20	**18**
Pubs	9	8	4	10	**4**
Agreed public location	8	20	9	20	**7**
Private party	2	6	1	3	**5**
Street	4	3	3	2	**2**
Work	1	1	0	0	**1**
Acquaintance's home	3	2	1	2	**0**

Source: EDRS participant interviews

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

Note: Participants were allowed to nominate more than one response

KE Comments

- Reports regarding the ecstasy market were mixed. Several KE reported that the ecstasy market had "definitely made a comeback", whilst others reported that the prevalence of ecstasy use had dropped off or remained stable.
- Ecstasy was reported to cost $15−50 for a pill. One KE had heard reports of two ecstasy pills costing $100, which was subsequently driving some people towards using methamphetamine (i.e. $100 for a point of methamphetamine was considered better value than $100 for two ecstasy pills).
- Interestingly, one KE noted that there was a discrepancy in the purity of 'ecstasy' pills which were seized in large quantities and those which were seized from nightclub venues. More specifically, analysis of large ecstasy seizures revealed that the majority of pills contained very little MDMA, whilst pills seized from nightclubs were of a much higher purity (with most of the pills found to contain MDMA). The reasons for this discrepancy were unclear.
- The most common drugs detected in seized 'ecstasy' pills over the preceding 12 months (excluding MDMA) were 25I-NBOMe and PMA. Other analogue drugs that were detected include 2CB, 2CI, 6-APB and a-PVP.
- In July 2013, a bad batch of ecstasy pills resulted in 21 people being hospitalised. Analysis revealed that the virtually all of the 'ecstasy' pills consumed by these individuals contained 25I-NBOMe.
- One KE raised concerns that self-testing kits were becoming less common.

5.2 Methamphetamine

Key Findings

- The reported last median price of a point of powder, base and crystal methamphetamine all remained stable at $100, $90 and $100 respectively.
- The purity of powder, base and crystal methamphetamine was largely perceived as high, and had remained stable over the last six months.
- All forms of methamphetamine were reported as easy or very easy to obtain.
- The largest proportion of participants reported that they purchased all forms of methamphetamine from friends.

5.2.1 Price

Not all participants were able to comment on the price of all three, or any, of the forms of methamphetamine. Table 23 presents the prices of methamphetamine and Table 24 presents whether these had changed over the six months preceding interview.

The reported last median price of a point of powder, base and crystal all remained stable in 2013 at $100, $90 and $100 respectively (Table 23). Across all forms of methamphetamine, the majority of those who were able to comment reported that the price had remained stable in the six months preceding interview (see Table 24).

Table 23: Median price of last purchase of the main forms of methamphetamine, 2012 & 2013

	Median price per amount $ (range; n)					
Amount	**Powder**		**Base**		**Crystal**	
	2012	**2013**	2012	**2013**	2012	**2013**
Point Price at last purchase	100 (10−100; 15)	**100^ (50−100; 8)**	85 (25−100; 10)	**90^ (50−100; 6)**	100 (30−100; 20)	**100 (30−100; 19)**
Gram Price at last purchase	225^ (20−700; 6)	**280^ (100−750; 3)**	325^ (250−400; 2)	**-**	800^ (600−1000; 5)	**450^ (250−650; 2)**

Source: EDRS participant interviews
^ Small numbers reported (n<10)

Table 24: Changes in price over the last six months, 2012 & 2013

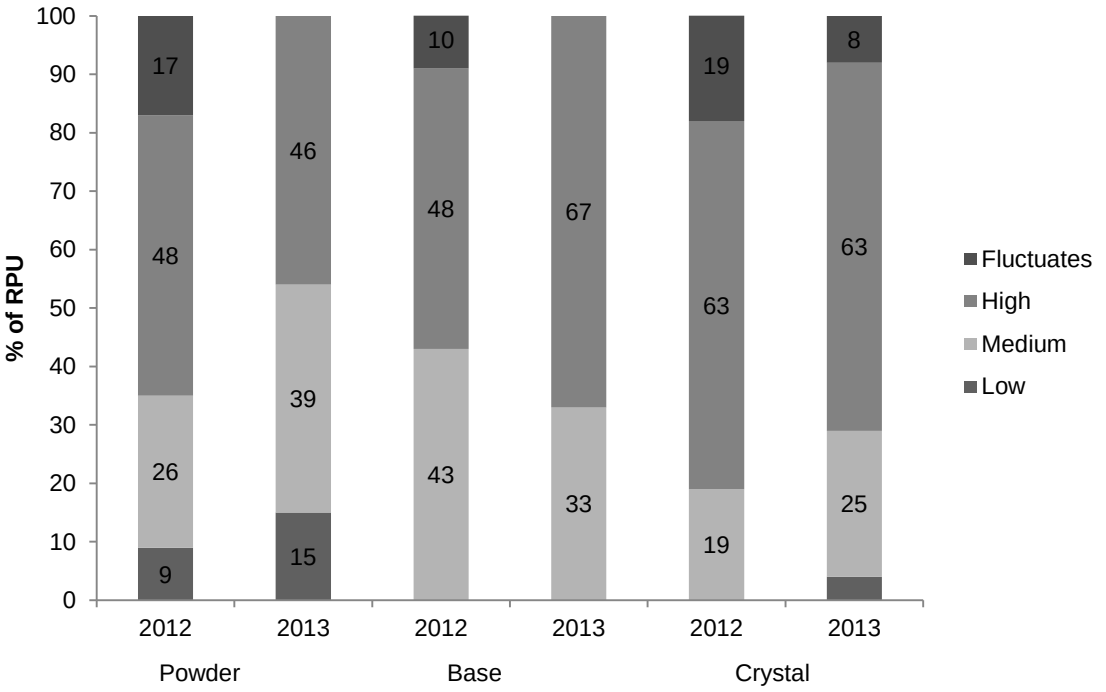
Change in price	**Powder**		**Base**		**Crystal**	
	2012 (n=22)	**2013 (n=10)**	2012 (n=17)	**2013 (n=5)**	2012 (n=25)	**2013 (n=21)**
Increasing	27	**0**	35	**0**	20	**14**
Stable	64	**100**	65	**100^**	60	**67**
Decreasing	0	**0**	0	**0**	12	**10**
Fluctuating	9	**0**	0	**0**	8	**10**

Source: EDRS participant interviews
Note: Excludes 'don't know'
^ Small numbers reported (n<10)

5.2.2 Purity

As can be seen in Figure 15, the perceived purity of methamphetamine was 'high' across all forms of methamphetamine (although it should be noted that only six participants were able to report on the perceived purity of base methamphetamine). Methamphetamine powder was generally viewed as having the lowest purity of the three forms of methamphetamine; of those able to answer 15% reported that the purity of speed was low and 39% reported that it was medium. Across all forms of methamphetamine, the greatest proportion of participants reported that the purity had remained stable over the preceding six months (see Table 25).

Figure 15: Purity of the main forms of methamphetamine over the last six months, 2012 & 2013



Source: EDRS participant interviews
Note: 'Don't know' not included

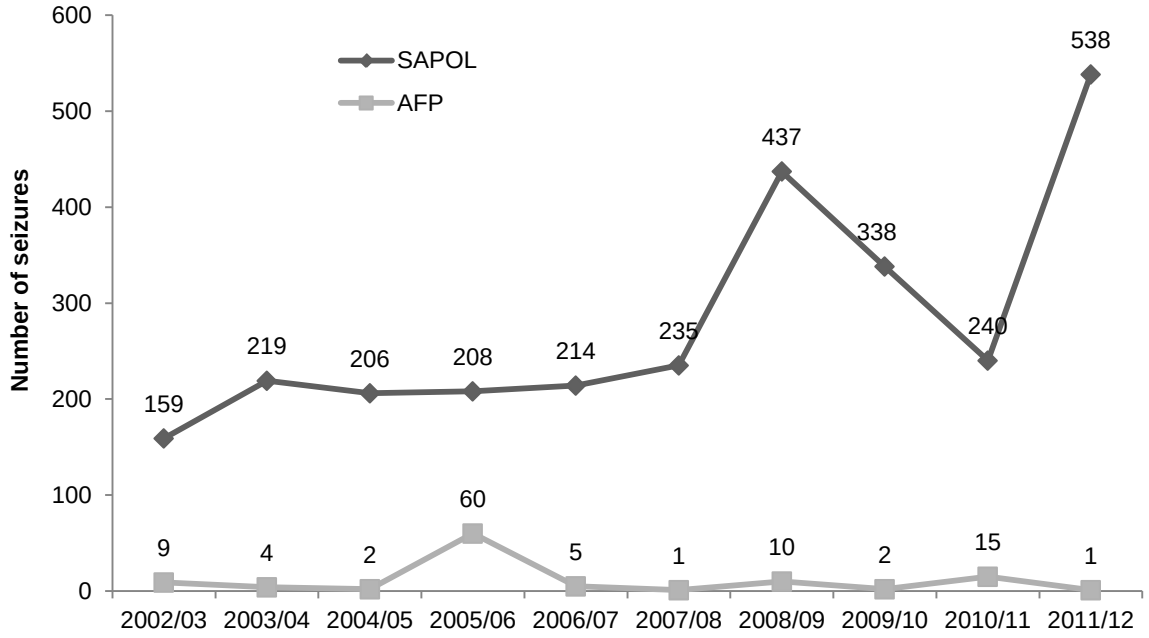
Table 25: Changes in purity of the main forms of methamphetamine over the last six months, 2012 & 2013

Change in price	Powder		Base		Crystal	
	2012 (n=20)	**2013 (n=11)**	2012 (n=17)	**2013 (n=5)**	2012 (n=24)	**2013 (n=22)**
Increasing	15	**9**	18	**0**	8	**14**
Stable	55	**55**	47	**80**	50	**45**
Decreasing	10	**0**	12	**20**	13	**14**
Fluctuating	20	**36**	24	**0**	29	**27**

Source: EDRS participant interviews
Note: 'Don't know' not included

The ACC data were unavailable for 2012/13 at the time of publication. As a consequence, data provided by the ACC relates to the data on seizures and purity levels during the last financial year, 2011/12 (Australian Crime Commission, 2013). Figure 16 shows the number of seizures for amphetamine-type stimulants, by SAPOL and the AFP. As can be seen, SAPOL seizures more than doubled in 2011/12, reversing the downward trend that had been observed from 2008/09−2010/11. The number of AFP seizures remained low, with only one seizure reported in 2011/12.

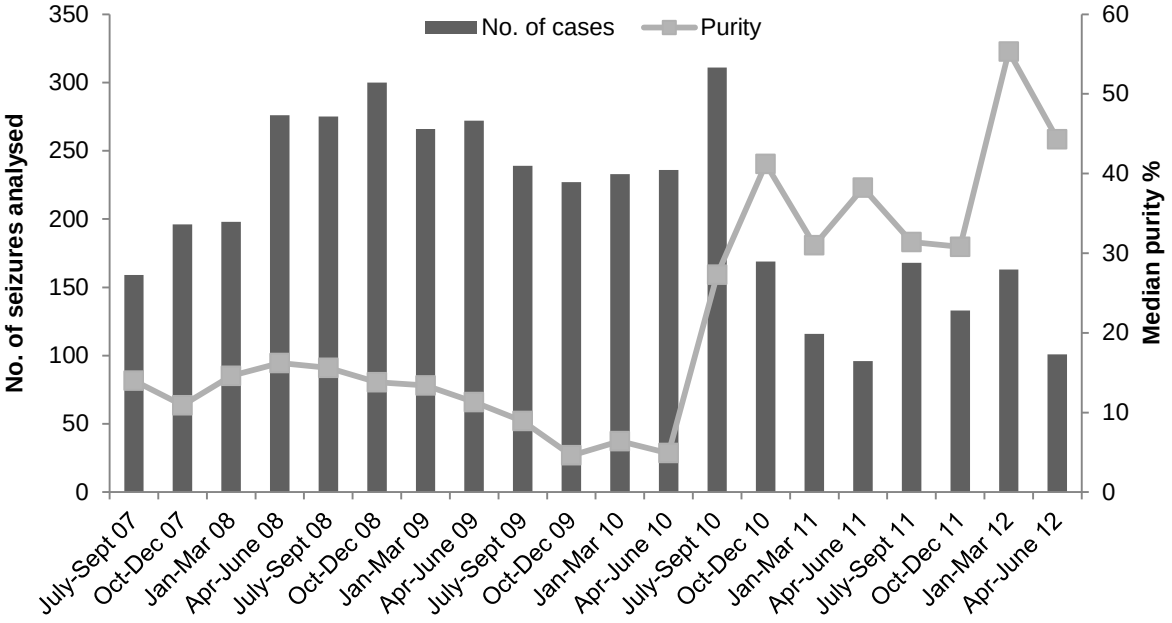
Figure 16: Number of seizures: amphetamine-type stimulants, 2002/03–2011/12



Source: Australian Crime Commission, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013

Figure 17 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 2007/08 to 2011/12. The total number of SAPOL methamphetamine seizures analysed from July 2011 to June 2012 was 565, which was a slight decrease from the 2010/11 financial year (692). However, the overall median purity of the seizures analysed increased slightly, from 31.7% in 2010/11 to 43.3%. The majority of seizures analysed were more than 2 grams.

Figure 17: Median purity of methylamphetamine, 2007/08–2011/12

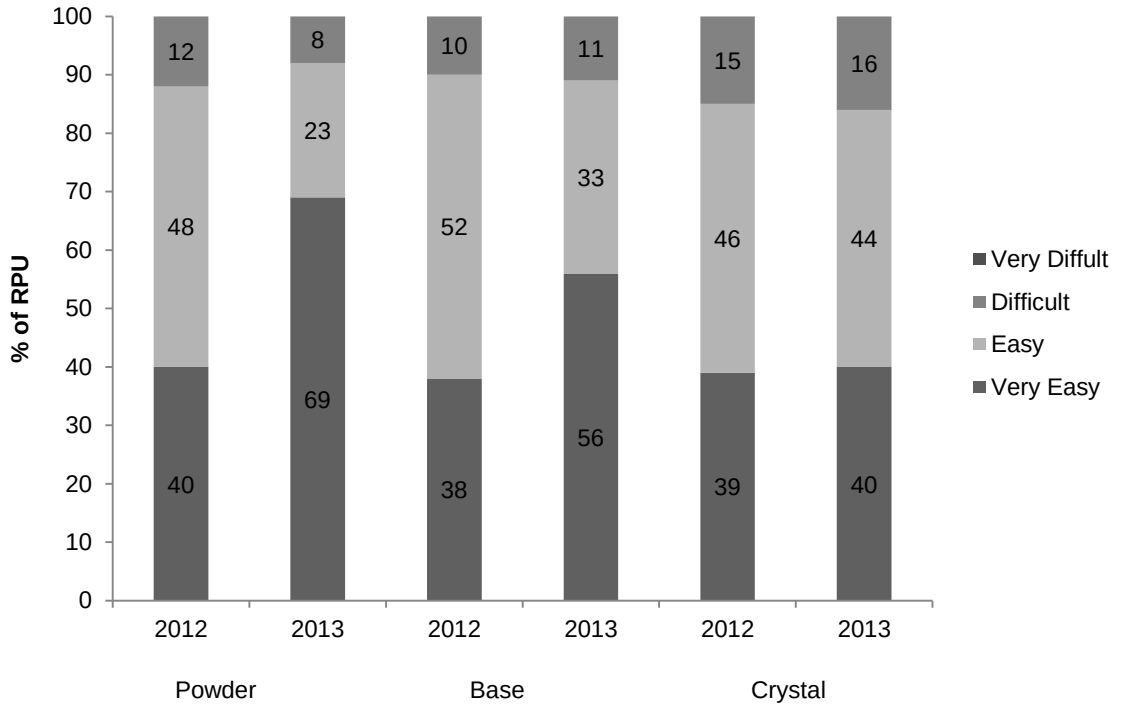


Source: Australian Crime Commission, 2009, 2010, 2011, 2012, 2013

5.2.3 Availability

Overall, all three forms of methamphetamine were considered to be 'easy' or 'very easy' to obtain by the majority of participants (see Figure 18). Eight percent of those able to answer reported that methamphetamine powder was 'difficult' to obtain, whilst for base and crystal the figures were 11% and 16% respectively. The majority of participants reported the availability of all forms of methamphetamine as stable in the last six months (see Table 26).

