

# **New South Wales**

**G. Entwistle and L. Burns**

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

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**NEW SOUTH WALES  
TRENDS IN ECSTASY AND RELATED  
DRUG MARKETS  
2013**



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

**Gavin Entwistle and Lucy Burns**

National Drug and Alcohol Research Centre  
University of New South Wales

**Australian Drug Trends Series No. 119**

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## ABBREVIATIONS

<b>2C-B</b>	4-bromo-2,5-dimethoxyphenethylamine
<b>2C-E</b>	2,5-dimethoxy-4-ethylphenethylamine
<b>2C-I</b>	2,5-dimethoxy-4-iodophenethylamine
<b>5-MeO-DMT</b>	5-methoxy-dimethyltryptamine
<b>ABCI</b>	Australian Bureau of Criminal Intelligence
<b>ABS</b>	Australian Bureau of Statistics
<b>ACC</b>	Australian Crime Commission
<b>ACON</b>	AIDS Council of NSW
<b>ACPR</b>	Australasian Centre for Policing Research
<b>ACT</b>	Australian Capital Territory
<b>ADIS</b>	Alcohol and Drug Information Service
<b>AFP</b>	Australian Federal Police
<b>Health</b>	Australian Government Department of Health
<b>A&amp;TSI</b>	Aboriginal and/or Torres Strait Islander
<b>AIHW</b>	Australian Institute of Health and Welfare
<b>ATS</b>	amphetamine type stimulant
<b>AUDIT</b>	Alcohol Use Disorders Identification Test
<b>BBVI</b>	blood-borne viral infections
<b>BOCSAR</b>	Bureau of Crime Statistics and Research
<b>BZP</b>	1-benzylpiperazine
<b>CNS</b>	central nervous system
<b>DASSA</b>	Drug and Alcohol Services South Australia
<b>DMT</b>	dimethyl tryptamine
<b>DOB</b>	2,5-dimethoxy-4-bromoamphetamine
<b>DOI</b>	death on impact; 2,5-dimethoxy-4-iodoamphetamine
<b>DOM</b>	2,5-dimethoxy-4-methylamphetamine
<b>DXM</b>	dextromethorphan
<b>EDRS</b>	Ecstasy and Related Drug Reporting System
<b>ERD</b>	ecstasy and related drugs
<b>FDS</b>	Family Drug Support
<b>GBL</b>	gamma-butyrolactone
<b>GHB</b>	gamma-hydroxybutyrate
<b>GLBT</b>	gay/lesbian/bisexual/transgender
<b>HBV</b>	hepatitis B virus
<b>HCV</b>	hepatitis C virus
<b>HIV</b>	human immunodeficiency virus

<b>IDRS</b>	Illicit Drug Reporting System
<b>IDU</b>	injecting drug user(s)
<b>IPS</b>	illicit psychostimulant
<b>K10</b>	Kessler Psychological Distress Scale
<b>KE</b>	key expert(s)
<b>LBQ</b>	lesbian, bisexual and queer
<b>LSD</b>	<i>α</i> -lysergic acid diethylamide
<b>MDA</b>	3,4-methylenedioxyamphetamine
<b>MDEA</b>	3,4-methylenedioxyethylamphetamine
<b>MDMA</b>	3,4-methylenedioxymethamphetamine
<b>MDPV</b>	3,4-methylenedioxypyrovalerone; ivory wave
<b>MDS AODTS</b>	Minimum Data Set for Alcohol and Other Drug Treatment Services
<b>MPTP</b>	1-methyl-4-phenyl-1,2,5,6-tetrahydropyridine
<b>N</b>	(or n) Number of participants
<b>NDARC</b>	National Drug and Alcohol Research Centre
<b>NDLERF</b>	National Drug Law Enforcement Research Fund
<b>NDSHS</b>	National Drug Strategy Household Survey
<b>NNDSS</b>	National Notifiable Diseases Surveillance System
<b>NPS</b>	new psychoactive substances
<b>NSW</b>	New South Wales
<b>OTC</b>	over the counter
<b>PASW</b>	Predictive Analytics Software
<b>PDI</b>	Party Drugs Initiative
<b>PIED</b>	performance and image enhancing drugs
<b>PMA</b>	para-methoxyamphetamine
<b>PNS</b>	peripheral nervous system
<b>QLD</b>	Queensland
<b>QOL</b>	quality of life
<b>RPU</b>	regular psychostimulant user(s)
<b>SA</b>	South Australia
<b>SDS</b>	Severity of Dependence Scale
<b>SNOMED CT</b>	Systematized Nomenclature of Medicine Clinical Terms
<b>STI</b>	sexually transmitted infection(s)
<b>SWASH</b>	Sydney Women and Sexual Health Survey
<b>THC</b>	delta-9-tetrahydro-cannabinol
<b>TMA</b>	3,4,5-trimethoxyamphetamine
<b>VIC</b>	Victoria

## GLOSSARY OF TERMS

2C-B	Street term for 4-bromo-2,5-dimethoxyphenethylamine. It is a synthetic psychedelic of moderate duration
2C-I	Street term for 2,5-dimethoxy-4-iodophenethylamine. It is a short-acting synthetic psychedelic
Binge	Use over 48 hours without sleep
Bump	A bump refers to a small amount of powder, typically measured and snorted from the end of a key, the corner of a plastic card or a 'bumper'
Bumper	A bumper is a small glass nasal inhaler, purchased from tobacconists, used to store and administer powdered substances such as ketamine
Cap	Capsule
Cocaine	A central nervous system stimulant, obtained from the cocoa plant. Cocaine hydrochloride, the salt, is the more common form used in Australia. The freebase form is called 'crack'; little or no crack is available or used in Australia
Crystal	Street term for crystal methamphetamine, a potent form of methamphetamine. Also known as 'ice'
Daily use	Use occurring on each day in the past six months, based on a maximum of 180 days
Ecstasy	Street term for MDMA (3,4-methylenedioxymethamphetamine), which may contain a range of other substances. It is a hallucinogenic amphetamine
GBL	Acronym for gamma-butyrolactone. It is a GHB precursor and substitute, which metabolises into GHB in the stomach
GHB	Acronym for gamma-hydroxy butyrate. It is a central nervous system depressant. Other known terms include 'GBH' and 'liquid ecstasy'; however, the latter is misleading as GHB is a depressant, not a stimulant
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)
Ketamine	It is a dissociative psychedelic used as a veterinary and human anaesthetic
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: inject; smoke; snort; swallow; and/or shaft/shelve
LSD	Acronym for $\alpha$ -lysergic acid diethylamide. It is a powerful hallucinogen
MDA	Acronym for 3,4-methylenedioxymphetamine. It is classed as a stimulant hallucinogen. It is closely related to MDMA (and is sometimes found in ecstasy tablets); however, its effects are said to be slightly more psychedelic
Mephedrone	Mephedrone (2-methylamino-1-p-tolylpropane-1-one), also known as 4-methylmethcathinone (4-MMC) or 4-methylephedrone, is a stimulant and entactogen drug of the phenethylamine, amphetamine, and cathinone chemical classes
Methamphetamine	An analogue of amphetamine, it is a central nervous system stimulant. The three main forms of methamphetamine in Australia are methamphetamine powder ('speed'), methamphetamine base ('base') and crystalline methamphetamine ('crystal', 'ice')
Opiates	Opiates are derived directly from the opium poppy by extracting 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
PMA	Acronym for para-methoxyamphetamine. It is an amphetamine-type drug with both stimulant and hallucinogenic properties
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 last six months
Recent use	Use in the last six months via one or more of the following routes of administration: inject; smoke; snort; swallow; and/or shaft/shelve
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; shafting/shelving 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

## EXECUTIVE SUMMARY

The 2013 NSW Trends in Ecstasy and Related Drug Markets report represents the thirteenth year in which data has been collected in NSW on the markets for ecstasy and related drugs (ERD). The Ecstasy and related Drugs Reporting System (EDRS; formerly the Party Drugs Initiative, or PDI) is the most comprehensive and detailed study of ERD markets in NSW.

Using a similar methodology to the Illicit Drug Reporting System (IDRS), the EDRS monitors the price, purity and availability of 'ecstasy' (3,4-methylenedioxymethamphetamine; MDMA) and other related drugs such as methamphetamine, cocaine, gamma-hydroxybutyrate (GHB), d-lysergic acid diethylamide (LSD) and ketamine. It also examines trends in the use and harms of these drugs. 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 other drugs. RPU are recruited because they are considered a sentinel group to detect illicit drug trends. The information from RPU is, therefore, not representative of ecstasy and other drug users in the general population, but is indicative of emerging trends that may warrant further monitoring.

The findings from each year not only provide a snapshot of the drug markets in NSW, but also help to provide an evidence base for policy decisions, inform harm reduction messages, and provide directions for further investigation when issues of concern are detected. Continued monitoring of the ERD markets in NSW 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.

### Executive Summary snapshot

#### Demographics

- 100 RPU were sampled in the 2013 EDRS (75 male and 25 female).
- Participants were young (mean age = 23 years), reasonably well educated and most commonly spoke English as their first language.
- Very few participants reported being currently in drug treatment (1%).
- These demographics have remained relatively stable over time, aside from mild variations in student/work status.

#### Drug use history and current drug use

- Participants had experience with a wide range of drugs, having used an average of 10 different drug types during their lifetimes and 8 different drug types over the past six months.
- Eight percent reported having ever injected a drug.
- Reductions were seen in the lifetime use of methamphetamine base, lifetime and recent use of cocaine and the lifetime use of LSD.
- Ecstasy was the main drug of choice for one-third of the sample.
- One-quarter of the group had recently binged on ERD. Those who had recently binged had done so on a median of two times in the past six months.

- KE reported individuals in the night/club/bar scene and at festivals are showing more carelessness, are apathetic to illicit drug use and are mixing drugs more often.

## Ecstasy

### *Consumption patterns*

- Ecstasy was used on a median of 12 days over the past six months (i.e. approximately fortnightly).
- Participants had used a median of 2 tablets during a 'typical' occasion of use (range 1-6).
- Swallowing was the main route of administration (97%).
- The majority of RPU (89%) reported using other drugs in combination with ecstasy the last time they used it, most commonly alcohol, tobacco, cannabis, energy drinks and amyl nitrate.
- Three-fifths (58%) of participants used other drugs to help them come down from ecstasy the last time they used it (most commonly cannabis, tobacco and alcohol).
- Ecstasy was most commonly last used at a nightclub (51%) and other public venues.
- The proportion of the NSW population who reported using ecstasy within the last 12 months fell significantly from 3.5% in 2007 to 3% in 2010.
- Over one-quarter (29%) of men interviewed for the Sydney Gay Community Periodic Survey reported having recently used ecstasy, which was a significant decline from the 2009 survey.
- One-quarter (25%) of women in the Sydney Women and Sexual Health Survey had used ecstasy in the six months prior to interview in 2012.
- KE noted that most ecstasy users were Caucasian; however, there are significant numbers of people from Asian background also taking ecstasy.
- KE also reported ecstasy pills being 'cut' with other drugs such as speed in the last 6-12 months.

### *Market characteristics*

- *Price*: \$25 per tablet.
- *Purity*: Currently medium and stable.
- *Availability*: Currently easy to very easy to obtain and stable.
- Several KE had reason to believe that the purity of ecstasy was fluctuating dramatically throughout 2013.
- KE reported an increase in the forms of MDMA available, including in powder and crystal form.
- The general consensus amongst KE was that the availability of ecstasy has remained high and stable.

## Methamphetamine

### *Consumption patterns*

#### *Speed*

- Three-fifths of RPU had ever used speed and one-quarter had done so recently.
- Speed was used on a median of 2 days over the preceding six months and was primarily snorted (64%).
- The frequency and quantity of use appeared to be stable from 2012 to 2013.

### *Base*

- One-fifth of the sample had ever used base and 4% had done so recently.
- Base was used on a median of 1 day over the preceding six months and was primarily swallowed (n=3).
- The frequency of use appeared to be stable from 2012 to 2013.

### *Crystal*

- One-fifth of the sample had ever used crystal and one-tenth had done so recently.
- Crystal was used on a median of 4 days over the preceding six months and was primarily smoked (55%).
- The frequency and quantity of use appeared to be stable from 2012 to 2013.
- The use of methamphetamine among the NSW general population remained stable from 2007 (2.3%) to 2010 (2.1%).
- The use of speed by respondents in the Sydney Gay Community Periodic Survey has significantly decreased over time since 2009. However, a slight, though significant, increase in the proportion of participants reporting the use of crystal was reported over time since 2009.
- Fifteen percent of women interviewed in the Sydney Women and Sexual Health Survey had used speed and 5% had used crystal recently. These figures have remained relatively stable since 2010.
- Most KE expressed concern about crystal use and noted that the use of crystal was high and possibly even increasing.

### *Market characteristics*

#### *Speed*

- *Price:* \$150 per gram, which is a notable increase from 2012.
- *Purity:* Currently high, appeared to be stable.
- *Availability:* Reports variable.

#### *Base*

- *Price:* \$70 per gram.
- *Availability:* Reports variable.

#### *Crystal*

- *Price:* \$50 per point and reportedly stable.
- *Purity:* Reports variable for current purity and stability.
- KE who commented on speed and crystal methamphetamine rated it as readily available and highly pure.

## **Cocaine**

### *Consumption patterns*

- The majority of the group (64%) had tried cocaine at least once, and 42% had used it recently.
- Cocaine was used on a median of 2 days over the preceding six months and the main route of administration was snorting (86%).
- There was a significant decline in the lifetime and recent use of cocaine from 2012 to 2013.

- Recent use of cocaine among the NSW general population increased significantly from 1.6% in 2007 to 2.1% in 2010.
- Approximately one-fifth of participants in both the Sydney Gay Community Periodic Survey and the Sydney Women and Sexual Health Survey reported recent use of cocaine.
- KE reported that cocaine is becoming a less 'elitist' drug and is being used more often by younger individuals.
- Sex workers are another large population of cocaine users who may also use speedball (a combination of cocaine and an opiate).

#### *Market characteristics*

- *Price:* \$300 per gram, stable.
- *Purity:* Less variable, however similar purity ratings to 2012.
- *Availability:* Currently easy to obtain, stable.
- The general consensus amongst KE was that the price of cocaine is high and stable and the quality is low.

### **Ketamine**

#### *Consumption patterns*

- Over one-third of the sample had tried ketamine at least once and just under a quarter had used it recently.
- The proportion of participants reporting lifetime use of ketamine has shown a downward trend since 2010, however proportions reporting recent use has remained relatively stable.
- Ketamine was used on a median of 2 days over the preceding six months.
- Recent use of ketamine among the NSW general population remained low and stable.
- There was a significant decline in the use of ketamine among participants of the Sydney Gay Community Periodic Survey from 2009-2013.
- Recent ketamine use amongst women interviewed in the Sydney Women and Sexual Health Survey has remained relatively stable since 2006, with 6% reporting ketamine use in 2012.
- KE reported that ketamine use is most prominent in the gay community and can be used to enhance the effect of other illicit drugs such as ecstasy.

#### *Market characteristics*

- *Price:* \$150 per gram, stable.
- *Purity:* Variable reports on purity, stable.
- *Availability:* Difficult to obtain, stable.
- The overall consensus amongst KE was that ketamine was not readily available and quite expensive.

### **GHB**

#### *Consumption patterns*

- One-fifth of the sample had tried GHB at least once and 11% had used it recently.
- GHB was used on a median of 1 day over the preceding six months.
- The frequency and quantity of use of GHB remained stable from 2012 to 2013.
- Recent use of GHB among the NSW general population remained low and stable.

- From 2009 the use of GHB among participants of the Sydney Gay Community Periodic Survey had remained stable; however, there has been a slight increase in use from 2012 to 2013.
- GHB use among LBQ women in the Sydney Women and Sexual Health Survey has remained relatively stable across time, with 4% reporting recent GHB use in 2012.
- KE were of the opinion that the popularity of GHB has decreased since the rise in ecstasy purity.
- Several KE were also concerned about the unpredictable effects of GHB, reporting that individuals can often take the wrong dose or experience unintended effects.

#### *Market characteristics*

- *Price:* \$11.5 per mL, variable reports of stability.
- *Availability:* Currently very easy to easy to obtain, variable reports of stability.
- KE noted that GHB is always fluctuating with higher detections during the festival period of each year.

## LSD

#### *Consumption patterns*

- The vast majority of the sample had tried LSD at least once and just over half had used it recently.
- LSD was used on a median of 2 days over the preceding six months.
- Unlike most other drugs, LSD was often used in outdoor settings.
- The use of LSD among the sample has increased over the past six years.
- The use of hallucinogens among the NSW general population increased significantly from 0.6% in 2007 to 1.4% in 2010.
- The use of LSD among participants of the Sydney Women and Sexual Health Survey remained relatively low and stable over time.
- KE comments indicated that the introduction of new psychoactive substances such as 2C-B may have diluted the LSD market.

#### *Market characteristics*

- *Price:* \$20 per tab, stable.
- *Purity:* Medium, stable.
- *Availability:* Currently easy to very easy to obtain, stable.
- KE reported that LSD detections were trending upwards in the later months of 2013.

## Cannabis

#### *Consumption patterns*

- Almost every participant had tried cannabis at least once and the vast majority had used it recently.
- Cannabis was used on a median of 40 days (i.e. more than weekly) over the preceding six months.
- The use of cannabis had remained relatively stable over time.
- The use of cannabis among the NSW general population increased significantly from 9.1% in 2007 to 10.3% in 2010.
- The use of cannabis among participants of the Sydney Gay Community Periodic Survey has declined since 2009.

- Over one-third of women in the Sydney Women and Sexual Health Survey reported recent use of cannabis, which has remained stable over time.
- KE revealed that cannabis use may be more accepted by licit drug users given the recent decriminalisation/legalisation of cannabis in the United States.

#### *Market characteristics*

##### *Hydro*

- *Price:* \$20 per gram; \$300 per ounce, stable.
- *Potency:* Currently high, stable.
- *Availability:* Currently very easy to obtain, stable.

##### *Bush*

- *Price:* \$20 per gram; \$300 per ounce, stable.
- *Potency:* Currently high, stable.
- *Availability:* Currently easy to obtain, stable.
- KE were of the opinion that cannabis use has been more acceptable by 'night-life' society such as less frequent alcohol and tobacco users

#### **Other drug use**

##### *Alcohol*

- All of the 2013 NSW RPU reported lifetime use and 94% reported recent use of alcohol.
- KE reported that alcohol continued to be one of the most problematic drugs among RPU. A frequent risky-behaviour noted was the ritual of 'pre-drinking' before going out in order to become intoxicated faster and cheaper.

##### *Tobacco*

- The majority of RPU had used tobacco at least once (95%) and 84% had smoked within the past six months.

##### *Benzodiazepines*

- Slightly less than half of the group had recently used benzodiazepines. Illicit use was more common than licit use.
- KE reported that users of benzodiazepines were more experienced with their drug use and only represented a small number of the recreational drug user community.

##### *Antidepressants*

- One-in-ten RPU had recently used antidepressants. Licit use was more common than illicit use.

##### *Inhalants*

- Amyl nitrite was used more commonly among RPU (45%) than nitrous oxide (20%) over the six months preceding interview.
- The lifetime and recent use of inhalants has remained stable over time.

##### *MDA*

- Almost one-quarter of the sample reported using MDA in the past six months.
- There was a notable increase in recent use of MDA from 2010.

- KE reported that MDA was widely known and simply considered as a less desirable form of ecstasy.

#### *Heroin and other opiates*

- Three RPU reported recent heroin use. Recent use of other opiates was slightly more common for those illicitly obtained.

#### *Mushrooms*

- Just under half the sample had ever tried mushrooms and one-quarter had used mushrooms recently.

#### *Pharmaceutical stimulants*

- One-quarter of the group had recently used pharmaceutical stimulants. Illicit use was more common than licit use.
- The use of illicit pharmaceutical stimulants has steadily increased since 2009.

#### *Over the counter (OTC) drugs*

- Eighteen percent reported recent use of OTC codeine-containing products for non-pain use, and 12% reported recent use of OTC stimulants for non-medicinal use.

### **New psychoactive substance (NPS) use**

- In 2013, 79% of the NSW EDRS sample had ever consumed an NPS and three-fifths (59%) had done so in the previous six month period.
- The most commonly used psychoactive substances over the preceding six months were 2C-B (25%), herbal highs (13%), synthetic cannabinoids (25%) and DMT (9%).
- KE reported that although NPS are not overly prevalent amongst RPU, they have the potential to be very problematic.

### **Health-related harms associated with ecstasy and related drug use**

#### *Overdose, deaths and hospital admissions*

- One-third of participants reported having overdosed on a stimulant drug throughout their lifetime.
- Under one-fifth reported having ever overdosed on a depressant drug.
- Deaths associated with ecstasy, ketamine and cannabis have remained stable in the past year. A slight increase was observed in deaths associated with methamphetamines in 2011/12, however this has returned to levels previously in 2012/13.
- Hospital admissions in which amphetamine or cocaine was the principal diagnosis appeared to have remained stable in NSW. Hospital admissions where cannabis was the principal diagnosis appeared to be increasing over time.

#### *Service usage*

- Only 16% of respondents reported that they had recently accessed a medical or health service in relation to their drug use.
- Calls to ADIS and FDS regarding ecstasy and cocaine have gradually increased from 2012 to 2013. Calls regarding amphetamines, ketamine, GHB and LSD have remained relatively stable from 2011 to 2012.



### *Mental health*

- Participants commonly reported that their drug use caused repeated social problems (19%), resulted in exposure to risk of injury (21%) and/or interfered with responsibilities (36%). Recurrent drug-related legal problems were uncommon (3%).
- One-third of the group had recently experienced a mental health problem. Mood and anxiety disorders were most commonly reported.
- Participants completed the K10. One-third of the group fell into the 'high' or 'very high' distress categories.

### **Risk behaviour**

- Eight participants had ever injected a drug and six had done so recently.
- Three-fifths of the sample had recently had penetrative sex with a casual partner. Twelve percent of participants did not use a sexual barrier on the last occasion, when intoxicated, and 14% did not when sober. The main reasons were either that the other partner was using contraception, participants didn't want to or that protection was not available.
- Three-fifths of the sample had recently driven a vehicle. Of these, one-quarter had done so while over the legal blood alcohol limit and under half had driven after having taken an illicit drug.
- Participants completed the Alcohol Use Disorders Identification Test (AUDIT). One-third (66%) of the group fell in the 'harmful drinking' range.

### **Law enforcement-related trends associated with ERD use**

- Eight percent of RPU reported being arrested over the past year.
- Over one-quarter of RPU had committed a crime within the past month; most commonly drug dealing and property crimes.
- The number of arrests for ecstasy use/possession seemed to have decreased since mid-2013. However the opposite was seen for amphetamines and cocaine, showing an increased number of arrests from mid-2013.

### **Special topics of interest**

#### *Exposure to injecting*

- Forty-four percent of participants have friends/acquaintances that have injected a drug.
- One-fifth of the sample have been offered to inject a drug in the past 12-months.
- Over one-tenth of the sample have seriously considered injecting a drug.

#### *NPS health effects*

- The main reasons why participants had taken 2C-B in the past 6 months were because it was 'good value for money' and it produced a 'better high' and 'fewer side effects' than traditional stimulants such as ecstasy.
- The most commonly reported effects of 2C-B were euphoria, the urge to talk, the urge to move, increased energy and seeing things that were not there.

## Implications

The NSW branch of the EDRS aims ultimately to monitor trends in the Sydney ecstasy and related drug (ERD) markets and to investigate harms associated with ERD use. The 2013 NSW EDRS revealed ongoing changes in drug markets and indications of drug related harms which are discussed below.

### Ongoing fluctuation in ERD markets

Over the past three years, there has been growing evidence of increasing experimentation among RPU with other existing and emerging substances. Data from 2011 revealed growing interest in hallucinogens, specifically LSD and mushrooms. Furthermore participants in 2011 reported higher use of GHB and ketamine compared to previous years.

Data from 2012 reflected a similar pattern; although there were no significant changes to individual drug use patterns, there was an increase in the mean number of drug types used by the sample. In 2012, it was evident that there was a return of ecstasy purity after a significant decline in 2008/09.

The Illicit Drug Data Report of 2008/09 suggested that the drop in ecstasy purity from 2008-2011 was a result of the decreased availability of precursor substances due to the destruction of stockpiles in South-East Asia (Australian Crime Commission, 2009). Data from the 2013 survey has confirmed the return of ecstasy purity with participants reporting levels comparable to pre-2008 data.

However, in 2013, participants reported the lowest mean number of drug types used as well as a drop in the use of cocaine and amphetamines speed, base and crystal. Despite this drop, the use of LSD continued to increase with more than half the sample using LSD in the past 6-months.

It will be interesting to monitor the change in this figure over the coming year, especially after the recent media attention towards new psychoactive substances, especially 25I-NBOMe, colloquially known as 'synthetic-LSD'.

### New psychoactive substances

In 2013, we continued to see an upward trend in the use of new psychoactive substances (NPS) amongst Sydney RPU. With three-quarters of RPU reporting that they had used an NPS before, and half (51%) using an NPS in the last six months, there is an apparent need to continue monitoring these relatively new substances and acquiring a better understanding of the harms associated with these drugs.

Although there had been a significant decline in 2012 in the proportion of RPU reporting lifetime use of 2C-E and mephedrone, a notable proportion had reported recent use of 2C-I (6%) 2C-B (17%), DMT (9%), DXM (7%) and synthetic cannabinoids (25%). However, it still remains unclear whether these drugs are more common in scattered subcultures which may not be well sampled using the EDRS methodology.

Notably, the overall rate of use of NPS was greater than drugs such as ketamine, which had received substantially greater media and research attention, and for which harm reduction information was relatively widely available. There is a lack of research on the health and behavioural outcomes of using NPS, which in turn poses a significant risk to both the consumers and health workers in this area. It is critical that research continues to identify the associated risks of NPS use, so as to assist health professionals and law enforcement personnel to make informed decisions on appropriate interventions and harm reduction strategies.

## **Alcohol and tobacco use**

As in past years, alcohol and tobacco use continued to be highly prevalent amongst the NSW RPU cohort in 2013. Given this, focused interventions to reduce the harms associated with high risk alcohol (including binge drinking) and tobacco use are warranted.

Hazardous alcohol consumption is a concern in this population, particularly as a large majority of RPU scored in the harmful range for alcohol consumption, which may be indicative of alcohol related disorders and dependence. Of particular concern was the proportion of RPU who reported bingeing on alcohol whilst consuming ecstasy.

There is emerging evidence from animal studies to suggest that the interaction between these two drugs dramatically alters the pharmacology of MDMA in the brain, which in turn may exacerbate neurological harms or other associated problems, such as dependence. Furthermore, there is increased risk of dehydration when both alcohol and ecstasy are consumed, and individuals may end up consuming large quantities of alcohol because the immediate effects of intoxication are delayed when ecstasy has been consumed. Continued dissemination of harm reduction messages to reduce and prevent the use of alcohol at harmful levels is recommended in light of these findings.

With the vast majority of RPU also reporting recent tobacco use, and about one-quarter smoking daily, there is a clear need to focus interventions targeting tobacco use amongst this population. Further research is required to determine whether traditional interventions (e.g. nicotine gum) are a suitable fit for this group, or whether novel tailored interventions (e.g. e-cigarettes) would have more success in reducing tobacco use.

## **Polydrug use and awareness of associated risks**

Given that the NSW EDRS sample typically consumed ecstasy in combination with other drugs, it is clear that polydrug use and its related harms are an issue of concern for this cohort. Simultaneous consumption of different drugs may have harmful and unpredictable consequences, such as intoxication being enhanced due to the drug interactions arising from the concoction of drugs consumed. Binging on drugs further increases the risks associated with drug use. Research into the interactions of drugs, and treatment approaches and harm reduction interventions are warranted to better understand safe consumption patterns and overdose risks.

It is also critical that information regarding polydrug use is widely disseminated amongst this cohort. Given that 25% of individuals binged on ecstasy and related drugs, over half had used multiple drugs during a binge session and 9% had recently ingested a capsule of unknown contents, by increasing the cohort's awareness of potentially harmful drug combinations, this may encourage them to be more aware of the drugs they are consuming and of the potential risks involved. Continued use by RPU of combinations of multiple drugs warrants continued education regarding the harms associated with such behaviour.

## **Increase in the use of LSD**

Further investigation on the medical and mental health issues surrounding the use of LSD is warranted, as it is concerning to note that in 2013 the proportion of RPU that reported recent use of LSD was the highest recorded since the commencement of the EDRS in 2003. This number has steadily increased from 18% in 2008 to 51% in 2013. When looking at usage patterns from 2013, RPUs who used LSD recently only used it a median of 2 days in a 6 month period which is in stark contrast to drugs such as alcohol, tobacco, cannabis, ecstasy and crystal methamphetamine, all of which are associated with mental and physical health concerns (Agrawal, Budney & Lynskey, 2012; Wu, Ringwalt, Weiss & Blazer, 2009; Nasirzadeh, Eslami, Sharifirad & Hasanzadeh, 2013).

It may be that due to the nature of LSD as a recreational drug, people simply do not take enough to promote the development of problems that are more common in other drug use. Although this may not be a problem currently (as recent users do not show signs of increased frequency of use), it may be in the future if frequency of use increases.

Furthermore, given the steady rise in the use of new psychoactive substances (NPS), individuals may be using other drugs with similar psychedelic properties or are unknowingly purchasing NPS when they intended to purchase LSD (and similar, well-known psychedelics such as psilocybin mushrooms). With a limited knowledge of the effects of these NPS, future research should be directed towards the health effects of both traditional psychedelics and NPS.

# 1 INTRODUCTION

The Ecstasy and Related Drugs Reporting System (EDRS) is an ongoing monitoring system funded in 2013 by the Australian Government under the Substance Misuse Prevention and Service Improvement Grants Fund. It is run in a similar manner to the Illicit Drug Reporting System (IDRS), another ongoing data collection system funded by the Australian Government under the Substance Misuse Prevention and Service Improvement Grants Fund. The IDRS provides a coordinated approach to the monitoring of the markets of heroin, methamphetamine, cannabis and cocaine. It was identified that the IDRS did not capture the use of ecstasy and related drugs (ERD), as these were used infrequently among the target population of the IDRS – injecting drug users (IDU).

In June 2000, the National Drug Law Enforcement Research Fund (NDLERF), administered by the Australasian Centre for Policing Research (ACPR), funded a two-year, two state trial in New South Wales (NSW) and Queensland (QLD) of the feasibility of monitoring emerging trends in the markets for ecstasy and other related drugs using the extant IDRS methodology. In addition, Drug and Alcohol Services South Australia (DASSA) (formerly known as the Drug and Alcohol Services Council) agreed to provide funding for two years to allow the trial to proceed in this state. The results of this trial are presented elsewhere (see Topp et al., 2004). Regular psychostimulant users (RPU) were identified as an appropriate sentinel population to investigate ERD markets.

The term 'ecstasy and related drugs' includes any drug routinely used in the context of entertainment venues such as nightclubs or dance parties. ERD refers to drugs such as ecstasy (3,4-methylenedioxymethamphetamine – MDMA), methamphetamine, LSD (*d*-lysergic acid diethylamide), ketamine, MDA (3,4-methylenedioxyamphetamine) and GHB (gamma-hydroxybutyrate).

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

The 2013 NSW Trends in Ecstasy and Related Drug Markets report provides information regarding ecstasy and related drug trends in Sydney.

## 1.1 Aims

The aims of the 2013 NSW EDRS were:

1. to describe the demographic characteristics of a sample of current ecstasy users interviewed in Sydney in 2013;
2. to examine the patterns of ecstasy and related drug use of this sample, including lifetime and recent use of over 20 licit and illicit drugs;
3. to document the current price, purity and availability of ecstasy and related drugs in Sydney, including locations and persons scored from and locations of use;
4. to examine participants' perceptions of the incidence and nature of ecstasy and other drug-related harms, including health-related harms, as well as financial, occupational, social and legal harms;
5. to identify emerging trends in the ecstasy and related drug market that may require further investigation; and
6. to compare key findings of this study with those reported in previous years (2007-2013).