Figure 18: Availability of the main forms of methamphetamine over the last six months, 2012 & 2013



Source: EDRS participant interviews

Table 26: Change in availability of the main forms of methamphetamine over the last six months, 2012 & 2013

Change in availability in last 6 months (%)	Powder		Base		Crystal	
	2012 (n=22)	**2013 (n=13)**	2012 (n=19)	**2013 (n=8)**	2012 (n=26)	**2013 (n=23)**
More difficult	9	**0**	5	**0**	23	**13**
Stable	68	**100**	84	**100**	58	**70**
Easier	14	**0**	5	**0**	15	**13**
Fluctuates	9	**0**	5	**0**	4	**4**

Source: EDRS participant interviews
Note: Don't know not included

5.2.4 Supply: purchasing patterns and locations of use

When asked where they had bought the different forms of methamphetamine, participants provided similar profiles for each of the three forms (see Table 27). The largest proportion of participants reported that they purchased powder and crystal from friends, followed by a

known dealer. In regards to base methamphetamine, one-third of participants reported purchasing it from a known dealer (33%), followed by friends (22%).

An analysis of the location at which methamphetamine was reportedly purchased revealed that participants most commonly obtained all three forms of methamphetamine from a friend's home.

Table 27: Last person and source venue where participants purchased methamphetamine, 2013

% commented	Powder (n=14	Base (n=9)	Crystal (n=25)
Used, not scored	**14**	**22**	**12**
Who have you bought [meth] from in the last 6 months?			
Friends	**57**	**22**	**52**
Known dealers	**21**	**33**	**28**
Acquaintances	**7**	**11**	**0**
Strangers/unknown	**0**	**0**	**4**
Workmates	**0**	**11**	**4**
What venues do you normally score [meth] at?			
Own home	**7**	**11**	**8**
Dealer's home	**7**	**22**	**24**
Friend's home	**50**	**22**	**40**
Nightclub	**0**	**0**	**4**
Pub	**0**	**0**	**0**
Private party	**14**	**11**	**4**
Street	**0**	**0**	**0**
Raves	**0**	**0**	**0**
Live music event	**0**	**0**	**0**
Agreed public location	**7**	**0**	**4**
Acquaintances home	**0**	**0**	**0**
Work	**0**	**11**	**4**

Source: EDRS participant interviews

KE Comments

- Of those who were able to comment, the majority of KE agreed that the price and availability of methamphetamine had remained relatively stable over the past twelve months. It was generally reported that the price of methamphetamine was $100 for a point (range: $50 for those 'in the know' to $125).
- Reports regarding the purity of methamphetamine were mixed: two KE reported that the purity of methamphetamine had declined over the preceding twelve months, whilst others reported it had remained stable or fluctuated. One KE noted that their clients judged the purity of methamphetamine based on its colour (i.e. products which had a pink/red/green tinge were considered to have been cut with an adulterant and were thus deemed as being low purity).
- In regards to the manufacture of methylamphetamine, one KE noted that there had been a shift away from small user laboratories towards large scale laboratories. This was demonstrated by a marked increase in the seizures of large quantities of methylamphetamine, which could also be indicative of an increase in importation and higher level association.
- One KE had heard reports of people mixing hallucinogenics with methamphetamine to make mephedrone, although it was unclear it these were isolated incidents or part of a broader trend.

5.3 Cocaine

Key Findings

- In 2013, the median price of cocaine decreased slightly to $325 per gram.
- The current purity of cocaine was largely perceived as 'medium', and the majority of participants believed that purity had remained stable in the six months preceding interview.
- Reports regarding the current availability of cocaine were mixed, with a significant decline in the proportion of participants who reported that it was 'difficult' to obtain.
- Among those who could comment, most purchased cocaine from a friend and at a private residence (friend's home).

5.3.1 Price

Cocaine was most commonly purchased in grams and was purchased for a median of $325 (range $287−350). The majority of participants who commented on the price considered it to have remained stable in the last six months (86%), whilst 14% believed it had increased.

Table 28: Price of cocaine, 2012 & 2013

	2012	**2013**
Median price of last purchase Gram (range; n)	$350 (115−450; 17)	**$325 (287−350; 19)**
Price change in last month (%)	(n=28)	**(n=22)**
Increasing	11	**14**
Stable	61	**86**
Decreasing	18	**0**
Fluctuating	11	**0**

Source: EDRS participant interviews
Note: 'Don't know' excluded from analysis

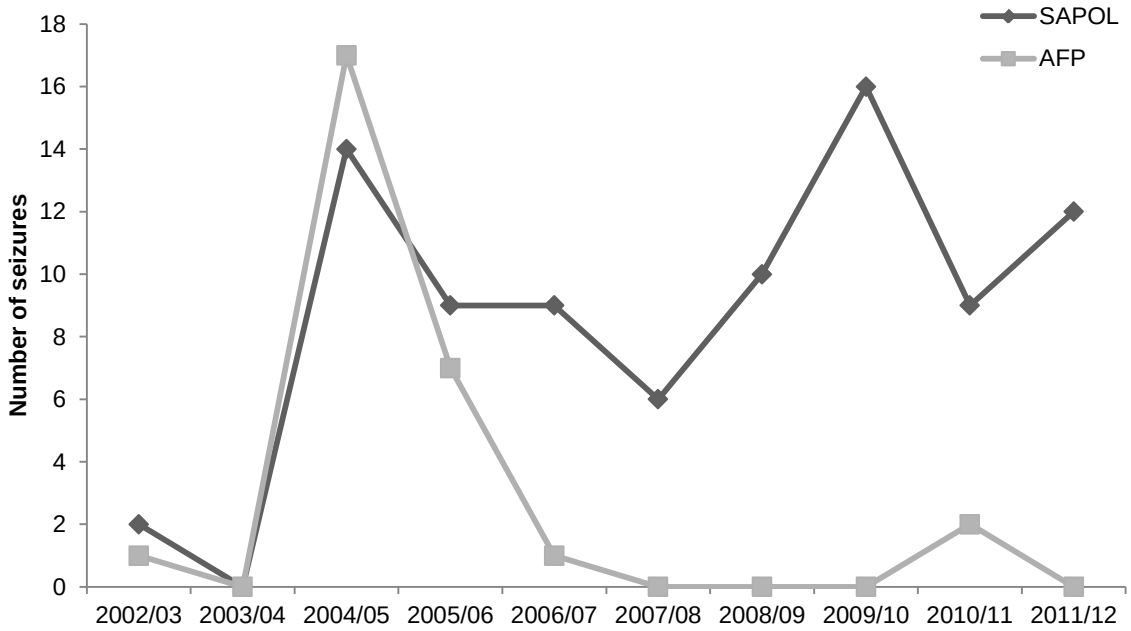
5.3.2 Purity

Participants were asked what the current purity or strength of cocaine was, and whether the purity had changed in the six months preceding interview. Of those able to answer (n=28), one-half (50%) reported that current purity of cocaine was medium, 29% reported it was high, 14% reported it was low and 7% reported that it fluctuated.

The majority of participants who commented (71%) reported that the purity of cocaine had remained stable over the past six months, whilst 14% believed it had fluctuated, 10% reported it had decreased and 5% reported that it had increased.

The ACC data were unavailable for 2012/13 at the time of publication. As a consequence, data provided by the ACC relates to the data on seizures and purity levels during the last financial year, 2011/12 (Australian Crime Commission, 2013). Figure 19 shows the number of seizures for cocaine, by SAPOL and the AFP. As can be seen, SAPOL seizures remained relatively stable in 2011/12 (9 versus 12 in 2010/11). There were no seizures made by the AFP.

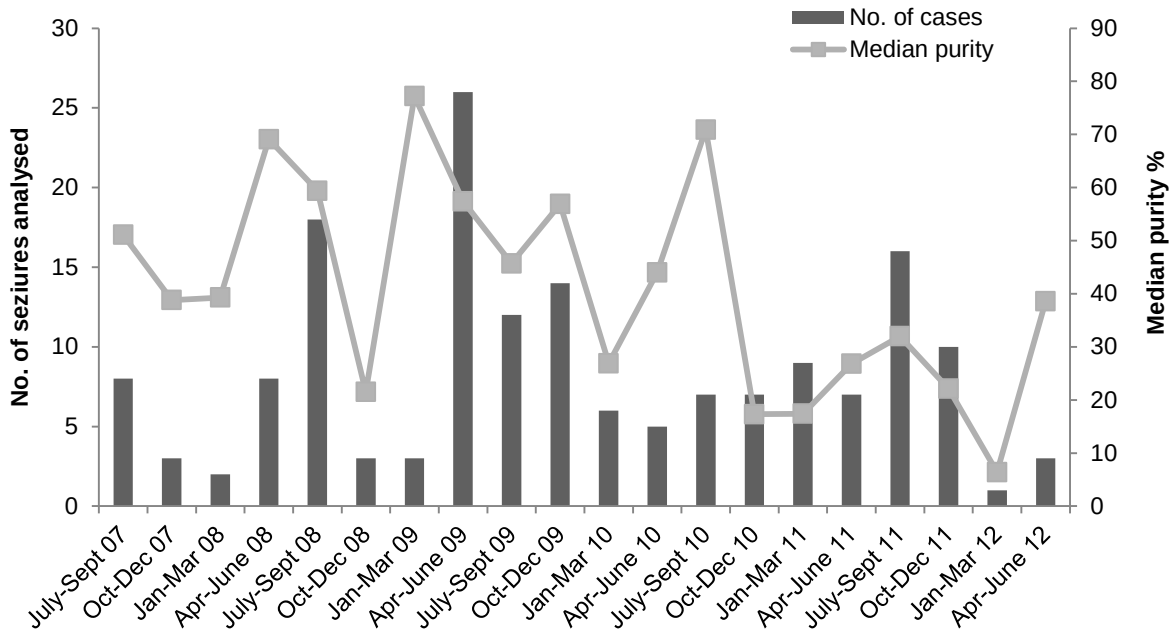
Figure 19: Number of cocaine seizures, 2002/03–2011/12



Source: Australian Crime Commission, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013

Figure 20 shows the number of cocaine seizures received and analysed by the state forensic laboratory (within the quarter depicted) and the median purity per quarter of those seizures from 2007/08 to 2011/12. The total number of SAPOL cocaine seizures analysed from July 2011 to June 2012 was 30, which was stable from the 2010/11 financial year (30). The overall median purity of the seizures analysed was 32%, which was an increase from the median purity reported in 2010/11 (19.5%). The majority of seizures analysed were more than 2 grams.

Figure 20: Number of cocaine seizures analysed and median purity, 2007/08–2011/12



Source: Australian Crime Commission, 2009, 2010, 2011, 2012, 2013

5.3.3 Availability

Reports regarding the current availability of cocaine were mixed. Of those able to answer, almost two-fifths (39%) reported that cocaine was 'easy' to obtain, whilst 29% reported that it was 'difficult' to obtain (versus 64% in 2012; p<0.05; 95% CI: 0.11−0.54). However, despite the apparent increase in availability, the majority (77%) of participants considered the ease of access to cocaine to have remained stable in the six months preceding interview.

Table 29: Availability of cocaine and change in availability over the last six months, 2012 & 2013

	2012 (n=36)	**2013 (n=28)**
Current availability (%)		
Very easy	3	21
Easy	25	39
Difficult	64	29*
Very difficult	8	11
Change in availability in last 6 months (%)	**(n=30)**	**(n=22)**
More difficult	10	9
Stable	73	77
Easier	10	9
Fluctuates	7	5

Source: EDRS participant interviews
Note: 'Don't know' not included
*$p<0.05$

Cocaine was most commonly acquired through friends (67%). Small numbers (n<5) reported sourcing cocaine through known dealers, unknown dealers, acquaintances, workmates or online. It was most commonly obtained in a friend's home (50%), followed by home delivery, nightclub, pub or private party (8% respectively; see Table 30).

Table 30: Last person and source venue where participants purchased cocaine, 2013

	(n=24) %
Who have you bought cocaine from in the last 6 months?	
Friends	**67**
Known dealers	**17**
Unknown dealer	**4**
Workmates	**4**
Acquaintances	**4**
Online	**4**
What venues do you normally score cocaine at?	
Own home	**8**
Dealer's home	**4**
Friend's home	**50**
Nightclub	**8**
Pubs	**8**
Private party	**8**
Work	**4**
Acquaintance's home	**4**
Online	**4**

Source: EDRS participant interviews

KE Comments

- Most of the KE reported that they were seeing very little cocaine use and as such were unable to provide information on its current price, purity or availability (PPA). Of those who were able to comment, the majority reported that the PPA of cocaine was stable. One KE reported that the price of cocaine was $600 for a gram.

5.4 LSD

Key Findings

- The median price of LSD remained stable at $15 for a tab.
- The purity of LSD was perceived as high and stable by the majority of participants; reports regarding availability were mixed.
- Participants generally bought LSD from friends and obtained it from a friend's home.

5.4.1 Price

In 2013, the median last price paid for a tab of LSD was $15 (range $8-25; n=21), stable from 2012 ($15; range=$10−30; n=11). The majority of those participants able to comment reported that the price of LSD had been stable in the previous six months (76%); the remaining participants believed the price had increased (10%), decreased (10%) or fluctuated (5%).

5.4.2 Purity

Table 31 summarises the current purity of LSD and the changes in purity in the last six months, as perceived by the participants in 2013. Almost two-thirds (64%) of the participants who were able to comment reported that the current purity of LSD was high, and the majority (70%) perceived that purity had remained stable in the six months prior to interview.

Table 31: Purity of LSD and change in purity over the last six months, 2012 & 2013

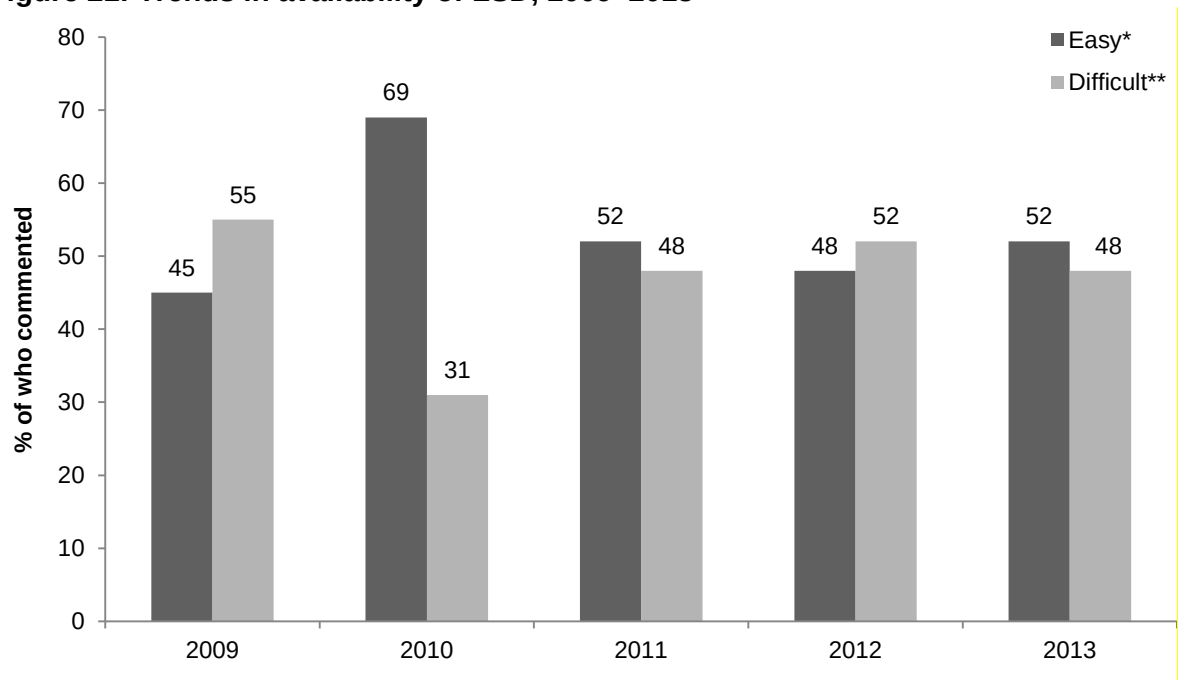
	2012 (n=19)	**2013 (n=25)**
Current purity (%)		
Low	11	**0**
Medium	37	**24**
High	53	**64**
Fluctuates	0	**12**
Change purity in last 6 months (%)	(n=18)	**(n=20)**
Increasing	22	**15**
Stable	44	**70**
Decreasing	33	**5**
Fluctuating	0	**10**

Source: EDRS participant interviews
Note: ' Don't know' not included

5.4.3 Availability

Reports regarding the availability of LSD were mixed: of those able to answer, 52% reported that it was 'difficult' or 'very difficult' to purchase LSD, whilst 48% reported that it was 'easy' or 'very easy' to obtain (see Figure 21). Sixty-three percent of those able to answer reported that the availability of LSD had been stable in the previous six months, 17% reported that it had become easier to obtain, 13% believed it had become more difficult to obtain and 8% reported that availability had fluctuated over the preceding six months.

Figure 21: Trends in availability of LSD, 2009–2013



Source: EDRS participant interviews
*Data for 'easy' contains the collapsed categories 'very easy' and 'easy'
**Data for 'difficult' is the collapsed categories 'difficult' and 'very difficult'

The majority of participants able to provide information reported that they had bought LSD most commonly from friends (65%) and that they had 'scored' at their friend's home (50%) (see Table 32).

Table 32: Usual person and source venue where participants purchased LSD, 2013

	% of participants
Who have you got LSD from in the last 6 months?	**(n=20)**
Friends	**65**
Known dealers	**30**
Acquaintances	**5**
What venues do you normally score LSD at?	**(n=20)**
Own home	**10**
Friend's home	**50**
Dealer's home	**15**
Nightclub	**5**
Pub/bar	**5**
Agreed public location	**15**

Source: EDRS participant interviews

KE Comments

- Most of the KE reported that they were seeing very little LSD use and as such were unable to provide information on its current PPA. Of those who were able to comment, the majority reported that the PPA of LSD was stable, with one KE reporting that the price of LSD was $20 for a tab.

5.5 Cannabis

Key Findings

- The price reported for hydro/bush remained stable at $25 for a bag.
- The purity of hydro was reported as high and bush as medium, with the purity of both types of cannabis perceived as stable in the previous six months.
- Availability was reported as easy or very easy to obtain, with the availability of both hydro and bush perceived as stable in the last six months.

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 (people who inject drugs) gave a single value of the average weight of cannabis bags sold in SA, 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 grams) and the median upper range was three grams (mean 2.9 grams). 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.

In 2013, participants completing this section were also asked if they were able to differentiate between hydro and bush cannabis in terms of price, potency and availability. Over two-thirds (69%) of the SA sample reported that they were able to distinguish between the two forms.

5.5.1 Price

The reported last median purchase price (by those able to comment) for a 'bag' of hydro (n=31) and bush cannabis (n=27) was $25 (range=$25−50 for both hydro and bush). The median purchase prices reported for an ounce of hydro (n=18) and bush (n=18) were also the same, at $220 an ounce (range=$100−250 for hydro and $100−280 for bush). These were similar to the prices reported in 2012.

The majority of participants (83%, 44 out of 53 participants) who were able to comment reported that the price of hydro had remained stable, whilst the remaining participants (17%) reported that it had increased in the six months prior to interview. The majority of participants able to comment on the price of bush also reported that the price had remained stable (80%, 45 out of 56 participants), whilst 9% reported that it had increased, 7% reported it had decreased and 5% reported that the price had fluctuated in the last six months.

5.5.2 Purity

Table 33 and Table 34 summarise the current purity of hydro and bush cannabis and the changes in the potency of cannabis over the last six months, according to participant reports. In 2013, the purity of hydro and bush cannabis was reported as high or medium by the majority of participants able to comment (hydro 87%; bush 88%). The majority of participants able to comment reported that the purity of hydro (61%) and bush cannabis (66%) was stable in the last six months.

Table 33: Purity of hydro and bush cannabis over the last six months, 2012 & 2013

	% Able to answer			
	2012		2013	
	Hydro (n= 50)	Bush (n=49)	**Hydro (n= 55)**	**Bush (n=56)**
High	64	34	**58**	**43**
Medium	26	51	**29**	**45**
Low	2	9	**7**	**5**
Fluctuates	8	7	**6**	**7**

Source: EDRS participant interviews
Note: 'Don't know' not included

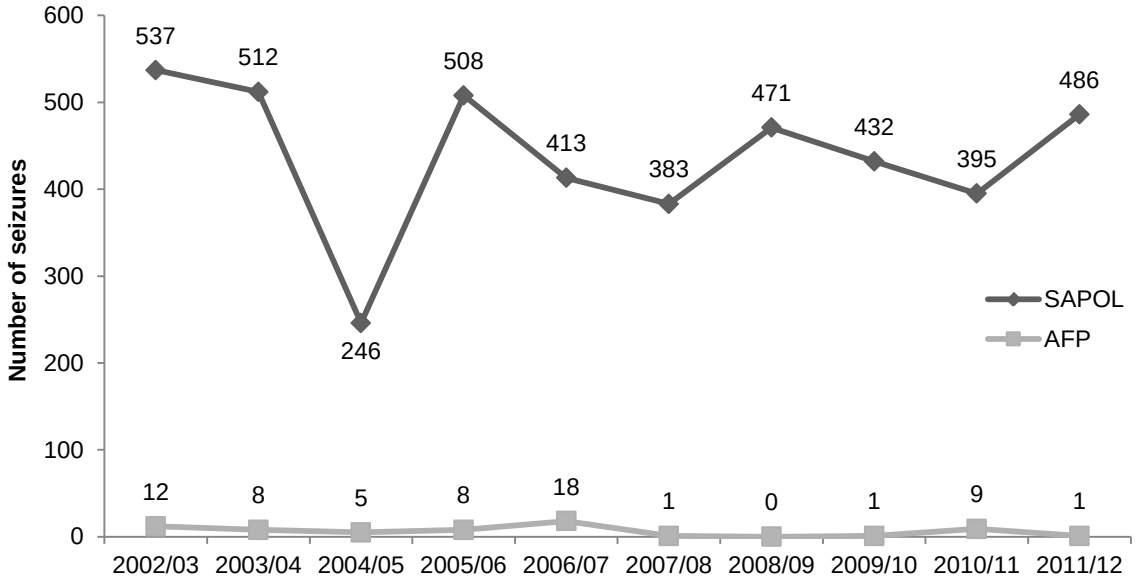
Table 34: Change in potency/strength of cannabis in last six months, 2012 & 2013

	% Able to answer			
	2012		2013	
	Hydro (n=60)	Bush (n=47)	**Hydro (n=51)**	**Bush (n=53)**
Increasing	10	14	**10**	**11**
Stable	62	59	**61**	**66**
Decreasing	5	5	**10**	**4**
Fluctuating	23	22	**20**	**19**

Source: EDRS participant interviews
Note: 'Don't know' not included

The ACC data were unavailable for 2012/13 at the time of publication. As a consequence, data provided by the ACC relates to the data on seizures during the last financial year, 2011/12 (Australian Crime Commission, 2013). Figure 22 shows the number of seizures for cannabis, by SAPOL and the AFP. As can be seen, SAPOL seizures increased in 2011/12, reversing the downward trend that had been observed from 2008/09-2010/11. The number of AFP seizures remained low, with only one seizure reported in 2011/12.

Figure 22: Number of cannabis seizures, 2002/03−2011/12



Source: Australian Crime Commission, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013

5.5.3 Availability

Table 35 and Table 36 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 2013, the majority of participants able to comment reported hydro and bush cannabis as 'easy' or 'very easy' to obtain (89% respectively). Almost two-thirds of those able to comment reported that the availability of hydro (65%) and bush (64%) had remained stable in the last six months. There was, however, a significant decrease in the proportion of participants who reported that the availability of hydro cannabis had remained stable in the preceding six months ($p<0.05$; 95% CI: 0.03−0.33), and an inverse increase in the proportion who reported that it had become more difficult to obtain ($p<0.05$; 95% CI: -0.27 − -0.04).

Table 35: Availability of cannabis currently, 2012 & 2013

How easy is it to get cannabis at the moment?	% Able to answer			
	2012		2013	
	Hydro (n=63)	Bush (n=61)	**Hydro (n=56)**	**Bush (n=55)**
Very easy	67	49	**55**	**53**
Easy	32	31	**34**	**36**
Difficult	2	15	**11**	**11**
Very difficult	0	5	**0**	**0**

Source: EDRS participant interviews
Note: 'Don't know' not included

Table 36: Change in availability of cannabis over the last 6 months, 2012 & 2013

Has [availability] changed in the last 6 months?	% Able to answer			
	2012		2013	
	Hydro (n=62)	Bush (n=60)	**Hydro (n=55)**	**Bush (n=55)**
More difficult	3	5	**18***	**11**
Stable	84	73	**65***	**64**
Easier	7	10	**9**	**18**
Fluctuates	7	12	**7**	**7**

Source: EDRS participant interviews
Note: 'Don't know' not included
*$p<0.05$

5.5.4 Usual source of purchase

Table 37 summarises information from participants on the source (both person and venue) from which they had 'usually' obtained cannabis in the preceding six months. In 2013, participants able to comment reported that they had 'usually' obtained cannabis from a friend (44% for both hydro and bush) or a known dealer (37% for both hydro and 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 (32% for hydro; 42% for bush), a dealer's home (30% for hydro; 26% for bush), home delivery (19% for hydro; 9% for bush) or an agreed public location (12% for hydro; 14% for bush).

Table 37: Usual person and source venue where participants purchased hydro and bush cannabis, 2013

	Hydro (n=57)	Bush (n=57)
Person (%)		
Friends	**44**	**44**
Known dealer	**37**	**37**
Workmates	**2**	**2**
Street dealer	**5**	**4**
Acquaintances	**2**	**4**
Unknown dealer/strangers	**4**	**0**
Grew own	**0**	**2**
Other	**2**	**2**
Haven't obtained	**5**	**7**
Venue (%)		
Home delivery	**19**	**9**
Dealer's home	**30**	**26**
Friend's home	**32**	**42**
Agreed public location	**12**	**14**
Street market	**2**	**0**
Grew own	**0**	**2**
Other	**0**	**0**
Haven't obtained	**5**	**7**

Source: EDRS participant interviews

Key Expert Comments

- The majority of KE agreed that the PPA of cannabis had remained stable in the twelve months preceding interview. The price of cannabis was reported to have remained stable at $25 for a bag (n=5).
- It was also noted by one KE that there had been an increase in clients buying an ounce of cannabis for $220−240, re-packaging it into jay bags and then selling them on for a cash profit. This was only noted in one suburb, south of Adelaide, and is perhaps attributable to increasing financial difficulties.

5.6 Other drugs

Very few participants were able to answer on benzodiazepines (n=7), pharmaceutical stimulants (n=5), ketamine (n=4), GHB (n=4), steroids (n=3) or MDA (n=2) and hence data will not be presented for these drugs. No participants were able to answer on antidepressants or antipsychotics.

6 Health-Related Trends Associated with Ecstasy & Related Drug Use

Key Findings

- Just under one-third of the sample self-reported that they had overdosed on a stimulant or depressant drug in the past twelve months (30% respectively).

Health service use

- Nine participants self-reported that they had received professional help for a drug and alcohol related issue, and thirteen participants self-reported that they had thought about seeking help for their drug and alcohol use.
- Telephone calls to ADIS remained stable for alcohol, ecstasy, cannabis and methamphetamine, whilst increasing slightly for cocaine.
- Alcohol dominated as the primary drug of concern for the largest proportion of total clients to DASSA treatment services, followed by amphetamines, cannabis, opioid analgesics and heroin. Both ecstasy and cocaine accounted for only a very small fraction of the total attendances.
- In 2013, 41% of RPU reported that their drug use had caused them to experience problems related to risk (e.g. driving or operating machinery while intoxicated) and 32% reported that it had caused them problems with responsibility (e.g. repeated absences from work/university).

Mental health

- Just over a quarter (28%) of the participants were assessed as having high to very high levels of psychological distress in 2013, with 23% of the sample reporting that they had experienced a mental health problem (other than drug dependence) in the six months preceding interview.

6.1 Overdose and drug-related fatalities

As in previous years, participants in the 2013 sample were 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 in their lifetime and in the last six months. The location where participants had overdosed was also investigated, as was the main drug participants believed was involved. Overall, when recent (in the twelve months prior to interview) 'stimulant' and 'depressant' overdoses were combined, 48 participants reported that they had had a recent overdose experience.

6.1.1 Stimulant overdose

Forty-one participants reported that they had 'ever' overdosed on 'stimulant' drugs, and this was stable from 2012. Those who had ever experienced a stimulant overdose reported doing so on a median of 2 occasions (range=1−200), and the median time since last overdose was 6 months (range=1−60 months).

Thirty participants reported that they had overdosed on a 'stimulant' drug in the last twelve months, and at the time of their most recent overdose they had been partying for a median of 7 hours (range=0−48). Participants predominantly reported being at a nightclub (n=8), a private party (n=6), a friend's home (n=6), or at their own home (n=4) at the time of overdose. Fewer participants reported being at a pub (n=2), live music event (n=2), public place (n=1), or outdoors (n=1) at the time of overdose. Amongst those who had recently overdosed, the main drug involved was ecstasy (n=19), whilst four participants reported that cocaine was the main drug involved. Fewer numbers attributed their most recent overdose to crystal methamphetamine, pharmaceutical stimulants, PMA, 2CB, ketamine and MDMA (n=1 respectively).

Of those who had overdosed in the past twelve months, half (n=15; 50%) reported that they had received some form of immediate treatment. The most common treatment received was being monitored or watched by friends (n=13), with smaller numbers reporting that they had been attended to by an ambulance (n=2), or attended a hospital emergency department (n=1). In addition, four participants reported seeking any post-treatment or information as a result of their overdose, either from the Pill Reports website (n=2), a different website (n=1), or a GP (n=1).

6.1.2 Depressant overdose

Forty participants reported they had 'ever' overdosed on 'depressant' drugs, again stable from 2012. Those that had experienced a depressant overdose had done so on a median of 10 occasions (range=1−100), and the median time since last overdose was 3 months (range=1−156 months).

Thirty participants reported overdosing on a 'depressant' drug in the last twelve months, and at the time of their most recent overdose they had been partying for a median of 6 hours (range=1−72). The main drug involved in these recent depressant overdoses was predominantly alcohol (n=28), with only one participant attributing their overdose to codeine and another attributing it to cannabis. The location of last overdose was quite mixed with most participants reporting that they were at a friend's home (n=9), their own home (n=6), a nightclub (n=6), or at a private party (n=5). Smaller numbers reported being at a pub (n=3), or outdoors (n=1).

Of those who had overdosed in the past twelve months, just under one-third (30%; n=9) reported that they had received some form of immediate treatment. The most common treatment received was being monitored or watched by friends (n=7), with one participant reporting that they had attended a hospital emergency department and another unable to remember what treatment they received. No participants reported seeking any post-treatment or information as a result of their overdose.

6.2 Help-seeking behaviour

In 2013, 9% of participants reported having sought help from a service or health professional in the last six months for any issue related to their drug and/or alcohol use. In addition, thirteen participants reported that they had thought about seeking help for reasons relating to their drug use. The reasons for not seeking help (even though they had thought about doing so) were diverse and included: believing they could manage the problem themselves (n=5), not knowing what services were available (n=2), not being a priority (n=2), not actually wanting to stop their drug use (n=2), lack of motivation (n=1), time constraints (n=1), and social stigma (n=1).

Amongst the entire sample, 84% reported accessing a health service (for any reason) in the preceding six months. The main service accessed was a general practitioner (n=64), with

smaller numbers reporting that they had visited a dentist (n=8), emergency department (n=4) and psychiatrist (n=3).

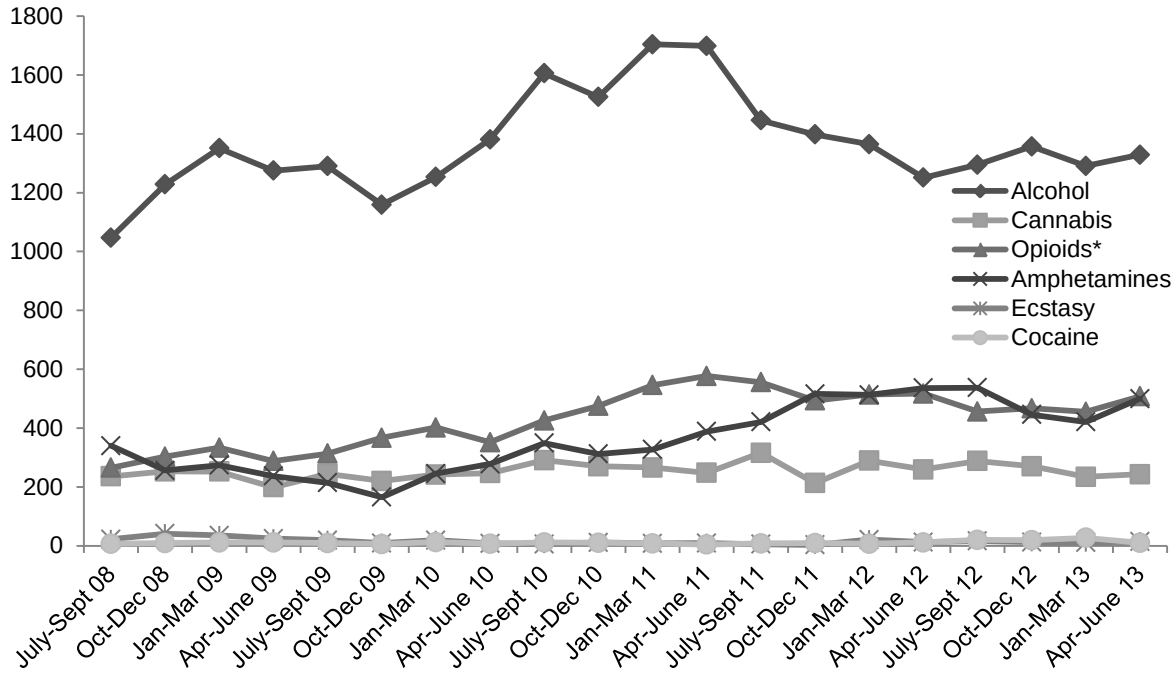
6.3 Drug treatment services

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). The 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, 2011), which details findings from DASSA and other non-government treatment agencies in SA.