## 2 METHOD

The 2013 EDRS used the methodology trialled in the feasibility study (Topp et al., 2004) to monitor trends in the markets for ERD. The three main sources of information used to document trends were:

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

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

### 2.1 Survey of regular psychostimulant users (RPU)

The sentinel population chosen to monitor trends in ecstasy and related drug (ERD) markets consisted of people who engaged in the regular use of tablets sold as 'ecstasy'. Although a range of drugs fall into the category 'ecstasy and related drugs', ecstasy is a drug that can be considered one of the main illicit drugs used in Australia. It is the second most widely used illicit drug after cannabis, with 3% of the population aged 14 years or older reporting recent use of ecstasy in the 2010 National Drug Strategy Household Survey (Australian Institute of Health and Welfare, 2011).

The ecstasy (tablets sold purporting to contain MDMA) market has existed here for more than two decades. 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. MDA), have fluctuated widely in availability (e.g. ketamine and LSD), or are relatively new in the market and are not as widely used as ecstasy (e.g. GHB). It has been suggested that it would be difficult to identify a regular user of GHB or ketamine who was not also an experienced user of ecstasy, whereas the reverse will often be the case (Topp & Darke, 2001). Ecstasy may be the first illicit drug with which many young Australians who choose to use illicit drugs will experiment with, and a minority of these users will go on to experiment with the less common related drugs such as ketamine, LSD and GHB.

The entrenchment of ecstasy in Australia's illicit drug markets, relative to other related drugs, underpinned the decision that regular use of ecstasy could be considered the defining characteristic of the target population – regular ecstasy users (REU, Topp and Darke, 2001). A sample of this population was successfully recruited and interviewed in the two-year feasibility trial, and was able to provide the data that were sought. However, as will become evident in the report, it is apparent that the ecstasy market and the regularity of its consumption and type of consumers may be changing. More discussion on this issue is in section 4.10: *New psychoactive substances*. Beginning in 2012, due to difficulty in smaller jurisdictions in recruiting REU, regular psychostimulant users (RPU) were also recruited to provide information on ERD markets. In 2013, the RPU criteria were adopted for all states. Interestingly, all participants had used ecstasy and only eight participants had not used ecstasy regularly in accordance with REU criteria. To summarise, only 8% of the 2013

sample were not REU, suggesting that EDRS results still comprise a large amount of data from regular ecstasy users.

A total of 100 RPU residing in the Sydney metropolitan region were interviewed for the 2013 NSW EDRS. Participants were recruited through a purposive sampling strategy (Kerlinger, 1986), which included advertisements in entertainment street press, gay and lesbian newspapers, social media, interviewer contacts, and 'snowball' procedures (Biernacki & Waldorf, 1981). 'Snowballing' is a means of sampling 'hidden' populations which relies on peer referral, and is widely used to access illicit drug users both in Australian (Boys, Lenton & Norcross, 1997; Ovendon & Loxley, 1996; Solowij, Hall & Lee, 1992) and international studies (Dalgarno & Shewan, 1996; Forsyth, 1996; Peters, Davies & Richardson, 1997). Initial contact was established through newspaper advertisements or interviewers' personal contacts. On completion of the interview, participants were requested to mention the study to friends who might be willing and able to participate and were handed cards containing the researcher's contact details to distribute to their peers.

### **2.1.1 Procedure**

Participants contacted the researchers by telephone and were screened for eligibility. To meet entry criteria, they had to be at least 17 years of age (due to ethical constraints), have used ecstasy at least six times during the preceding six months, and have been a resident of the Sydney metropolitan region for the past 12 months. As in the IDRS, the focus was on the capital city, as new trends in illicit drug markets are more likely to emerge in urban rather than in remote or regional areas.

Participants were informed that all information provided was strictly confidential and anonymous, and that the study would involve a face-to-face interview that would take approximately 45 minutes. All respondents were volunteers who were reimbursed \$40 for their participation. Interviews took place in a location negotiated with participants, predominantly at the National Drug and Alcohol Research Centre (NDARC) or in coffee shops, and were conducted by the NSW coordinator and a small group of casual interviewers. The nature and purpose of the study was explained to participants before informed consent was obtained.

### **2.1.2 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 et al., 1992) and powder amphetamine/methamphetamine (Darke et al., 1994) (Hando and Hall, 1993, Hando et al., 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 new psychoactive substance health effects.

### 2.1.3 Data analysis

The EDRS participant survey results are used as the primary basis on which to estimate drug trends. These participants provide the most comparable information on drug price, availability and use patterns in all jurisdictions and over time. However, purity of drug seizures data provided by the Australian Crime Commission (ACC) are an objective indicator of drug purity, and data are also presented in this report. Other indicator data are reported to provide a broader overview and a basis against which trends in EDRS participant data may be contextualised. Key expert data are discussed within the individual jurisdictional reports to provide a context around the quantitative data from the EDRS surveys.

For continuous, normally distributed variables, *t*-tests were employed 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 and Castellan, 1988), was employed. Categorical variables were analysed using  $\chi^2$ . To investigate differences between states/territories, dummy variables were created and an individual state/territory was compared against all the other states/territories combined. All analyses were conducted using SPSS for Windows, Version 20.0 SPSS Inc, 2011). More detailed analyses on specific issues may be found in other literature, including quarterly bulletins and peer-reviewed articles produced by the project, details of which may be found on the NDARC website.<sup>1</sup>

## 2.2 Survey of key experts (KE)

The main eligibility criterion for KE participation in the EDRS was regular contact with a range of RPU in the preceding six months. A small number of KE who did not have regular contact with RPU were also included because they had a special area of expertise which helped contribute to the 2013 EDRS report. Regular contact was defined as average weekly contact and/or contact with 10 or more RPU throughout the past six months. KE were recruited either through professional networks of project staff or recommendations, and in some instances through 'cold calls'.<sup>2</sup>

A total of 20 KE were interviewed in 2013. KE were administered a qualitative interview schedule derived from a previous study of cocaine use (Hando, Flaherty & Rutter, 1997), with the focus dependent on the KE's area of expertise. In general, KE were interviewed on topics relating to patterns of illicit drug use among the RPU/RPU they had had contact with in the past six months. The KE interviewed for the 2013 EDRS came from a wide range of occupations which fell into three major categories: law enforcement; health care provision; and hospitality industry workers.

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<sup>1</sup> See [www.ndarc.med.unsw.edu.au](http://www.ndarc.med.unsw.edu.au) for details (click on 'Drug Trends').

<sup>2</sup> People who were thought suitable to act as KE were contacted and invited to participate in a key expert (semi-structured) interview.

## 2.3 Other indicators

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

Data sources that have been included in this report are:

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

### 3 DEMOGRAPHICS

#### Summary:

- 100 RPU were sampled in the 2013 EDRS (75 male and 25 female).
- Participants were young (mean age = 23 years), reasonably well educated and most commonly spoke English as their first language.
- Very few participants reported being currently in drug treatment (1%).
- These demographics have remained relatively stable over time, aside from mild variations in student/work status.

#### 3.1 Overview of the EDRS participant sample

There were 100 RPU sampled in the 2013 NSW EDRS. Table 1 presents the demographics of the sample across time. The mean age of the 2013 sample was 23 years (median 20, range 17-53). Three-quarters (75%) of the participants interviewed were male; however, there were no significant differences in age when comparing males and females ( $p > .05$  CI [-5.14, .92]).

The vast majority (96%) spoke English as their first language and were born in Australia (79%). A minority (1%) identified as being of Aboriginal and/or Torres Strait Islander (ATSI) descent. Most participants identified as heterosexual (78%), followed by 10% as a gay man, 1% as a lesbian and 9% as a bisexual. Most participants reported being currently single (59%) and were residing in their parents' or family's house (54%) or rental accommodation (40%).

The median number of years of school education completed was 12 years (range 9-12), and 79% had completed high school education (year 12 or above). Many had completed either a trade or technical qualification (21%) or a university or college degree (12%), and 45% were currently engaged in some form of study. One-fifth (19%) of the sample reported being currently employed on a full-time basis, while 16% of participants were currently unemployed. Median weekly income for this group was \$300 per week (range \$0-\$2,500), and wage or salary was reported as the main source of income in the last month for the majority of participants (61%). Very few participants reported that they were currently in any form of drug treatment (1%).

Demographic characteristics of this sample have remained mostly stable from 2012 to 2013. It is noted that the 2013 sample comprised of a greater proportion of males. Additionally, there has been a marked reduction in the number of individuals both working and studying (22% in 2012 to 1% in 2013) which may account for the notable drop in the number of individuals employed full-time (27% in 2012 to 19% in 2013) and the increase in the number of full-time students (10% in 2012 to 40% in 2013).

**Table 1: Demographic characteristics of RPU, NSW 2007-2013**

Variable	2007 (N=100)	2008 (N=100)	2009 (N=100)	2010 (N=100)	2011 (N=100)	2012 (N=100)	<b>2013 (N=100)</b>
Mean age (years)	27	8	22	26	4	5	<b>23</b>
Male (%)	64	68	64	74	77	64	<b>75</b>
English-speaking background (%)	95	98	94	91	98	98	<b>96</b>
A&TSI (%)	2	3	0	1	1	2	<b>1</b>
Heterosexual (%)	60	63	91	78	76	82	<b>78</b>
Mean number of school years	12	12	12	12	12	12	<b>12</b>
Tertiary qualifications (%)	66	72	33	51	40	39	<b>33</b>
Employed full-time (%)	33	54	21	28	26	27	<b>19</b>
Full-time students (%) <sup>*</sup>	11	10	13	6	11	10	<b>40</b>
Unemployed (%)	17	11	13	16	25	17	<b>16</b>
Median weekly income (\$) (range)	Data not available until 2009		400 (50-2,115)	500 (0 - 4,231)	350 (67 - 2,400)	350 (0 - 1,700)	<b>300 (0-2,500)</b>
Prison history (%)	4	2	3	6	n/a	4	<b>1</b>
Currently in drug treatment (%)	10	3	4	5	3	3	<b>1</b>

**Source: EDRS regular psychostimulant user interviews 2007-2013**<sup>\*</sup> Question changed in 2007 to report only those in full-time education

## 4 CONSUMPTION PATTERN RESULTS

### 4.1 Drug use history and current drug use

#### Summary:

- Participants had experience with a wide range of drugs, having used an average of 10 different drug types during their lifetimes and 8 different drug types over the past six months.
- Eight percent reported having ever injected a drug.
- Reductions were seen in the lifetime use of methamphetamine base, lifetime and recent use of cocaine and the lifetime use of LSD.
- Ecstasy was the main drug of choice for one-third of the sample.
- One-quarter of the group had recently binged on ERD. Those who had recently binged had done so on a median of two times in the past six months.
- KE reported individuals in the night/club/bar scene and at festivals are showing more carelessness, are apathetic to illicit drug use and are mixing drugs more often.

Participants were asked about their lifetime and recent use of over 20 different drug types.<sup>3</sup> Experience with a broad range of drugs was very common. An decrease in the average number of drugs used within the lifetime (10, SD 3) was noted in the 2013 sample; however, this figure was not significantly different to that recorded in 2012. The average number of drugs used recently (8, SD 2) continues to remain remarkably stable over time (Table 2). Only eight RPU reported having ever injected a drug, which returned to figures comparable with 2009. A more thorough analysis of injecting drug use behaviours amongst this sample can be found in section 7.1 'Injecting risk behaviour'.

Table 2 presents the proportion of RPU reporting lifetime and recent drug use across time. There were very few significant changes from 2012 to 2013 but they include:

- a significant decline in the proportion reporting lifetime use of methamphetamine base ( $p < .05$ );
- a significant decline in the proportion reporting both lifetime and recent use of cocaine ( $p < .05$  respectively);
- a significant decline in the proportion reporting lifetime use of LSD ( $p < .05$ ).

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<sup>3</sup> 'Lifetime' usage refers to drugs that have ever been used. 'Recent' usage refers to drugs that had been used in the six months prior to the interview.

**Table 2: Lifetime and recent polydrug use among RPU, NSW 2007-2013**

Variable	2007 (N=100)	2008 (N=100)	2009 (N=100)	2010 (N=100)	2011 (N=100)	2012 (N=100)	<b>2013 (N=100)</b>
Mean no. drug types ever used	11	11	11	11	11	15	<b>10</b>
Mean no. drug types used recently	7	6	7	7	7	7	<b>8</b>
Ever inject any drug (%)	32	19	9	22	13	20	<b>8</b>
<i>Alcohol</i>							
ever used (%)	98	99	100	100	100	98	<b>100</b>
used last 6 mths (%)	92	95	100	97	99	95	<b>94</b>
<i>Cannabis</i>							
ever used (%)	97	93	98	98	97	99	<b>97</b>
used last 6 mths (%)	74	71	83	78	83	86	<b>90</b>
<i>Tobacco</i>							
ever used (%)	92	95	95	92	95	96	<b>95</b>
used last 6 mths (%)	72	63	84	76	92	91	<b>84</b>
<i>Methamphetamine powder (speed)</i>							
ever used (%)	86	92	83	79	67	67	<b>56</b>
used last 6 mths (%)	45	48	37	29	32	31	<b>25</b>
<i>Methamphetamine base (base)</i>							
ever used (%)	54	53	51	53	41	38	<b>21</b>
used last 6 mths (%)	23	17	23	18	16	9	<b>4</b>
<i>Methamphetamine crystal (ice)</i>							
ever used (%)	60	52	29	44	37	32	<b>21</b>
used last 6 mths (%)	42	33	9	21	19	18	<b>11</b>
<i>Cocaine</i>							
ever used (%)	88	90	85	88	84	81	<b>64</b>
used last 6 mths (%)	62	51	64	60	59	57	<b>42</b>
<i>LSD</i>							
ever used (%)	68	57	62	77	75	84	<b>71</b>
used last 6 mths (%)	22	18	37	44	46	43	<b>51</b>

**Table 2: Lifetime and recent polydrug use of RPU, NSW 2007-2013 (continued)**

Variable	2007 (N=100)	2008 (N=100)	2009 (N=100)	2010 (N=100)	2011 (N=100)	2012 (N=100)	2013 (N=100)
<i>MDA</i>							
ever used (%)	27	30	13	21	22	28	<b>28</b>
used last 6 mths (%)	8	5	2	2	8	16	<b>23</b>
<i>Ketamine</i>							
ever used %	62	65	53	64	56	48	<b>36</b>
used last 6 mths (%)	36	30	19	24	39	24	<b>24</b>
<i>GHB</i>							
ever used (%)	37	37	24	42	30	22	<b>21</b>
used last 6 mths (%)	23	24	6	17	16	11	<b>11</b>
<i>Amyl nitrite</i>							
ever used (%)	65	72	74	78	75	70	<b>64</b>
used last 6 mths (%)	31	37	38	46	40	37	<b>45</b>
<i>Nitrous oxide</i>							
ever used (%)	36	34	27	45	41	46	<b>38</b>
used last 6 mths (%)	14	8	5	15	13	12	<b>20</b>
<i>Benzodiazepines*</i>							
ever used (%)	59*	52*	47	64	57	57	<b>45</b>
used last 6 mths (%)	36*	29*	24	38	34	30	<b>25</b>
<i>Antidepressants*</i>							
ever used (%)	30*	26*	20	26	27	24	<b>19</b>
used last 6 mths (%)	17*	10*	10	12	9	11	<b>9</b>
<i>Pharmaceutical stimulants*</i>							
ever used (%)	42	38	52	48	50	62	<b>59</b>
used last 6 mths (%)	13	10	14	16	20	25	<b>35</b>
<i>Mushrooms</i>							
ever used (%)	45	35	48	60	58	57	<b>48</b>
used last 6 mths (%)	9	9	21	10	25	21	<b>25</b>

\* Includes licitly and illicitly obtained

**Table 2: Lifetime and recent polydrug use of RPU, NSW 2007-2013 (continued)**

Variable	2007 (N=100)	2008 (N=100)	2009 (N=100)	2010 (N=100)	2011 (N=100)	2012 (N=100)	2013 (N=100)
<i>Heroin</i>							
ever used (%)	28	11	11	23	13	14	<b>9</b>
used last 6 mths (%)	6	3	3	12	2	9	<b>3</b>
<i>Methadone</i>							
ever used (%)	13	7	1	8	5	11	<b>6</b>
used last 6 mths (%)	10	3	0	4	2	8	<b>4</b>
<i>Buprenorphine</i>							
ever used (%)	8	5	2	4	3	4	<b>2</b>
used last 6 mths (%)	2	1	1	2	1	2	<b>1</b>
<i>OTC codeine*</i>	Data not available until 2009						
ever used (%)			77	69	57	26**	<b>18**</b>
used last 6 mths (%)			55	46	39	12**	<b>9**</b>
<i>OTC stimulants*</i>							
ever used (%)	42	38	60	50	43	18**	<b>12**</b>
used last 6 mths (%)	3	10	34	27	27	4**	<b>3**</b>
<i>Other opiates*</i>							
ever used (%)	27	23	27	39	34	17	<b>26</b>
used last 6 mths (%)	11	8	2	8	14	5	<b>11</b>

**Source: EDRS regular psychostimulant user interviews 2007-2013**

**Note:** OTC (over the counter)

\* Includes licitly and illicitly obtained

\*\* For non-pain use only

Participants also reported having used other drugs such as 2C-B (4-bromo-2,5-dimethoxyphenethylamine), DMT (dimethyl tryptamine) and synthetic cannabinoids. In 2010, the EDRS began to systematically investigate these other, less commonly used, drugs. This information can be found in section 4.10 'New psychoactive substance (NPS) use.

In 2013, approximately one-third (34%) of participants reported that ecstasy was their main drug of choice. Other commonly reported drugs were cannabis (30%), alcohol (21%) and LSD (6%). Smaller proportions of the sample nominated other drugs such as cocaine (2%) and crystal methamphetamine (2%).



One-quarter (25%) of participants reported bingeing on ERD over the past six months. Bingeing is defined as using the drug on a continuous basis for more than 48 hours without sleep (Ovendon & Loxley, 1996). Participants who had binged had done so on a median of 2 occasions over the preceding six months. The median length of the longest binge was 56 hours (range 48-120). Among those who had recently binged, the vast majority (92%) had used ecstasy during a binge episode. Similarly, a large proportion (44%) had used cannabis during a binge episode. Other drugs used during binge episodes included tobacco (64%), speed (32%), energy drinks (28%), consuming more than five standard drinks of alcohol (28%), amyl nitrite (24%), cocaine (20%), crystal (20%), less than five standard drinks of alcohol (16%), LSD (16%), GHB (12%) and MDA (8%). One individual reported using pharmaceutical stimulants and nitrous oxide during a binge episode respectively.

### **Key expert comments**

One KE working in illicit-drug training courses noted that people are becoming more careless and are quite happy to mix drugs despite the possible consequences. This individual also reported higher numbers of individuals who use energy drinks before the start of a 'big-night'.

Another KE working in the service industry reported similar patterns of behaviour in bars and clubs around Darling Harbour and Sydney CBD; higher levels of energy drinks mixed with alcohol and an apathetic approach to illicit drug use.

Speed was reported as being used most often with ecstasy, potentiating the effects of both drugs. Speed was also reported as being used often with alcohol, allowing individuals to drink more. One KE reported the use of ketamine and amyl nitrite to potentiate the effects of other illicit drugs. Finally, two KE working in the service industry said that cannabis is often used with most illicit drugs.

## 4.2 Ecstasy use

### Summary:

- Ecstasy was used on a median of 12 days over the past six months (i.e. approximately fortnightly).
- Participants had used a median of 2 tablets during a 'typical' occasion of use (range 1-6).
- Swallowing was the main route of administration (97%).
- The majority of RPU (89%) reported using other drugs in combination with ecstasy the last time they used it, most commonly alcohol, tobacco, cannabis, energy drinks and amyl nitrate.
- Three-fifths (58%) of participants used other drugs to help them come down from ecstasy the last time they used it (most commonly cannabis, tobacco and alcohol).
- Ecstasy was most commonly last used at a nightclub (51%) and other public venues.
- The proportion of the NSW population who reported using ecstasy within the last 12 months fell significantly from 3.5% in 2007 to 3% in 2010.
- Over one-quarter (29%) of men interviewed for the Sydney Gay Community Periodic Survey reported having recently used ecstasy, which was a significant decline from the 2009 survey.
- One-quarter (25%) of women in the Sydney Women and Sexual Health Survey had used ecstasy in the six months prior to interview in 2012.
- KE noted that most ecstasy users were Caucasian; however, there are significant numbers of people from Asian background also taking ecstasy.
- KE also reported ecstasy pills being 'cut' with other drugs such as speed in the last 6-12 months.

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

On average, participants in the 2013 EDRS had used ecstasy for the first time at 18 years of age (median 18, range 13-35). Participants reported using ecstasy regularly (at least monthly) at a mean age of 20 years (median 19, range 15-45).

#### 4.2.1 Ecstasy use among RPU

Table 3 presents an outline of patterns of use of ecstasy among RPU. Ecstasy was used on a median of 12 days (range 2-48) over the preceding six months. Almost half the sample had used ecstasy between monthly and fortnightly (45%), two-fifths (42%) had used it between fortnightly and weekly and 21% had used ecstasy more than once a week over the preceding six months.

The majority (79%) of respondents commonly used more than one tablet during a session. RPU had used a median of 2 tablets during a 'typical' occasion of use (range 1-6) over the preceding six months. The median number of tablets consumed in the 'heaviest' session over the preceding six months was 4 (range 1-12).

Almost all RPU reported that swallowing was their main route of administration (97%) for ecstasy; however, 3% reported mainly snorting it. Participants were asked to identify each method of administration they had used over the preceding six months for ecstasy 'pills'. Swallowing (98%) and snorting (48%) were by far the most common methods of administration, although smaller proportions had shelved/shafted (2%), smoked (1%) or injected (1%) ecstasy.

**Table 3: Patterns of ecstasy use among RPU, NSW 2007-2013**

Ecstasy variable	2007 (N=100)	2008 (N=100)	2009 (N=100)	2010 (N=100)	2011 (N=100)	2012 (N=100)	<b>2013 (N=100)</b>
Mean age first used ecstasy (years)	19	20	17	18	18	18	<b>18</b>
Ecstasy 'favourite' drug (%)	38	30	45	32	32	38	<b>34</b>
Median days used ecstasy last 6 mths	12.5	12	15	12	13	12.5	<b>12</b>
Use ecstasy weekly or more (%)	21	19	24	18	26	18	<b>21</b>
Median ecstasy tablets in 'typical' session	2	2	2.5	2	2	2	<b>2</b>
Typically use >1 tablet (%)	84	82	91	84	85	76.5	<b>79</b>
Recently binged on ecstasy (%)	36	30	33	26	31	24	<b>25</b>
Ever injected ecstasy (%)	15	8	5	11	2	8	<b>4</b>

**Table 3: Patterns of ecstasy use among RPU, NSW 2007-2013 (continued)**

Ecstasy variable	2007 (N=100)	2008 (N=100)	2009 (N=100)	2010 (N=100)	2011 (N=100)	2012 (N=100)	<b>2013 (N=100)</b>
Mainly swallowed ecstasy last 6 mths (%)	97	100	96	92	93	92	<b>97</b>
Mainly snorted ecstasy last 6 mths (%)	2	-	3	7	7	7	<b>3</b>
Mainly injected ecstasy last 6 mths (%)	1	-	1	1	-	1	-

**Source: EDRS regular psychostimulant user interviews 2007-2013**

Participants were asked about their use of different forms of ecstasy (tablets, powder, capsules and crystals). Almost every participant (99%) reported having used ecstasy tablets ('pills') during the preceding six months. Two-fifths (42%) reported having ever used ecstasy powder, and almost one-third (29%) had done so recently. Three-quarters (73%) reported having ever used ecstasy capsules ('caps') and more-than-half (59%) had used them over the preceding six months. Over one third (37%) reported having ever used MDMA crystals, and one-quarter (28%) had done so over the preceding six months. Pills were first used at a median age of 18 years (range 13-35), powder at 19 years (range 15-38), caps at 19 years (15-41) and crystals at 20 years (range 15-47).

The majority of RPU (89%) reported using other drugs in combination with ecstasy the last time they used it. The drugs most commonly used with ecstasy were alcohol (61% of those who reported last using other drugs with ecstasy; i.e. 24% less than five standard drinks and 37% more than five standard drinks), tobacco (47%), cannabis (37%), energy drinks (16%) and amyl nitrate (15%).

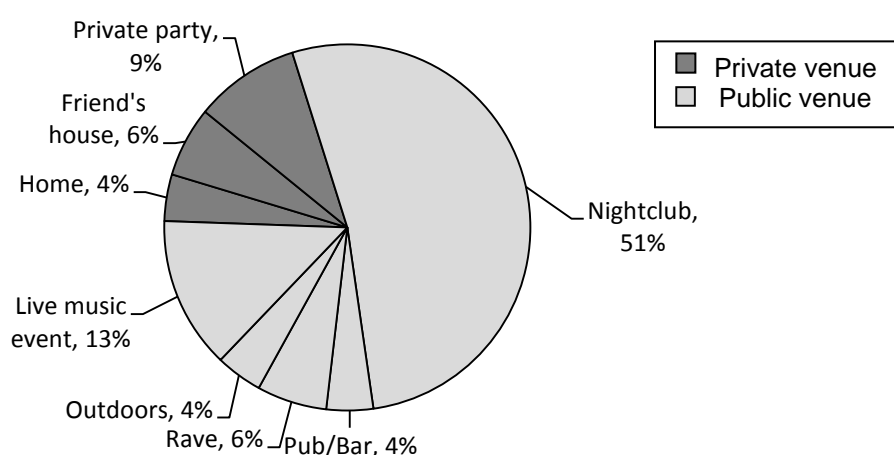
About three-fifths (58%) of the sample used other drugs to help them come down from ecstasy the last time they used it. Among these respondents, the three most commonly reported drugs used to come down from ecstasy were cannabis (46%), tobacco (12%) and alcohol (10% overall; 6% less than five standard drinks, 4% more than five standard drinks).

More-than-half of the group reported that most (48%) or all (5%) of their friends had used ecstasy over the last six months. One-third (33%) reported that 'about half' and 14% reported that 'a few' of their friends had used ecstasy recently. Similar to 2012, no participants reported that they were the only person in their social network that had recently used ecstasy.

#### **4.2.2 Locations of ecstasy use**

Participants were asked where they spent the most time while intoxicated, the last time they used ecstasy. Ecstasy was most commonly last used in public venues (81%) although one-fifth of participants reported last using ecstasy in private venues (19%). The majority of participants last used ecstasy at a nightclub (51%).

**Figure 1: Location of last ecstasy use among RPU, NSW 2013**



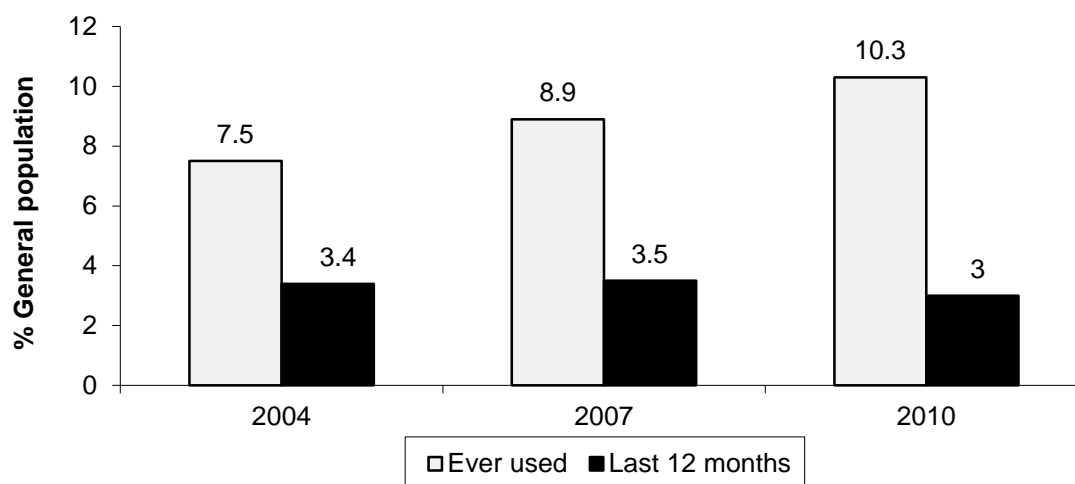
Source: EDRS regular psychostimulant user interviews 2013

#### 4.2.3 Use of ecstasy in other populations

##### *General population*

Figure 2 presents data collected for the National Drug Strategy Household Survey (NDSHS) from 2004 to 2010. Over this time, the reported lifetime prevalence of ecstasy use among the general Australian population (aged 14 years and over) increased from 7.5% to 10.3%. However, in 2010 for the first time since 1995, the NDSHS recorded a significant decline in the proportion of the general Australian population who reported having used ecstasy within the past year (Australian Institute of Health and Welfare, 2011). Data for recent use of ecstasy in NSW (2.9%) was comparable with the national figure.

**Figure 2: Percentage of sample reporting lifetime and recent ecstasy use in the NSW general population, 2004-2010**



Source: Australian Institute of Health and Welfare (2005a, 2008b, 2011)

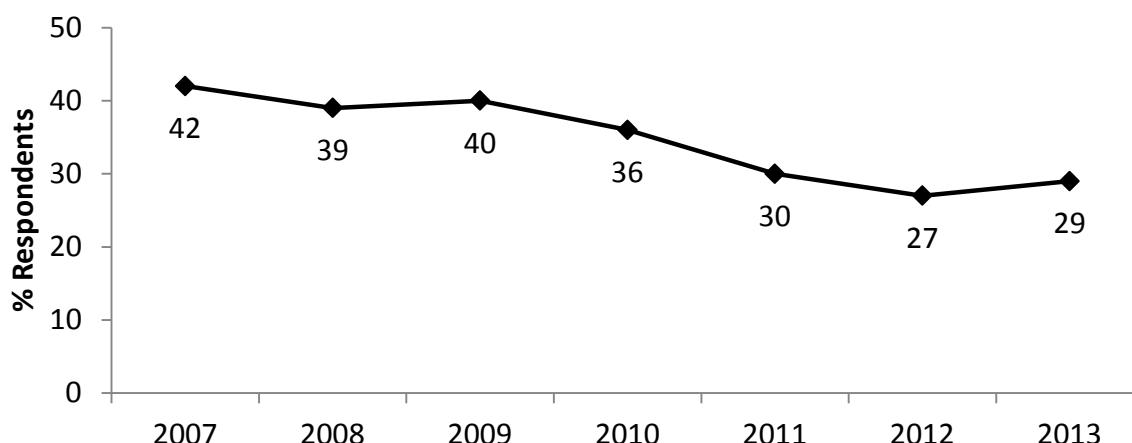
##### *Sydney Gay Community Periodic Survey*

The Sydney Gay Community Periodic Survey is an annual cross-sectional survey of gay and homosexually active men. The first survey was conducted in February 1996 and the most

recently published survey was completed in 2013, with 2,546 men participating. The major aim of the survey is to provide data on levels of sexual-, STI- and HIV-related practices, though the survey also asks about drug use in the past six months.

Figure 3 shows the proportion of men surveyed who had used ecstasy in the past six months. In 2013, approximately one-quarter (29%) of the sample reported having recently used ecstasy. The authors reported that, since the 2009 survey, there had been a significant decline in the reported use of ecstasy. Additionally, it was noted that from 2009 there has been a significant downward trend in ecstasy use amongst this group (Hull et al., 2013).

**Figure 3: Proportion of gay men in Sydney reporting recent ecstasy use, 2007-2013**



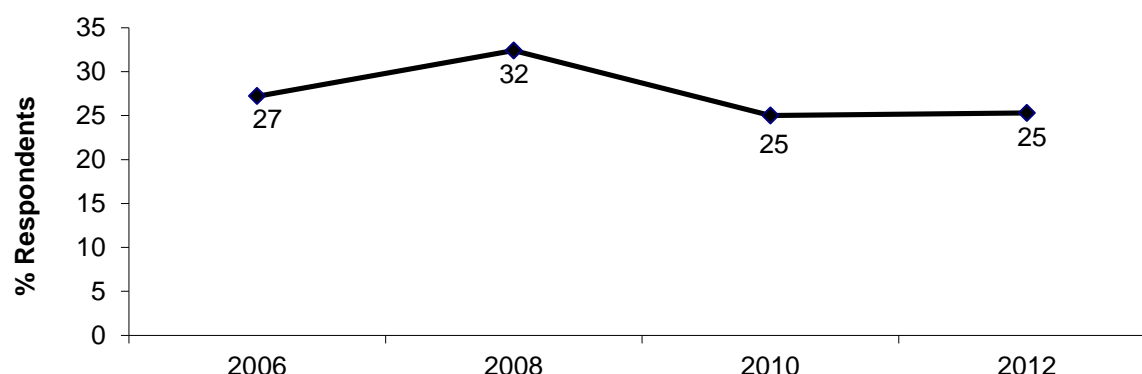
**Source: Sydney Gay Community Periodic Survey 2006-2013**

#### *Sydney Women and Sexual Health Survey*

First conducted in Sydney in 1996 and run every two years since, the Sydney Women and Sexual Health survey (SWASH) is the longest running and only regular survey of lesbian, bisexual and queer (LBQ) women's health and well-being in Australia (Mooney-Somers, Deacon, Comfort, Richters & Parkhill, 2013). SWASH is a unique and important source of health-related information pertaining to Australian LBQ women. The most recently published survey was completed in 2012 with 827 women participating.

Figure 4 shows the proportion of women surveyed who had used ecstasy in the past six months. In 2012, one-quarter (25%) of the sample reported having recently used ecstasy. This figure has remained stable since 2010.

**Figure 4: Proportion of LBQ women in Sydney reporting recent ecstasy use, 2006-2012**



**Source: Sydney Women and Sexual Health Survey 2006-2012**

### *Illicit Drug Reporting System*

A separate monitoring system investigating trends in the use of ecstasy in injecting drug users has been conducted in NSW since 1996, in Victoria (VIC) and South Australia (SA) since 1997 and nationally since 2000. This is called the Illicit Drug Reporting System, or IDRS, and reports and bulletins are available from the NDARC website (<http://ndarc.med.unsw.edu.au/project/illicit-drug-reporting-system-idrs>).

### **Key expert comments**

Several KE had reported stable use of ecstasy in the past 6-12 months despite observing fluctuations in the price, purity and availability of the ecstasy market over the same time period (see section 5.1 for more details).

Four KE from the medical/service industry who are in contact with many ecstasy users across Sydney's main metropolitan area were able to comment on this group's demographics. The most common average age range of users reported was 18-26; however, one reported people up to 45 years old taking ecstasy. All four reported even numbers of male and female users; however, two reported that males took more during a session and were more irresponsible. All commenters reported a large student population of users and low numbers of users who were unemployed. The general consensus was that ecstasy users were 'party goers', requiring a stable income. Those who worked at festival events commented that demographics change dramatically from festival to festival.

Two KE mentioned that amongst heavy drug users, as individuals get older and earn a higher income, they move onto 'harder' drugs such as speed and cocaine. Three of the four KE reported that a majority of users were Caucasian while a significant number of users came from other backgrounds, especially at music festivals.

### **Key expert comments**

Three individuals working in the service industry reported that given the unstable purity of ecstasy pills in the past few years, many pills are 'cut' with other drugs, the most popular being speed. Following from this, one KE working in music festival first-aid reported sketchy purity towards the end of the festival season in early 2013 resulting in more people presenting amphetamine/methamphetamine-type symptoms after supposedly taking a small ecstasy dose.

Another KE working in an emergency/psychiatry department also commented that, compared to other illicit drugs, ecstasy use was relatively safe and emergency department presentations only occur when someone has unintentionally taken a bad or adulterated pill.

One individual working in toxicology for drug treatment programs and drug court cases reported low numbers of MDMA-positive urine/blood tests and suggested that this is due to the low numbers of ecstasy users in drug treatment programs.

One KE working in law enforcement reported stable ecstasy detections in the past 6 months with most detections being possessions as opposed to seizures. They noted that the most common form seen recently has been tablets (60%) followed by powder (19%) and crystal (12%).

Several KE from geographical locations outside Sydney such as Dubbo and Nowra reported little to no use of ecstasy in these communities. One individual from law enforcement in the Greater Western Sydney area reported a slight increase in the use of ecstasy in the past few years but commented that its use is very much restricted to Sydney's main metropolitan areas. Another medical professional working with teenager and young adult populations from the Greater Western Sydney area commented that ecstasy was the most common drug used after cannabis and this has remained stable for the past few years.

One KE working with GLBT (gay/lesbian/bisexual/transgender) clients in clubs/bars had observed that ecstasy was the main illicit drug of choice in this group.

Two individuals working in the service industry commented on usage patterns in the main bar/club areas of Sydney such as Kings Cross, Darling Harbour and Sydney CBD. One reported that ecstasy was more popular than alcohol and, in most illicit drug users, was used more frequently. Additionally, people have recently been starting to munch on pills rather than swallow them as it is purported to absorb more quickly and produce a heightened effect. The other reported an increase in the use of ecstasy capsules due to the fear of buying a dirty pill. According to this KE, people who use capsules don't get such a heightened effect, but still get a happy feeling.

Similarly one of the KE working at music festivals commented that people who take any other form other than pills report much less of a comedown, suggesting that these forms (powder/crystals/caps) are much more pure and less adulterated.



## 4.3 Methamphetamine use

### **Summary:**

#### *Speed*

- Three-fifths of RPU had ever used speed and one-quarter had done so recently.
- Speed was used on a median of 2 days over the preceding six months and was primarily snorted (64%).
- The frequency and quantity of use appeared to be stable from 2012 to 2013.

#### *Base*

- One-fifth of the sample had ever used base and 4% had done so recently.
- Base was used on a median of 1 day over the preceding six months and was primarily swallowed (n=3).
- The frequency of use appeared to be stable from 2012 to 2013.

#### *Crystal*

- One-fifth of the sample had ever used crystal and one-tenth had done so recently.
- Crystal was used on a median of 4 days over the preceding six months and was primarily smoked (55%).
- The frequency and quantity of use appeared to be stable from 2012 to 2013.
- The use of methamphetamine among the NSW general population remained stable from 2007 (2.3%) to 2010 (2.1%).
- The use of speed and by respondents in the Sydney Gay Community Periodic Survey has significantly decreased over time since 2009. However, a slight, though significant, increase in the proportion of participants reporting the use of crystal was reported over time since 2009.
- Fifteen percent of women interviewed in the Sydney Women and Sexual Health Survey had used speed and 5% had used crystal recently. These figures have remained relatively stable since 2010.
- Most KE expressed concern about crystal use and noted that the use of crystal was high and possibly even increasing.

Throughout the 1990s, the proportion of amphetamine-type substance (ATS) seizures that were methamphetamine (rather than amphetamine sulphate, the form most commonly available throughout the 1980s) steadily increased, until methamphetamine dominated the

market (Australian Bureau of Criminal Intelligence, 2001). Both the number and weight of ATS (excluding MDMA) detections at the Australian border increased in 2010-11, with the number of detections the highest recorded in the last decade (Australian Crime Commission, 2012).

Chemically, amphetamine and methamphetamine differ in molecular structure but are closely related. They exert their effects indirectly by stimulating the release of peripheral nervous system (PNS) and central nervous system (CNS) monoamines (principally dopamine, noradrenaline, adrenaline and serotonin), and both have psychomotor, cardiovascular, anorexogenic and hyperthermic properties (Seiden, Sobol & Ricaurte, 1993). Compared to amphetamine, methamphetamine has proportionally greater CNS than PNS stimulatory effects (Chesher, 1993), and is a more potent form with stronger subjective effects.

In Australia today, the powder traditionally known as 'speed' is almost exclusively methamphetamine. The more potent forms of this family of drugs, known by terms such as ice, shabu, crystal meth, base and paste are also methamphetamine.

The distinction between methamphetamine powder ('speed'), methamphetamine base ('base') and crystalline methamphetamine ('crystal') has been made in an attempt to collect more comprehensive information on the use, price, purity and availability of each of these different forms.

'Speed' is typically manufactured in Australia and ranges in colour from white to yellow, orange, brown or pink, due to differences in the chemicals used to produce it. It is usually of relatively low purity (approximately 10%) (McKetin, McLaren & Kelly, 2005).

'Base' (also called paste, wax, point or pure) is thought to be an oily or gluggy, damp, sticky, powder that often has a brownish tinge. Base is also thought to be manufactured in Australia; its purity has been found to be approximately twice that of speed (21%) (McKetin, McLaren & Kelly, 2005).

The crystal form (also called ice, shabu, or crystal meth) is large crystals that range from translucent to white but may also have a green, blue or pink tinge due to either impurities or the addition of food dye. Crystal is predominantly manufactured in Asia and imported into Australia (Topp & Churchill, 2002), although the first crystalline methamphetamine laboratory was detected in QLD in February 2002 (Australian Crime Commission, 2003). Pure crystal has an estimated purity of 80%.

A form of methamphetamine with a crystalline appearance has been detected which has a lower purity (19%); this lower purity crystalline methamphetamine may reflect either methamphetamine base with a crystalline appearance or crystal methamphetamine cut with crystalline adulterants (McKetin, McLaren & Kelly, 2005).

#### **4.3.1 Methamphetamine use among RPU**

In 2013, RPU reported lower average lifetime and recent use of all three types of methamphetamine. Additionally, there was a significant decline in the proportion reporting lifetime use of methamphetamine base ( $p < .05$ ).

### *Methamphetamine powder (speed)*

Over half of participants (56%) had ever used speed and one-quarter (25%) of the sample had used it during the preceding six months. Speed was first used at a median age of 18 years (range 13-30). Speed was used on a median of 2 days (range 1-12) over the preceding six months. The vast majority (96%) of those who had recently used speed had done so on a less than monthly basis.

Most recent users quantified their use in terms of 'grams' (n=7) or 'lines' (n=6). The median amount used in a 'typical' or 'average' use episode in the preceding six months was either 0.5 grams (range 0.05-1) or 1.25 lines (range 1-3). The median amount used in the 'heaviest' use episode was very similar, either 1 gram (range 0.5-3) or 1.25 lines (range 0.5-7). The most common route of administration for speed users in the preceding six months was snorting (64%); however, other routes of administration included swallowing (52%) and smoking (1%).

There was no significant change in the proportions reporting the lifetime or recent use of speed from 2012 to 2013. Reported frequency of use also appears stable (Table 4).

**Table 4: Patterns of speed use among RPU, NSW 2007-2013**

Speed variable	2007 (N =100)	2008 (N =100)	2009 (N=100)	2010 (N=100)	2011 (N =100)	2012 (N =100)	2013 (N=100)
Ever used (%)	86	92	83	79	67	<b>67</b>	<b>56</b>
Used last six months (%)	45	48	37	29	32	<b>31</b>	<b>25</b>
<i>Of those who had used:</i>							
Median days used last 6 mths (range)	6 (1-90)	4 (1-120)	3 (1-30)	2 (1-30)	3 (1-40)	<b>2 (1-180)</b>	<b>2 (1-12)</b>
<i>Median quantities used (grams):</i>							
Typical (range)	0.5 (0.25-2)	1 (0.2-2)	1 (0.2-2)	1 (0.3-2)	0.5 (0.2-1.5)	<b>1 (0.25-2)</b>	<b>0.5 (0.05-1)</b>
Heavy (range)	1 (0.5-3.5)	1 (0.2-4)	1 (0.25-3.5)	1 (0.3-7)	0.6 (0.25-6)	<b>1.25 (0.25-4)</b>	<b>1 (0.5-3)</b>

**Source: EDRS regular psychostimulant user interviews 2007-2013**

### *Methamphetamine base*

One-fifth (21%) of the sample had ever used base and only four individuals had used it over the preceding six months. The median age at which base was first used was 21 years (range 17-40). Base had been used on a median of 1 day (range 1-5) over the preceding six months. All users (100%) who had recently used base had done so less than monthly, one-quarter (25%) had used it between monthly and fortnightly, and three-quarters (75%) had used it 3 times in the 6 months prior to the survey.

Of the four individuals that had used base over the preceding six months, two quantified their use in terms of grams, one in terms of lines and one in terms of points. Because the number of respondents in 2013 was so low, average quantities used in a session was not reported.

Three participants had reported swallowing base over the preceding six-months and two reported snorting it.

The proportions reporting the lifetime use of base has remained stable from 2012 to 2013 (Table 5), as have the frequency and quantities used. However, there has been a significant decline in the proportion reporting lifetime use of base from 2012 to 2013 ( $p < .05$ ).

**Table 5: Patterns of base use among RPU, NSW 2007-2013**

Base variable	2007 (N 100)	2008 (N=100)	2009 (N=100)	2010 (N=100)	2011 (N=100)	2012 (N=100)	<b>2013 (N=100)</b>
Ever used (%)	54	53	51	53	41	38	<b>21</b>
Used last six months (%)	23	17	23	18	16	9	<b>4</b>
<i>Of those who had used:</i>							
Median days used last 6 mths (range)	5 (1-90)	2 (1-120)	2 (1-96)	2 (1-18)	2 (1-20)	2 (1-30)	<b>1 (1-5)</b>
<i>Median quantities used (points):</i>							
Typical (range)	2 (0.5-5)	2 (1-5)	2 (0.3-4)	1 (0.5-2)	2 (0.1-5)	1 (0.1-2)	<b>N/A<sup>^</sup></b>
Heavy (range)	2 (0.5-5)	2 (1-5)	2 (0.5-6)	1.25 (0.5-3)	2 (0.1-10)	2 (0.5-3)	<b>N/A<sup>^</sup></b>

**Source: EDRS regular psychostimulant user interviews 2007-2013**

<sup>^</sup>Data not reported as  $n < 5$ .

#### *Crystal methamphetamine*

One-fifth (21%) of the sample had ever used crystal, and one-tenth (11%) had used it over the six months prior to the interview. The median age of first use of crystal was 24 years (range 16-47). Crystal was used on a median of 4 days (range 1-48) over the preceding six months. More-than-half (64%) of those who had recently used crystal had done so less than monthly, one-fifth (18%) had used between fortnightly and monthly, 9% between fortnightly and weekly and 9% at more than once per week.

The majority of respondents quantified their use in terms of 'points' (generally believed to be 0.1 grams). These participants reported using a median of 2 points (range 0.5-4) during 'typical' sessions of use and this was equivalent during the heaviest episode of crystal use over the preceding six months. As in previous years, smoking was the most common route of administration for crystal (55%), followed by injecting (45%).

The proportions reporting the use of crystal have remained relatively stable from 2012 to 2013 (Table 6). Although the frequency of use of crystal has fluctuated since 2006, a

downward trend in crystal use in the NSW RPU sample does appear to be emerging in recent years.

**Table 6: Patterns of crystal use among RPU, NSW 2007-2013**

Crystal variable	2007 (N 100)	2008 (N=100)	2009 (N=100)	2010 (N=100)	2011 (N=100)	2012 (N=100)	<b>2013 (N=100)</b>
Ever used (%)	60	52	29	44	37	32	<b>21</b>
Used last 6 mths (%)	42	33	9	21	19	18	<b>11</b>
<i>Of those who had used:</i>							
Median days used last 6 mths (range)	9 (1-180)	6 (1-170)	12 (1-48)	3 (1-20)	6 (1-96)	8 (1-96)	<b>4 (1-48)</b>
<i>Median quantities used (points):</i>							
Typical (range)	1 (0.25-3)	1.75 (0.5-3)	1 (1-5)	1 (0.5-7)	2 (0.5-6)	1.25 (0.25-3)	<b>2 (0.5-4)</b>
Heavy (range)	3 (0.25-15)	2 (1-6)	3.5 (1-5)	3 (0.5-10)	3 (0.5-12)	3 (0.3-5)	<b>2 (0.5-4)</b>

Source: EDRS regular psychostimulant user interviews 2007-2013

#### 4.3.2 Locations of methamphetamine use

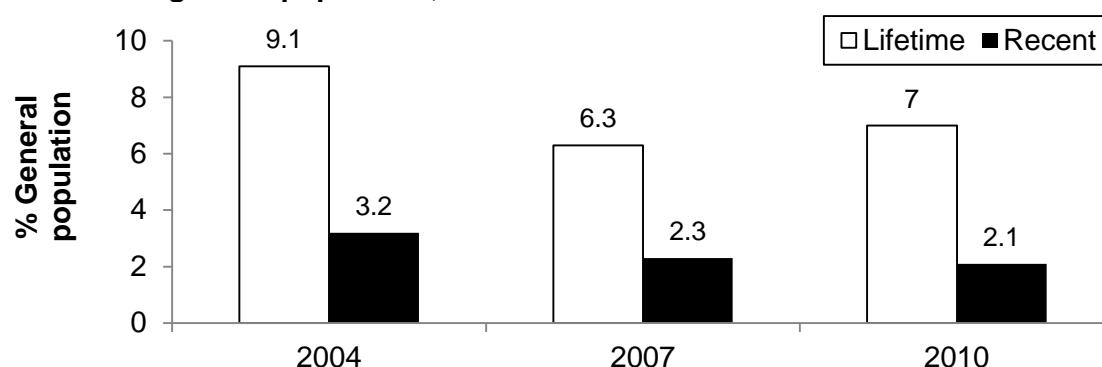
Because comments on the location of methamphetamine use were quite low (n=6 for powder, n=4 for base and n=7 for crystal), this data was not reported for 2013.

#### 4.3.3 Methamphetamine use in other populations

##### *General population*

Figure 5 shows the proportion of the general population in NSW (aged 14 years and over) who reported having recently used any form of methamphetamine. The authors reported a significant increase in the proportion of the Australian population who had ever used methamphetamines from 2007 to 2010, while the proportions reporting last year use remained relatively stable at 2.1% (Australian Institute of Health and Welfare, 2011).

**Figure 5: Percentage of sample reporting recent\* and lifetime methamphetamine use in the NSW general population, 2004-2010**



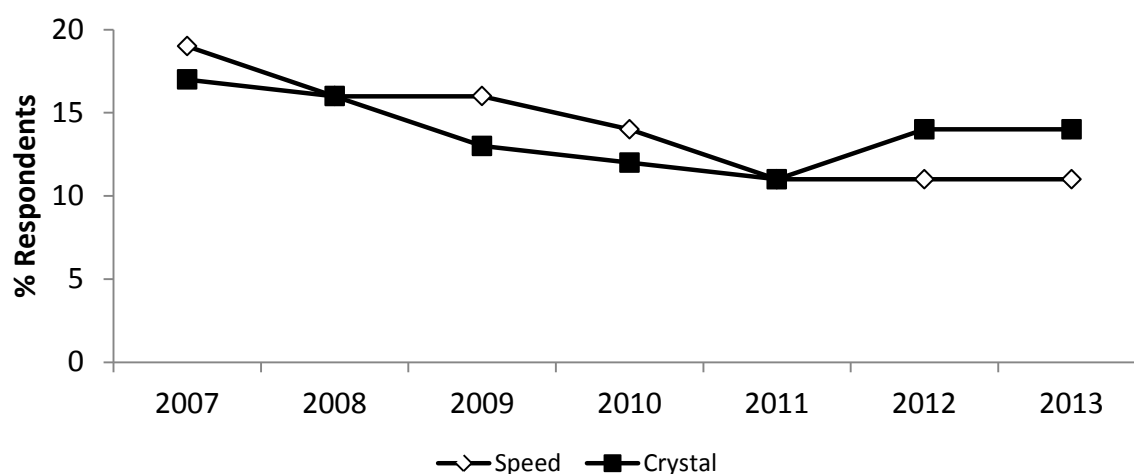
**Source: Australian Institute of Health and Welfare (2005b, 2008a, 2011)**

\* Used in the last 12 months

#### *Sydney Gay Community Periodic Survey*

The Sydney Gay Community Periodic Survey shows the proportion of gay men surveyed who had used speed and crystal in the past six months (Figure 6). In 2013, 11% of men interviewed had used speed and 14% had used crystal. The 2013 survey shows no changes in speed or crystal use since 2012; however, the authors reported an overall significant decline in the use of speed since 2009 and an overall significant increase in the proportion of participants reporting the use of crystal methamphetamine (Hull et al., 2013).

**Figure 6: Proportion of gay men in Sydney reporting recent speed and crystal use, 2007-2013**

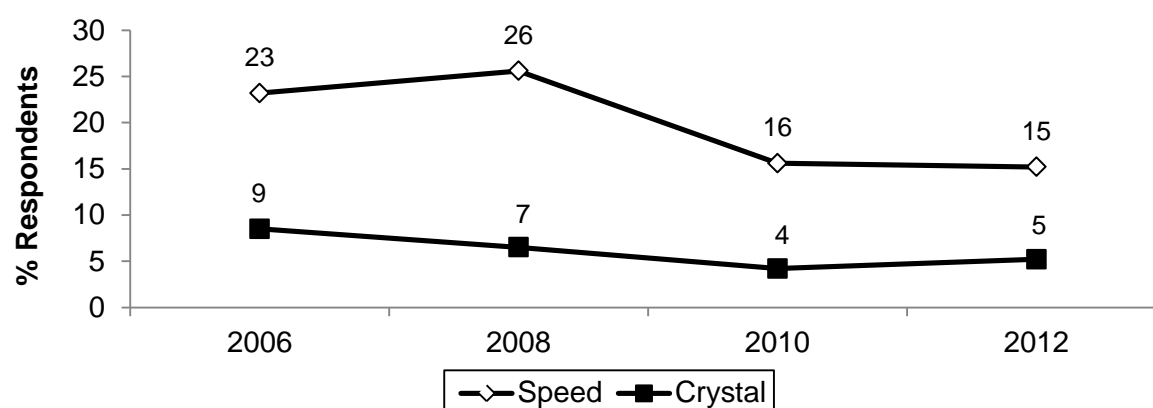


**Source: Sydney Gay Community Periodic Survey 2007-2013**

#### *Sydney Women and Sexual Health Survey*

The Sydney Women and Sexual Health Survey (Figure 7) showed the proportion of LBQ women surveyed who had used speed and crystal in the past six months. In 2012, 15% of women interviewed had used speed and 5% had used crystal. These figures appear to have remained relatively stable since 2010 (Mooney-Somers, Deacon, Comfort, Richters & Parkhill, 2013).

**Figure 7: Proportion of LBQ women in Sydney reporting recent speed and crystal use, 2006-2012**



**Source: Sydney Women and Sexual Health Survey 2006-2012**

### *Illicit Drug Reporting System*

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

### **Key expert comments**

There were mixed opinions on the use of speed, base and crystal from KE in 2013; not many individuals were able to comment on changes in methamphetamine use specifically amongst RPU.

Of those who commented on the usage patterns of speed, all agreed that its use has remained stable. Three individuals working in the service industry reported that speed use alone is not very frequent; however, speed is very popular and prominent amongst RPU when used with other drugs such as ecstasy or alcohol.

One of these KE noted that speed is used to negate the effects of alcohol, allowing individuals to drink more before getting intoxicated. There were mixed reports of the use of speed with ecstasy or cannabis, as the use of speed was said to either increase the effects of the other drug or negate the effects. One KE working in law enforcement in Greater Western Sydney noted reports of speed use with LSD and also mentioned that these people were more experienced drug users.

Across three medical professionals around the Kings Cross area, all reported speed use as stable, with most agreeing that usage is high amongst RPU; however, one was of the opinion that speed use was trending downwards. Another individual stated that there is a tendency to under-report speed use as medical problems associated with speed use are infrequent.

### **Key expert comments**

Medical professionals in both Dubbo and Nowra/Wollongong/Southern Highlands reported speed as the drug of most concern in these communities as reported by users themselves. The individual working in the Nowra area noted that the use of speed was high, in part due to the low socioeconomic status of individuals living in the area combined with the low price of speed, being cheaper than alcohol.

No KE could comment about base use.

Of the KE who commented about crystal methamphetamine use, most agreed that usage was high and either stable or increasing. All three medical professionals from around the Kings Cross area report higher overdoses (such as heart palpitations) and psychiatric presentations (such as drug induced psychosis) following crystal use and explained that this was due to the increase in crystal purity and an increase in the frequency of use.

However a KE working in drug court toxicology reported no change in methamphetamine use from 2012 to 2013.

The medical professional working in the Nowra area noted that crystal has been of more concern over the past few years due to its availability.

Three KE from the service industry around Oxford Street, Darling Harbour and Kings Cross noted that there was a negative stigma against crystal use amongst recreational RPU and often people will go out of their way to ensure they do not accidentally take crystal methamphetamine. The negative stigma has most likely been due to anecdotal reports of friends or relations who have used crystal previously with many reporting physical changes after only two weeks of use.



## 4.4 Cocaine use

### Summary:

- The majority of the group (64%) had tried cocaine at least once, and 42% had used it recently.
- Cocaine was used on a median of 2 days over the preceding six months and the main route of administration was snorting (86%).
- There was a significant decline in the lifetime and recent use of cocaine from 2012 to 2013.
- Recent use of cocaine among the NSW general population increased significantly from 1.6% in 2007 to 2.1% in 2010.
- Approximately one-fifth of participants in both the Sydney Gay Community Periodic Survey and the Sydney Women and Sexual Health Survey reported recent use of cocaine.
- KE reported that cocaine is becoming a less 'elitist' drug and is being used more often by younger individuals.
- Sex workers are another large population of cocaine users who may also use speedball (a combination of cocaine and an opiate).

Cocaine is a stimulant, like methamphetamine. Cocaine is a colourless or white crystalline alkaloid. Cocaine hydrochloride, a salt derived from the cocoa plant, is the most common form of cocaine available in Australia. 'Crack' is a form of freebase cocaine (hydrochloride removed) which is particularly pure; however, it is infrequently encountered in this country (Australian Crime Commission, 2013).

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

The majority (64%) of regular psychostimulant users in 2013 had ever used cocaine, and less than half (42%) had used it during the six months prior to the interview. There was a significant decline in the proportion reporting both lifetime and recent use of cocaine from 2012 to 2013 ( $p < .05$  respectively). The median age at which cocaine was first used was 19 years (range 16-38).

### 4.4.1 Cocaine use among RPU

Participants who had used cocaine over the preceding six months had done so on a median of 2 days (range 1-10). The majority (88%) of participants had used cocaine on a less than monthly basis, and the remaining regular recent users (12%) had used between monthly and fortnightly. Almost half (45%) of recent cocaine users quantified their use in terms of grams. The median amount used during a 'typical' occasion of use was 0.5 gram (range 0.1-2) and the median amount used on the heaviest occasion was 0.5 gram (range 0.1-6). Eighteen recent users quantified their use of cocaine according to 'lines'. These participants reported using a median of 2 lines (range 1-10) in a 'typical' session and equivalent median use on the heaviest occasion. The majority (86%) of recent users of cocaine reported having

snorted it over the preceding six months. A notable proportion of recent users of cocaine reported having swallowed it (29%), injected it (2%) and smoked it (2%) during this time.

Table 7 presents data across time on the prevalence, frequency and quantity of cocaine use among RPU interviewed in NSW. There were significant drops in both the lifetime ( $p < .05$ ) and recent ( $p < .05$ ) use of cocaine from 2012 to 2013. The frequencies of use and quantities used have remained remarkably stable.

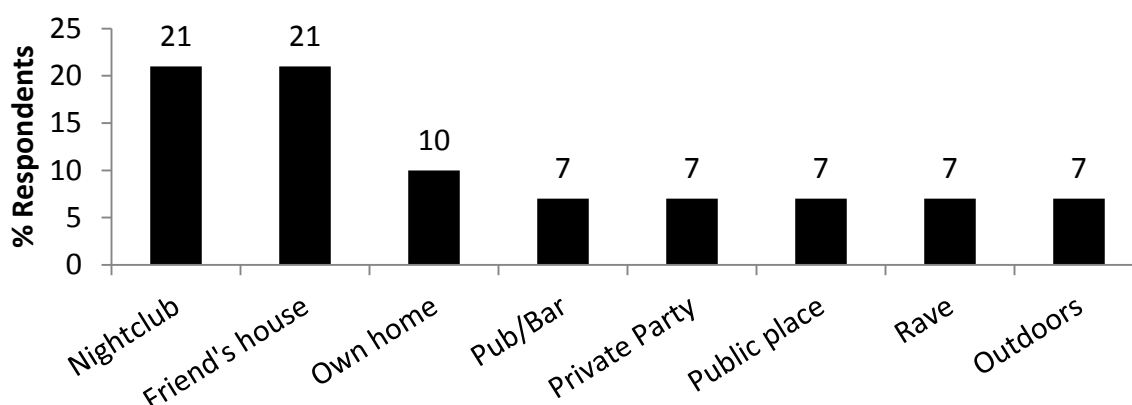
**Table 7: Patterns of cocaine use among RPU, NSW 2007-2013**

Cocaine variable	2007 (N=100)	2008 (N=100)	2009 (N=100)	2010 (N=100)	2011 (N=100)	2012 (N=100)	<b>2013 (N=100)</b>
Ever used %	88	90	85	88	84	81	<b>64</b>
Used last 6 mths %	62	51	64	60	59	57	<b>42</b>
<i>Of those who had used:</i>							
Median days used last 6 mths (range)	4 (1-48)	5 (1-90)	3 (1-30)	5 (1-100)	4 (1-120)	3 (1-90)	<b>2 (1-10)</b>
<i>Median quantities used (grams):</i>							
Typical (range)	0.5 (0.25-3)	0.5 (0.25-2)	0.5 (0.1-2.5)	0.5 (0.2-3)	0.5 (0.1-3)	0.5 (0.1-1)	<b>0.5 (0.1-2)</b>
Heavy (range)	1 (0.25-7)	1 (0.5-5)	1 (0.25-5)	1 (0.25-7)	1 (0.1-6.5)	1 (0.1-5)	<b>0.5 (0.1-6)</b>

**Source: EDRS regular psychostimulant user interviews 2007-2013**

Among those who commented (n=29, Figure 8), the largest portions reported last using cocaine in a nightclub (21%) or a friend's house (21%). However, a smaller portion of respondents reported last using cocaine at home (10%).

**Figure 8: Last location of cocaine use among RPU, NSW 2013**



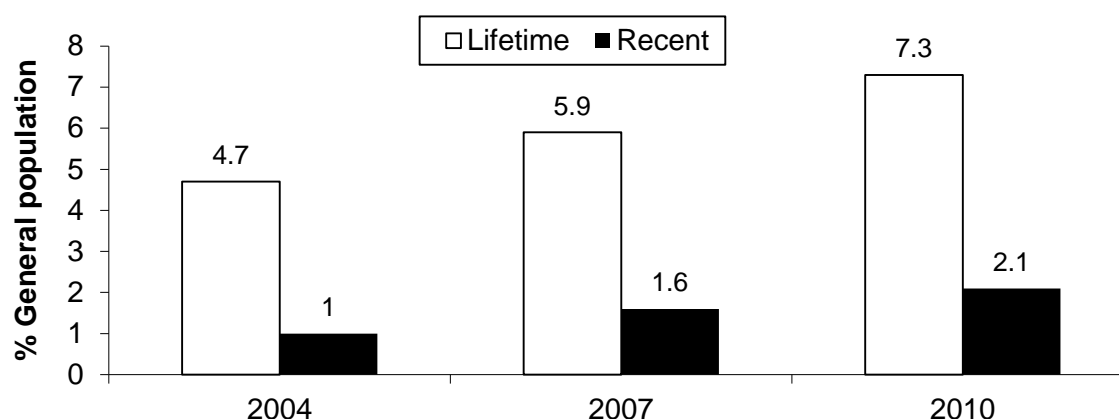
Source: EDRS regular psychostimulant user interviews 2013

#### 4.4.2 Cocaine use in other populations

##### *General population*

Reported lifetime use of cocaine increased significantly to 7.3% of the Australian population in 2010 (Figure 9). There was also a significant increase in the proportions who had used cocaine within the past year (from 1.6% to 2.1%) (Australian Institute of Health and Welfare, 2011).