6.3.1 Treatment services ADIS

Figure 23 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 2008/09 to 2012/13. It can be seen that the majority of drug-related calls to SA ADIS across the time period depicted have been alcohol-related, although there has been a decline in the number of alcohol-related calls over the past two financial years. In regards to opioids and amphetamines there appears to have been a slight upward trend in the numbers of calls to ADIS, whilst the number of cannabis-related calls have remained relatively stable. 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 23: Number of drug-related calls to ADIS per quarter, by selected drug type, July 2008–June 2013



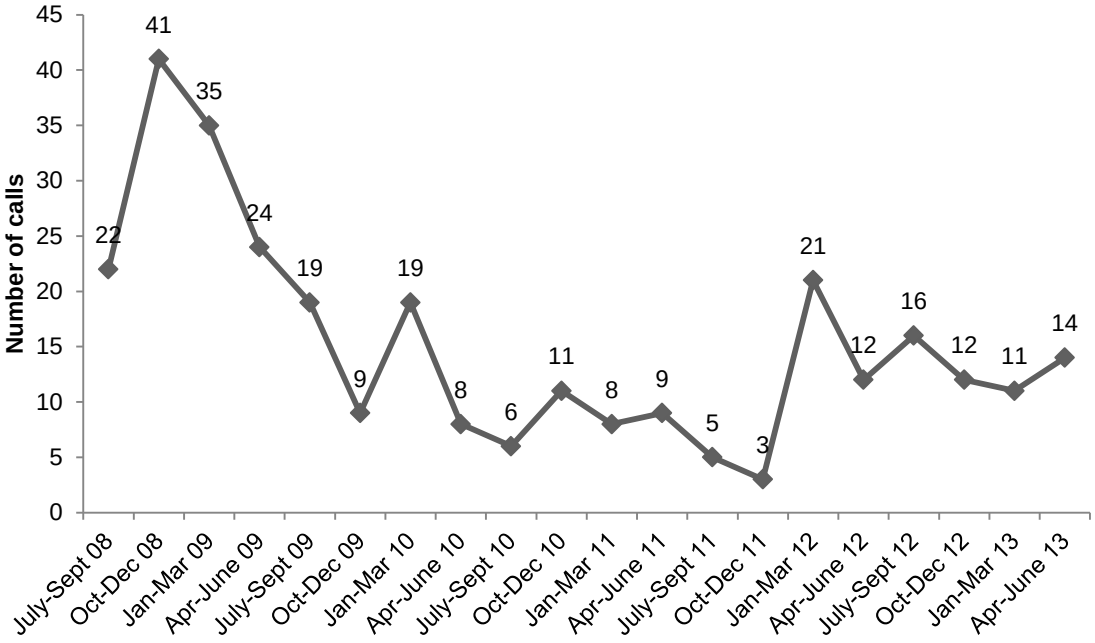
Source: SA ADIS

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

6.3.1.1 Ecstasy-related calls

Telephone calls to ADIS regarding ecstasy accounted for just 0.3% (n=53) of the total coded telephone contacts (drug-related) in the 2012/13 financial year (n=15,252); this was stable from 2011/12 (0.3%; n=41). Figure 24 depicts the number of ecstasy-related calls per quarter for the last five financial years. Although the number of calls regarding ecstasy have fluctuated over the years, it can be seen that, overall, they have remained extremely low.

Figure 24: Number of inquiries to ADIS regarding ecstasy, July 2008–June 2013



Source: SA ADIS

6.3.1.2 Methamphetamine-related calls

Telephone calls to ADIS regarding amphetamines accounted for 12.5% (n=1,904) of the 15,252 total drug-related calls in the 2012/13 financial year. This was stable from the previous financial year (12.6% of a total 15,761 calls), and represents a plateauing of the upward trend observed from 2009−12.

Figure 23 depicts the number of amphetamine-related calls per quarter for the last five financial years compared to calls related to other drug types. As can be seen, in 2012/13 calls related to methamphetamine have continued to be higher than those for cannabis and were equivalent to the number of opioid-related calls.

6.3.1.3 Cocaine-related calls

Telephone calls to ADIS regarding cocaine accounted for only 0.5% (n=76) of total drug-related telephone calls in 2012/13; this was a slight increase from 2011/12 (0.2%; n=35).

Figure 23 depicts the number of cocaine-related calls per quarter for the last five financial years compared to calls related to other drug types. As can be seen, the number of calls regarding cocaine have remained consistently low over the years.

6.3.1.4 Cannabis-related calls

Telephone calls to ADIS regarding cannabis accounted for 6.8% (n=1,035) of the total coded telephone contacts (drug-related) in the 2012/13 financial year, and this was stable from 2011/12 (6.8%; n=1,077).

Figure 23 depicts the number of cannabis-related calls per quarter for the last five financial years compared to calls related to other drug types. As can be seen, the number of cannabis-related calls have remained relatively stable over the past five years.

6.3.2 Treatment services DASSA

As can be seen in Table 38, in 2012/13 alcohol continued to dominate as the primary drug of concern for clients to DASSA treatment services, followed by amphetamines, cannabis, opioid analgesics and heroin. Both ecstasy and cocaine accounted for only a very small fraction (<1%) of the total attendances. There was a very slight decline in the proportion of total clients nominating ecstasy as their primary drug of concern, whilst the proportion of clients nominating cocaine as their drug of concern remained stable.

Table 38: Primary drug of concern nominated by clients of Drug and Alcohol Services South Australia, as a percentage of total number of clients*, 2008/09–2012/13

Drug type (%)	2008/09 N=5,816	2009/10 N=5,716	2010/11 N=5,430	2011/12 N=5,438	**2012/13 N=5,262**
Alcohol	57.5	57.1	54.7	49.4	**47.5**
Amphetamines	15.2	13.3	16.0	19.4	**19.1**
Heroin	7.8	8.6	8.7	7.8	**8.6**
Opioid analgesics	7.3	7.0	6.9	8.3	**8.9**
Cannabis	10.3	10.8	11.4	13.9	**13.9**
Benzodiazepines	2.0	1.9	1.9	1.9	**2.0**
Ecstasy	2.0	1.6	1.0	0.5	**0.3**
Cocaine	0.5	0.4	0.2	0.2	**0.2**
Tobacco	0.4	0.6	0.7	0.5	**0.5**
Unknown	0.2	0.1	0.1	0.3	**0.1**
Buprenorphine	1.1	1.3	1.4	1.8	**1.9**
Other	1.7	2.5	2.1	1.2	**3.0**

Source: Drug and Alcohol Services South Australia

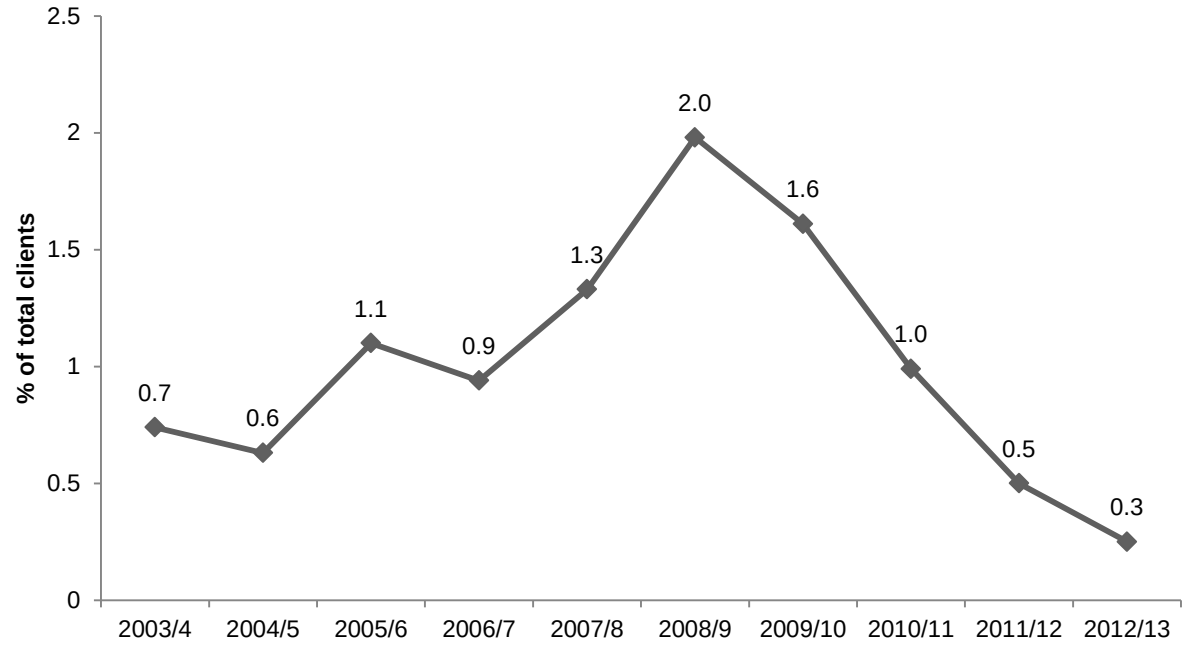
* Total number of clients = total number of individuals who started one or more new episodes of treatment during the period. Figures rounded up to one decimal place

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

6.3.2.1 Ecstasy-related attendances

DASSA treatment data revealed that in 2012/13 there were 13 clients (individuals) to all DASSA treatment services who nominated ecstasy as their primary drug of concern. This constitutes 0.3% of total clients for that year, continuing a downward trend that has been observed from 2008/09 onwards. See also Table 38 for a comparison of ecstasy to other primary drugs of concern among clients of DASSA treatment services.

Figure 25: Percentage of total DASSA clients with ecstasy as the primary drug of concern, 2003/04–2012/13

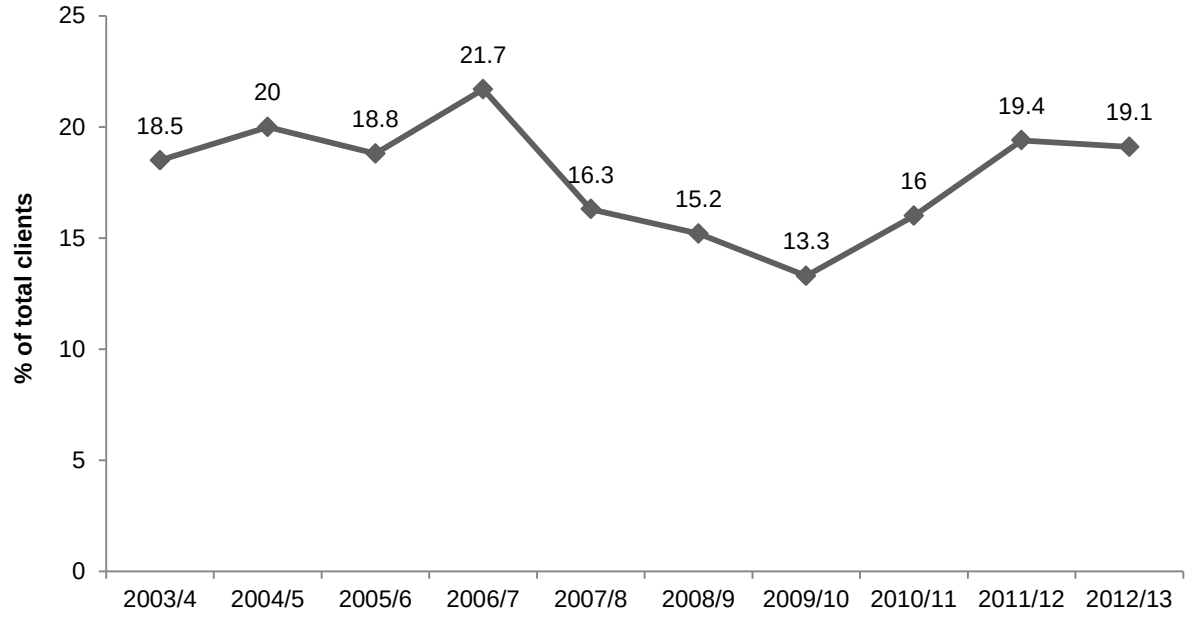


Source: Drug and Alcohol Services South Australia

6.3.2.2 Methamphetamine-related attendances

The proportion of clients nominating amphetamines as their primary drug of concern remained stable in 2012/13. Amphetamines (19.1%) continued to dominate as the most common *illicit* drug of concern amongst DASSA clients, coming second only to alcohol (47.5%).

Figure 26: Percentage of total DASSA clients with amphetamines as the primary drug of concern, 2003/04–2012/13

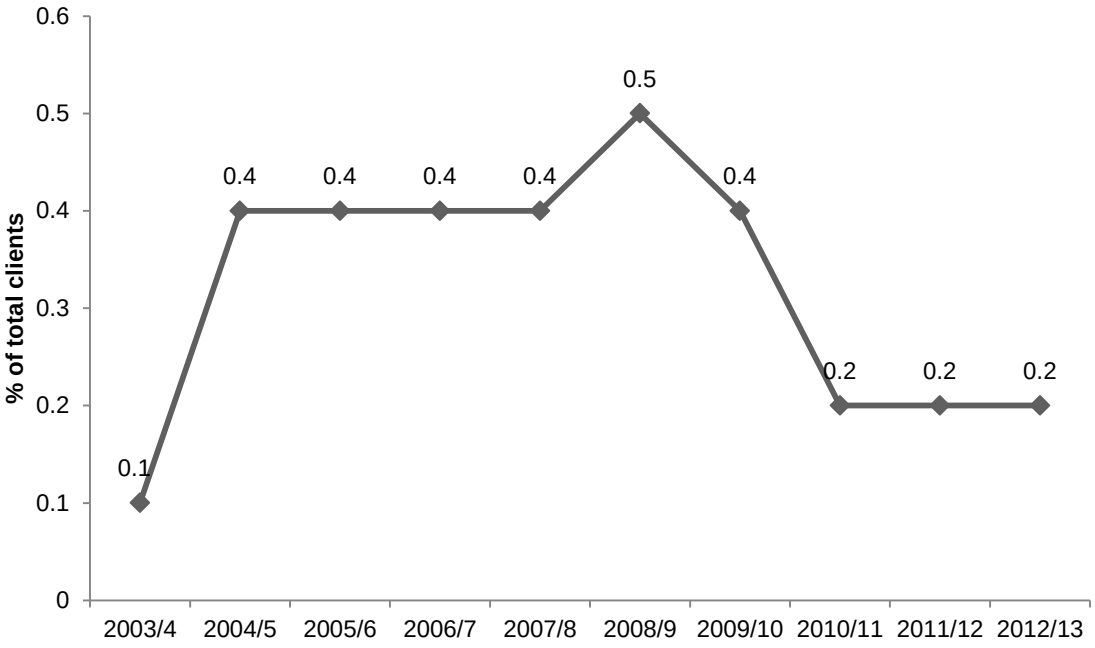


Source: Drug and Alcohol Services South Australia

6.3.2.3 Cocaine-related attendances

The proportion of clients nominating cocaine as their primary drug of concern has remained consistently low across all years reported. Of clients to all DASSA treatment services, 0.21% (n=11 of 5,262 individuals) nominated cocaine as their primary drug of concern in 2012/13.

Figure 27: Percentage of total DASSA clients with cocaine as the primary drug of concern, 2003/04–2012/13

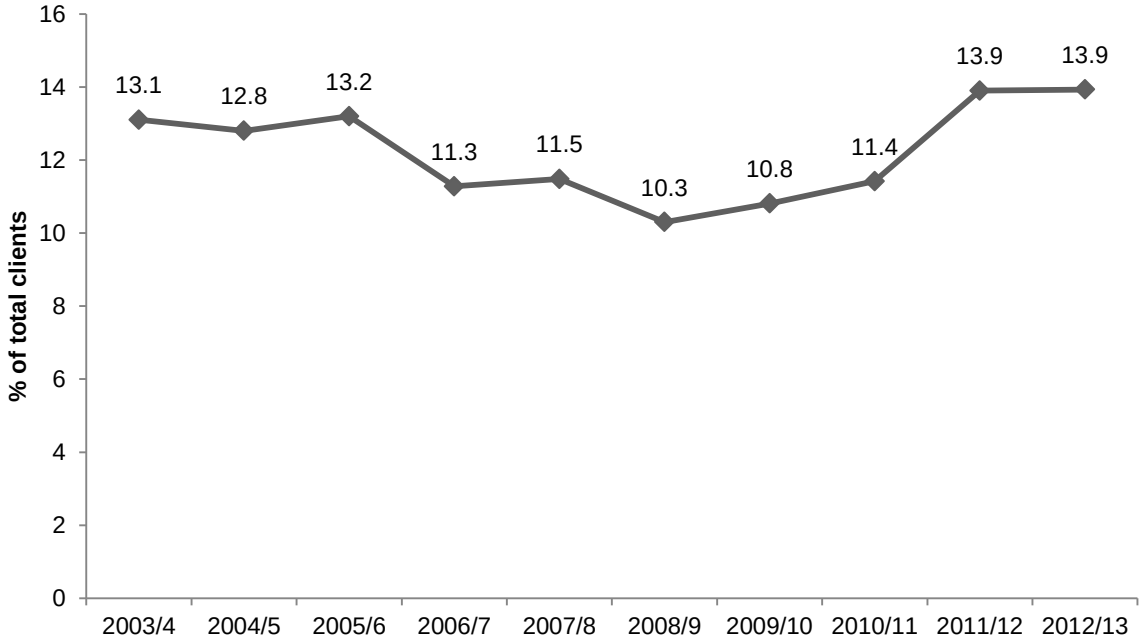


Source: Drug and Alcohol Services South Australia

6.3.2.4 Cannabis-related attendances

The proportion of clients nominating cannabis as their primary drug of concern remained stable in 2012/13. Of clients to all DASSA treatment services, 13.9% (n=733 of 5,262 individuals) nominated cannabis as their primary drug of concern in 2012/13.

Figure 28: Percentage of total DASSA clients with cannabis as the primary drug of concern, 2003/04–2012/13



Source: Drug and Alcohol Services South Australia

6.4 Other self-reported problems associated with ecstasy and related drug use

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 39). In 2013, the most common problem associated with drug use related to risk/injury problems (where participants could have been hurt or hurt others; for example, driving or operating machinery while intoxicated), followed by responsibility problems (either at work, home or school; for example, neglect of household/children, repeated absences from work/school/university etc.). Almost a quarter (23%) of the sample reported that drug use had caused them to have repeated problems with family, friends or people at work/school, whilst 4% reported recurrent drug-related legal problems.

Table 39: Self-reported problems associated with ecstasy and related drug use, 2012 & 2013

	2012 (n=92)	**2013 (n=100)**
Relationship/social problems (%)	24	**23**
Legal/police problems (%)	7	**4**
Risk problems (%)	42	**41**
Responsibility problems (%)	42	**32**

Source: EDRS participant interviews

Participants were also asked to nominate which drug or drugs they attributed the problem to. A summary of these data is given in Table 40. As can be seen, alcohol was the most common drug held responsible for legal, risk and responsibility problems, whilst relationship problems were attributed largely to ecstasy and cannabis.

Table 40: Proportion of participants reporting other harms associated with main drug in the last six months, 2012 & 2013

	Relationship/social problems		Legal/police problems		Risk problems		Responsibility problems	
(%)	2012 n=22	**2013 n=23**	2012 n=6	**2013 n=4**	2012 n=39	**2013 n=40**	2012 n=39	**2013 n=32**
Ecstasy	27	**39**	0	**25**	15	**15**	39	**28**
Cannabis	27	**35**	17	**0**	13	**10**	26	**22**
Alcohol	27	**13**	67	**75**	64	**63**	33	**44**
Speed	0	**4**	0	**0**	0	**3**	0	**3**
Base	5	**0**	17	**0**	3	**0**	3	**0**
Crystal	5	**4**	0	**0**	0	**5**	0	**3**
LSD	0	**0**	0	**0**	3	**3**	0	**0**
Benzodiazepines	0	**0**	0	**0**	0	**0**	0	**0**
Heroin & other opiates	5	**0**	0	**0**	3	**0**	0	**0**
Other	5	**4**	0	**0**	0	**3**	0	**0**

Source: EDRS participant interviews

6.5 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 41. It is important to note that these data are likely to be an under-estimate of drug-related Emergency Department presentations. Drug involvement may not always be coded accurately, and coding accuracy is also dependent on accurate self-reporting of those presenting. Data should be interpreted with these caveats in mind. Readers are also warned that these are 'uncleaned' data and should be interpreted with caution; however, they are included here to give a picture of trends over time, rather than to provide precise numbers.

It is noteworthy that alcohol accounted for the most attendances by far across all years, followed by benzodiazepines. 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 relatively stable in 2012/13; however, there was a slight decrease in

the number of cannabis-related attendances and an increase in the number of amphetamine-related attendances. Amphetamine-related attendances remained the most common of the illicit drug-related attendances at the RAH, with attendances related to heroin declining slightly in 2012/13. 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 2005/06 (from 89 to 31), increased slightly in 2006/07 to 37, and again decreased in 2007/08 with no attendances recorded for 2008/09−2012/13.

Table 41: Number of attendances[*] to the Emergency Department at the Royal Adelaide Hospital, SA, from 2003/04–2012/13 (per drug or diagnosis)

	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	**2012/ 2013**
Amphetamines	81	91	61	82	67	58	61	61	83	**109**
Cocaine	1	4	6	4	1	4	5	1	2	**4**
LSD	2	6	3	2	3	7	7	3	2	**2**
GHB	28	48	38	14	15	15	17	20	20	**17**
Alcohol	1,106	1,465	1,409	1,559	1,554	1,585	2,078	2,119	1,835	**1,860**
Cannabis	11	15	13	15	15	13	11	14	22	**14**
Heroin	25	30	32	39	44	66	51	66	63	**55**
Other opioid[**]	57	70	68	59	28	38	36	38	40	**47**
Benzodiazepines	138	141	122	174	145	151	169	162	147	**117**
Antidepressants	80	87	55	74	78	67	58	71	73	**67**
Drug addiction[#]	20	37	28	17	8	1	0	0	0	**0**
Drug-induced psychosis[#]	44	89	31	37	28	0	0	0	0	**0**
Drug withdrawal[#]	24	26	19	20	0	0	0	0	0	**0**
Other[##]	442	434	360	579	528	464	480	471	439	**448**
TOTAL	*2,059*	*2,543*	*2,245*	*2,675*	*2,514*	*2,469*	*2,973*	*3,026*	*2,726*	***2,740***

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

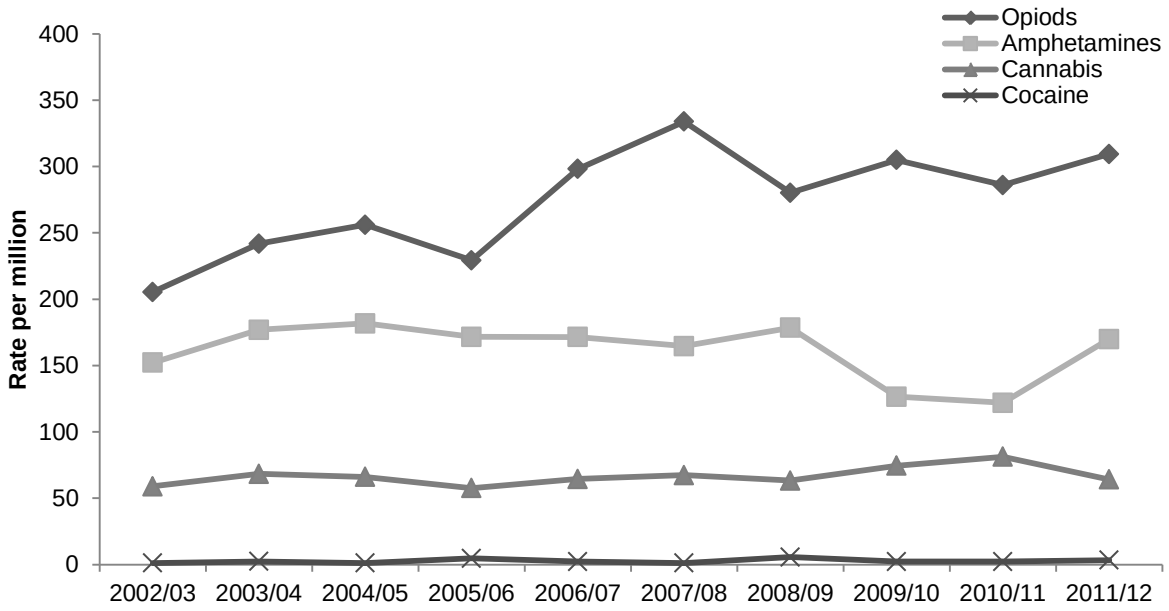
6.5.1 Hospital admissions

An analysis of data, provided by the Australian Institute of Health and Welfare (AIHW) from the National Hospital Morbidity Dataset (NHMD), for the period 1997/98 to 2010/11 (financial years), was undertaken by NDARC. These data report on both state-specific and national drug-related hospital admissions (for the four main illicit drug types), adjusted so that all years reflect International Statistical Classification of Diseases and Related Health Problems, Ninth 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 incomparable coding for these conditions between ICD-9 and International Classification of Diseases and Related Health Problems,

Tenth Revision (ICD-10)[9]. It should also be noted that these data lag behind other indicators by one year. At the time of printing, data was not available for 2012/13.

The substances most commonly involved in a primary diagnosis for SA drug-related hospital admissions were opioids (heroin, morphine, methadone etc.), followed by amphetamines, cannabis and cocaine (see Figure 29). Ecstasy-related admissions are not specifically coded.

Figure 29: Rate per million people of substance-related admissions* (primary diagnosis) to hospital in South Australia, 2002/03–2011/12



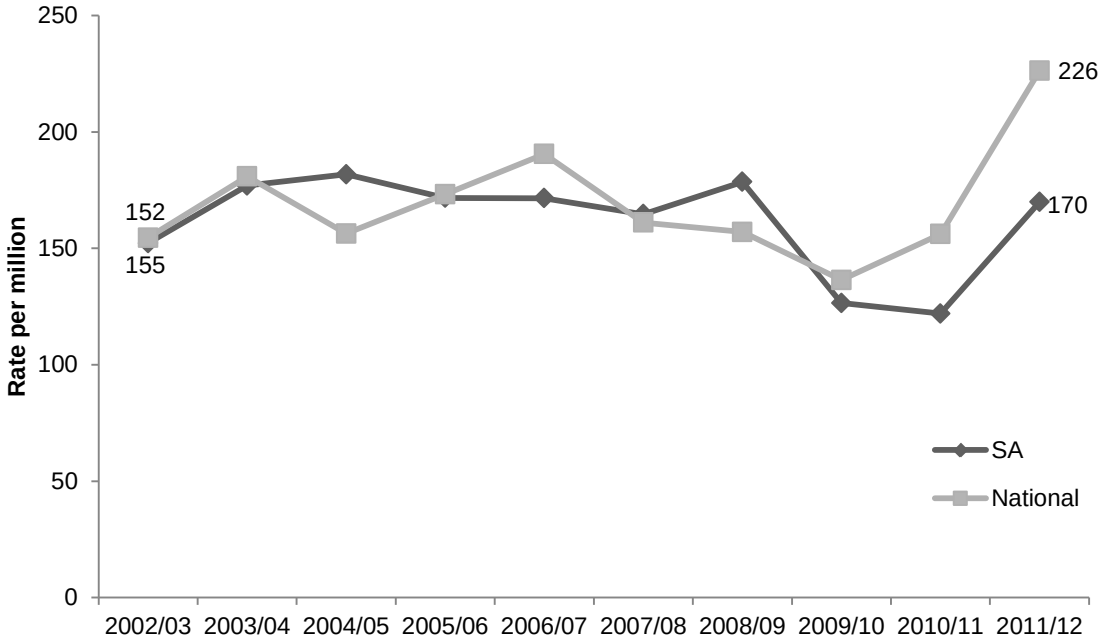
Source: Australian Institute of Health and Welfare
* For persons aged between 15 and 54 years
Note: 'Primary diagnosis' was given to those admissions where the substance was considered the primary reason for the patient's episode of care

6.5.1.1 Amphetamine-related hospital admissions

Figure 30 shows the long-term trend of amphetamine-related hospital admissions, from 2002/03 onwards. Admissions with amphetamines as a primary diagnosis increased sharply in 2011/12; from 122 per million in 2010/11 to 170 per million. There was also a sharp increase at the national level, from 156 per million in 2010/11 to 226 per million; this continues an upward trend that has been observed from 2009/10 onwards. Readers are reminded that this figure does not include amphetamine-related psychosis or withdrawal admissions.

[9] 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 30: Rate of amphetamine-related admissions* (primary diagnosis) to hospital in South Australia and nationally, per million people, 2002/03–2011/12

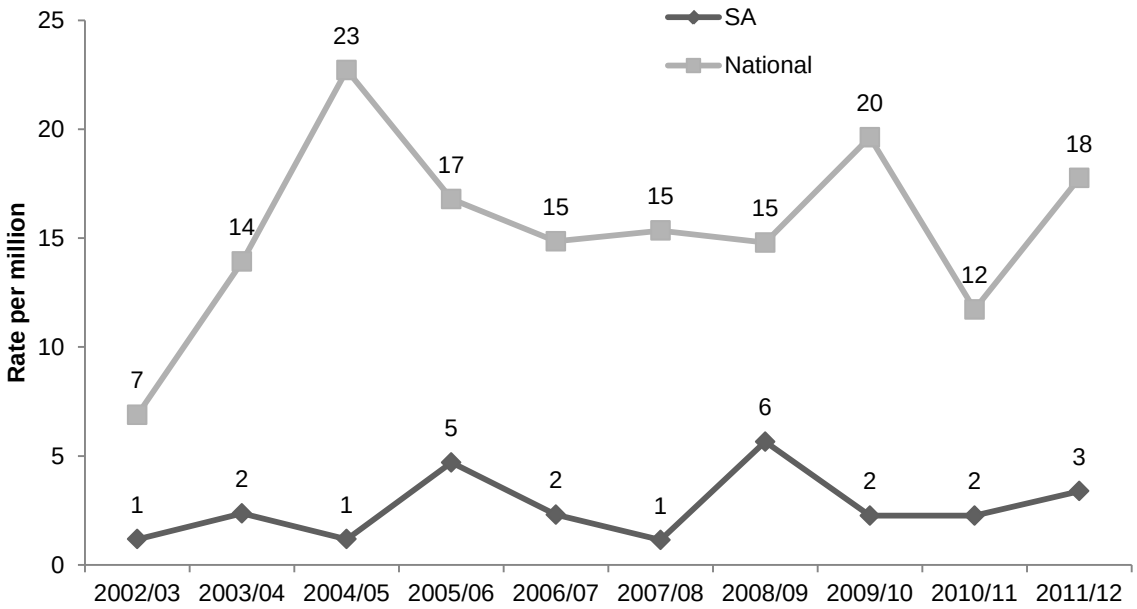


Source: Australian Institute of Health and Welfare
* For persons aged between 15 and 54 years, excluding amphetamine withdrawal and psychosis admissions
Note: 'Primary diagnosis' was given to those admissions where the substance was considered the primary reason for the patient's episode of care

6.5.1.2 Cocaine-related hospital admissions

Figure 31 shows that the rates of cocaine-related hospital admissions have fluctuated considerably over the years, both nationally and in SA. However, the national rate of cocaine-related admissions has remained consistently higher than observed in SA. Interestingly, in 2011/12 the rates of admissions observed at the national level increased (from 12 per million in 2010/11 to 18 per million), whilst in SA admissions remained stable (at 3 per million).