**Figure 9: Percentage of sample reporting recent\* and lifetime cocaine use in the NSW general population, 2004-2010**



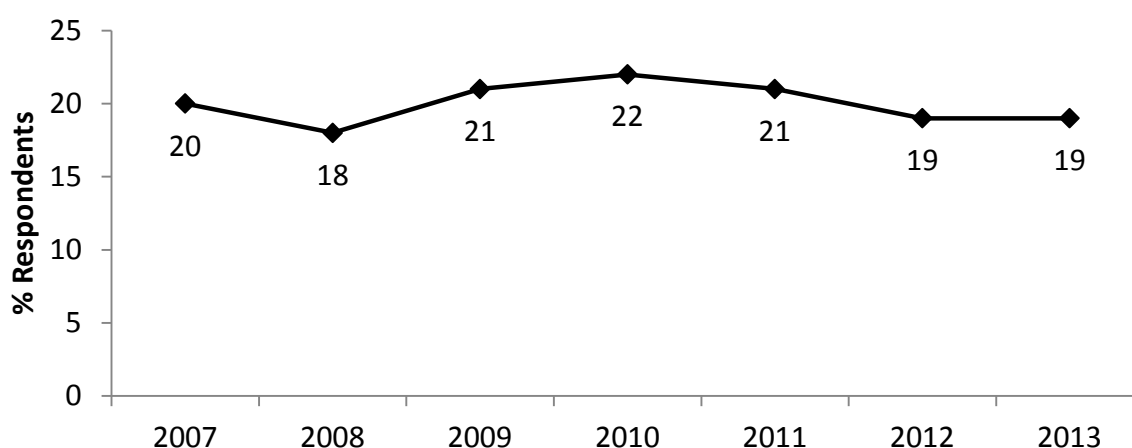
Source: Australian Institute of Health and Welfare (2005b, 2008a, 2011)

\* Used in the last 12 months

##### *Sydney Gay Community Periodic Survey*

In 2013, approximately one-fifth of gay men interviewed for the survey reported the recent use of cocaine (Figure 10). The authors reported a significant decrease in the proportions of participants that used cocaine in the six months prior to interview since 2009 (Hull et al., 2013).

**Figure 10: Proportion of gay men in Sydney reporting recent cocaine use, 2007-2013**

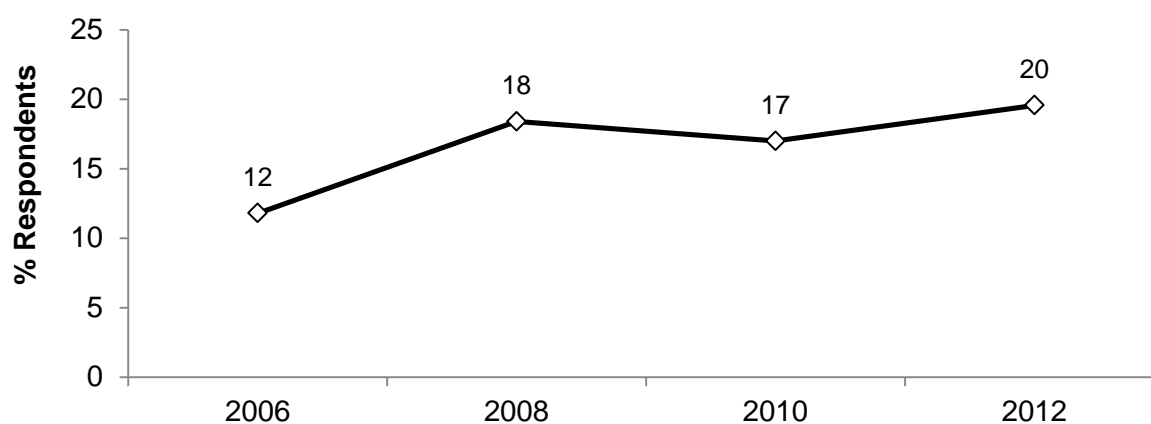


Source: Sydney Gay Community Periodic Survey 2007-2013

*Sydney Women and Sexual Health Survey*

The Sydney Women and Sexual Health Survey (Figure 11) reports the proportion of LBQ women surveyed who had used cocaine in the past six months. In 2012, one-fifth of LBQ women had recently used cocaine (Mooney-Somers, Deacon, Comfort, Richters & Parkhill, 2013). There appears to be an upward trend in the use of cocaine amongst this group.

**Figure 11: Proportion of LBQ women in Sydney reporting recent cocaine use, 2006-2012**



Source: Sydney Women and Sexual Health Survey 2006-2012

*Illicit Drug Reporting System*

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

### **Key expert comments**

All KE commented that cocaine was an expensive drug and therefore mostly used by older, more affluent individuals. The general consensus was that the price of cocaine was the determining factor defining the population that used the drug.

One medical professional from the Kings Cross area reported that most of the time the medical issues surrounding cocaine are cardiac related with extreme cases presenting with heart attacks.

Of the individuals interviewed outside Sydney's main metropolitan area, few people reported cocaine use, as the individuals from these communities were generally of a lower socioeconomic status.

Three people working in the service industry commented on the use of cocaine in younger populations. They were of the opinion that in the last few years, cocaine has been seen as less of an 'elitist' drug and is more available amongst young adults. Furthermore, students and others with low incomes tend to group together and share a dose to make it more affordable.

One KE in the service industry reported that cocaine was not regularly used and, when it was, often it would be binged on rather than taken in small doses.

Many KE from both the medical and service industry have commented that a large population of cocaine users are sex workers/erotic dancers, partly due to the fact that their clients often pay with cocaine. In this population, many individuals use cocaine to 'prop their mood up' and escape any mental health issues such as anxiety and depression.

One medical professional commented that this population of sex workers frequently uses speedball which is a combination of cocaine and an opiate such as heroin. Another KE from the service industry was of the opinion that most low-income individuals obtain cocaine through sex workers and dancers.

## 4.5 Ketamine use

### Summary:

- Over one-third of the sample had tried ketamine at least once and just under a quarter had used it recently.
- The proportion of participants reporting lifetime use of ketamine has shown a downward trend since 2010; however, proportions reporting recent use have remained relatively stable.
- Ketamine was used on a median of 2 days over the preceding six months.
- Recent use of ketamine among the NSW general population remained low and stable.
- There was a significant decline in the use of ketamine among participants of the Sydney Gay Community Periodic Survey from 2009-2013.
- Recent ketamine use amongst women interviewed in the Sydney Women and Sexual Health Survey has remained relatively stable since 2006, with 6% reporting ketamine use in 2012.
- KE reported that ketamine use is most prominent in the gay community and can be used to enhance the effect of other illicit drugs such as ecstasy.

Ketamine is a rapid acting, dissociative anaesthetic that is used in veterinary surgery and less commonly in human surgery. Ketamine is a liquid that can be injected for legitimate use. It is typically converted into a fine powder through evaporation, and is typically snorted. Ketamine can also be made into tablets, capsules and tabs (liquid soaked blotter paper) which are usually swallowed. Common names for ketamine include K, special K or vitamin K.

Ketamine produces a dissociative state in the user, commonly eliciting an out-of-body experience. It has a combination of stimulant, depressant, hallucinogenic and analgesic properties. Too much ketamine can result in the user having a 'near death experience' or falling into a 'K hole'.

As ketamine is complicated to manufacture, and precursor chemicals are difficult to obtain, it is unlikely that it is produced in clandestine laboratories. The majority of ketamine used by RPU is probably diverted from veterinary sources or imported from overseas, making supply irregular compared with other illicit substances (Australian Crime Commission, 2008, 2009, 2010).

Just over one-third (36%) of the 2013 sample of regular psychostimulant users reported having ever used ketamine and approximately one-quarter (24%) had done so recently. Ketamine was first used at a median age of 21 years (range 15-32).

### 4.5.1 Ketamine use among RPU

Ketamine had been used on a median of 2 days (range 1-10) by RPU who had recently used ketamine. Of these RPU, 88% had used ketamine on a less than monthly basis, and the remaining 12% had done so between monthly and fortnightly. Eight recent users of ketamine reported their use in terms of 'bumps'.<sup>4</sup> They reported using a median of 2 bumps on both a typical occasion (range 1-5) and 2 bumps on the heaviest occasion (range 1-10) over the preceding six months. The other common unit reported was points (n=7). These respondents reported using a median of 1 point (range 0.5-3) in an average session of use, and 1 point (range 0.5-6) during the heaviest episode of use.

The most common route of administration for ketamine was snorting (79%), followed by swallowing (17%) over the past six months. Nine participants commented on the location of ketamine use. Ketamine was most commonly last used at either a nightclub (33%) or at a friend's house (33%). The remaining three participants reported using ketamine at home, outdoors and at a live music event.

Table 8 presents data across time regarding patterns of ketamine use among RPU interviewed in the EDRS. The proportions reporting recent use of ketamine remained stable from 2012 to 2013. The frequency of use also remained fairly stable. However, there seems to be a downward trend in the lifetime use of ketamine from 2010 to 2013.

**Table 8: Patterns of ketamine use among RPU, NSW 2007-2013**

Ketamine variable	2007 (N=100)	2008 (N=100)	2009 (N=100)	2010 (N=100)	2011 (N=100)	2012 (N=100)	<b>2013 (N=100)</b>
Ever used (%)	62	65	53	64	56	48	<b>36</b>
Used last 6 mths (%)	36	30	19	24	39	24	<b>24</b>
<i>Of those who had used:</i>							
Median days used last 6 mths (range)	2 (1-25)	3 (1-12)	2 (1-8)	2.5 (1-30)	2 (1-100)	3 (1-12)	<b>2 (1-10)</b>
<i>Median quantities used (bumps):</i>							
Typical (range)	1 (1-3)	2 (1-4)	4 (1-7)	3 (1-12)	2 (1-10)	2 (1-10)	<b>2 (1-5)</b>
Heavy (range)	2 (1-10)	2 (1-10)	4.5 (1-8)	3 (1-12)	3 (1-10)	2 (1-12)	<b>2 (1-10)</b>

**Source: EDRS regular psychostimulant user interviews 2007-2013**

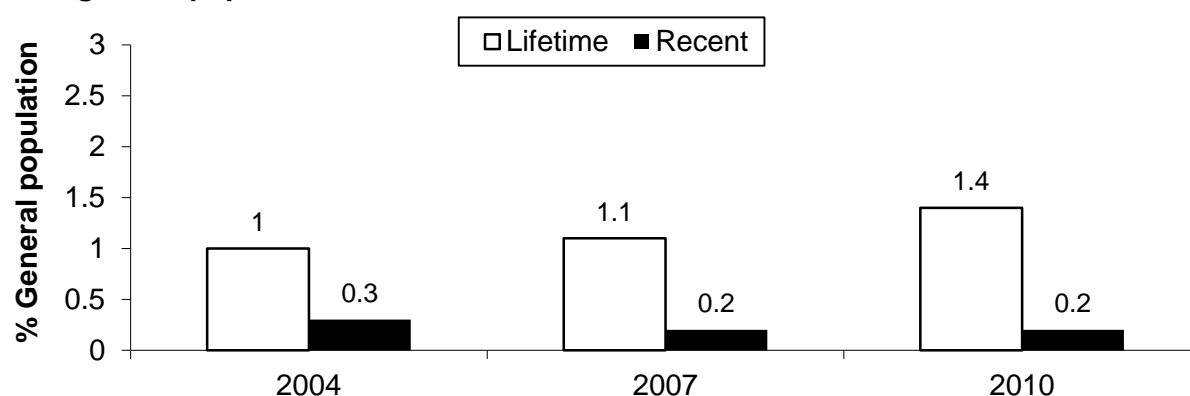
<sup>4</sup> A bump refers to a small amount of powder, typically measured and snorted from the end of a key, the corner of a plastic card or a 'bumper'. A bumper is a small glass nasal inhaler, purchased from tobacconists, used to store and administer powdered substances such as ketamine.

## 4.5.2 Ketamine use in other populations

### *General population*

Ketamine was first included in the National Drug Strategy Household Survey in 2004 (Australian Institute of Health and Welfare, 2005a). While there was a significant increase in the proportions reporting lifetime ketamine use, the proportions reporting use within the past year remained low and stable (Figure 12) (Australian Institute of Health and Welfare, 2011).

**Figure 12: Percentage of sample reporting recent\* and lifetime ketamine use in the NSW general population, 2004-2010**



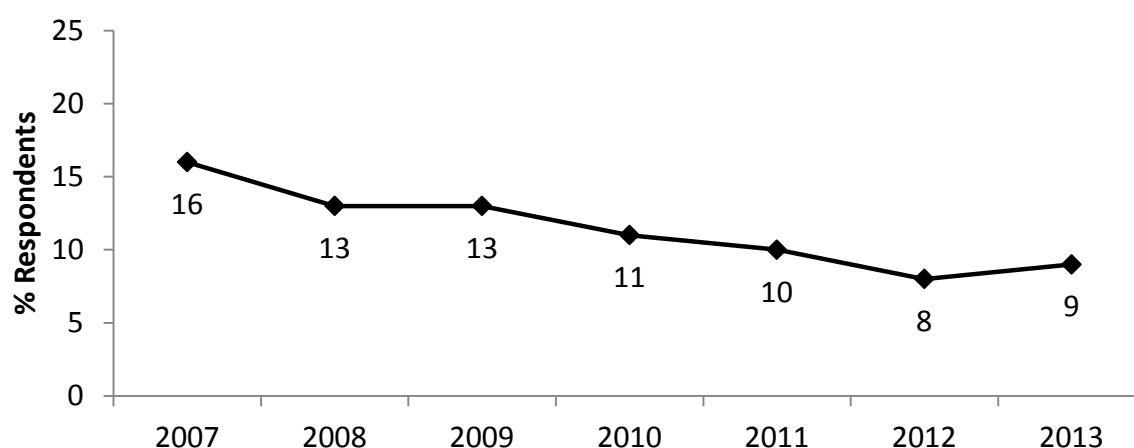
Source: Australian Institute of Health and Welfare (2005a, 2008b, 2011)

\*Used in the last 12 months

### *Sydney Gay Community Periodic Survey*

Figure 13 shows the proportion of men surveyed who had used ketamine in the past six months. This figure had remained relatively stable from 2012 to 2013 at approximately one-tenth of the group. The authors reported a significant decline in the use of ketamine among their sample from 2009 to 2013 (Hull et al., 2013).

**Figure 13: Proportion of gay men in Sydney reporting recent ketamine use, 2007-2013**



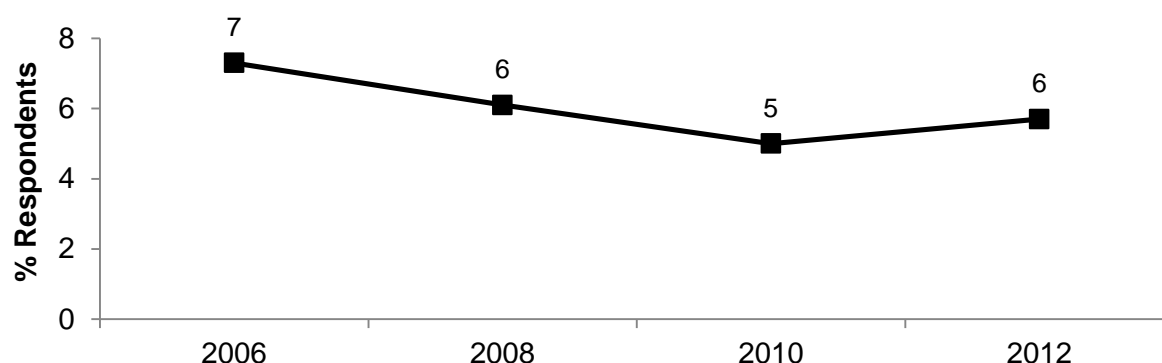
Source: Sydney Gay Community Periodic Survey 2007-2013



### *Sydney Women and Sexual Health Survey*

Figure 14 shows the proportion of women surveyed who had used ketamine in the past six months. In 2012, 6% of this group reported recent use of ketamine, which has remained relatively stable since 2006 (Mooney-Somers, Deacon, Comfort, Richters & Parkhill, 2013).

**Figure 14: Proportion of LBQ women in Sydney reporting recent ketamine use, 2006-2012**



Source: Sydney Women and Sexual Health Survey 2006-2012

#### **Key expert comments**

Only KE from the metropolitan areas of Sydney were able to comment about Ketamine use.

Although KE from the medical and service industries considered ketamine as a drug most prominently used in the gay community, one individual working in GLBT clubs and bars was of the opinion that ketamine was used more by people in the 'alternative' or 'underground' gay community. This individual reported that in this population, ketamine was the most common drug used after ecstasy. Furthermore, ketamine use has increased slightly over the last 6-12 months and this may be due to the dissipation of ketamine use as taboo. According to this KE, younger people are using it less and older populations tend to be using it more frequently.

Two medical professionals who work around the Kings Cross area reported low numbers of individuals presenting with a ketamine overdose and one mentioned that some individuals have unknowingly taken ketamine when intending to take ecstasy.

One individual from the service industry reported that people take ketamine as a cheaper alternative to cocaine as it mimics cocaine's effects. This person also noted that people who start using ketamine become addicted very quickly.

Another KE working in the service industry reported that people use ketamine to enhance the effect of other drugs—the rationale being that ketamine (being a dissociative) forces the brain and body to relax which allows other drugs to overcome the body's natural resistance.

Furthermore this KE noted a poor knowledge base on the uses and harms of ketamine in a population of RPU.

## 4.6 GHB use

### Summary:

- One-fifth of the sample had tried GHB at least once and 11% had used it recently.
- GHB was used on a median of 1 day over the preceding six months.
- The frequency and quantity of use of GHB remained stable from 2012 to 2013.
- Recent use of GHB among the NSW general population remained low and stable.
- From 2009 the use of GHB among participants of the Sydney Gay Community Periodic Survey had remained stable; however, there has been a slight increase in use from 2012 to 2013.
- GHB use among LBQ women in the Sydney Women and Sexual Health Survey has remained relatively stable across time, with 4% reporting recent GHB use in 2012.
- KE were of the opinion that the popularity of GHB has decreased since the rise in ecstasy purity.
- Several KE were also concerned about the unpredictable effects of GHB, reporting that individuals can often take the wrong dose or experience unintended effects.

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

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

Approximately one-fifth (21%) of the sample had ever used GHB and about one-in-ten (11%) RPU reported having done so recently. GHB was first used at a median of 21 years (range 16-47).

#### 4.6.1 GHB use among RPU

GHB had been used on a median of 1 day (range 1-30) over the past six months. Three-quarters (73%) of those who had recently used GHB had done so on a less than monthly basis, one-fifth using GHB between monthly and fortnightly and one participant using GHB more than weekly.

Ten participants commented on the quantities of GHB they used. These participants reported using a median of 4mL (range 2-8) in an average episode of use and 4.5mL (range 2-10) in their heaviest episode of use over the past six months. All recent users of GHB had swallowed it. Eight participants commented on where they had last used GHB. The majority had used GHB last in a nightclub (63%).

From 2012 to 2013 the proportion reporting the lifetime and recent use of GHB remained stable (Table 9). Figures regarding the frequencies and quantities of use of GHB also appear to have remained stable, although caution should be used when examining the data given the small numbers of participants who were able to report on this data.

**Table 9: Patterns of GHB use among RPU, NSW 2007-2013**

GHB variable	2007 (N=100)	2008 (N=100)	2009 (N=100)	2010 (N=100)	2011 (N=100)	2012 (N=100)	<b>2013 (N=100)</b>
Ever used (%)	37	37	24	42	30	22	<b>21</b>
Used last 6 mths (%)	23	24	6	17	16	11	<b>11</b>
<i>Of those who had used:</i>							
Median days used last 6 mths (range)	6 (1-180)	2.5 (1-48)	4 <sup>^</sup> (1-72)	3 (1-10)	2 (1-4)	2 (1-90)	<b>1 (1-30)</b>
<i>Median quantities used (mL):</i>							
Typical (range)	2 (1-15)	3 (1-20)	7 <sup>^</sup> (5.5-10)	3.5 (1-10)	2 <sup>^</sup> (1-4)	2 <sup>^</sup> (2-30)	<b>4<sup>^</sup> (2-8)</b>
Heavy (range)	6 (2-40)	6 (1-20)	8 <sup>^</sup> (5.5-15)	5 (1-50)	4 <sup>^</sup> (1-10)	4.5 <sup>^</sup> (2-80)	<b>4.5<sup>^</sup> (2-10)</b>

**Source: EDRS regular psychostimulant user interviews 2007-2013**

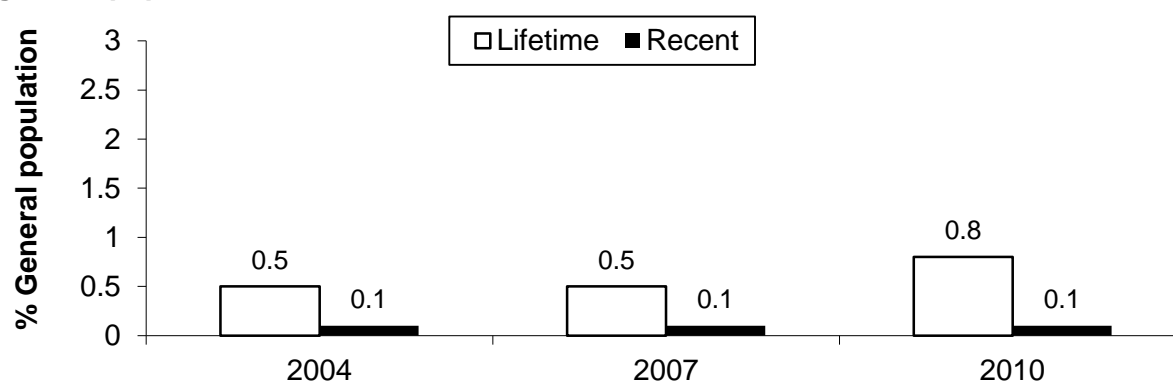
<sup>^</sup> Small numbers reporting, interpret with caution

## 4.6.2 GHB use in other populations

### *General population*

The 2004 National Drug Strategy Household Survey was the first to include GHB as a separate drug class (Australian Institute of Health and Welfare, 2005a). From 2007 to 2010 the recent use of GHB among the NSW general population aged 14 years and over remained stable at 0.1%, while the proportions reporting lifetime use increased significantly to 0.8% (Figure 15) (Australian Institute of Health and Welfare, 2011).

**Figure 15: Percentage of sample reporting recent\* and lifetime GHB use in the NSW general population, 2004-2010**



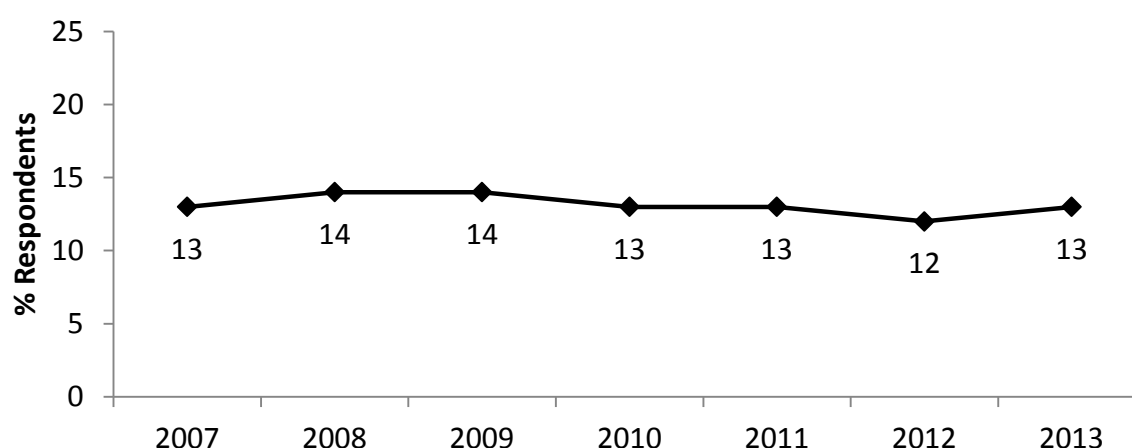
Source: Australian Institute of Health and Welfare (2005a, 2008b, 2011)

\* Used in the last 12 months

### *Sydney Gay Community Periodic Survey*

Figure 16 shows the proportion of gay men surveyed who had used GHB in the past six months. Since 2009, GHB use has remained stable; however, the authors report a significant increase in use from 2012 to 2013 with just over one-in-ten (13%) reportedly using GHB 2013 (Hull et al., 2013).

**Figure 16: Proportion of gay men in Sydney reporting recent GHB use, 2007-2013**

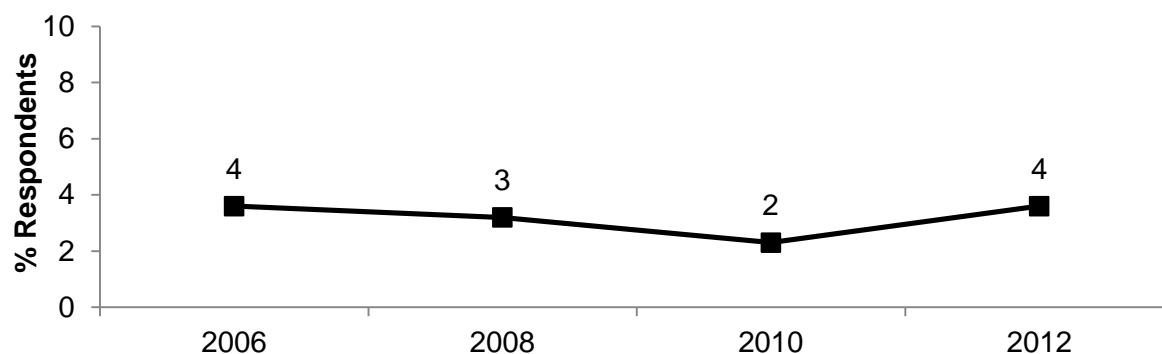


Source: Sydney Gay Community Periodic Survey 2007-2013

### *Sydney Women and Sexual Health Survey*

Figure 17 shows the proportion of women surveyed who had recently used GHB. This figure had remained relatively stable across time, with 4% reporting recent GHB use in 2012 (Mooney-Somers, Deacon, Comfort, Richters & Parkhill, 2013).

**Figure 17: Proportion of LBQ women in Sydney reporting recent GHB use, 2006-2012**



Source: Sydney Women and Sexual Health Survey 2006-2012

#### **Key expert comments**

Four of the six individuals who commented on GHB related its use to the GLBT population. However, one KE who works with GLBT drug users reported that the popularity of GHB has decreased due to the rise in purity of ecstasy over the past 6-12 months. Furthermore, GHB has a reputation for being unpredictable; for example, it can be relatively easy to take the wrong dose and, even when taken correctly, there can be unintended effects.

One medical professional from the Kings Cross area reported that some individuals come into the emergency department so intoxicated and in so much pain, they forget the previous night. Because they have no memory of the negative consequences of GHB, users will repeatedly use GHB to intoxication.

## 4.7 LSD use

### Summary:

- The vast majority of the sample had tried LSD at least once and just over half had used it recently.
- LSD was used on a median of 2 days over the preceding six months.
- Unlike most other drugs, LSD was often used in outdoor settings.
- The use of LSD among the sample has increased over the past six years.
- The use of hallucinogens among the NSW general population increased significantly from 0.6% in 2007 to 1.4% in 2010.
- The use of LSD among participants of the Sydney Women and Sexual Health Survey remained relatively low and stable over time.
- KE comments indicated that the introduction of new psychoactive substances such as 2C-B may have diluted the LSD market.

Lysergic acid diethylamide is commonly known as LSD, 'trips' or 'acid'. It is a powerful hallucinogen which can produce significant changes in perception, mood and thought. Only a small amount is needed to cause visual hallucinations and distortions. These experiences are known as 'trips'. Unpleasant reactions to LSD include fear, anxiety and depression. LSD is manufactured in illicit laboratories and the majority of LSD is believed to be imported from overseas.

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

### 4.7.1 LSD use among RPU

Table 10 presents data across time on patterns of LSD use among RPU.

Almost three-quarters (71%) of the sample had ever used LSD and half (51%) had used it recently. Respondents had first used LSD at a median age of 18 years (range 15-43). There has been a notable upward trend in proportion of individuals reporting recent use of LSD since 2008. Conversely from 2012 to 2013, there was a significant decline in the proportion of respondents who reported lifetime use of LSD ( $p < .05$ ). LSD was used on a median of 2 days (range 1-24) over the preceding six months.

Of those who had used LSD, four-fifths (82%) had done so on a less than monthly basis, over one-tenth (14%) had used it between monthly and fortnightly, and 4% had used LSD between fortnightly and weekly.

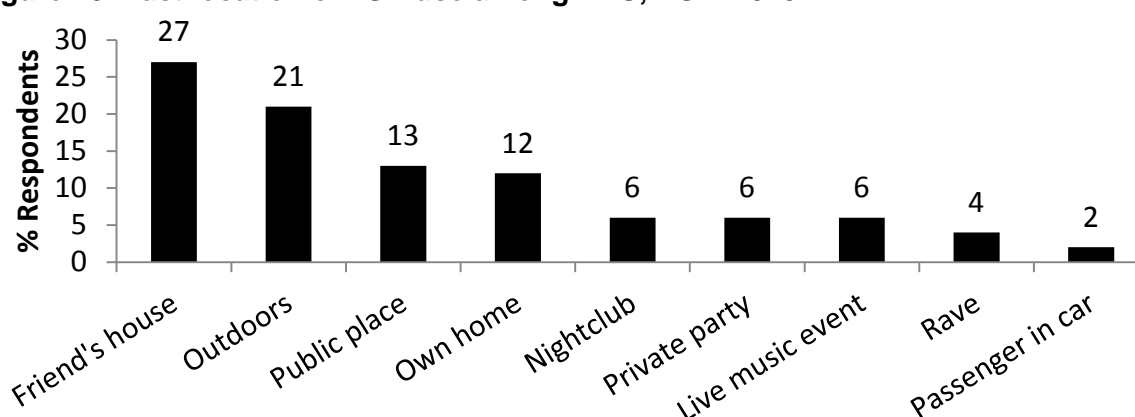
All respondents quantified their use in terms of tabs. They reported having used a median of 1 tab (range 0.25-7.5) during a 'typical' episode of use, and 1.5 tabs (range 0.5-10) during the heaviest episode of use in the preceding six months. All recent users of LSD had swallowed it.

**Table 10: Patterns of LSD use among RPU, NSW 2007-2013**

LSD variable	2007 (N=100)	2008 (N=100)	2009 (N=100)	2010 (N=100)	2011 (N=100)	2012 (N=100)	2013 (N=100)
Ever used (%)	68	57	62	77	75	84	71
Used last 6 mths (%)	22	18	37	44	46	43	51
<i>Of those who had used:</i>							
Median days used last 6 mths (range)	2.5 (1-20)	2 (1-20)	2 (1-25)	3 (1-25)	2 (1-48)	3 (1-24)	2 (1-24)
<i>Median quantities used (tabs):</i>							
Typical (range)	1 (0.25-4)	1 (0.25-2.5)	1 (0.5-3)	1 (0.5-3)	1 (0.25-5)	1 (0.5-2)	1 (0.25-7.5)
Heavy (range)	1 (0.25-10)	1.75 (0.5-3)	1 (0.5-3.5)	1 (0.5-6)	1 (0.25-20)	1 (0.5-5)	1.5 (0.5-10)

Source: EDRS regular psychostimulant user interviews 2007-2013

Figure 18 presents the location of last LSD use. In contrast to many of the other drugs reported herein, LSD had been most often used at a friend's house (27%) and outdoors (21%). However, respondents had also recently used it in a public place such as a street or park (13%), at home (12%), and, less commonly, in other venues.

**Figure 18: Last location of LSD use among RPU, NSW 2013**

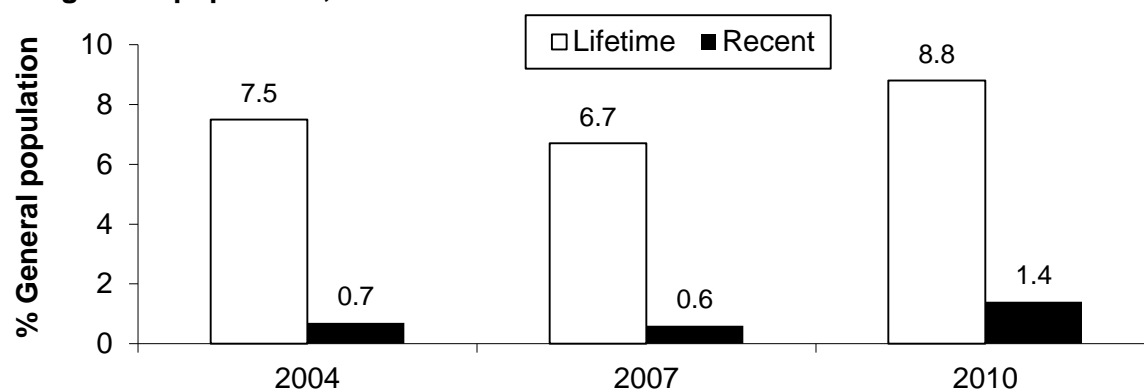
Source: EDRS regular psychostimulant user interviews 2013

## 4.7.2 Hallucinogen use in other populations

### *General population*

Figure 19 presents data across time on the recent use of hallucinogens in the NSW general population among participants aged 14 years or over. The authors noted a significant increase in the proportions reporting both lifetime and past year use of hallucinogens from 2007 to 2010 (Australian Institute of Health and Welfare, 2011).