Figure 31: Rate of cocaine-related admissions* (primary diagnosis) to hospital in South Australia and nationally, per million people, 2002/03–2011/12



Source: Australian Institute of Health and Welfare

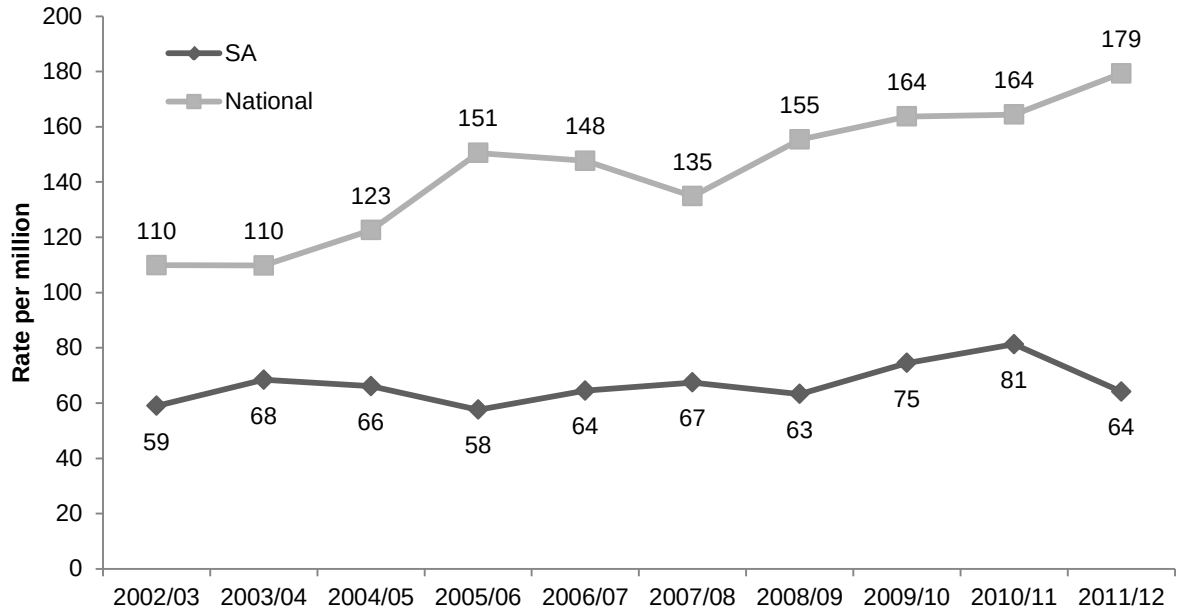
* For persons aged between 15 and 54 years, excluding cocaine withdrawal and psychosis admissions

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

6.5.1.3 Cannabis-related hospital admissions

Figure 32 depicts the long-term trend in cannabis-related hospital admissions (primary diagnosis), both nationally and in SA from 2002/03 onwards. As can be seen, national rates have been trending upwards over the last decade, whilst SA rates have remained relatively stable. Interestingly, in 2011/12 the rates of admissions observed at the national level increased (from 164 per million in 2010/11 to 179 per million), whilst in SA admissions decreased (from 81 per million in 2010/11 to 64 per million). Readers are reminded that this figure does not include cannabis-related psychosis or withdrawal admissions.

Figure 32: Rate of cannabis-related admissions* (primary diagnosis) to hospital in South Australia and nationally, per million people, 2002/03–2011/12



Source: Australian Institute of Health and Welfare

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

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

6.6 Mental and physical health problems

6.6.1 Mental health problems and psychological distress (K10)

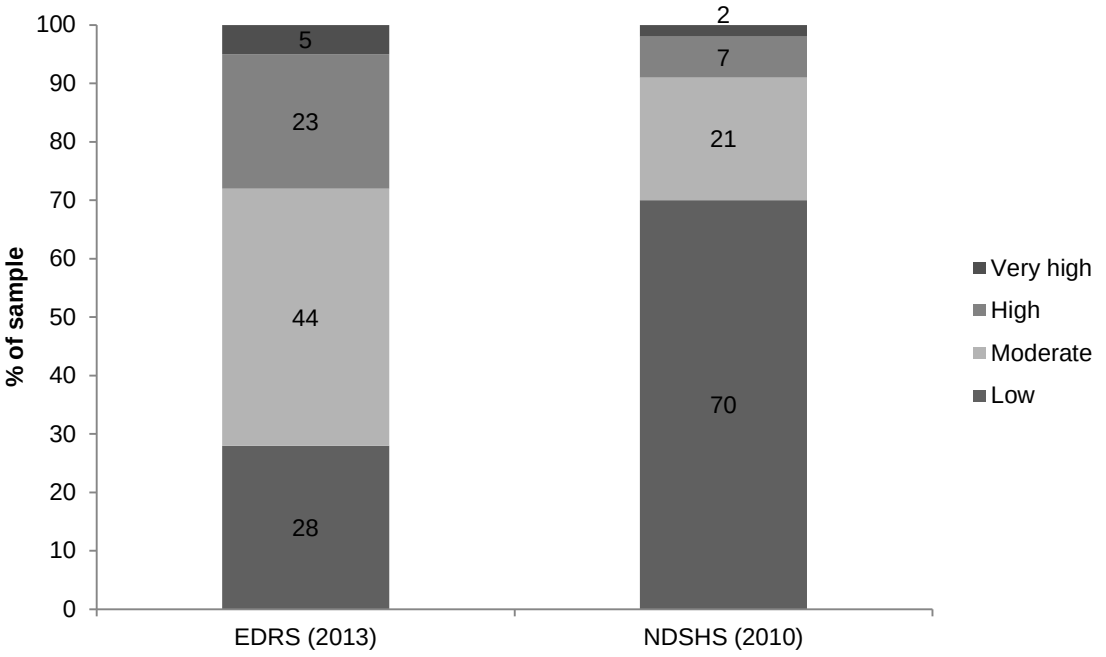
In 2013, the Kessler Psychological Distress Scale (K10) (Kessler & Mroczek, 1994) was used to give a measure of levels of psychological distress among the participant sample.

The K10 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.

Twenty-eight percent of participants had scores between 10 and 15 on the K10 (low risk), 44% of participants scored between 16 and 21 (moderate distress), 23% of participants scored from 22 to 29 (high distress), and 5% scored from 30 to 50 (very high distress) (Figure 33). The median total score for participants was 17 (range=9−35), indicating that over half of the sample was at moderate or high/very high risk of psychological distress as measured by the K10.

The 2010 National Drug Strategy Household Survey (Australian Institute of Health & Welfare, 2011) provided the most recent Australian population norms available for the K10, and used four categories to describe degree of distress as used in the EDRS. Using these categories, the proportion of EDRS participants reporting 'high' (23%) or 'very high' (5%) distress was higher (28%) compared to those in the National Drug Strategy Household Survey (9%/high = 7%; very high = 2%).

Figure 33: Proportion of population (NDSHS, 2010) and sample of K10 categories, 2013



Source: EDRS interviews; Australian Institute of Health & Welfare, 2011
Note: The extent to which cut-offs derived from population samples can be applied to the RPU population is yet to be established and, therefore, these findings should be taken as a guide only

6.6.2 Self-reported mental health problems

In 2013, 23% of the sample reported experiencing a mental health problem (other than drug dependence) in the six months preceding interview. This was stable from 2012.

The majority of participants reported experiencing anxiety (74%; n=17) and depression (65%; n=15). Smaller numbers reported paranoia (9%, n=2), manic depression (9%; n=2), mania (9%; n=2), schizophrenia (4%; n=1), drug-induced psychosis (4%; n=1), other psychosis (4%; n=1) or phobias (4%; n=1). Two-fifths (61%; n=14) of those who reported suffering from a mental health problem had sought professional help for such problems, and 11 participants had been prescribed some form of medication (most commonly antidepressants).

7 RISK BEHAVIOUR

Key Findings

Injecting risk behaviour

- Twelve percent of the sample reported having injected at some time in their lives, and 6% reported injecting in the six months preceding interview. The median age of first injection was 21 years.
- Among those who had injected in the preceding six months (n=6), the most commonly injected drug was methamphetamine.
- Syringes were typically obtained from a Clean Needle Program (67%). Of those who had injected in the preceding six months, no participants reported having shared needles, and only one participant reported sharing spoons/mixing containers.

Sexual risk behaviour

- Seventy percent of RPU reported having had casual sex in the six months preceding interview. Interestingly, being sober did not seem to improve the use of protection, with about a half of the sample reporting they had not used any protection during their last sexual encounter (regardless of whether they were sober or under the influence of drugs and/or alcohol at the time).
- Of those who reported having casual sex in the past six months, the vast majority (93%) reported doing so whilst under the influence of drugs and/or alcohol.
- Over half of the sample (58%) had received a sexual health check-up in their lifetime, with two participants reporting that they had been diagnosed with an STI in the past year.

Driving risk behaviour

- Eighty-six percent of RPU reported that they had driven a vehicle in the preceding six months, and of these, 37% had driven whilst over the BAC limit.
- Of those who had driven recently, 62% had done so whilst under the influence of drugs. The drugs most commonly used whilst driving were cannabis and ecstasy.

Alcohol risk behaviour

- Using the Alcohol Use Disorders Identification Test (AUDIT), participants scored a mean of 14.8, with no significant differences being noted between males and females. The majority of the sample (86%) scored eight or more; these are levels at which alcohol intake may be considered hazardous.

7.1 Injecting risk behaviour

Detail on injecting and injecting-related risk behaviour has been included in the EDRS survey since 2004. In 2013, 12% of the sample reported ever injecting any drug; and 50% (n=6) of those reported having injected in the six months prior to interview. The median age of first injecting any drug was 21 years (range=14−30 years; n=12). The majority of participants reported that methamphetamine was the first drug ever injected (50%; n=6), whilst one-third reported that heroin was the first drug ever injected (33%; n=4). The remaining participants reported that cocaine (n=1) and human growth hormones (n=1) were the first drugs ever injected.

7.1.1 Recent injectors

Participants who had injected in the last six months reported injecting on a median of 48 occasions in that period (range=4−100), which equates to approximately twice a week. Methamphetamine was the drug most commonly injected in the past six months (50%), followed by heroin (33%) and steroids (17%).

One-third of recent injectors (33%; n=2) had injected while coming down from ERD in the preceding six months and 33% (n=2) had injected both while under the influence of ERD and while coming-down during that time. Those who had injected whilst under the influence of, or coming-down from, drugs in the past six months reported doing so on a median of 20 occasions (range=2−48; n=4).

7.1.2 Context of injecting

Participants reported obtaining needles mainly from a Clean Needle Program (67%; n=4), followed by a chemist (17%; n=1) and hospital (17%; n=1). Participants were able to nominate more than one source.

The majority of participants who had injected usually did so on their own (83%; n=5), with close friends (33%; n=2) or with their regular sex partner (17%; n=1). Those who had recently injected reported having injected at their own home (83%; n=5) or at a friend's home (17%; n=1).

7.1.3 Sharing of needles/syringes and other injecting equipment

In 2013, there were no participants who had shared needles. One participant reported sharing spoons or mixing containers with another person.

7.2 Sexual risk behaviour

Participants were asked to provide information regarding 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 fist.

7.2.1 Recent sexual activity

Table 42 summarises the reports of recent sexual activity and condom use with casual partners. Seventy percent of the sample reported having casual sex with at least one casual partner in the six months preceding interview. Twenty-two percent reported having one casual sexual partner during the preceding six months and 48% reported having multiple casual partners. Participants were asked about the use of 'protective barriers' which were defined as 'condoms, dams or gloves', with casual partners. As can be seen in Table 42, the use of protective barriers was mixed, with 44% of the sample reporting that they had not used protection the last time they had sex while sober. The main reasons for not using protection in such encounters were: it wasn't mentioned (n=8), using a contraceptive pill (n=7), agreed not to (n=5), participant did not wish to use (n=4), or lack of availability (n=2).

Table 42: **Prevalence of sexual activity and number of sexual partners in the preceding six months, 2012 & 2013**

	2012	**2013**
No. casual sexual partners (%)	(n=92)	**(n=100)**
No casual partner	36	**30**
1 person	11	**22**
2 people	20	**15**
3−5 people	23	**26**
6−10 people	5	**6**
10 or more	5	**1**
Use of protection during sex with casual partner when sober* (%)	(n=59)	**(n=70)**
Yes	56	**49**
No	36	**44**
Not applicable	9	**7**

Source: EDRS participant interviews
*Among those who had had casual sex

7.2.2 Drug use during sex

Table 43 summarises the reports of recent sexual activity and condom use while under the influence of a drug or drugs, in the last six months. The majority (93%) of those reporting recent penetrative sex with a casual partner reported that they had had penetrative sex with a casual partner whilst under the influence of alcohol and/or drugs, in the six months prior to interview. Interestingly, the large majority (92%) of these participants reported doing so on multiple occasions, with 20% reporting that they had done so on more than ten occasions.

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 (66%), followed by alcohol (49%) and cannabis (39%) (see Table 43).

Just over half of participants (51%) who had had recent penetrative sex with a casual partner whilst under the influence of drugs reported that they had not used protection, whilst the remaining half (49%) reported that they had used protection. These were very similar proportions to those who had used protective barriers when sober. The main reasons for not using protection whilst on drugs included: it wasn't mentioned (n=11), using a contraceptive pill (n=6), lack of availability (n=3), agreed not to (n=2), participant didn't want to (n=2) or partner didn't want to (n=2).

Table 43: Drug use during sex with a casual partner in the preceding six months, 2012 & 2013

	2012 n=59	**2013 n=70**
Penetrative sex with casual partner while on drugs (%)[*#]	85	**93**
No. times had sex while on drugs with casual partner (%)	n=50	**n=65**
Once	10	**8**
Twice	6	**22**
3−5 times	34	**32**
6−10 times	22	**19**
Eleven +	28	**20**
Drugs used during last sexual episode	n=50	**n=65**
Ecstasy	60	**66**
Alcohol	54	**49**
Cannabis	42	**39**
Methamphetamine – powder	0	**3**
Methamphetamine – base	4	**0**
Methamphetamine – crystal	6	**12**
Cocaine	10	**3**
LSD	0	**2**
Ketamine	0	**0**
Mushrooms	0	**2**
Amyl nitrate	2	**2**
Nitrous oxide	4	**2**
GHB	0	**2**
Pharmaceutical stimulants	2	**0**
Other opiates	0	**2**
Benzodiazepines	0	**3**
Use of protection during sex with casual partner under influence of drugs (%)[#]	n=50	**n=65**
Yes	66	**49**
No	34	**51**
Not applicable	0	**0**

Source: EDRS participant interviews
[*] In the six months preceding interview
[#] Of those who had sex with a casual partner

7.2.3 Sexual health

The majority of participants reported having had a sexual health check-up within their lifetime (58%), and of these participants 11% had ever been diagnosed with a sexually transmitted infection (Table 44). Two participants reported being diagnosed with an STI in the past year, and both had been diagnosed with Chlamydia.

Table 44: Sexual health check-ups and diagnosis, 2012 & 2013

	2012	**2013**
Sexual health check-up (lifetime) %	(n=91)	**(n=93)**
No	45	**42**
Yes (last year)	41	**39**
Yes (>year ago)	14	**19**
Diagnosed with STI (lifetime)[#] %	(n=50)	**(n=54)**
No	86	**89**
Yes, in last year	8	**4**
Yes, >year ago	6	**7**
Don't know/didn't get result	1	**0**

Source: EDRS participant interviews
[#] Of those who had ever had a sexual health check up

7.3 Driving risk behaviour

Eighty-six percent of RPU reported that they had driven a vehicle in the preceding six months. These participants were asked whether they had driven after consuming any illicit drug(s) in the six months prior to interview, and, if so, which drugs were involved. They were also asked if they had driven whilst over the limit for alcohol. The results are detailed in Table 45.

Table 45: Recent occurrence of driving following drug use, 2012 & 2013

% of recent drivers	2012 (n=77)	**2013 (n=86)**
Driven over the limit for alcohol*	47	**37**
Driven after taking any illicit drug*	56	**62**
Driven after illicit use of#:	(n=43)	**(n=53)**
Ecstasy	56	**51**
Methamphetamine – powder	9	**0**
Methamphetamine – base	9	**2**
Methamphetamine – crystal	14	**17**
Pharmaceutical stimulants	0	**4**
Cannabis	72	**64**
LSD	0	**2**
MDA	0	**0**
Mushrooms	5	**2**
Cocaine	2	**6**
Amyl nitrate	0	**2**
Nitrous oxide	0	**0**
Heroin	0	**2**
Other opiates	0	**2**
Benzodiazepines	2	**0**
Other	2	**0**

Source: EDRS participant interviews
* In the six months preceding interview
# Of those who had DUI of illicit drugs

Thirty-seven percent of the participants (n=32) who had driven a vehicle in the six months prior to interview reported that they had driven while over the limit of alcohol, and they had done so on a median of two occasions (range=1−24) during that period. Forty-three percent of recent drivers (n=37) had been random breath tested (for alcohol) in the six months prior to interview; however, only three participants registered a positive result for being over the legal limit.

Sixty-two percent of recent drivers (n=53) also reported that they had driven after consuming an illicit drug, and they had done so on a median of 4 occasions (range=1−150). The drugs most commonly reported as having been used prior to driving, in the previous six months, were cannabis (64%), ecstasy (51%) and crystal methamphetamine (17%). The 'last' time participants drove they did so under the influence of cannabis (62%), ecstasy (38%), crystal methamphetamine (8%), pharmaceutical stimulants (2%), LSD (2%), heroin (2%), cocaine (2%) and amyl nitrate (2%). Participants reported driving a median of one hour after taking any illicit drug (range=0−12 hours; n=53). Twenty-seven percent of recent drivers (n=23) had ever been tested for drug driving, with 12 participants reporting that they had been tested for drug driving in the six months prior to interview. Three participants reported that they had tested positive to their most recent drug driving test. MDMA was the only drug detected (n=2), with one participant unsure what they tested positive for.

Participants who had driven after consuming illicit drugs were asked how they thought their driving ability had been impacted on the last occasion of drug driving. Over two-fifths (43%)

of participants reported that it had no impact, 43% said it impaired their driving ability and 13% thought it had improved their ability to drive.

In 2013, participants who had driven in the six months preceding interview were asked some additional questions about the likelihood of being caught for drug driving and whether the introduction of roadside drug driving had changed their driving behaviour. Recent drivers believed that a median of 5 out of 100 drug drivers would be caught (range=0−50), and thirty-seven percent (n=32) reported that the introduction of roadside drug testing had changed their driving behaviour − primarily by not driving after taking drugs (n=20), getting a taxi (n=11), or waiting a few hours before driving (n=10). When asked how many times they thought they would drug drive in the next six months, over half (52%; n=44) reported that they didn't plan to drug drive in the next six months. However, forty-eight percent of recent drivers (n=41) did report an intention to drive after taking illicit drugs in the next six months, and they planned to do so on a median of five occasions (range=1−150).

7.4 The Alcohol Use Disorders Identification Test (AUDIT)

The AUDIT (Saunders et al., 1993) was completed by RPU participants in the EDRS for the sixth year running. The AUDIT was designed by the World Health Organization (WHO) as a brief screening scale to identify individuals with alcohol problems, including those in the early stages. It is a ten-item scale, designed to assess three conceptual domains: alcohol intake; dependence; and adverse consequences (Reinert & Allen, 2002). Total scores of eight or more are recommended as indicators of hazardous and harmful alcohol use and may also indicate alcohol dependence (Babor et al., 1992). Higher scores indicate greater likelihood of hazardous and harmful drinking; such scores may also reflect greater severity of alcohol problems and dependence, as well as a greater need for more intensive treatment (Babor et al., 2000).

Table 46 presents an overview of the AUDIT scores. The overall mean score on the AUDIT was 14.8 (range=0−31; SD=6.9), and there were no significant differences in female and male AUDIT scores. Eighty-six percent of the sample scored eight or more, which are levels at which alcohol intake may be considered hazardous; again there were no significant differences between male and female participants.

The total AUDIT score places respondents into one of four 'zones' or risk levels. In 2013, 14% scored in Zone 1 (low-risk drinking or abstinence), 43% scored in Zone 2 (alcohol use in excess of low-risk guidelines), 20% scored in Zone 3 (harmful or hazardous drinking) and 22% scored in Zone 4 (those in this zone may be referred to evaluation and possible treatment for alcohol dependence). This was stable from 2012.

Table 46: AUDIT total scores and proportion of RPU scoring above recommended levels indicative of hazardous alcohol intake, 2012 & 2013

	2012	**2013**
Mean AUDIT total score	16.2	**14.8**
SD	6.8	**6.9**
(range)	(0−34)	**(0−31)**
Score 8 or above (%)	88	**86**
Zone 1	12	**14**
Zone 2	34	**43**
Zone 3	21	**20**
Zone 4	33	**22**

Source: EDRS participant interviews. Note: Zone 1 refers to low risk drinking or abstinence; Zone 2 consists of alcohol use in excess of low-risk guidelines; Zone 3 may refer to harmful or hazardous drinking; and Zone 4 may be indicative of those warranting evaluation or treatment for alcohol dependence

8 Law Enforcement-Related Trends Associated with Ecstasy Related Drug Use

Key Findings

- In 2013, the proportion of participants who had engaged in a criminal offence in the month prior to interview declined (albeit non-significantly) to 32%.
- Eleven percent of RPU reported that they had been arrested in the past year, stable from 2012.
- Arrests made by SA police increased for amphetamine-type stimulants, decreased for cannabis and remained stable for cocaine.

8.1 Reports of criminal activity among RPU

Table 47 summarises participants' reports of criminal activity in the month prior to interview, arrests in the twelve months prior to interview and lifetime prison history, over the past five years. In 2013, 32% of participants reported involvement in some type of crime in the month prior to interview, which was a non-significant decline from 2012. Drug dealing was the most commonly reported crime across all years of the survey. Smaller proportions of participants also reported involvement in a property crime, fraud and violent crime in the month prior to interview.

Table 47: Criminal activity in the month prior to interview, as reported by participants, 2009–2013

	2009 (n=100)	2010 (n=92)	2011 (n=76)	2012 (n=92)	**2013 (n=100)**
Criminal activity in last month:					
Property crime	19	4	20	16	**7**
Drug dealing	29	19	33	28	**22**
Fraud	2	4	4	1	**3**
Violent crime	5	4	11	7	**4**
Any crime	38	22	46	45	**32**
Arrested in last 12 months	13	12	16	15	**11**
Ever in prison	8	6	Not asked	7	**3**

Source: EDRS participant interviews

In 2013, participants who had committed an offence in the preceding month were asked whether they had been under the influence of drugs and/or alcohol at the time of their last offence, and if so, what drugs they were under the influence of. The results are presented in Table 48; due to the small numbers reported, readers are advised to view these findings with caution.

Table 48: Under the influence of drugs and/or alcohol at the time of last offence*, 2013

%	Dealing (n=22)	Property crime (n=7)	Violent crime (n=4)	Fraud (n=3)
Under the influence of AOD	50	71	100	33
Drugs under the influence of:**	**n=11**	**n=5**	**n=4**	**n=1**
Ecstasy	55	0	0	0
Cannabis	36	40	0	100
Crystal	0	20	0	0
LSD	0	0	25	0
Alcohol	9	40	75	0

Source: EDRS participant interviews
*Amongst those who had committed an offence in the preceding month
**Amongst those who reported being under the influence of drugs and/or alcohol at the time of last offence

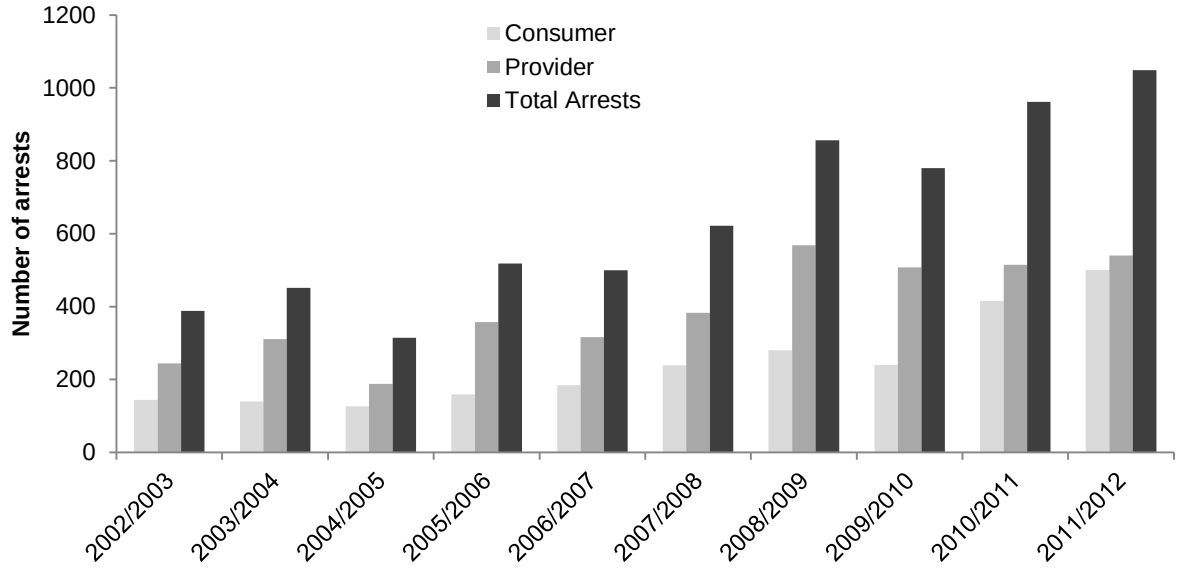
8.2 Arrests

Eleven percent of RPU reported that they had been arrested within the last twelve months, similar to previous years. The most common reasons for arrest were driving offences (n=3), use/possession of drugs (n=2), property crime (n=2) and being drunk and disorderly (n=2). Due to the very small numbers presented here, it is not possible to make any meaningful comparisons with the 2012 data.

8.2.1 Amphetamine-type stimulants

Figure 34 presents the number of consumer and provider arrests for amphetamine-type stimulants made in SA between 2002/03 and 2011/12. Amphetamine-type stimulants include amphetamine, methamphetamine and phenethylamines. The ACC classifies consumers as offenders who are charged with user-type offences (e.g. possession and use of illicit drugs), whereas providers are offenders who are charged with supply-type offences (e.g. trafficking, selling, manufacture or cultivation). The number of total arrests increased in 2011/12 (to 1049), continuing an overall upward trend that has been observed since 2004/05.

Figure 34: Number of amphetamine-type stimulants consumer and provider arrests, 2002/03–2011/12

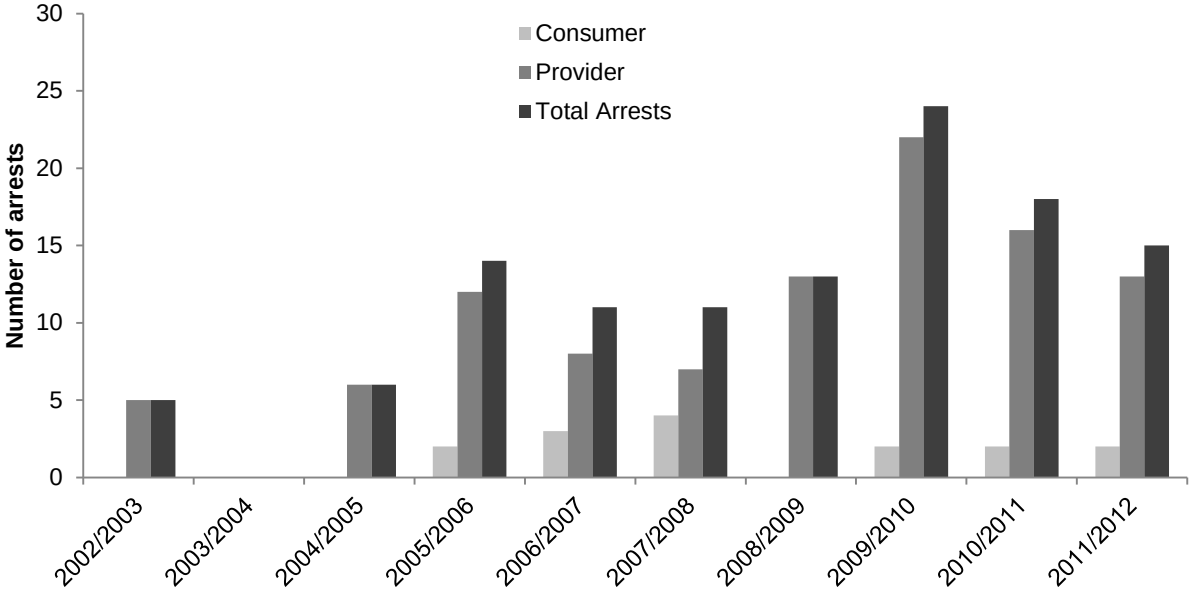


Source: Australian Crime Commission, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013
Note: Data not available for the 2012/13 financial year. Also, total arrests includes those offenders for whom consumer/provider status was not stated and thus may exceed the sum of consumer and provider arrests

8.2.2 Cocaine

In 2011/12, provider arrests decreased slightly from 16 to 13, and consumer arrests remained stable at 2. Total cocaine-related arrests remained low.

Figure 35: Number of cocaine consumer and provider arrests, 2002/03–2011/12

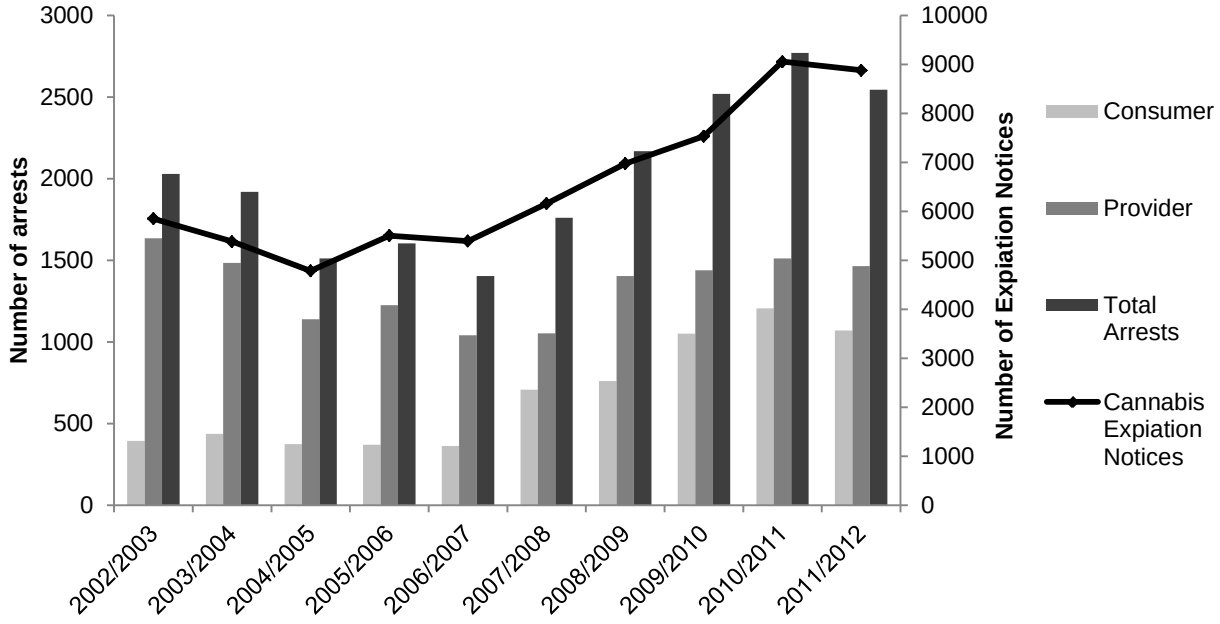


Source: Australian Crime Commission, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013
Note: Data not available for the 2012/13 financial year. Also, total arrests includes those offenders for whom consumer/provider status was not stated and thus may exceed the sum of consumer and provider arrests

8.2.3 Cannabis

Figure 36 presents the number of cannabis consumer and provider arrests in SA from 2002/03 to 2011/12. It also presents the total number of Cannabis Expiation Notices, which is a small fine used to deal with minor cannabis offences, whereby the offence is expiated on payment of the fine. In SA, a higher number of drug-specific arrests were due to provider-type cannabis offences. Total cannabis arrests decreased slightly in 2011/12, perhaps signifying a plateauing of the upward trend observed from 2006/07−2010/11. The number of Cannabis Expiation Notices issued in SA also decreased, from 9,055 in 2010/11 to 8,878 in 2011/12.

Figure 36: Number of cannabis consumer and provider arrests, 2002/03–2011/12



Source: Australian Crime Commission, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013
Note: Data not available for the 2012/13 financial year. Also, total arrests includes those offenders for whom consumer/provider status was not stated and thus may exceed the sum of consumer and provider arrests

9 SPECIAL TOPICS OF INTEREST

Key Findings

Exposure to injecting

- Over two-fifths (44%) of RPU reported knowing a few friends or acquaintances that had injected an illicit drug in their lifetime; amongst these participants 43% reported that they had been directly exposed to the injecting practice at some stage throughout their life.
- Approximately one-fifth of the sample (22%) reported that they had been offered drugs to inject in the preceding twelve months and 10% reported that they had ever seriously considered injecting a drug.
- When asked how likely they would be to inject a drug in the future, the overwhelming majority (75%) reported that it would be 'extremely unlikely'.