**Figure 19: Percentage of sample reporting recent\* and lifetime hallucinogen use in the NSW general population, 2004-2010**



**Source: Australian Institute of Health and Welfare (2005a, 2008b, 2011)**

\*Used in the last 12 months

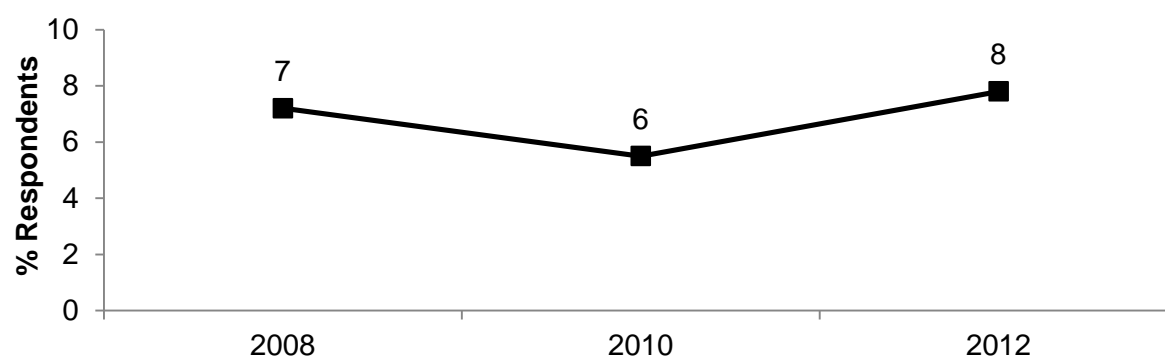
### *Sydney Gay Community Periodic Survey*

LSD was omitted from the questionnaire for the Sydney Gay Community Periodic Survey in 2011. The most recent data available is from 2010 where 6% reported recently using LSD/trips.

### *Sydney Women and Sexual Health Survey*

Figure 20 shows the proportion of women surveyed who had used LSD in the past six months. This figure had remained relatively stable since 2008, with nearly one-tenth of the group reporting recent LSD use (Mooney-Somers, Deacon, Comfort, Richters & Parkhill, 2013).

**Figure 20: Proportion of LBQ women in Sydney reporting recent LSD use, 2008-2012**



**Source: Sydney Women and Sexual Health Survey 2008-2012**

Note: LSD use was not recorded in the 2006 survey



### *Illicit Drug Reporting System*

A separate monitoring system investigating trends in the use of hallucinogens in injecting drug users has been conducted in NSW since 1996, in Victoria (VIC) and South Australia (SA) since 1997 and nationally since 2000. This is called the Illicit Drug Reporting System, or IDRS, and reports and bulletins are available from the NDARC website (<http://ndarc.med.unsw.edu.au/project/illicit-drug-reporting-system-idrs>).

#### **Key expert comments**

Only one KE working in the service industry could comment on trends in LSD use over the past year. This individual noted that the introduction of new psychoactive substances (NPS; see section 4.10) mimicking hallucinogens diluted the LSD market.

Additionally, this KE was of the opinion that dealers were more reluctant to sell LSD due to the negative media attention towards NPS in the early months of 2013.

However, this individual did notice an increase in users in the later months of 2013 and suggested that LSD use was returning to the levels seen in 2011/2012.

Another KE working in law enforcement reported a decrease in the average age of individuals caught possessing LSD from 28.6 years of age in the first half of 2012 to 27 years of age in the same period of 2013.

## 4.8 Cannabis use

### Summary:

- Almost every participant had tried cannabis at least once and the vast majority had used it recently.
- Cannabis was used on a median of 40 days (i.e. more than weekly) over the preceding six months.
- The use of cannabis had remained relatively stable over time.
- The use of cannabis among the NSW general population increased significantly from 9.1% in 2007 to 10.3% in 2010.
- The use of cannabis among participants of the Sydney Gay Community Periodic Survey has declined since 2009.
- Over one-third of women in the Sydney Women and Sexual Health Survey reported recent use of cannabis, which has remained stable over time.
- KE revealed that cannabis use may be more accepted by licit drug users given the recent decriminalisation/legalisation of cannabis in the United States.

Cannabis is derived from the cannabis plant (*Cannabis sativa*). While cannabis can be grown in almost any climate, it is being increasingly cultivated by means of indoor hydroponic technology. The main active ingredient in cannabis is delta-9-tetrahydrocannabinol (THC). Cannabis is used recreationally in three main forms: marijuana ('bush' or 'hydro' – see below for a description of these forms of marijuana); hashish ('hash'); and hash oil (National Drug and Alcohol Research Centre, 2008). Cannabis remains the dominant illicit drug in Australia in terms of arrests, seizures and use (Australian Crime Commission, 2013).

Almost every participant in the 2013 EDRS (97%) had ever used cannabis and the majority (90%) reported having done so over the six months preceding the interview (Table 11). Cannabis was first used at a median age of 16 years (range 11-30).

### 4.8.1 Cannabis use among RPU

Recent cannabis users reported having used it on a median of 40 days (range 1-180). While approximately one-fifth of users (20%) had used cannabis on a less than monthly basis and 14% had used on a monthly to fortnightly basis, substantial proportions had used it more than fortnightly (66%) more than weekly (57%) and on a daily basis (6%). The majority of cannabis users (87%) had smoked it over the past six months and about one-third (31%) reported having recently ingested it.

Recent users of cannabis were asked how much they had smoked on their last occasion of use. Forty-one participants quantified their last use in terms of cones and reported having smoked a median of 4 cones (range 1-35) on their last occasion of use. Thirty-six RPU quantified their use in terms of joints and reported having smoked a median of 1 joint (range 0.25-7) on their last occasion of use.

Trends in the use of cannabis are presented in Table 11. There was no significant change in the proportions reporting the lifetime or recent use of cannabis or in the number of days of use from 2012 to 2013.

**Table 11: Patterns of cannabis use among RPU, NSW 2007-2013**

Cannabis variable	2007 (N=100)	2008 (N=100)	2009 (N=100)	2010 (N=100)	2011 (N=100)	2012 (N=100)	<b>2013 (N=100)</b>
Ever used (%)	97	93	98	98	97	99	<b>97</b>
Used last 6 mths (%)	74	71	83	78	83	86	<b>90</b>
<i>Of those who had used:</i>							
Median days used last 6 mths	48	24	25.5	49	48	48	<b>40</b>
(range)	(1-180)	(1-180)	(1-180)	(1-180)	(1-180)	(1-180)	<b>(1-180)</b>

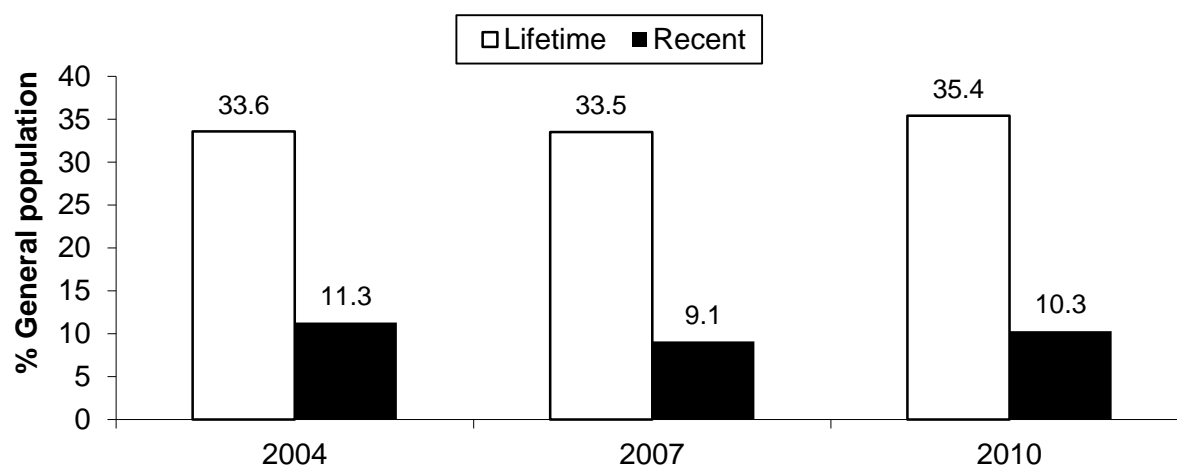
Source: EDRS regular psychostimulant user interviews 2007-2013

#### 4.8.2 Cannabis use in other populations

##### *General population*

The proportion of the NSW general population aged 14 years or over reporting recent use of cannabis increased significantly from 9.1% in 2007 to 10.3% in 2010. There was also a significant increase in the proportions reporting lifetime cannabis use over this time (Figure 21) (Australian Institute of Health and Welfare, 2011).

**Figure 21: Percentage of sample reporting recent\* and lifetime cannabis use in the NSW general population, 2004-2010**



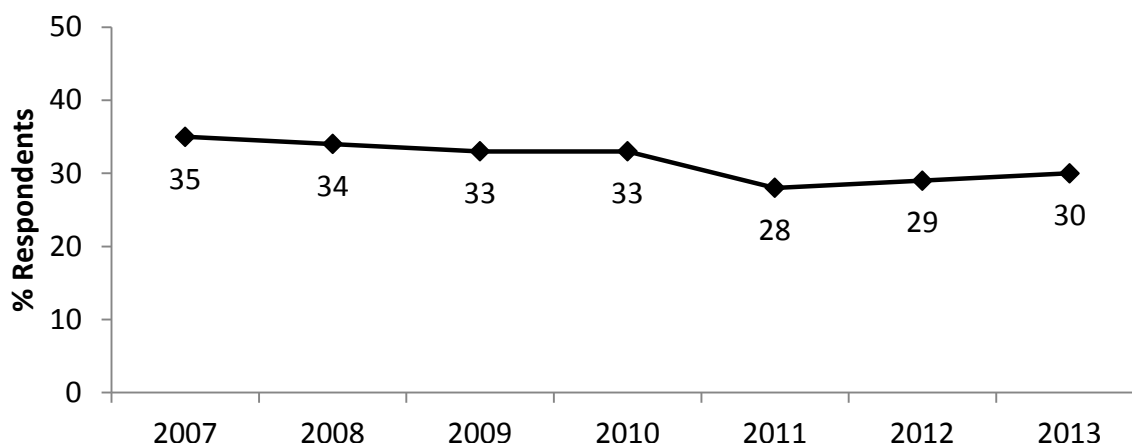
Source: Australian Institute of Health and Welfare (2005a, 2008b, 2011)

\* Used in the last 12 months

### *Sydney Gay Community Periodic Survey*

Figure 22 shows the proportion of gay men surveyed that had used cannabis in the past six months. About one-third of the men who participated had recently used cannabis. The authors reported a significant decrease in the use of cannabis over time since 2009 (Hull et al., 2013).

**Figure 22: Proportion of gay men in Sydney reporting recent cannabis use, 2007-2013**

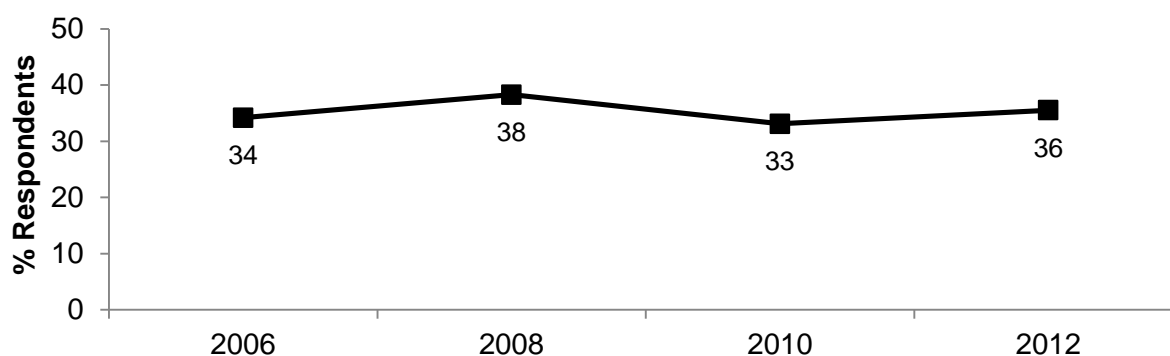


Source: Sydney Gay Community Periodic Survey 2007-2013

### *Sydney Women and Sexual Health Survey*

Figure 23 shows the proportion of women surveyed who had used cannabis in the past six months. This figure had remained relatively stable over time at approximately one-third of the group (Mooney-Somers, Deacon, Comfort, Richters & Parkhill, 2013).

**Figure 23: Proportion of LBQ women in Sydney reporting recent cannabis use, 2006-2012**



Source: Sydney Women and Sexual Health Survey 2006-2012

### *Illicit Drug Reporting System*

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

### **Key expert comments**

All KE from medical, legal and service industries agreed that cannabis was the most used illicit drug and usage patterns have remained stable in 2013.

One KE working in drug use training programs and festival first aid commented that although cannabis does not cause mental health problems, it does potentiate problems such as anxiety, depression and paranoia, which many people don't realise. This was a common comment which was raised by many of the KE in 2013.

This person was of the opinion that people who are frequent users of alcohol and cannabis are generally of a lower socioeconomic status and have a lower number of completed school years.

One medical professional working in Dubbo said that cannabis was perceived as relatively safe and that overdose could not occur, which may contribute to its widespread use around the area.

One KE working in the service industry was of the opinion that cannabis use has been more acceptable by night-life society (such as the low frequency alcohol and tobacco users), most likely due to the decriminalisation/legalisation of cannabis in an area of the United States.

## 4.9 Other drug use

### **Summary:**

#### *Alcohol*

- All of the 2013 NSW RPU reported lifetime use and 94% reported recent use of alcohol.
- KE reported that alcohol continued to be one of the most problematic drugs among RPU. A frequent risky-behaviour noted was the ritual of 'pre-drinking' before going out in order to become intoxicated faster and cheaper.

#### *Tobacco*

- Almost all RPU had used tobacco at least once (95%) and 84% had smoked within the past six months.

#### *Benzodiazepines*

- Slightly less than half of the group had recently used benzodiazepines. Illicit use was more common than licit use.
- KE reported that users of benzodiazepines were more experienced with their drug use and only represented a small number of the recreational drug user community.

#### *Antidepressants*

- One-in-ten RPU had recently used antidepressants. Licit use was more common than illicit use.

#### *Inhalants*

- Amyl nitrite was used more commonly among RPU (45%) than nitrous oxide (20%) over the six months preceding interview.
- The lifetime and recent use of inhalants has remained stable over time.

#### *MDA*

- Almost one-quarter of the sample reported using MDA in the past six months.
- There was a notable increase in recent use of MDA from 2010.
- KE reported that MDA was widely known and simply considered as a less desirable form of ecstasy.

#### *Heroin and other opiates*

- Three RPU reported recent heroin use. Recent use of other opiates was slightly more common for those illicitly obtained.

#### *Mushrooms*

- Just under half the sample had ever tried mushrooms and one-quarter had used mushrooms recently.

#### *Pharmaceutical stimulants*

- One-quarter of the group had recently used pharmaceutical stimulants. Illicit use was more common than licit use.
- The use of illicit pharmaceutical stimulants has steadily increased since 2009.

#### *Over the counter (OTC) drugs*

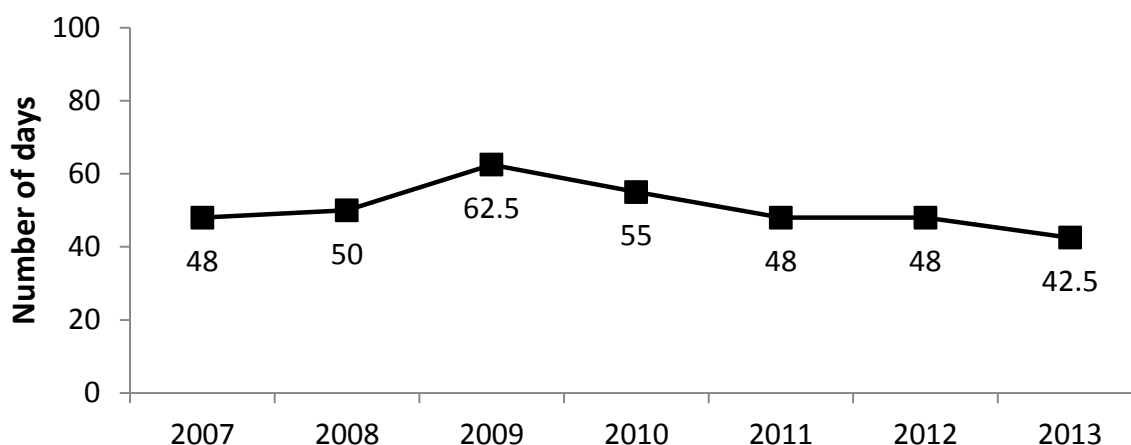
- Eighteen percent reported recent use of OTC codeine-containing products for non-pain use, and 12% reported recent use of OTC stimulants for non-medicinal use.

### 4.9.1 Alcohol

The entire 2013 sample of RPU reported having used alcohol at least once (100%) and almost all participants (94%) reported having done so during the past six months. Participants had first used alcohol at a median age of 15 years (range 5-19). Participants reported having consumed alcohol on a median of 42.5 days (range 1-180) over the preceding six months and the majority of RPU had used alcohol on a greater than weekly basis (63%) or a weekly to monthly basis (23%).

Figure 24 presents the median days of use of alcohol by RPU within the six months preceding the interview across time. Since 2009 there has been a notable decrease in the proportion of participants who used alcohol recently. See section 7.4 'Problematic alcohol use among RPU' for a discussion of harmful alcohol use among RPU in NSW.

**Figure 24: Days of alcohol use among RPU in the last six months, NSW 2007-2013**



Source: EDRS regular psychostimulant user interviews 2007-2013

### **Key expert comments**

Most KE agreed that alcohol was currently the most problematic drug. Two individuals were of the opinion that alcohol use was increasing, specifically at nightclubs and bars.

One major problem mentioned by many KE was the price of alcohol and the social consequences of it being so expensive. Three individuals said they noticed higher rates of 'pre-loading' (drinking in a private setting before going out) as alcohol is too expensive in the major night life areas such as Kings Cross, Sydney CBD and Darling Harbour. Two individuals noted that alcohol prices and 'token' systems implemented at music festivals fail to curb alcohol use as alcohol prices incentivise pre-loading behaviour and the drinking of spirits instead of beer and wine in order to get intoxicated faster.

Two individuals working in the service industry commented that the increase in alcohol prices was in fact turning people towards illicit drugs such as ecstasy and speed which are cheaper and last longer.

One KE working in the service industry had noticed that more and more individuals were drinking beyond their limits and showing less respect for the people around them. Adding to this, a medical professional working in the Kings Cross area noted no change in the number of alcohol-related violence cases, however did notice an increase in the severity of cases being presented to emergency departments.

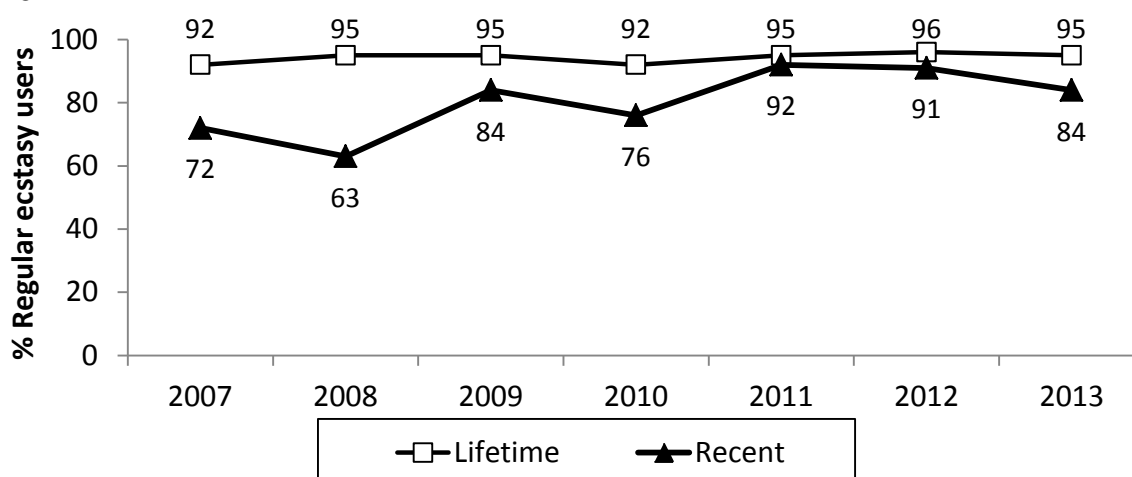
Individuals working in Greater Western Sydney and other parts of NSW note that alcohol is readily available in these communities and individuals don't understand the dangers of mixing alcohol with other drugs such as cannabis and prescription medication.

### **4.9.2 Tobacco**

The vast majority (95%) of RPU interviewed in 2013 had used tobacco at some point and most (84%) reported having done so over the preceding six months. Tobacco was first used at a median age of 16 years (range 5-28). Tobacco had been used on a median of 72 days (range 1-180) over the preceding six months and roughly one-quarter (29%) of those who had recently used tobacco were daily smokers which was a significant decline from 60% in 2012 ( $p < .001$ ). The proportion of RPU using tobacco in their lifetime and over the past six months has remained relatively stable from 2012 to 2013 (Figure 25).



**Figure 25: Proportion of RPU reporting lifetime and recent tobacco use, NSW 2007-2013**



Source: EDRS regular psychostimulant user interviews 2007-2013

### 4.9.3 Benzodiazepines

Slightly less than half (45%) of the sample reported having ever used any benzodiazepines and one-quarter (25%) reported having done so recently. Lifetime and recent use of benzodiazepines remained relatively stable from 2012 to 2013 (Figure 26).

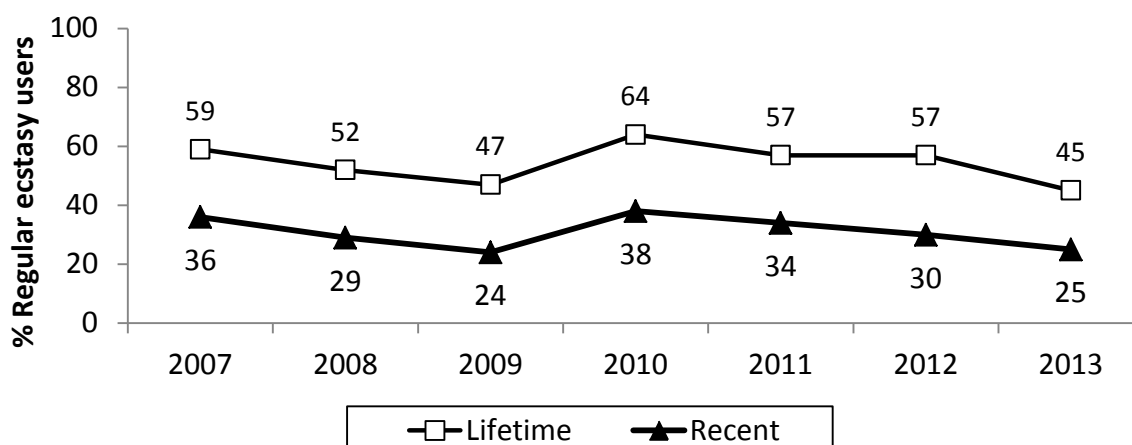
#### *Licit benzodiazepines*

One-tenth (11%) of RPU reported having ever used licitly obtained benzodiazepines and 6% had done so recently. Licit benzodiazepines were first used at a median age of 19 years (range 18-42). They had been used on a median of 5 days (range 2-30) over the six months prior to the interview. The majority reported using licitly obtained benzodiazepines less than monthly (50%) and between monthly and fortnightly (33%). All six participants reported swallowing as the route of administration of licitly obtained benzodiazepines over this period; however, one participant also reported snorting licitly obtained benzodiazepines.

#### *Illicit benzodiazepines*

Two-fifths (42%) of RPU had ever used illicitly obtained benzodiazepines, and one-fifth (19%) had done so over the preceding six months. They were first used at a median age of 20 years (range 16-43) and were only reported as being swallowed. Illicit benzodiazepines had been used on a median of 2 days (range 1-10) by recent users, with the majority (74%) reporting that they had used illicitly obtained benzodiazepines on a less than monthly basis.

**Figure 26: Proportion of RPU reporting lifetime and recent benzodiazepine use, NSW 2007-2013**



Source: EDRS regular psychostimulant user interviews 2007-2013

### Key expert comments

Of the few KE that commented, all agreed that drugs such as Valium and Xanax were used as 'downers' to help people come down from other drugs or to help go to sleep.

One KE working in the service industry commented that those who use benzodiazepines are generally the more experienced drug users and this represents only a small percentage of the recreational drug using population.

### 4.9.4 Antidepressants

One-fifth (19%) of participants reported having ever used antidepressants and one-in-ten (9%) had done so over the preceding six months. Lifetime and recent use of antidepressants remained relatively stable from 2012 to 2013.

#### *Licit antidepressants*

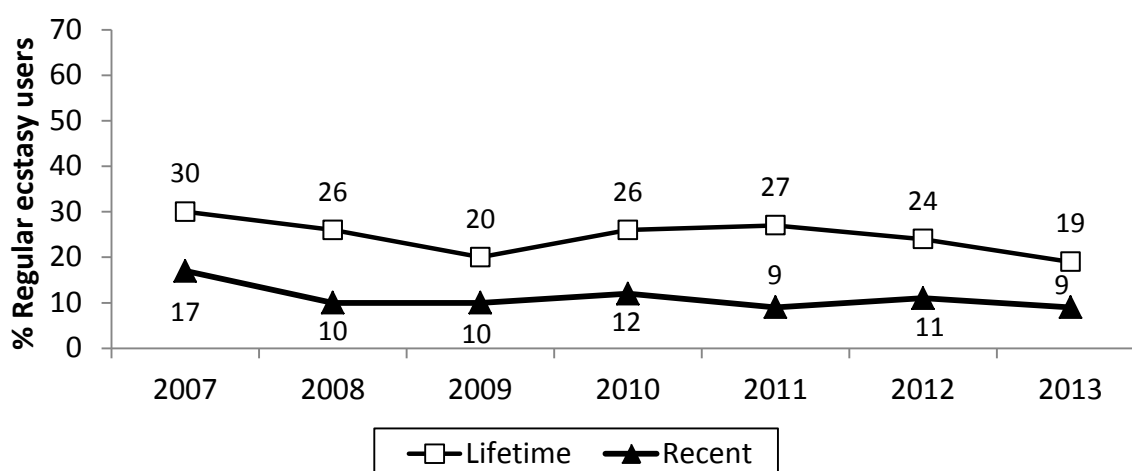
Over one-tenth of the sample (12%) had ever used licitly obtained antidepressants and less than one-tenth (7%) had done so over the preceding six months. Licit antidepressants were first used at a median age of 26 years (range 14-45). They had been used on a median of 48 days (range 1-180), with the majority of participants reporting that they had used licitly obtained antidepressants more than weekly (57%).

#### *Illicit antidepressants*

Seven participants reported having ever used illicit antidepressants and two participants reported having used them over the past six months. Illicit antidepressants were first used at a median age of 18 years (range 16-19). Given the small sample who had recently used illicitly obtained antidepressants (n=2), data on routes of administration and the median days of use are not presented here.

Figure 27 presents data from 2006 onwards on the reported lifetime and recent use of any antidepressants. Both of these proportions have remained stable from 2012 to 2013.

**Figure 27: Proportion of RPU reporting lifetime and recent antidepressant use, NSW 2007-2013**



Source: EDRS regular psychostimulant user interviews 2007-2013

#### 4.9.1 Inhalants

##### *Amyl nitrite*

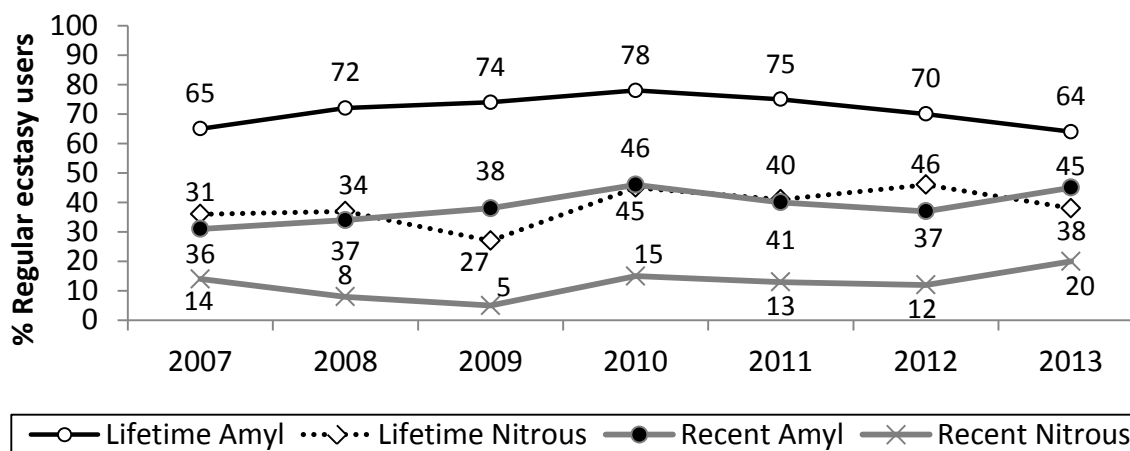
Roughly three-fifths (64%) of RPU interviewed had ever used amyl nitrite and over two-fifths of the sample (45%) had used it over the preceding six months. Amyl nitrite was first used at a median age of 18 years (range 12-40). Those who had recently used it had done so on a median of 5 days (range 1-160) over the preceding six months. The majority of recent users of amyl nitrite (58%) used it on a less than monthly basis or between monthly and weekly (29%).

##### *Nitrous oxide*

Approximately two-fifths (38%) of the sample reported having ever used nitrous oxide and 20% had done so recently. Nitrous oxide was first used at a median age of 18 years (range 15-33). Among those who had used it over the last six months, nitrous oxide had been used on a median of 3 days (range 1-20) during this time, with the majority reporting that they used it on a less than monthly basis (85%).

Figure 28 presents trends across time of the proportions of the EDRS samples that had ever used, and had recently used, both amyl nitrite and nitrous oxide. The proportions reporting recent and lifetime use of both drugs remained stable from 2012 to 2013.

**Figure 28: Proportion of RPU reporting lifetime and recent amyl nitrite and nitrous oxide use, NSW 2007-2013**



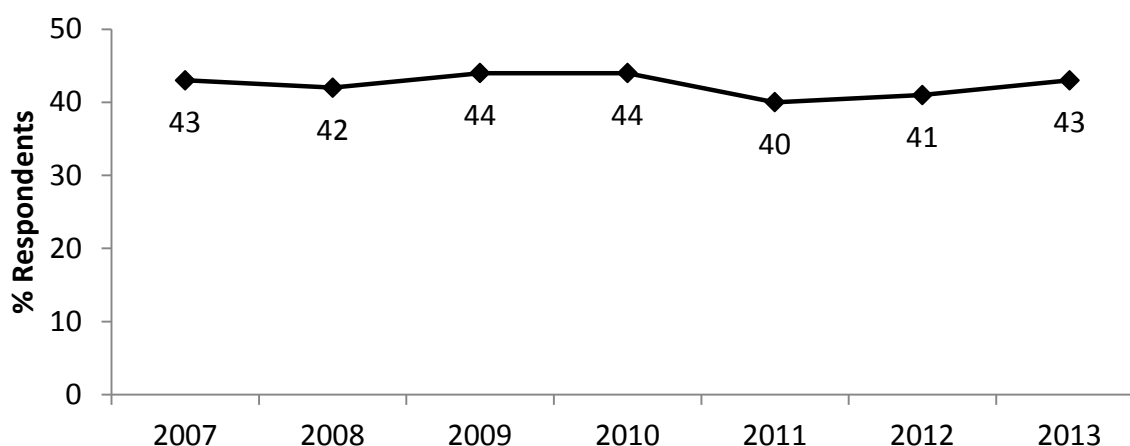
**Source: EDRS regular psychostimulant user interviews 2007-2013**

#### *Inhalant use in other populations*

The recent use of inhalants in the NSW general population aged 14 years and older has remained low, although there was a significant increase reported from 0.4% in 2007 to 0.6% in 2010 (Australian Institute of Health and Welfare, 2008, 2011).

Data collected across time from the Sydney Gay Community Periodic Survey has shown that large proportions of men reported the use of amyl nitrite in the past six months (Figure 29). Two-fifths (43%) of participants in 2013 reported recently using amyl nitrite, which has remained stable across time (Hull et al., 2013).

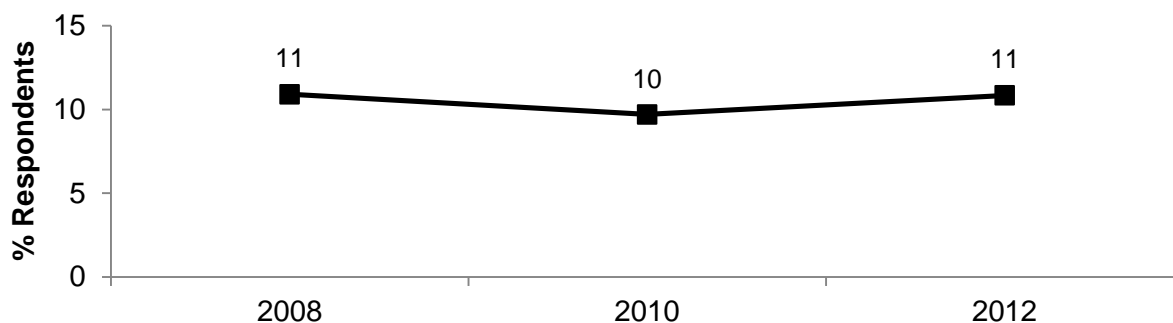
**Figure 29: Proportion of gay men in Sydney reporting recent amyl nitrite use, 2007-2013**



**Source: Sydney Gay Community Periodic Survey 2007-2013**

In the 2012 Sydney Women and Sexual Health Survey, approximately one-tenth of LBQ participants reported recent use of amyl nitrite (Figure 30). These figures have remained stable over the past four years (Mooney-Somers, Deacon, Comfort, Richters & Parkhill, 2013).

**Figure 30: Proportion of LBQ women in Sydney reporting recent amyl nitrite use, 2008-2012**

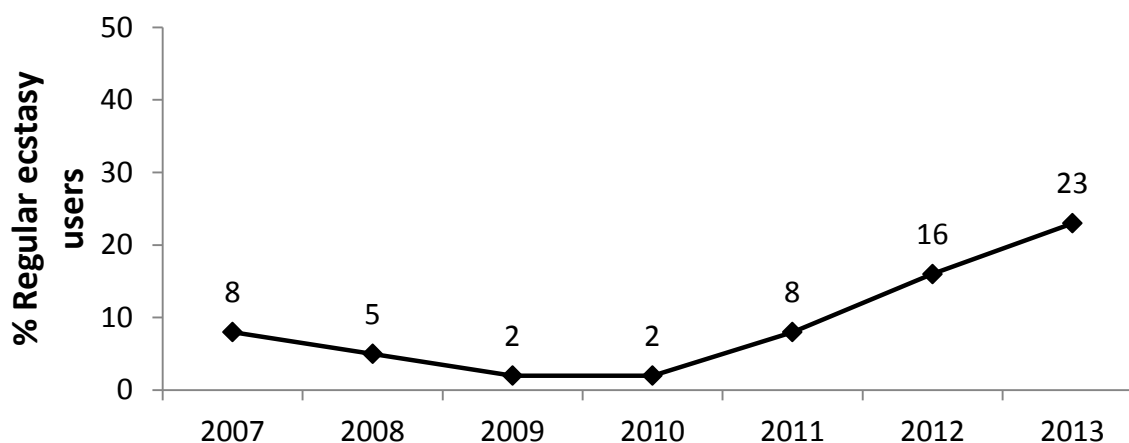


Source: Sydney Women and Sexual Health Survey 2008-2012

#### 4.9.5 MDA

Over one-quarter (28%) of participants in the 2013 EDRS reported having ever used MDA, and 23% reported they had used it over the preceding six months. MDA was first used at a median age of 19 years (range 16-40). Recent users reported using MDA on a median of 3 days (range 1-15). The proportion of individuals reporting using MDA in the six months prior to interview has increased from 2% in 2010 to 23% in 2013 (Figure 31).

**Figure 31: Proportion of RPU reporting recent MDA use, 2007-2013**



Source: EDRS regular psychostimulant user interviews 2007-2013

#### Key expert comments

Only three KE could comment on MDA use.

According to these individuals, MDA was simply considered a less desirable form of ecstasy and the most common form after MDMA.

Two of these individuals estimated the price of an MDA pill to range between \$10-20.

#### 4.9.6 Heroin and other opiates

##### *Heroin*

Nine participants reported that they had ever used heroin and three reported using it in the preceding six months. The median age that heroin was first used was 22 years (range 13-47). Given such a small sample of recent users, details regarding frequency and quantity of use are not presented.

##### *Methadone and buprenorphine*

Six participants reported the lifetime use of methadone and four participants had used it over the preceding six months. Two participants reported lifetime use of buprenorphine and only one had used it within the past six-months. Once again given such a small sample of recent users, details regarding frequency and quantity of use are not presented.

##### *Other opiates*

While 15% of respondents had ever used a licitly obtained opiate (other than heroin, methadone or buprenorphine), only seven participants had used a licitly obtained opiate recently. Under one-fifth (17%) of the sample reported having ever used other illicitly obtained opiates and four participants had used them over the six months prior to the interview.

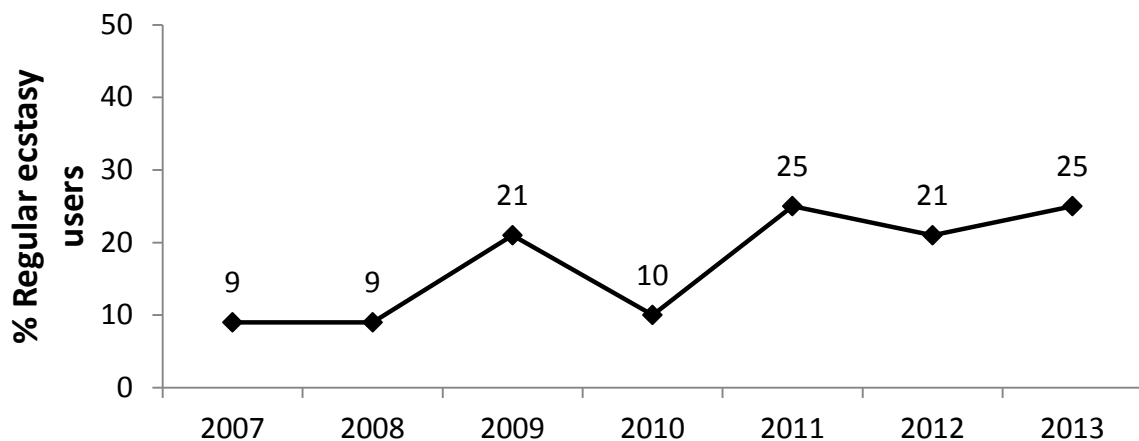
##### *Illicit Drug Reporting System*

A separate monitoring system investigating trends in the use of heroin and other opiates in injecting drug users has been conducted in NSW since 1996, in Victoria (VIC) and South Australia (SA) since 1997 and nationally since 2000. This is called the Illicit Drug Reporting System, or IDRS, and reports and bulletins are available from the NDARC website (<http://ndarc.med.unsw.edu.au/project/illicit-drug-reporting-system-idrs>).

#### 4.9.7 Mushrooms

Just under half (48%) of the RPU interviewed in 2013 reported having ever used mushrooms and one-quarter (25%) had done so over the preceding six months. Mushrooms were first used at a median age of 19 years (range 15-38). The majority (88%) of participants who had recently used mushrooms had done so on a less than monthly basis reported only swallowing as the main route of administration. Recent use of mushrooms appears to have remained relatively stable from 2012 to 2013 (Figure 32).

**Figure 32: Proportion of RPU reporting recent mushroom use, 2007-2013**



Source: EDRS regular psychostimulant user interviews 2007-2013

#### 4.9.8 Pharmaceutical stimulants

Almost three-fifths (59%) of participants in 2013 reported having ever used pharmaceutical stimulants and over one-third (35%) had done so within the six months preceding the interview. The lifetime use of pharmaceutical stimulants had remained mostly stable from 2012 to 2013; however, there has been a notable upward trend in recent use since 2008 (Figure 33).

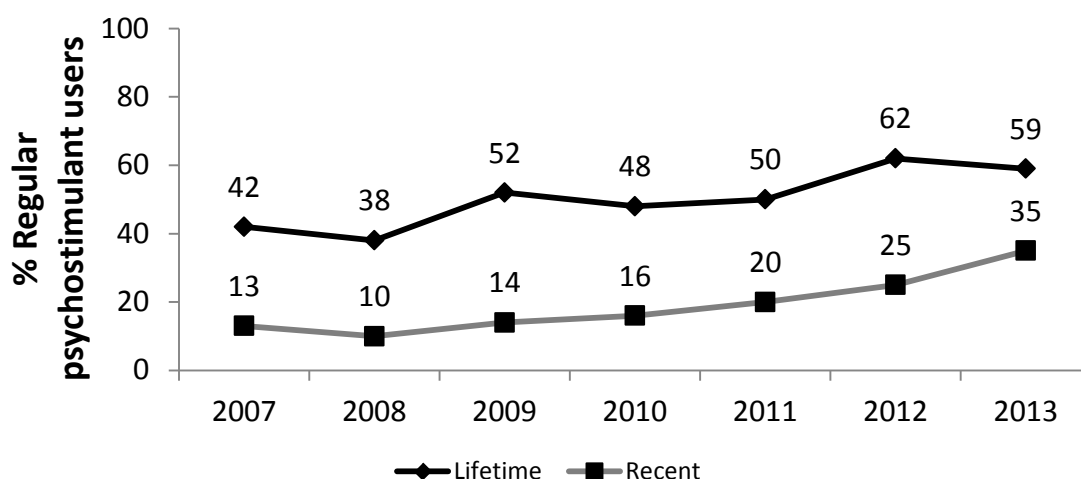
##### *Licit pharmaceutical stimulants*

While eleven participants reported having used licitly obtained pharmaceutical stimulants, only six RPU had used them recently. Licitly obtained pharmaceutical stimulants were first used at a median age of 16 years (range 5-18).

##### *Illicit pharmaceutical stimulants*

Over half of the sample (53%) had ever used illicitly obtained pharmaceuticals and 30% had done so over the preceding six months. Since 2009, there has been a steady increase in the use of illicitly obtained pharmaceutical stimulants. Illicit pharmaceutical stimulants were first used at a median age of 18 years (range 14-47). Those who had recently used them had done so on a median of 3 days (range 1-90) over the preceding six months. While the majority of those who had recently used illicitly obtained pharmaceutical stimulants had swallowed them (90%), one-third of this group had also recently snorted them (33%).

**Figure 33: Proportion of RPU reporting lifetime and recent pharmaceutical stimulant use, 2007-2013**



Source: EDRS regular psychostimulant user interviews 2007-2013

#### 4.9.9 Over the counter drugs

##### *Codeine*

One-fifth (18%) of the sample reported having ever used over the counter codeine-containing products for non-pain use and 9% reported having done so over the preceding six months. These products were first used at a median age of 19 years (range 17-23). Swallowing was the only route of administration.

##### *Stimulants*

One-tenth of the sample (12%) reported having ever used over the counter stimulants (such as Sudafed and Codral) for non-medicinal use and only 3% had used them recently. These products were first used at a median age of 20 years (range 16-30). Given such a small sample of recent users, details regarding frequency and quantity of use are not presented.

#### 4.9.10 Performance and image enhancing drugs (PIED)

In the 2013 NSW RPU sample, four participant reported lifetime use of steroids and only one reported steroid use in the preceding six months.



## 4.10 New psychoactive substance (NPS) use

### *Pharmaceutical stimulants*

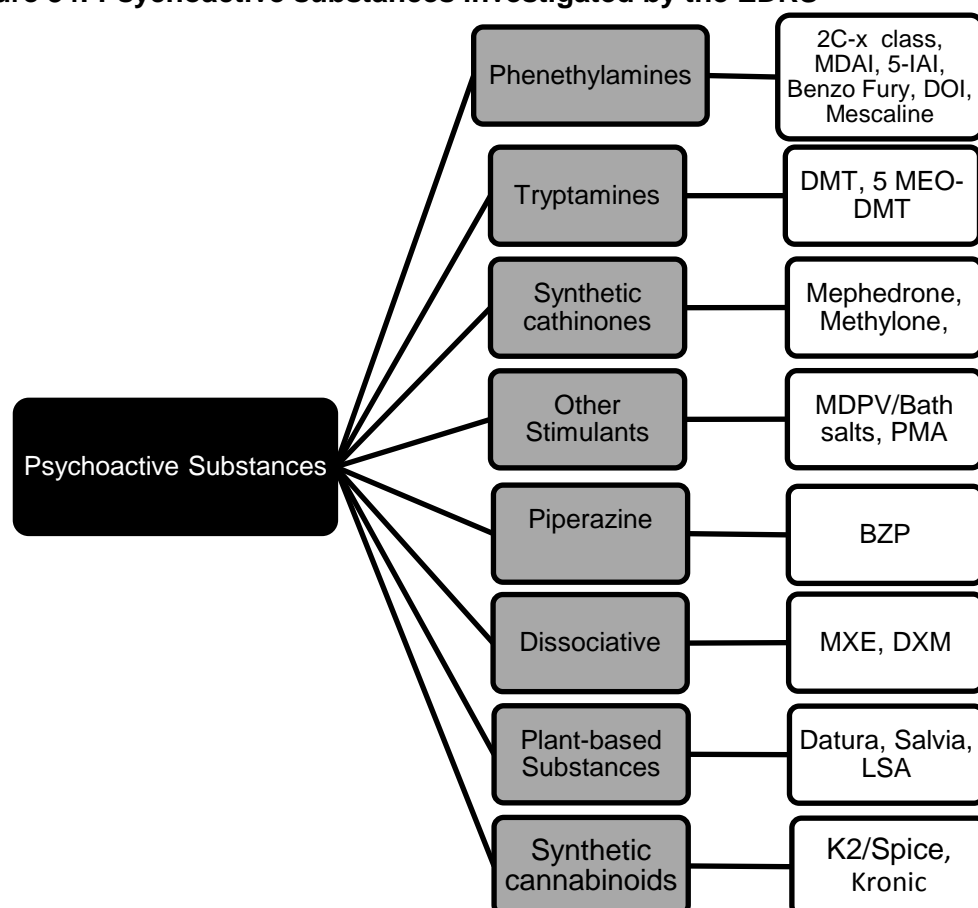
- One-quarter of the group had recently used pharmaceutical stimulants. Illicit use was more common than licit use.
- The use of illicit pharmaceutical stimulants has steadily increased since 2009.

### *Over the counter (OTC) drugs*

- Eighteen percent reported recent use of OTC codeine-containing products for non-pain use, and 12% reported recent use of OTC stimulants for non-medicinal use.

From 2010 onward, the EDRS began to systematically investigate a group of new 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 34.

**Figure 34: Psychoactive substances investigated by the EDRS**



Psychedelic refers to “a mental state of enlarged consciousness, involving a sense of aesthetic joy and increased perception transcending verbal concepts” or “denoting or relating to any of a group of drugs inducing such a state, especially LSD” (Macquarie Dictionary). Phenethylamine is a neurotransmitter that is an amine resembling amphetamine in structure and pharmacological properties. Derivatives of phenethylamine are referred to as

phenethylamines (Merriam-Websters Medical Dictionary). Tryptamine is a crystalline amine derived from tryptophan. Substituted derivatives of this amine, some of which are significantly hallucinogenic or neurotoxic, are known as 'tryptamines' (Merriam-Websters Medical Dictionary).

Table 12 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 12: New psychoactive substances**

Street name	Chemical name	Information on drug	Information on use and effects
<i>Phenethylamines</i>			
2C-I	2,5-dimethoxy-4-iodophenethylamine	A psychedelic drug with stimulant effects	Recent reports suggest that 2C-I is slightly more potent than the closely related 2C-B. A standard oral dose of 2C-I is between 10-25mg.
2C-B	4-Bromo-2,5-dimethoxyphenethylamine	A psychedelic drug with stimulant effects	2C-B is sold as a white powder sometimes pressed in tablets or gel caps. The dosage range is listed as 16-24mg. Commonly taken orally but can also be snorted.
2C-E	2,5-dimethoxy-4-ethylphenethylamine	A psychedelic drug with stimulant effects	Mostly taken orally and is highly dose-sensitive. 2C-E is commonly active in the 10-20mg range.
25I-NBOMe	4-iodo-2,5-dimethoxy-N-2-methoxybenzylphenethylamine	A psychedelic drug with stimulant effects	Chemically related to 2C-I, 25I-NBOMe is potent psychedelic available in powder, tablet and liquid formulations.
DOI (death on impact)	2,5-dimethoxy-4-iodoamphetamine	A psychedelic phenethylamine	Requires only very small doses to produce full effects. It is uncommon as a substance for human ingestion but common in research. Has been found on blotting paper and may be sold as LSD <sup>5</sup> .
Mescaline	3,4,5-trimethoxyphenethylamine	A hallucinogenic alkaloid	First isolated in 1896 from the peyote cactus of northern Mexico. A standard dose for oral mescaline use ranges from 200-500mg.
5-IAI	5-iodo-2-aminoindan	A psychedelic drug with stimulant effects	Not much is known about 5-IAI other than it is a substitute for MDMA.
Benzo Fury	6-2-aminopropylbenzofuran; 1-1-benzofuran-	A psychedelic drug with stimulant effects	6-APB is a synthetic chemical that became available via online vendors in 2010. Little is known about its effects, which are presumed to include

<sup>5</sup> Erowid: <http://www.erowid.org/chemicals/doi/doi.shtml>

	6-ylpropan-2-amine		stimulation and euphoria, though not enough reliable human data has been recorded to say much with certainty.
<i>Tryptamines</i>			
DMT	Dimethyl tryptamine	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 <sup>6</sup> .
5-MeO-DMT	5-methoxy-N,N-dimethyltryptamine	A naturally occurring psychedelic tryptamine present in numerous plants and in the venom of the <i>Bufo alvarius</i> toad	5-MeO-DMT is comparable in effects to DMT; however, it is substantially more potent. It can be injected, smoked or sniffed and the effects rarely last more than two hours. 5-MeO-DMT is mostly seen in crystalline form <sup>7</sup> but has been reportedly sold in powder form.
<i>Synthetic cathinones</i>			
Mephedrone	4-methyl-methcathinone	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. Mephedrone is probably the most well known of a group of drugs derived from cathinone (a chemical found in the plant called khat) <sup>8</sup> .
Methylone	3,4-methylenedioxy-N-methylcathinone	An entactogen and stimulant of the phenethylamine, amphetamine, and cathinone classes	Reported dosages range from 100-250mg orally. Effects are primarily psychostimulant in nature.
<i>Other stimulants</i>			
Ivory wave/MDPV	Methylenedioxy pyrovalerone (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) <sup>9</sup> .
PMA	Paramethoxyamphetamine; 4-methoxy-amphetamine	A synthetic hallucinogen that has stimulant effects	Ingesting a dose of less than 50mg (usually one pill or capsule) without other drugs or alcohol induces symptoms reminiscent of MDMA,

<sup>6</sup> Drugscope: <http://www.drugscope.org.uk/resources/drugsearch/drugsearchpages/dmt>

<sup>7</sup> Erowid: [http://www.erowid.org/chemicals/5meo\\_dmt/5meo\\_dmt.shtml](http://www.erowid.org/chemicals/5meo_dmt/5meo_dmt.shtml)

<sup>8</sup> Drugscope: <http://www.drugscope.org.uk/resources/drugsearch/drugsearchpages/mephedrone>

<sup>9</sup> Drugscope: [http://www.drugscope.org.uk/Media/Press+office/pressreleases/ivory\\_wave\\_MDPV](http://www.drugscope.org.uk/Media/Press+office/pressreleases/ivory_wave_MDPV)

although PMA is more toxic than MDMA. Doses over 50mg are considered potentially lethal (due to the risk of overheating). Pure PMA is a white powder, but street products can also be beige, pink or yellowish. Today it is usually made into pressed pills<sup>10</sup>.

#### *Piperazine*

BZP	1-benzylpiperazine	A piperazine; a CNS stimulant.	Gained popularity in some countries in the early 2000s 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. BZP is used orally at doses of between 70-150mg and effects are reported to last 6-8 hours <sup>11</sup> .
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#### *Dissociative*

Methoxetamine (MXE)		Chemical analog of ketamine. Dissociative with sedative properties	The use of methoxetamine was first publicly reported in 2010. Its effects are described by some as similar to ketamine or high-dose DXM while others report not finding it similar to those substances.
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. Recreational doses range from 100-1200mg or more <sup>12</sup> .

#### *Plant Based Substances*

Datura	Commonly <i>Datura innoxia</i> and <i>Datura stramonium</i> . Contains Atropine and Scopolamine.	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 <sup>13</sup> .
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<sup>10</sup> Drugscope: <http://www.drugscope.org.uk/resources/drugsearch/drugsearchpages/pma>

<sup>11</sup> Erowid: [http://www.erowid.org/chemicals/bzp/bzp\\_basics.shtml](http://www.erowid.org/chemicals/bzp/bzp_basics.shtml)

<sup>12</sup> Erowid: [http://www.erowid.org/chemicals/dxm/dxm\\_basics.shtml](http://www.erowid.org/chemicals/dxm/dxm_basics.shtml)

<sup>13</sup> Drugscope: <http://www.drugscope.org.uk/resources/drugsearch/drugsearchpages/datura>

	Also known as Angel's Trumpet		
Salvia	<i>Salvia divinorum</i> (contains Salvinorin A)	Salvia is derived from the American plant <i>Salvia divinorum</i> , 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 <sup>14</sup> .
LSA	<i>d</i> -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.
<i>Synthetic cannabinoids</i>			
Kronic	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.
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.

Amongst the 2013 NSW EDRS sample, 79% reported having ever used NPS and 59% reported using NPS in the last six months. The most common psychoactive substances ever used among Sydney RPU were 2C-B (37%), herbal highs (35%), synthetic cannabinoids (46%) and DMT (16%). However, the proportions who had used psychoactive substances in the last six months were lower. Those most commonly used over the preceding six months were 2C-B (25%), synthetic cannabinoids (25%), herbal highs (13%), and DMT (9%).

Table 13 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 increase in the proportion reporting the use of synthetic cannabinoids both in their lifetime ( $p < .01$ ) and in the six months prior to interview ( $p < .05$ )
- a significant increase in the proportion reporting lifetime use of a capsule with unknown contents ( $p < .05$ ).

<sup>14</sup> Drugscope: <http://www.drugscope.org.uk/resources/drugsearch/drugsearchpages/salvia>

**Table 13: New psychoactive substance use among RPU, NSW 2010-2013**

New psychoactive substances	2010 (N=100)	2011 (N=100)	2012 (N=100)	2013 (N=100)
Phenethylamines				
2C-I				
ever used (%)	4	5	4	11
used last 6 mths (%)	1	1	1	6
2C-B				
ever used (%)	16	22	35	37
used last 6 mths (%)	2	9	17	25
2C-E				
ever used (%)	2	10	2	3
used last 6 mths (%)	2	8	2	1
25I-NBOMe				
ever used (%)	Data not available until 2013			5 <sup>&amp;</sup>
used last 6 mths (%)				4 <sup>&amp;</sup>
DOI (Death On Impact)				
ever used (%)	-	1	-	-
used last 6 mths (%)	-	1	-	-
Mescaline				
ever used (%)	8	13	8	10
used last 6 mths (%)	1	4	1	2
5-IAI				
ever used (%)	Data not available until 2012		1	-
used last 6 mths (%)			-	-
Benzo Fury / 6-APB				
ever used (%)	Data not available until 2012		1	3
used last 6 mths (%)			1	1
MDAI				
ever used (%)	Data not available until 2012		2	2
used last 6 mths (%)			-	-
Tryptamines				
DMT				
ever used (%)	18	21	15	16
used last 6 mths (%)	7	8	11	9
5-MeO-DMT				
ever used (%)	1	4	-	2
used last 6 mths (%)	-	1	-	1

<sup>&</sup>Numbers of 25I-NBOMe were tallied from individuals who marked 25I-NBOMe in the 'other' NPS category.

**Table 13: New psychoactive substance use among RPU, NSW 2010-2013 (continued)**

New psychoactive substances	2010 (N=100)	2011 (N=100)	2012 (N=100)	2013 (N=100)
<i>Synthetic cathinones</i>				
<i>Mephedrone</i>				
ever used (%)	4	17	4	11
used last 6 mths (%)	4	4	-	1
<i>Methylone</i>				
ever used (%)	Data not available until 2011	4	10	3
used last 6 mths (%)		3	8	1
<i>Other stimulants</i>				
<i>MDPV / Ivory Wave</i>				
ever used (%)	-	-	-	1
used last 6 mths (%)	-	-	-	-
<i>PMA</i>				
ever used (%)	2	5	3	2
used last 6 mths (%)	-	2	-	-
<i>Piperazine</i>				
<i>BZP</i>				
ever used (%)	2	11	4	5
used last 6 mths (%)	-	2	-	-
<i>Dissociatives</i>				
<i>Methoxetamine / MXE</i>				
ever used (%)	Data not available until 2012		2	-
used last 6 mths (%)			2	-
<i>DXM</i>				
ever used (%)	2	13	10	11
used last 6 mths (%)	-	6	2	7
<i>Plant Based Substances</i>				
<i>Datura</i>				
ever used (%)	1	9	6	3
used last 6 mths (%)	-	1	-	1
<i>Salvia</i>				
ever used (%)	n/a	15	10	7
used last 6 mths (%)		1	1	1
<i>LSA</i>				
ever used (%)	Data not available until 2011	5	3	10
used last 6 mths (%)		1	-	2

**Table 13: New psychoactive substance use among RPU, NSW 2010-2013 (continued)**

New psychoactive substances	2010 (N=100)	2011 (N=100)	2012 (N=100)	2013 (N=100)
<i>Synthetic cannabinoids</i>				
Kronic ever used (%) used last 6 mths (%)	Data not available until 2012			<b>19</b> <b>8</b>
K2 / Spice ever used (%) used last 6 mths (%)	Data not available until 2011	1 1	Refer to synthetic cannabinoids	<b>17</b> <b>8</b>
Synthetic cannabinoids ever used (%) used last 6 mths (%)	Data not available until 2011	3 <sup>^</sup> 3 <sup>^</sup>	23 <sup>#</sup> 12 <sup>#</sup>	<b>46<sup>*</sup></b> <b>25<sup>*</sup></b>
<i>Other</i>				
MPTP ever used (%) used last 6 mths (%)	Data not available until 2011	- -	- -	- -
Capsule (contents unknown) ever used (%) used last 6 mths (%)	Data not available until 2012		14 8	<b>27</b> <b>9</b>
Herbal high ever used (%) used last 6 mths (%)	Data not available until 2012		26 13	<b>35</b> <b>13</b>

**Source: EDRS regular psychostimulant user interviews 2010-2013**

<sup>^</sup> In 2011, 'K2 / Spice' and 'Other synthetic cannabinoids' were separate categories.

<sup>#</sup> In 2012, 'synthetic cannabinoids' incorporated both 'K2 / Spice' and 'Other synthetic cannabinoids' categories.

<sup>\*</sup> In 2013, 'synthetic cannabinoids' incorporated 'Kronic', 'K2 / Spice' and 'Other synthetic cannabinoids' categories. Kronic and K2 / Spice were coded separately in 2013.

### Key expert comments

Overall, KE knowledge of these drugs was scarce and usually based on small numbers. KE reported that although NPS are not overly prevalent amongst RPU, they have the potential to be very problematic.

One individual working in the service industry noted that 2C-I and 2C-B oddly did not have 'comedowns', rather, they had a 'comeup'. This comeup was described as a period of feeling sick and bloated soon after ingesting the pill followed by the intended effect of the pill.

Another individual working in law enforcement noted an increase in DMT and PMAA detections and a decrease in PMA detections. The purity of DMT seizures ranges from 14-82.5%.



## 5 DRUG MARKET: PRICE, PURITY, AVAILABILITY AND SUPPLY

### 5.1 Ecstasy

#### Summary:

- *Price:* \$25 per tablet.
- *Purity:* Currently medium and stable.
- *Availability:* Currently easy to very easy to obtain and stable.
- Several KE had reason to believe that the purity of ecstasy was fluctuating dramatically throughout 2013.
- KE reported an increase in the forms of MDMA available, including in powder and crystal form.
- The general consensus amongst KE was that the availability of ecstasy has remained high and stable.

#### 5.1.1 Price

Almost all (98%) participants were able to comment on the price of ecstasy tablets in Sydney. The median price was reported by users to be \$25 per tablet (range 20-250) (Table 14). While the majority of the group (77%) reported that the price of ecstasy tablets had remained stable, over one-tenth (13%) reported that this price had decreased over the six months preceding the interview.

Over half (54%) of the sample was able to comment on the price of ecstasy capsules (commonly referred to as caps). Caps were reportedly \$37.5 each (range \$25-50). As only six participants were able to comment on the price of ecstasy powder and seven on crystal MDMA, these data will not be presented here.

**Table 14: Price of ecstasy purchased by RPU, NSW 2007-2013**

Ecstasy variable	2007 (N=100)	2008 (N=100)	2009 (N=100)	2010 (N=100)	2011 (N=100)	2012 (N=100)	2013 (N=100)
Median price/tablet (\$) (range)	30 (15-40)	30 (15-50)	20 (11-40)	25 (10-50)	25 (7-50)	25 (5-50)	25 (20-250)
<i>Price change:</i>							
Increased (%)	4	5	6	20	28	24	7
Stable (%)	71	68	58	61	58	56	77
Decreased (%)	12	17	27	15	8	8	13
Fluctuated (%)	8	3	4	4	6	12	3
Don't know (%)	5	7	5	-	-	-	-

**Source: EDRS regular psychostimulant user interviews 2007-2013**

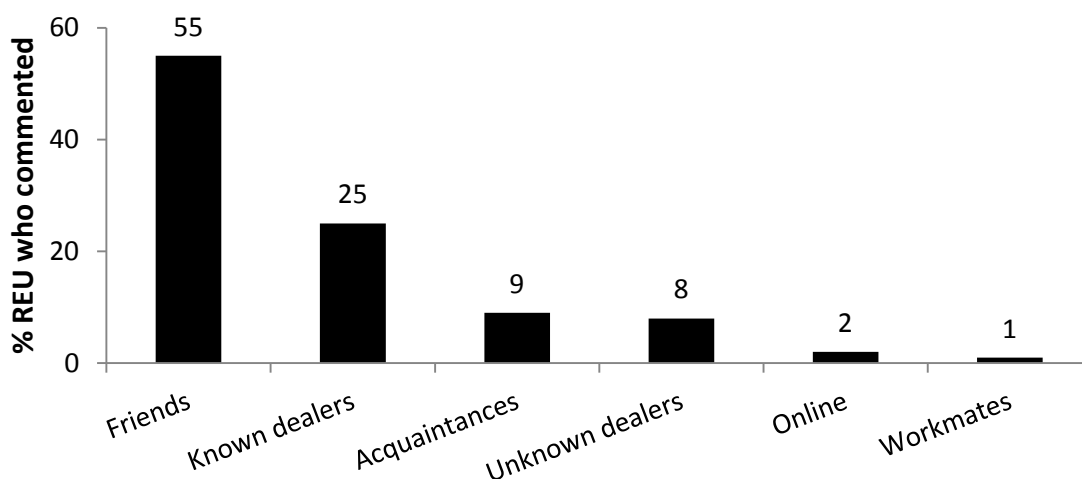
Note: Response option 'don't know' was removed from analyses from 2010 onward

Participants were asked questions regarding their purchasing of ecstasy over the last six months. Participants reported that they had purchased ecstasy from a median of 4 people (range 1-80). While two-fifths (37%) of the sample usually purchased ecstasy for themselves only, three-fifths of the sample (62%) had purchased ecstasy for themselves and others. When asked about how frequently they purchased ecstasy, the majority of participants reported that they had bought ecstasy monthly or less (44%) or fortnightly or less (30%). A smaller proportion reported that they purchased ecstasy weekly or less (20%) or more than weekly (5%). The median number of tablets purchased was 4 (range 1-500).