NPS health effects

- Amongst those who had used 2CB in the preceding six months, the factors that had influenced their decision to use 2CB the most were availability, value for money, higher level of purity compared to other drugs and fewer side effects compared to other drugs.
- Effects that had never been experienced by participants that had used 2CB included: anger and aggression, shortness of breath, chest pain and skin rash. The effects that were experienced 'most of the time' by the majority of participants included: urge to move (75%), urge to talk (67%) and increased energy (67%).
- One-quarter of recent 2CB users reported that they had taken 2CB (or another stimulant drug) to relieve drug withdrawals, 17% continued to take 2CB even though they had physical or psychological problems, 17% had given up important activities because of their 2CB use and 17% had been concerned about their use of 2CB.

Ecstasy dependence

- RPU scored a median of 1 on the ecstasy SDS.
- Over one-third of the sample (38%) obtained a score of zero on the ecstasy SDS, and 24% obtained a score of 1 on the scale. This indicates that over three-fifths of the sample reported no or few symptoms of dependence in relation to ecstasy use.

9.1 Exposure to injecting

Interviews with Key Experts, conducted as part of the 2012 EDRS, identified that there could be an increasing number of young people injecting as a ROA. Key Experts reported that they have noticed an increasing number of young people presenting to emergency services with injection-related problems, indicating that in addition to an increase in young people injecting, there could be a lack of awareness around safe injecting practices. While rates of injecting drug use among EDRS samples have traditionally been extremely low, identifying risk of injecting could have important harm reduction implications, particularly in relation to education around blood-borne viruses and safe injecting practices.

The aim of this module was to investigate the risk of injecting drug use among RPU by: (a) identifying the level of exposure to injecting; (b) investigating attitudes toward the practice of injecting drugs; and (c) investigating beliefs around the likelihood of injecting a drug in the future.

In relation to exposure to injecting, 44% of RPU reported knowing a few friends or acquaintances that had injected an illicit drug in their lifetime, whilst half (50%) reported that they did not know of any person that had injected. Amongst those who had a friend/acquaintance with a lifetime injecting history, 77% reported knowing a friend/acquaintance who had injected in the preceding 12 months, whilst 23% didn't know of anyone who had injected in that timeframe. In addition, amongst this group that knew of lifetime injectors, two-fifths (43%) reported that they had been directly exposed to the injecting practice within their lifetime (i.e. in the vicinity of the injecting practice taking place).

Smaller numbers of the whole sample reported having been offered drugs to inject (22%) in the last twelve months, and 10% reported that they had ever seriously considered injecting a drug. The main reasons nominated for not injecting a drug were: not the preferred ROA (20%), do not use drugs that are injectable (i.e. cannabis) (14%), fear of needles (12%), and concerns about dependence (12%). The main reasoning for this sample to consider injecting a drug was curiosity (18%), to have a stronger drug effect (15%) and to get high/have fun (6%); however half (53%) the participants reported that they 'would not consider' injecting a drug. Finally, participants were asked to rate on a scale of 1−10 (where 1 means 'extremely unlikely' and '10' means 'extremely likely') how likely they would be to inject a drug in the future, to which the overwhelming majority (75%) endorsed '1' which was 'extremely unlikely'. Small numbers (4%) reported that they would be 'extremely likely' to inject a drug in the future.

Table 49: Exposure to injecting, 2013

%	SA n=100
What proportion of your friends/acquaintances have ever injected a drug illicitly?	
Most	**1**
About half	**0**
A few	**44**
None	**50**
I don't know	**5**
Of those who know someone who has injected, who has injected (past 12 months)?	**n=44**
A friend/acquaintance	**77**
A (non-partner) family member	**0**
Partner	**2**
No one	**23**
Of those who know someone who has injected, have they ever injected around you?	**n=44**
Yes	**43**
No	**57**
Have you been offered drugs to inject in the past 12-months?	**n=100**
Yes	**22**
No	**78**
Have you ever seriously considered injecting a drug?	**n=100**
Yes	**10**
No	**78**
I have already injected a drug	**12**

Source: EDRS interviews

Table 50: Reasons for considering injecting as an ROA, 2013

What would be your main reason for not injecting a drug? (%)	SA n=100
Not my preferred administration	20
Don't use drugs that are injectable	14
Fear of needles	12
Concerns about dependence	12
Social stigma associated with injecting	7
Concerns about BBVI's	10
I will continue to inject no matter what	4
Concern about injection related injury	7
I don't know how to inject myself	0
No access to injecting equipment	2
Did not enjoy/bad experience	0
Other	12
What would be your main reason for injecting a drug? (%)	**SA n=100**
Would not consider	53
Curiosity	18
To have stronger drug effect	15
Get high/have fun	6
Peer pressure/influence	1
Family use	0
Opportunity presented itself	1
Preferred route of administration	1
Other	5

Source: EDRS participant interviews

9.2 NPS health module

The past 10 years has seen the emergence of a range of substances that mimic illicit stimulants and hallucinogens such as amphetamines, ecstasy and LSD – often referred to collectively as 'new psychoactive substances' (NPS). As they are designed to be structurally similar to their banned counterparts, without containing controlled substances, they do not fall readily under legislative control and some have been marketed as 'legal highs'. The promotion of these substances as 'legal highs', together with the fact that they can be bought over the Internet, over the counter, and in shop fronts in Australia has made them accessible to people who may not have used illicit drugs previously, and also gives the illusion of safety. However, the safety or otherwise of these substances is unclear, and there is little evidence on which to base public policies relating to these substances. Indeed, the health and social consequences of these drugs remain poorly understood in Australia, and internationally. This module has therefore been included to improve our knowledge and understanding of the use and effects of four of the most commonly used NPS: mephedrone, 2CB, methylone and

MDPV. However, since only small numbers reported recent use of mephedrone (n=3), methylone (n=1) and MDPV (n=1), data will only be presented for 2CB.

Of those who had used NPS, participants were asked if they bought that particular NPS in a pre-packaged brand. Of those that used 2CB (n=13), no participants purchased 2CB as a pre-packaged brand.

As this is a new growing class of drug, particular motivations to use these drugs were assessed and rated in terms of their influence. For example, on a scale of 0 to 10 where 0 is no influence at all and 10 is maximum influence, how motivating have the following factors been when you have taken 2CB? Results are presented in percentages for those that answered it had 'some' influence (i.e. rated the motivation factor greater than zero). As seen in

Table 51, availability (58%), value for money (58%), the higher level of purity compared to other drugs (50%) and fewer side effects compared to other drugs (50%) were the most influential factors when considering the use of 2C-B.

Table 51: Factors that had some influence (rated greater than '0') on whether EDRS participants used 2CB, 2013

(%)	2CB n=12
Legal to buy it	**17**
Easy to buy on the internet and delivered to my home	**42**
High level of purity compared to traditional illegal stimulants	**50**
It was good value for money	**58**
Better high compared to traditional illegal stimulants	**42**
Fewer side effects compared to traditional illegal stimulants	**50**
Single dose doesn't last too long	**42**
No other drug available to me at the time so I bought it	**58**

Source: EDRS participant interviews

The prevalence and frequency of drug effects were also investigated. Effects that had *never* been experienced by participants that had used 2CB included: anger and aggression (100%), shortness of breath (100%), chest pain (100%) and skin rash (100%). The effects that were experienced 'most of the time' by the majority of participants included: urge to move (75%), urge to talk (67%) and increased energy (67%).

Table 52: Prevalence of effects for 2CB, 2013

(%)	2CB			
	Never	Once	Sometimes	Most of the time
Euphoria	17	8	25	50
Increased energy	17	8	8	67
Improved concentration	50	0	33	17
Empathy with others	17	0	8	75
Urge to talk	8	8	17	67
Urge to move	8	0	17	75
Increased sexual desire	33	0	25	42
Restless or anxious	25	0	50	25
Angry or aggressive	100	0	0	0
Agitated	67	8	8	17
No appetite for food	42	0	8	50
You were forgetting things	58	0	25	17
Panicky	75	0	17	8
Paranoid	67	8	17	8
Blurred vision	42	0	50	8
Seeing things not there	50	8	17	25
Hearing things not there	58	8	17	17
Body sweating	8	8	58	25
Overheating	33	0	33	33
Heat raving or erratic	17	0	50	33
Shortness of breath	100	0	0	0
Headache	92	8	0	0
Chest pain	100	0	0	0
Clenching jaw, grinding teeth	33	0	50	17
Shaky hands, fingers	67	0	33	0
Fingers/toes were cold or numb	83	0	17	0
Skin discolouration (red/blue)	83	0	17	0
Skin rash	100	0	0	0
Vomiting	83	0	17	0
Hard to sleep	42	0	42	17

Source: EDRS interviews

If participants answered that they had experienced a particular effect, they were asked the level of intensity for this experience, whether it was ‘mild’, ‘moderate’ or ‘intense’. For 2CB, the effects that were nominated as being the most intense included: urge to move (64%), empathy with others (60%) and urge to talk (55%).

Table 53: Intensity of effects experienced for 2CB, 2013

(%)	2C-B		
	Mild	Moderate	Intense
Euphoria	20	40	40
Increased Energy	20	40	40
Improved concentration	-	-	-
Empathy with others	10	30	60
Urge to talk	18	27	55
Urge to move	9	27	64
Increased sexual desire	-	-	-
Restless or anxious	-	-	-
Angry or aggressive	-	-	-
Agitated	-	-	-
No appetite for food	-	-	-
You were forgetting things	-	-	-
Panicky	-	-	-
Paranoid	-	-	-
Blurred vision	-	-	-
Seeing things not there	-	-	-
Hearing things not there	-	-	-
Body sweating	27	55	18
Overheating	-	-	-
Heat racing or erratic	10	80	10
Shortness of breath	-	-	-
Headache	-	-	-
Chest pain	-	-	-
Clenching jaw, grinding teeth	-	-	-
Shaky hands, fingers	-	-	-
Fingers/toes were cold or numb	-	-	-
Skin discolouration (red/blue)	-	-	-
Skin rash	-	-	-
Vomiting	-	-	-
Hard to sleep	-	-	-

Source: EDRS participant interviews
Note: Data not presented where n<10

Finally, participants were asked about the addictive properties that may be associated with the use of NPS. Amongst those who had used 2CB, 25% reported that they had taken 2CB (or another stimulant drug) to relieve drug withdrawals, 17% continued to take 2CB even though they had physical or psychological problems, 17% had given up important activities because of their 2CB use and 17% had been concerned about their use of 2CB (Table 54).

Table 54: Level of tolerance and properties of addiction of 2CB, 2013

(%)	2CB n=12
Usual dose has not had the same effect as when you first started	**17**
Taken (drug) in larger amounts than intended	**8**
Persistent desire or strong urge to take (drug)	**8**
Continued to take (drug) even though you've had physical or psychological problems	**17**
Spent a great deal of time getting (drug) or taking it or recovering	**8**
Have you given up important social, occupational or recreational activities because of (drug)	**17**
Have you been concerned about your use of (drug)	**17**
Have you taken (drug) or another stimulant to help relieve drug withdrawals	**25**
Wanted to cut down/take (drug) less often but not successful	**8**
Friends and family have expressed concern about your use of (drug)	**8**

Source: EDRS participant interviews

9.3 Ecstasy severity of dependence

The question as to whether it is possible to be dependent on ecstasy is a controversial one. Currently, in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, text revision (DSM-IV-TR), it is possible to be diagnosed with ecstasy dependence (coded as either amphetamine dependence or hallucinogen dependence), and there are clear case studies in the literature of people who are dependent on ecstasy. In addition, animal models have demonstrated that dependence on ecstasy is biologically plausible. However, findings in relation to ecstasy dependence should be interpreted with caution due to the fact that there has been limited research into this syndrome (Degenhardt, Bruno & Topp, 2010).

To date, internationally, there have been a small number of studies of rates of dependence in ecstasy users. Studies from the US household survey suggest a prevalence rate of past-year dependence in approximately 3.6−3.8% of ecstasy users in the general population. An early NDARC study suggests a lifetime prevalence rate of 64% in similar types of RPU interviewed in the EDRS.

From 2011 onwards, participants of the EDRS have been asked questions from the Severity of Dependence Scale (SDS) adapted to investigate ecstasy dependence. The SDS is a five-item questionnaire designed to measure the degree of dependence on a variety of drugs. The SDS focuses on the psychological aspects of dependence, including impaired control of drug use, and preoccupation with and anxiety about use. The SDS appears to be a reliable measure of the dependence construct. It has demonstrated good psychometric properties with heroin, cocaine, amphetamine, and methadone maintenance patients across five samples in Sydney and London (Dawe et al., 2002). A total score was created by summing responses to each of the five questions. Possible scores range from 0 to 15.

Two cut-off scores are presented below of 3 or more and 4 or more. A cut-off score of 3 or more was used as these scores have been recently found in the literature to be a good balance between sensitivity and specificity for identifying problematic dependent ecstasy use (Bruno, Gomez & Matthews, 2011). Nineteen percent of RPU obtained a score of 3 and above, which was a significant decline from 2012 (39%; $p<0.01$; 95% CI: 0.07−0.32). The cut off score of 4 and above is a more conservative estimate which has been used previously in the literature as a validated cut-off for methamphetamine dependence (Topp & Mattick, 1997; Bruno et al., 2009). Eleven percent of RPU participants scored 4 or above, which was again a significant decline from 2012 (29%; $p<0.01$; 95% CI: 0.07−0.29). There were no significant gender differences amongst those who scored 3 or 4 or above.

The median SDS score was 1 (range=0−8). Over one-third of the sample (38%) obtained a score of zero on the ecstasy SDS, and 24% obtained a score of 1 on the scale. This indicates that a little more than three-fifths of the sample (62%) reported no or few symptoms of dependence in relation to ecstasy use. These findings are supported by the fact that the majority of participants (71%) reported that they ‘never or almost never’ felt that their use of ecstasy was out of control and 83% reported that they would find it ‘not difficult to stop or miss a prospective dose of ecstasy’.

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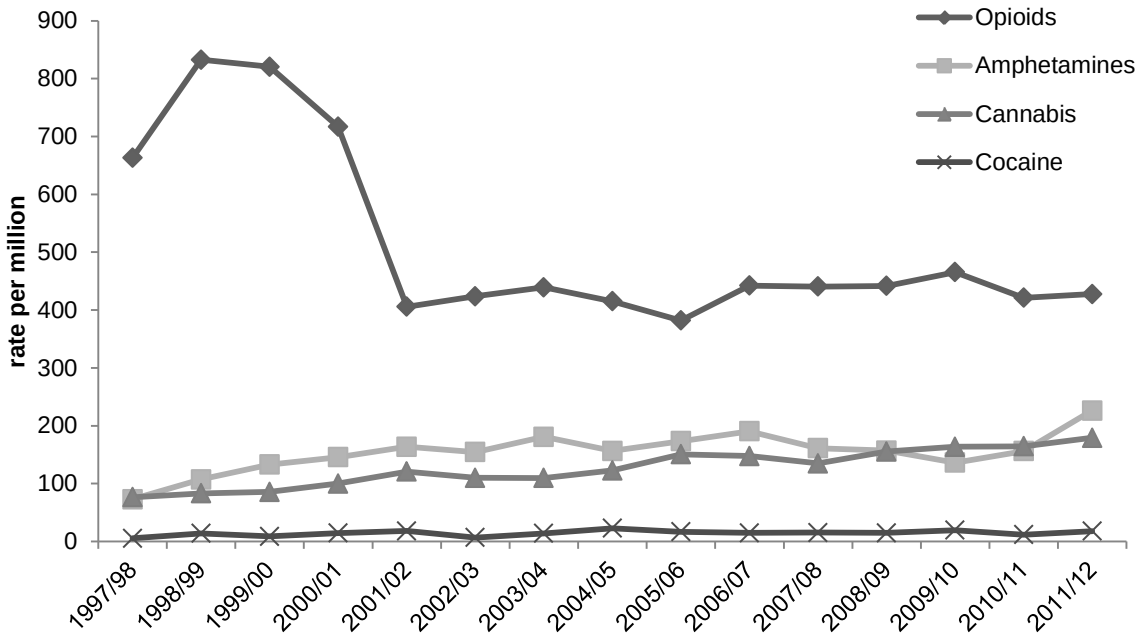
APPENDIX 1: RATE OF SUBSTANCE-RELATED ADMISSIONS* (PRIMARY DIAGNOSIS) TO HOSPITAL IN AUSTRALIA, 1997/1998–2011/12



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