*Source person and source location of last purchase*

Participants were asked to describe the types of person they had last purchased ecstasy from (Figure 35). The majority of the group reported that they had last purchased ecstasy from a friend (55%) although one-quarter (25%) had last bought it from a dealer (who was previously known to them). Smaller proportions purchased ecstasy from acquaintances and unknown dealers.

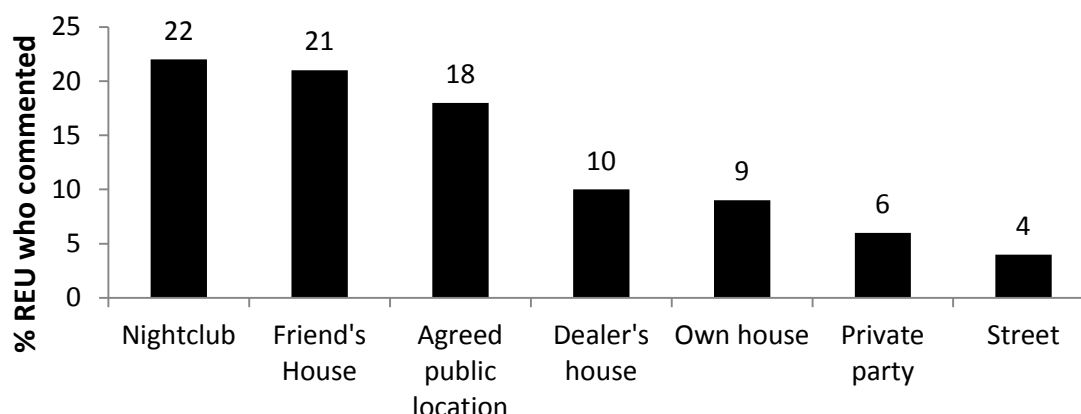
**Figure 35: People from whom ecstasy was last purchased by RPU, NSW 2013**



**Source: EDRS regular psychostimulant user interviews 2013**

Ecstasy was most often obtained at a nightclub (22%) on the last occasion of purchase. Other common locations for purchasing ecstasy were at a friend's house (22%), at an agreed public location (18%), at a dealer's house (10%) or at their own house (9%). Smaller proportions also reported purchasing ecstasy at a private party (6%) or on the street (4%) (Figure 36).

**Figure 36: Locations at which ecstasy was last purchased\* among RPU, NSW 2013**



**Source: EDRS regular psychostimulant user interviews 2013**

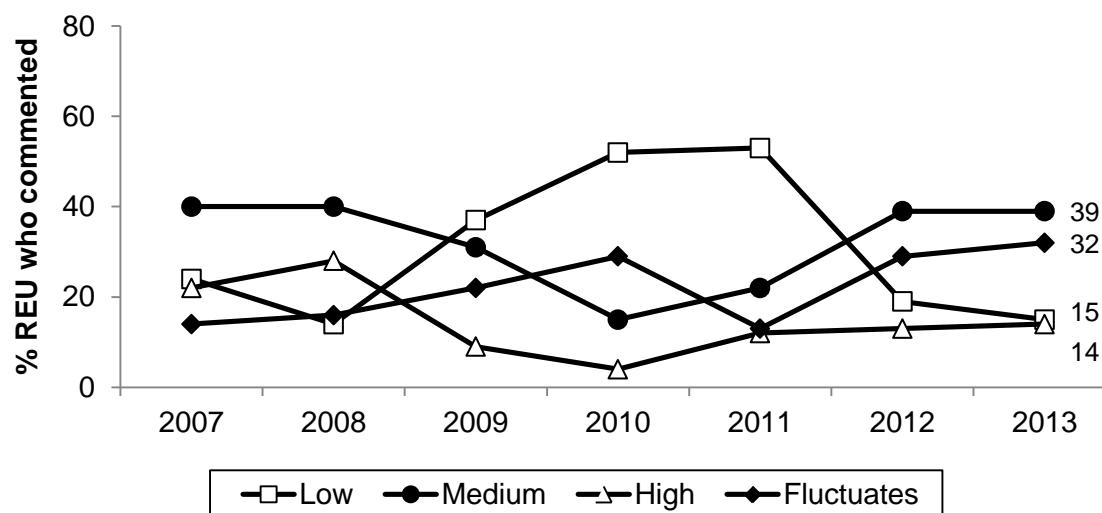
\* Locations with <4% response were not included

## 5.1.2 Purity

### *Current purity*

Figure 37 presents RPU reports of ecstasy purity across time. In 2012, the majority of the sample reported that the current purity of ecstasy was either 'medium' (39%) or that it 'fluctuated' (32%). Fifteen percent of participants reported that ecstasy purity was 'high' and 14% reported that it was 'low'. These figures have remained stable since 2012.

**Figure 37: RPU reports of current ecstasy purity, NSW 2007-2013**



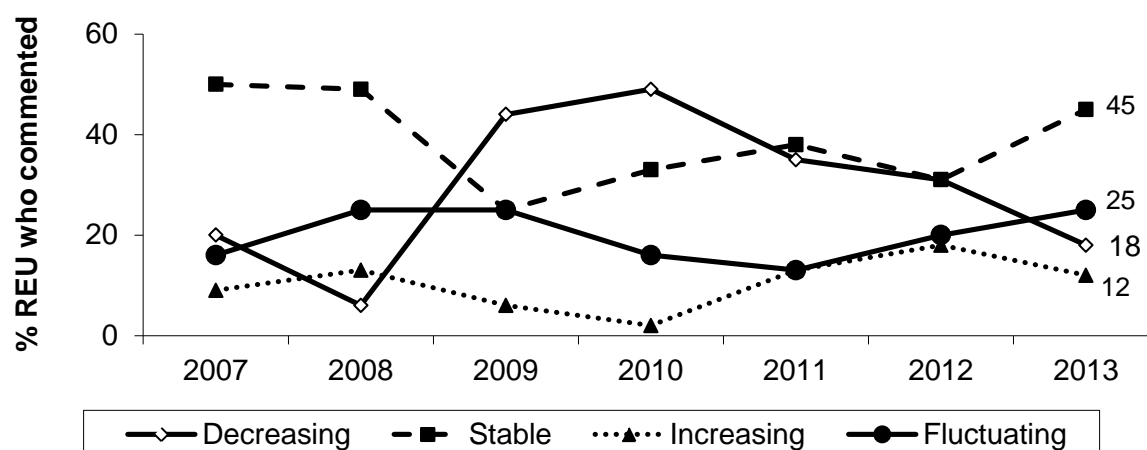
**Source: EDRS regular psychostimulant user interviews 2007-2013**

Note: Response option 'don't know' was removed from analyses from 2010 onward

### *Purity change*

Figure 38 presents RPU reports of changes in the purity of ecstasy over the six months prior to the interview. Just under half the sample reported that the purity of ecstasy remained stable (45%) and a quarter had reported that the purity of ecstasy has fluctuated (25%). An additional 18% reported that purity of ecstasy had decreased, and the remaining 12% reported that purity had increased. These figures have remained relatively stable from 2011 to 2012.

**Figure 38: RPU reports of change in ecstasy purity in the past six months, NSW 2007-2013**



**Source: EDRS regular psychostimulant user interviews 2007-2013**

Note: Response option 'don't know' was removed from analyses from 2010 onward

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

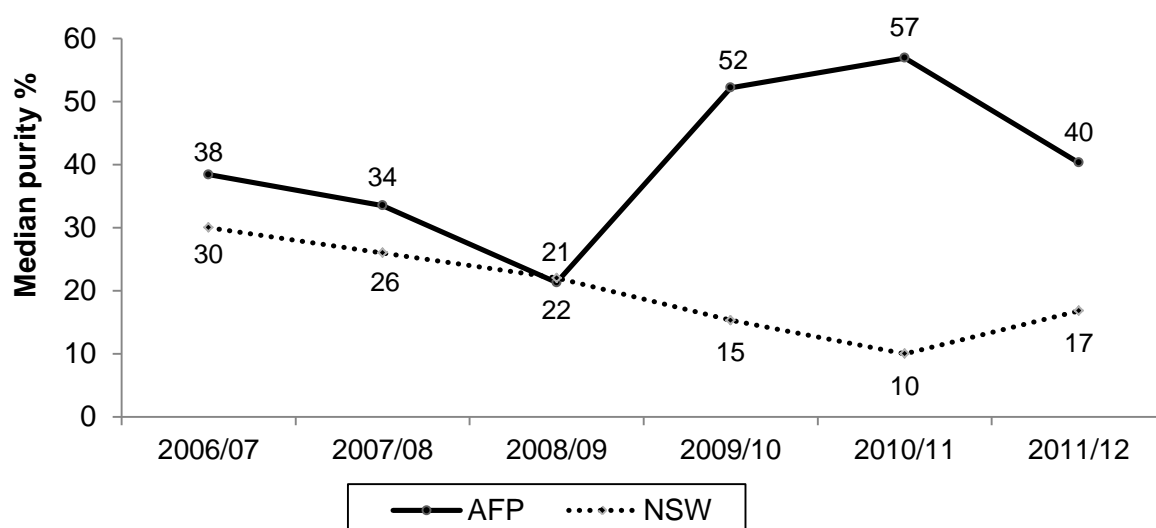
The purity data presented in this report were provided by the Australian Crime Commission (ACC), formerly the Australian Bureau of Criminal Intelligence (ABCI). The ACC reports both federal and state police seizure data, including number and weight of seizures. In 1999/00, the purity was reported as 'ecstasy' seizures. Since 2000/01, ecstasy seizures have been reported under phenethylamines. Ecstasy belongs to the phenethylamine family of drugs. Other drugs such as DOB (2,5-dimethoxy-4-bromoamphetamine), DOM (2,5-dimethoxy-4-methylamphetamine), MDA, MDEA, mescaline, PMA and TMA (3,4,5-trimethoxyamphetamine) also belong to the phenethylamine family (Australian Crime Commission, 2003) and seizures of these drugs are included in the seizure data from 2000/01.

Figure 39 presents the median purity of phenethylamines seizures analysed by the NSW Police and Australian Federal Police (AFP) from 2006/07 to 2011/12. While the median purity of analysed seizures has increased slightly for NSW, the median purity of phenethylamines seized by the AFP dropped from 57% in 2010/11 to 40% in 2011/12.

It should be noted that figures do not represent the purity levels of all seizures – only those that have been analysed at a forensic laboratory. In addition, the period between the date of seizure by police and the date of receipt at the laboratory can vary greatly, and no adjustment has been made to account for double-counting joint operations between the AFP and NSW Police. Further, patterns of arrest and police operations change over time; for

example, targeting of higher-level suppliers versus street dealers, and this, in turn, can influence the purity of the drug seized.

**Figure 39: Median purity of phenethylamines seizures analysed in NSW, 2006/07-2011/12\***

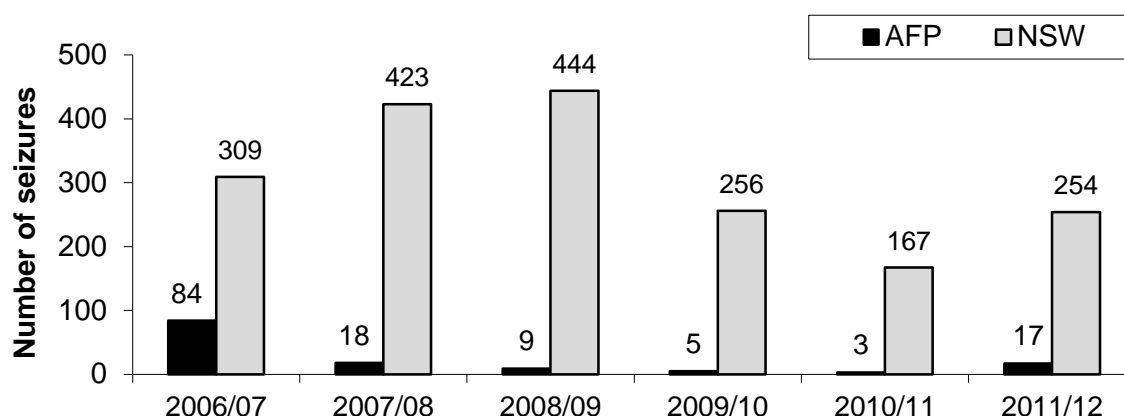


**Source: Australian Crime Commission (2008, 2009, 2010, 2011, 2012, 2013)**

\* Data for 2012/13 were unavailable at time of publication

Following the decline in phenethylamine seizures made by the NSW Police from 2008/09 to 2010/11, there was an increase in the number of seizures reported in 2011/12 (Figure 40). Similarly, the number of seizures made by the AFP increased from 3 cases in 2010/11 to 17 cases in 2011/2012. Caution should be used when interpreting this increase in the number of seizures analysed from 2011/12 when compared with previous years as this may reflect an increased police attention toward phenethylamines rather than an increased availability of these drugs.

**Figure 40: Number of phenethylamines seizures analysed in NSW, 2006/07-2011/12\***



**Source: Australian Crime Commission (2008, 2009, 2010, 2011, 2012, 2013)**

\* Data for 2012/13 were unavailable at time of publication

### 5.1.3 Availability

The large majority (91%) of RPU interviewed in 2013 reported that it was currently 'easy' or 'very easy' to obtain ecstasy (Table 15). Three-fifths (58%) of respondents indicated that the

availability of ecstasy had remained 'stable' over the preceding six months. Compared to 2012 there were more individuals in 2013 who reported ecstasy as easier to obtain (32%).

**Table 15: Reports of availability of ecstasy in the past six months by RPU, NSW 2007-2013**

Ecstasy variable	2007 (N=100)	2008 (N=100)	2009 (N=100)	2010 (N=100)	2011 (N=100)	2012 (N=100)	2013 (N=100)
<i>Current availability:</i>							
Very easy (%)	72	74	52	41	51	42	<b>50</b>
Easy (%)	25	22	44	41	37	46	<b>41</b>
<i>Availability:</i>							
Stable (%)	81	73	61	59	72	62	<b>58</b>
Easier (%)	7	16	22	10	13	18	<b>32</b>

**Source: EDRS regular psychostimulant user interviews 2007-2013**

Note: Response option 'don't know' was removed from analyses from 2010 onward

### Key expert comments

Amongst the KE who could comment on price, purity and availability of ecstasy, there was a general consensus that the availability has remained high and stable despite dramatic fluctuations in the price and purity.

It was generally agreed that the price of pills ranged from \$15 to \$35; however, these prices can change depending on whether there is a personal connection with a dealer and the consumer, if individuals buy in bulk or if a pill is being bought at a place where there is a high risk of being caught by the police such as a club or festival. Additionally, pill price and hedonic effect is largely related to what is contained in the pill, with more expensive pills containing pure MDMA, mid-strength pills containing a combination of MDMA and other chemicals such as MDA or MDX and cheap pills containing no MDMA.

One KE from law enforcement reported that the purity of ecstasy in the last year ranged from 2.5% to 89% with a median of 33.17% which was an increase from the previous year at 26.2%.

Two KE from the service industry stated that the purity of ecstasy pills had declined after 2011 and since then there has been an emergence of 'dirty' pills or pills containing other chemicals such as MDA or MDX. According to these KE, RPU reports suggest that in the late part of 2012 there was a large increase in quality which dropped down in early to mid-2013. However, coming up to festival period in the summer of 2013, the quality of ecstasy has risen. These individuals were of the opinion that the ecstasy market is quite prominent, constantly fluctuating and always competitive.

Another KE in law enforcement reported a substantial number of pill-press seizures. These pill-presses can be bought in separate parts on the internet and, because of such availability, the ecstasy market has only increased.

## 5.2 Methamphetamine

### Summary:

#### *Speed*

- *Price*: \$150 per gram, which is a notable increase from 2012.
- *Purity*: Currently high, appeared to be stable.
- *Availability*: Reports variable.

#### *Base*

- *Price*: \$70 per gram.
- *Availability*: Reports variable.

#### *Crystal*

- *Price*: \$50 per point and reportedly stable.
- *Purity*: Reports variable for current purity and stability.

Given the low proportion of amphetamine/methamphetamine users in the 2013 sample, only a small proportion were confident in answering questions on price, purity and availability for each of the three forms—speed, base and crystal.

### 5.2.1 Price

#### *Speed*

Six participants reported on the price of speed over the six months prior to the interview (Table 16). The median price reported the last time speed was purchased was \$150 a gram (range \$50-300), which is a large increase from 2012 (\$75 per gram). However, it should be noted that the lowest number of participants reported the price of speed in 2013 and thus these numbers should be interpreted with caution.

Of the participants who commented, three believed the price of speed had remained stable over the preceding six months while the remaining participant had reported a drop in price.

#### *Base*

Only two participants were able to report on the price of base overall thus, these figures must be interpreted with caution. These two participants had last purchased base by the gram and reported a median price of \$70 per gram (range \$60-80) (Table 16).

Given the small number of commenters, data is not included for the change in base price over the preceding six months.

#### *Crystal*

Seven participants were able to comment on the price of crystal over the preceding six months. The median price for a point of crystal was \$50 (range \$50-75), and this price has remained stable from 2012 (Table 16).

The majority (n=4) of those who commented on changes to the price of crystal over this time reported that it had remained stable.

**Table 16: Price of various methamphetamine forms purchased by RPU, NSW 2007-2013**

Median price	2007	2008	2009	2010	2011	2012	2013
Speed	n=23	n=27	n=18	n=14	n=27	n=21	n=6
Point (\$) (range)	47.5 (40-50)	-	-	-	32.5 <sup>^</sup> (15-50)	35 <sup>^</sup> (20-50)	50 <sup>^</sup> (-)
Gram (\$) (range)	50 (30-200)	50 (20-100)	47.5 (10-100)	55 (30-150)	80 (20-280)	75 <sup>^</sup> (20-450)	150 <sup>^</sup> (50-300)
Base	n=9	n=13	n=13	n=16	n=12	n=7	n=2
Point (\$) (range)	40 (15-50)	42.5 (20-70)	30 <sup>^</sup> (20-60)	20 <sup>^</sup> (10-50)	-	50 <sup>^</sup> (40-60)	-
Gram (\$) (range)	100 (50-200)	150 <sup>^</sup> (120-300)	150 <sup>^</sup> (100-200)	200 <sup>^</sup> (60-450)	100 <sup>^</sup> (60-150)	170 <sup>^</sup> (160-180)	70 <sup>^</sup> (60-80)
Crystal	n=37	n=27	n=9	n=18	n=16	n=15	n=7
Point (\$) (range)	50 (30-60)	50 (40-60)	50 <sup>^</sup> (50-80)	50 (40-90)	60 (16-100)	50 (40-100)	50 <sup>^</sup> (50-75)
Gram (\$) (range)	315 (280-350)	300 <sup>^</sup> (-)	-	-	-	500 <sup>^</sup> (-)	400 <sup>^</sup> (300-500)

**Source: EDRS regular psychostimulant user interviews 2007-2013**

<sup>^</sup> Small numbers reporting, interpret with caution

## 5.2.2 Purity

### *Speed*

Only five individuals commented on the current purity of speed, four of which rated it as having a 'high' purity while the remaining participant rated it as 'medium'. All three participants that commented reported that the purity of speed has remained stable over the six months prior to interview.



### Base

Given the low numbers of commenters (n=2), ratings of the purity of base are not included in this report.

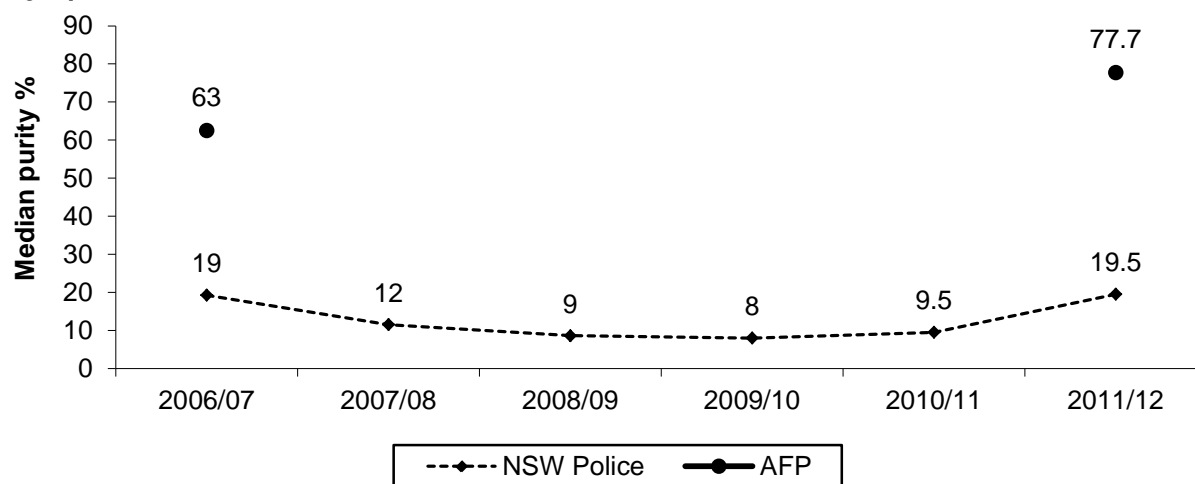
### Crystal

Six participants commented on the current purity of crystal as well as the change in purity over the preceding six months. Three participants reported crystal as having a 'medium' purity, one reported crystal currently having a 'high' purity and two reported that the purity is fluctuating. In relation to the change in purity over the last six months, four of the six participants rated the purity of crystal as remaining stable while one participant reported an increase in purity in the last six months and one participant reporting a fluctuating purity.

Figure 41 shows the median purity of methylamphetamine seizures analysed in NSW for the period July 2006 to June 2012. According to data gathered by NSW Police, the median purity of methylamphetamine seizures analysed has increased from 9.5% in 2010/11 to 19.5% in 2011/12, returning to similar purity levels of the 2006/07 period. Furthermore, 2011/12 was the first period since 2006/07 where methylamphetamine seizure purity data was available from the AFP. The AFP reported a median purity of 77.7% across the 2011/12 period.

It should be noted that figures do not represent the purity levels of all methylamphetamine seizures, only those that have been analysed at a forensic laboratory. In addition, the period between the date of seizure by police and the date of receipt at the laboratory can vary greatly, and no adjustment has been made to account for double-counting joint operations between the AFP and NSW Police.

**Figure 41: Median purity of methylamphetamine seizures analysed in NSW, 2006/07-2011/12**

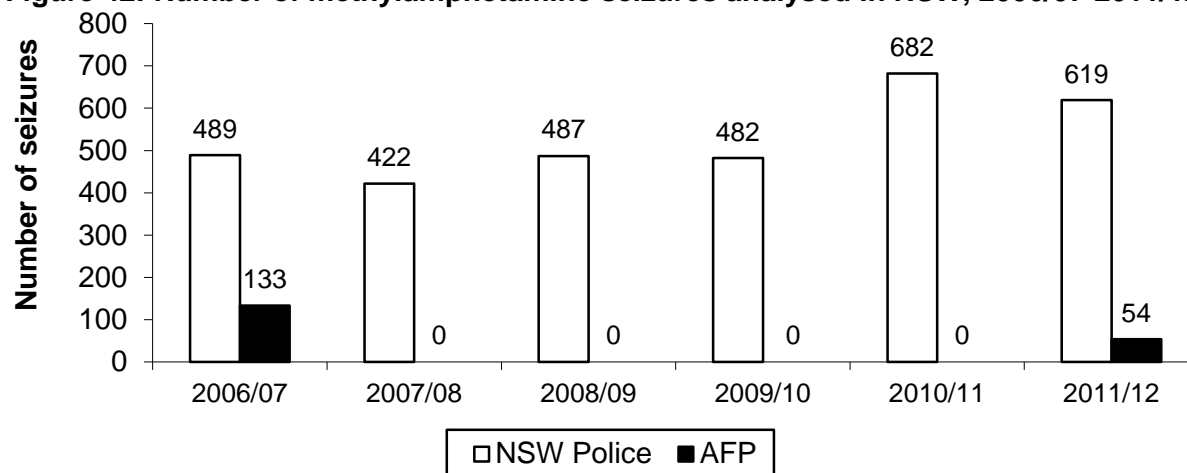


**Source: Australian Crime Commission (2008, 2009, 2010, 2011, 2012, 2013)**

Note: Data for 2012/13 were unavailable at time of publication

Figure 42 shows the number of methylamphetamine seizures upon which the above purity figures are based. The number of seizures analysed in NSW appears to have slightly decreased over the last year. No methylamphetamine seizures were reported for the AFP over the period July 2007 to June 2011.

**Figure 42: Number of methylamphetamine seizures analysed in NSW, 2006/07-2011/12**



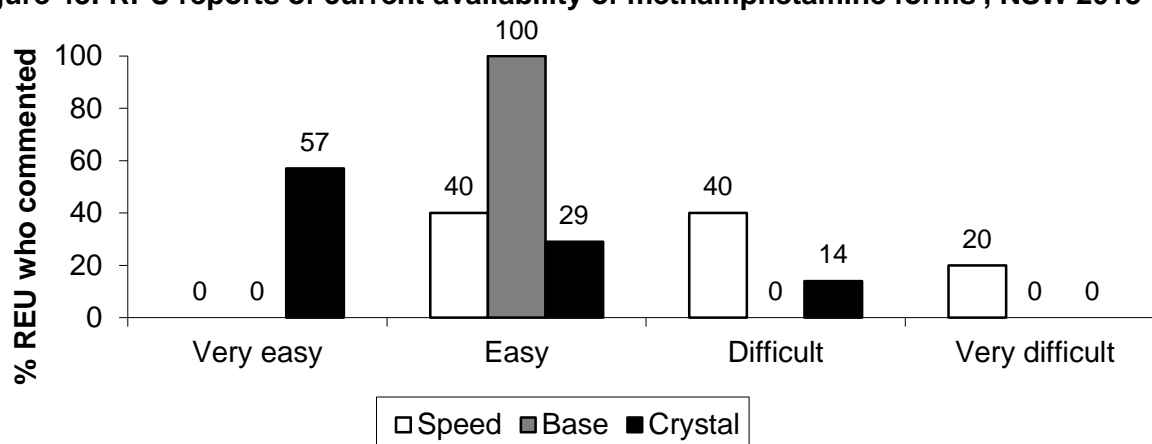
**Source: Australian Crime Commission (2008, 2009, 2010, 2011, 2012, 2013)**

Note: Data for 2012/13 were unavailable at time of publication

### 5.2.3 Availability

Poor agreement was found among participants commenting on the current availability of speed. Of the five individuals that commented, two reported that speed was 'easy' to obtain and two reported that it was 'difficult' to obtain. The two participants that commented on base reported it as 'easy' to obtain and of the participants that commented on crystal availability (n=7), 86% reported that it was 'easy' or 'very easy' to obtain at the time of interviewing in 2013 (Figure 43).

**Figure 43: RPU reports of current availability of methamphetamine forms\*, NSW 2013**

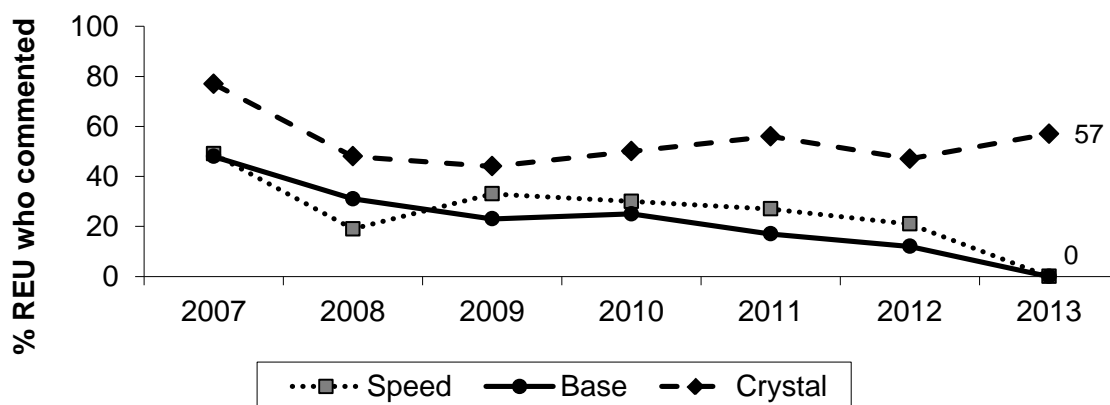


**Source: EDRS regular psychostimulant user interviews 2013**

\* Of those who commented (speed n=5; base n=2; crystal n=7)

Figure 44 shows the proportion of RPU reporting the availability of the three forms of methamphetamine as 'very easy' to obtain over time. Due to low proportions of respondents in 2013, users did not rate speed or base as 'very easy' to obtain. Additionally it is difficult to comment on trends in availability given such low responding in 2013.

**Figure 44: Proportion of RPU reporting methamphetamine as 'very easy' to obtain across time, NSW 2007-2013**

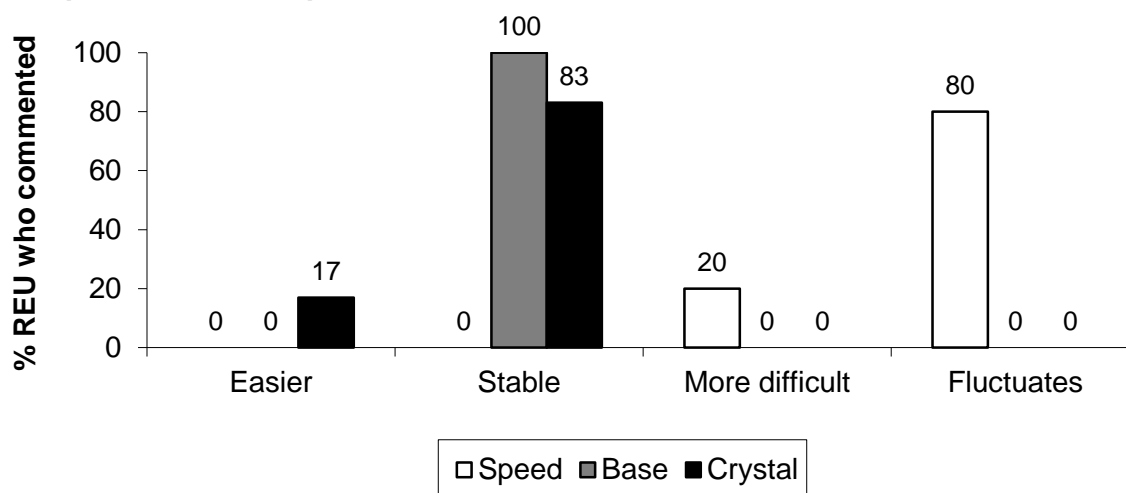


**Source: EDRS regular psychostimulant user interviews 2007-2013**

Note: Response option 'don't know' was removed from analyses from 2010 onward

Figure 45 presents the perceived change in availability of speed, base and crystal over the six months prior to interviewing. Most participants who commented believed that the availability of speed (63%), base (63%) and crystal (80%) had remained stable. Once again, given the small number of respondents, it is difficult to comment on accurate changes in the availability of methamphetamine.

**Figure 45: RPU reports of changes in the availability of various forms of methamphetamine in the past six months\*, NSW 2013**



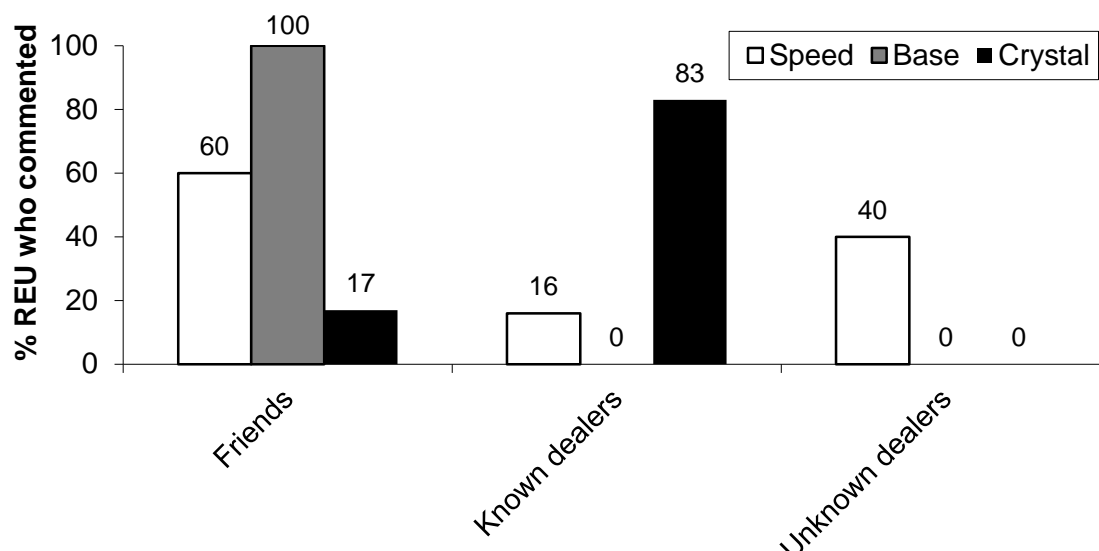
**Source: EDRS regular psychostimulant user interviews 2013**

\* Of those who commented (speed n=5; base n=2; crystal n=6)

### Source person and source location

Overall, methamphetamines were most commonly purchased from friends followed by known dealers. Participants also reported having purchased from known and unknown dealers (Figure 46).

**Figure 46: People from whom methamphetamine was last purchased\* by RPU, NSW 2013**

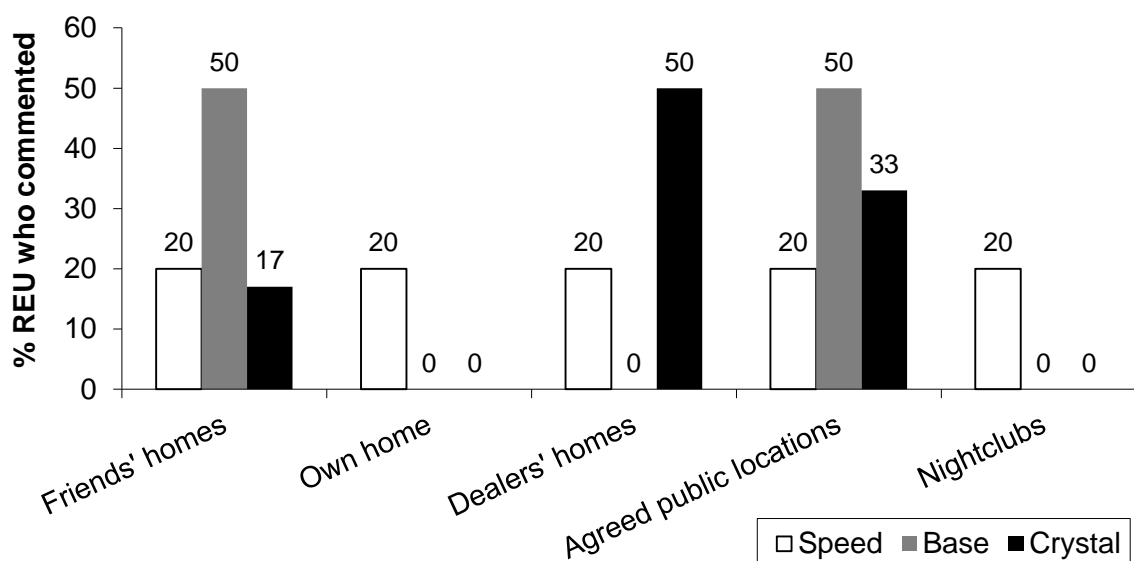


**Source: EDRS regular psychostimulant user interviews 2013**

\*Of those who commented (speed n=5; base n=2; crystal n=6)

Figure 47 compares locations of last purchase across the three forms of methamphetamine. Crystal was most commonly purchased at a dealer's home or an agreed public location and speed was bought from a variety of different locations.

**Figure 47: Locations at which methamphetamine was last purchased\* among RPU, NSW 2013**



**Source: EDRS regular psychostimulant user interviews 2013**

\*Of those who commented (speed n=5; base n=2; crystal n=6)

### **Key expert comments**

All KE that made comments about speed reported it as highly available; however, none could report on changes in availability, and price estimates were hard to obtain given the rare number of individuals who did not mix speed with other drugs.

One KE from law enforcement noted that when police make a big 'drug bust' this only reduces speed availability for roughly one month, after which usage returns to similar levels.

Those who commented on crystal methamphetamine rated it as readily available and highly pure. Three medical professionals from the Kings Cross area commented that crystal is becoming more pure given the increase in the number of drug-induced psychosis presentations with doses as small as one point (one-tenth of a gram).

Two KE from drug enforcement commented on the price and purity of methamphetamines. Of the three main types, powder currently has a median purity of 10%, base a median of less than 10% and crystal a median purity over 70%. In relation to crystal purity, the variability ranged from 60-80% over the January to June (2013) period which is less than the previous period which ranged from 45-80% (July-December, 2012).

Of the methamphetamine detected by NSW Police, 60% came from personal possession (60%); however, there are also significant detections from domestic laboratories. Most methamphetamine in NSW has been manufactured in Australia; however, there are specific instances where they are imported, such as importations from North America and Asia.

## 5.3 Cocaine

### Summary:

- *Price*: \$300 per gram, stable.
- *Purity*: Less variable, however similar purity ratings to 2012.
- *Availability*: Currently easy to obtain, stable.
- The general consensus amongst KE was that the price of cocaine is high and stable and the quality is low.
- The general consensus amongst KE was that the price of cocaine is high and stable and the quality is low.

### 5.3.1 Price

Twenty-nine participants were able to comment on the price of cocaine. The median price per gram was \$300 (range \$200-370). This figure has continued to remain stable for the past seven years (Table 17).

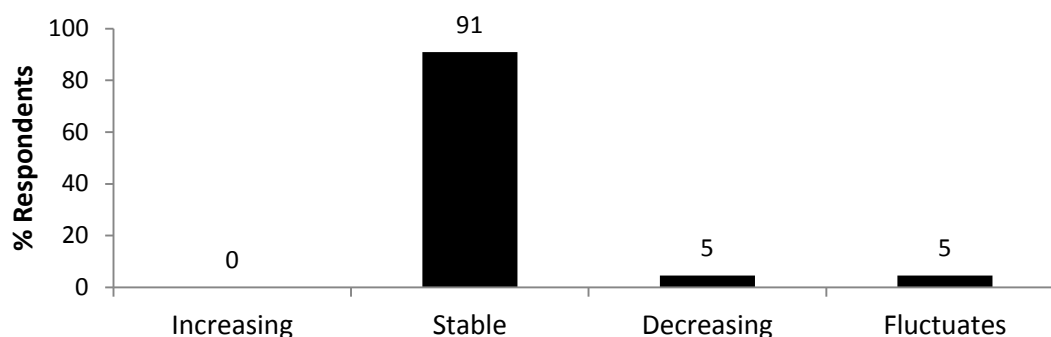
**Table 17: Price of cocaine purchased by RPU, NSW 2007-2013**

Cocaine variable	2007 (n=50)	2008 (n=41)	2009 (n=34)	2010 (n=38)	2011 (n=37)	2012 (n=33)	2013 (n=29)
Median price per gram (\$) (range)	300 (180-350)	300 (250-400)	300 (120-400)	300 (200-450)	300 (80-1,000)	<b>300</b> <b>(220-350)</b>	<b>300</b> <b>(200-370)</b>

Source: EDRS regular psychostimulant user interviews 2007-2013

The majority (91%) of those who commented on the price of cocaine believed it had remained stable over the preceding six months (Figure 48).

**Figure 48: Recent changes in price of cocaine purchased among RPU, NSW 2013**



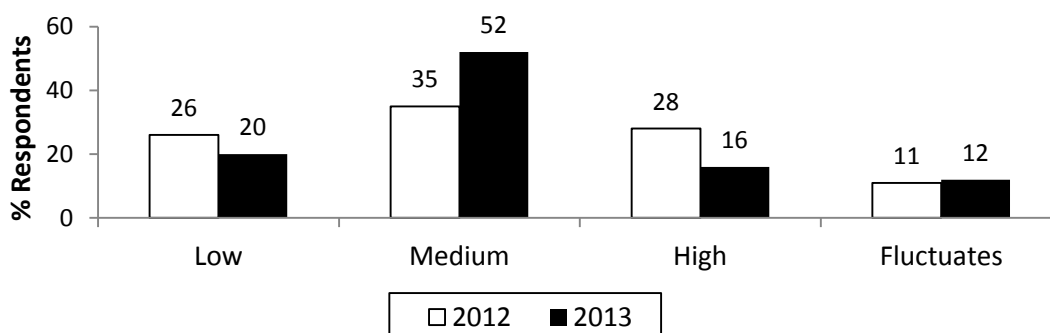
Source: EDRS regular psychostimulant user interviews 2013

Note: Response option 'don't know' was removed from analyses

### 5.3.2 Purity

Twenty-five RPU were able to comment on the purity of cocaine. There was slightly higher agreement on the current purity of cocaine compared to 2012 participant ratings, with the largest portion of participants rating cocaine purity as 'medium' (52%), followed by 'low' (20%) and 'high' (16%) (Figure 49). These data together suggest that the current purity of cocaine is variable but possibly more towards medium to low purity.

**Figure 49: RPU reports of current purity of cocaine, NSW 2012 and 2013**

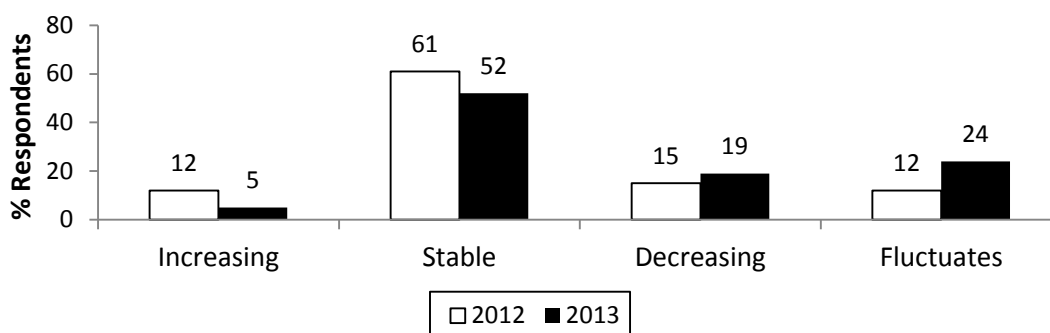


**Source: EDRS regular psychostimulant user interviews 2012 and 2013**

Note: Response option 'don't know' was removed from analyses

Ratings of the change in cocaine purity over the preceding six months have remained stable from 2012 to 2013. The most notable change, however, has been an increase in the proportion of respondents reporting that the purity of cocaine is fluctuating from 12% in 2012 to 24% in 2013 (Figure 50).

**Figure 50: RPU reports of change in cocaine purity in the past six months, NSW 2012 and 2013**



**Source: EDRS regular psychostimulant user interviews 2012 and 2013**

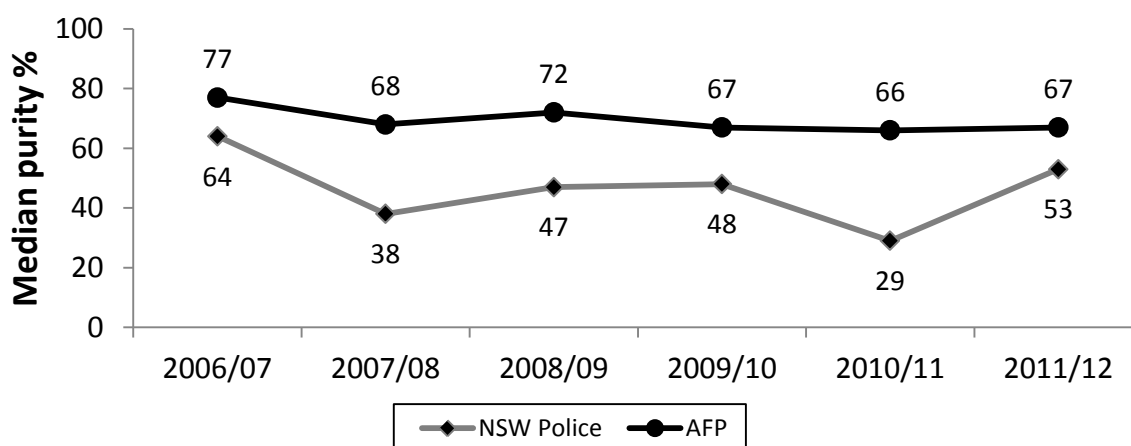
Note: Response option 'don't know' was removed from analyses

Figure 51 presents data on the purity of cocaine seizures analysed in NSW by the AFP and NSW Police between July 2005 and June 2012. The purity of cocaine samples analysed by the AFP appears to have remained relatively stable over time. The purity of seizures analysed by NSW police continued to be substantially lower than those analysed by the AFP, and there was a notable rise in purity over the 2011/12 period.

It should also be noted that figures do not represent the purity levels of all cocaine seizures – only those that have been analysed at a forensic laboratory. The period between the date of seizure by police and the date of receipt at the laboratory can vary greatly. No adjustment

has been made to account for double-counting joint operations between the AFP and state/territory police.

**Figure 51: Median purity of cocaine seizures analysed in NSW, 2006/07-2011/12**

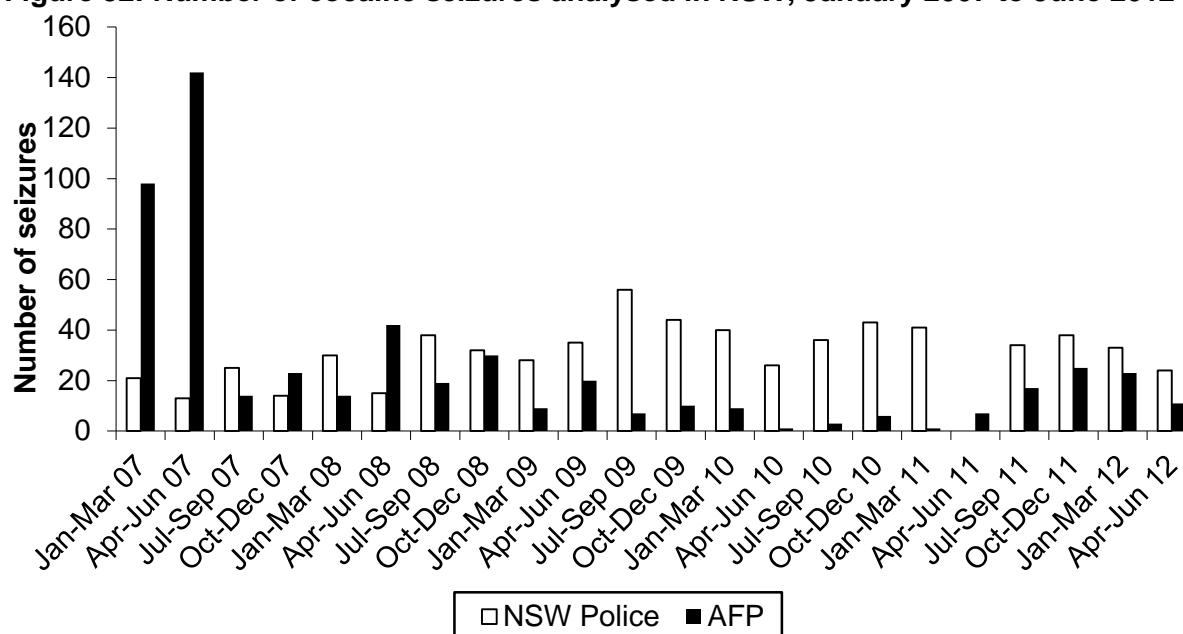


**Source: Australian Crime Commission (2007, 2008, 2009, 2010, 2011, 2012, 2013)**

Note: Data for 2012/13 were unavailable at time of publication

Figure 52 shows the number of seizures analysed in NSW between January 2007 and June 2012. The number of seizures made by the NSW Police peaked in mid- to late-2009, and then returned to levels observed earlier. The number of seizures analysed by the AFP has remained lower than the rates observed for NSW Police.

**Figure 52: Number of cocaine seizures analysed in NSW, January 2007 to June 2012**



**Source: Australian Crime Commission (2007, 2008, 2009, 2010, 2011, 2012, 2013)**

Note: Data for 2012/13 were unavailable at time of publication

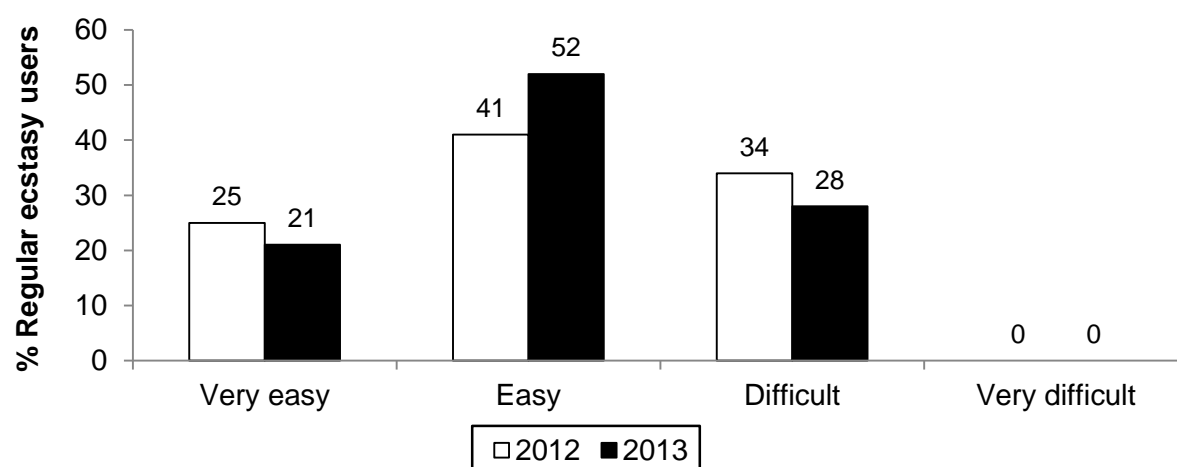
### 5.3.3 Availability

Twenty-nine participants were able to comment on the availability of cocaine. Of these, the majority (73%) believed cocaine was currently either 'easy' or 'very easy' to obtain. However,



roughly one-quarter (28%) reported that it was currently 'difficult' to obtain. These figures have remained comparable with those from 2012 (Figure 53).

**Figure 53: RPU reports of current availability of cocaine, NSW 2012 and 2013**

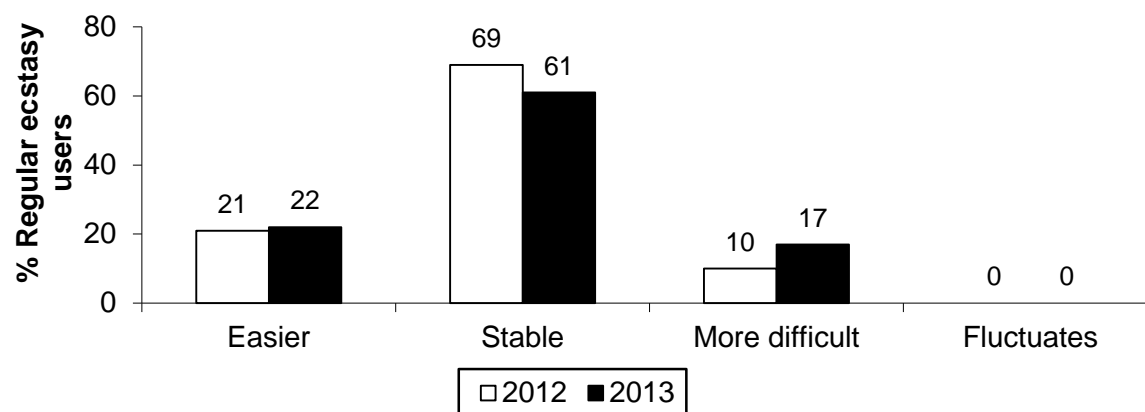


**Source: EDRS regular psychostimulant user interviews 2012 and 2013**

Note: Response option 'don't know' was removed from analyses

Three-fifths (61%) of those who commented stated that the availability of cocaine had remained stable over the preceding six months (Figure 54). This figure was similar to that reported in 2012.

**Figure 54: RPU reports of change in the availability of cocaine in the past six months, NSW 2012 and 2013**



**Source: EDRS regular psychostimulant user interviews 2012 and 2013**

Note: Response option 'don't know' was removed from analyses

### *Source person and source location*

Of those who commented on purchasing cocaine over the preceding six months (n=29), the majority had purchased it from a friend (31%) or a known dealer (28%). The most common location of last purchase was at a friend's home (24%) followed by either a dealer's home or an agreed public location (14% respectively). Smaller proportions purchased cocaine at other varied locations.

### **Key expert comments**

Not many KE were able to comment on the price, purity and availability of cocaine.

However, of those who made a comment, the general consensus was that the price of cocaine is high and stable and the quality is low, specifically comparable to other places outside Australia such as the US, South America and Europe. One KE explained that this may be because when cocaine gets to Australia, it is 'cut' with different substances and materials (such as chalk).

One KE from law enforcement reported that the purity of cocaine has remained stable over the past two years with the median purity of the last recorded period (1<sup>st</sup> of January to the 1<sup>st</sup> of July 2013) being 53%.

This individual also reported that the majority of detections came from Sydney's CBD, Kings Cross, Redfern and Surry Hills.

One KE who works in toxicology mentioned that, over the last couple of years, cocaine use spread from the inner city to areas in and around Sydney's western suburbs with proportions of about 50% of cocaine users from these areas.

However, the KE from law enforcement reported no detections of cocaine in western Sydney. This individual also mentioned that this may be because many affluent cocaine users are not caught as they rarely use the drug in public settings and thus are not detected as often by police.

## 5.4 Ketamine

### Summary:

- *Price*: \$150 per gram, stable.
- *Purity*: Variable reports on purity, stable.
- *Availability*: Difficult to obtain, stable.
- The overall consensus amongst KE was that ketamine was not readily available and quite expensive.

### 5.4.1 Price

The reported price of ketamine has increased from \$150 per gram to \$200 (Table 18). However, from 2007-2013 the price range has been quite large, possibly indicating that the street price can be variable. In 2013, there were four reports of ketamine purchased by the point at \$20.

Of the five RPU who commented, three reported that the price of ketamine had remained stable over the preceding six months, while the remaining two believed it had increased.

**Table 18: Price of ketamine purchased by RPU, NSW 2007-2013**

Ketamine variable	2007 (n=15)	2008 (n=13)	2009 (n=6)	2010 (n=7)	2011 (n=14)	2012 (n=8)	2013 (n=5)
Median price per gram (\$) (range)	150 (50-280)	150 (40-250)	150 (140-170)	150 (100-280)	150 (50-200)	150 (20-180)	<b>200</b> <b>(15-200)</b>

**Source: EDRS regular psychostimulant user interviews 2007-2013**

### 5.4.2 Purity

Seven participants were able to comment on the purity of ketamine. Of these participants, five reported that ketamine was currently of 'high' purity while the remaining two reported the current purity of ketamine as medium. Five of these participants commented on the change in purity of ketamine over the preceding six months which all five reported as stable.

### 5.4.3 Availability

Eight participants commented on the availability of ketamine, with five participants reporting ketamine as difficult to obtain. The remaining three reported that ketamine was easy to obtain. When asked about changes in the availability of ketamine over the preceding six months, only six participants could comment, five of which reporting that ketamine availability has remained stable. The remaining individuals reported ketamine as more difficult to obtain over the preceding six months.

#### *Source person and source location*

Of the nine RPU who commented, four reported that on the last occasion they purchased ketamine from a friend and three reported purchasing from a known dealer. In keeping with

this, the majority of individuals purchased ketamine in their own home, at a dealer's home or at a friend's house (two participants respectively).

### **Key expert comments**

The overall consensus was that ketamine was not readily available and quite expensive. A KE working in law enforcement reported police detections as low and stable. They said that ketamine is often seized in 'poly-drug seizures' mostly around the metropolitan areas of Sydney.

## 5.5 GHB

### Summary:

- *Price:* \$11.5 per mL, variable reports of stability.
- *Availability:* Currently very easy to easy to obtain, variable reports of stability.
- KE noted that GHB is always fluctuating with higher detections during the festival period of each year.

### 5.5.1 Price

Given the confusion regarding the size of vials in which GHB is typically purchased and the uncertainty around what constitutes a typical dose, it is not surprising that there is wide variation and seemingly inconsistent reports of the price of GHB between years.

In 2013, six participants commented on the price of GHB. The median price of 1mL was \$11.5 (range \$4-25). This is marginally higher than the price recorded in 2012 (\$9 per mL; range \$6-25); however, due to small sample numbers this should be interpreted cautiously. Anecdotally, participants often commented that a 'fish' of GHB usually contains 2mL and this was a very common quantity purchased. One participant reported purchasing a 'fish' for \$27. Of the six respondents, four reported that the price of GHB had remained stable. Again, since such small numbers comment on the price of GHB, it is difficult to identify trends and draw strong conclusions from this data and it is presented as an indicator of the market only.

### 5.5.2 Purity

Eight participants were able to comment on the purity of GHB. Three RPU reported that GHB purity is currently 'medium' and only one reported GHB purity as fluctuating. When asked about changes to the purity of GHB over the preceding six months, most respondents reported that it had remained stable (four participants) or was decreasing (two participants).

### 5.5.3 Availability

Eight participants were able to comment on the availability of GHB. The majority of participants (89%) reported that GHB was easy (63%) or very easy (25%) to obtain. Half (50%) the group said that the availability of GHB had remained stable, while other respondents reported that it was more difficult (25%) or easier (13%) to obtain.

#### *Source person and source location*

GHB had been last purchased from either friends (38%), known dealers (38%) or acquaintances (25%). There were a mixture of locations reported as the last venue that GHB was purchased, including at a nightclub (50%), at a friend's home (25%), at the dealer's home (13%) or at a day club (13%).

**Key expert comments**

Only one KE in law enforcement was able to comment on price and availability of GHB. This individual noted that GHB is always fluctuating with higher detections during the festival period of each year.

According to this KE, one millilitre of GHB costs roughly \$3 with a plastic fish container (4-5mL) ranging from \$15-25.

All GHB detections have come from drug dogs .

## 5.6 LSD

### Summary:

- *Price*: \$20 per tab, stable.
- *Purity*: Medium, stable.
- *Availability*: Currently easy to very easy to obtain, stable.
- KE reported that LSD detections were trending upwards in the later months of 2013.

### 5.6.1 Price

Fifty-two participants reported on the price of LSD (Table 19). The median price last paid for a tab of LSD was \$20 (range \$8-50), which has remained stable over the last four years. The majority of those who commented (65%) reported that the price had remained stable over the preceding six months, with only a small portion reporting that the price was increasing (8%), decreasing (12%) or fluctuating (2%).

**Table 19: Price of LSD purchased by RPU, NSW 2007-2013**

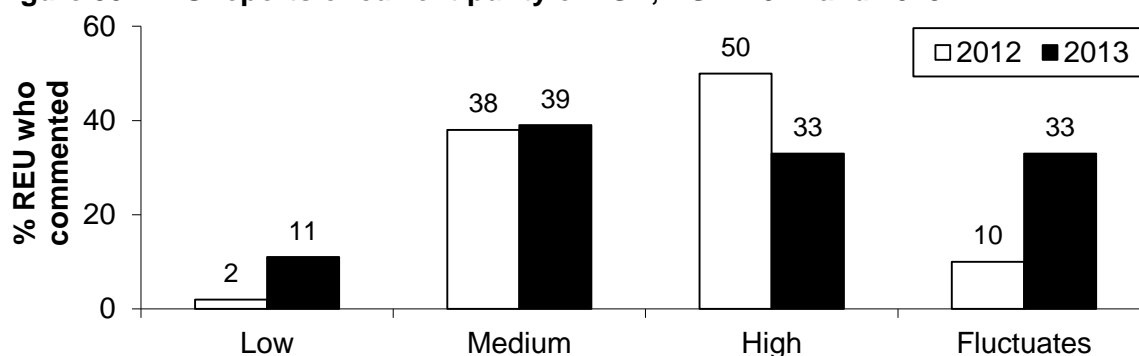
LSD variable	2007 (n=34)	2008 (n=12)	2009 (n=30)	2010 (n=31)	2011 (n=34)	2012 (n=37)	<b>2013 (n=52)</b>
Median price per tab (\$) (range)	15 (10-25)	15 (10-50)	20 (10-40)	20 (2-30)	20 (6-30)	20 (12-40)	<b>20 (8-50)</b>

**Source: EDRS regular psychostimulant user interviews 2007-2013**

### 5.6.2 Purity

Forty-six participants commented on the purity of LSD. Of these, 39% reported that LSD was currently of 'medium' purity and 33% reported 'high' purity, which is a notable drop from 50% in 2012 (Figure 55). Additionally the proportion of individuals that reported LSD purity as 'fluctuating' increased from 10% in 2012 to 33% in 2013. Of the RPU that commented, 44% reported that the purity of LSD had remained stable over the past six months. However, a significant proportion (30%) reported that it had fluctuated.

**Figure 55: RPU reports of current purity of LSD, NSW 2012 and 2013**



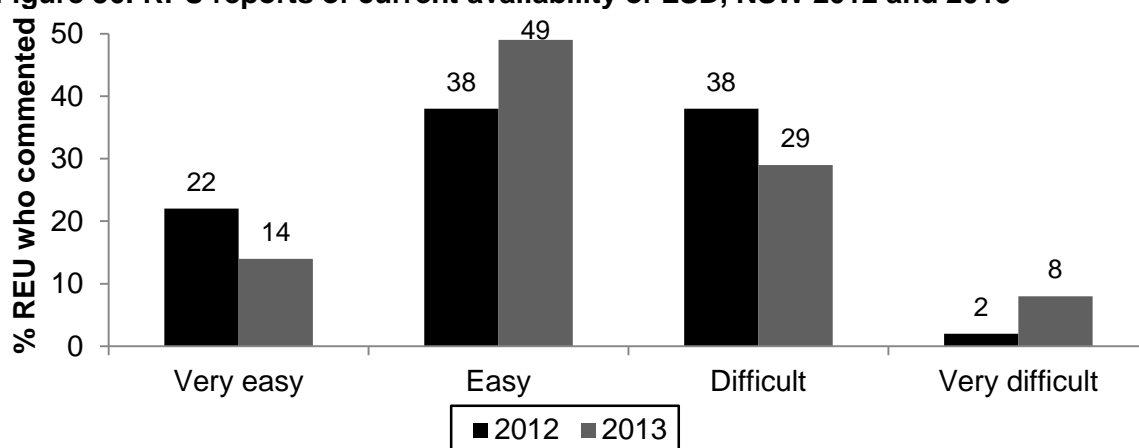
**Source: EDRS regular psychostimulant user interviews 2012 and 2013**

Note: Response option 'don't know' was removed from analyses

### 5.6.3 Availability

Fifty-one participants commented on the availability of LSD. The majority of respondents (63%) believed that LSD was currently 'easy' or 'very easy' to obtain; however, 29% reported that it was 'difficult' (Figure 56). These figures remained comparable with those from 2012. aside from a significant increase in the proportions reporting that LSD availability is 'easy' to obtain from 38% to 49%. The majority of those who commented on availability of LSD reported that it had remained stable (58%) and almost one-third (31%) reported that it had become more difficult to obtain. A smaller proportion reported that it had become easier (11%) to obtain.

**Figure 56: RPU reports of current availability of LSD, NSW 2012 and 2013**



**Source: EDRS regular psychostimulant user interviews 2012 and 2013**

Note: Response option 'don't know' was removed from analyses

#### *Source person and source location*

LSD was most commonly purchased from friends (52%) or known dealers (24%) and most commonly at an agreed public location (38%) or a friend's home (34%). Smaller proportions of various other locations were also reported.



**Key expert comments**

One KE working in the service industry reported that in the later months of 2013, the purity of LSD was quite high; however, the price fluctuates greatly from \$15-25 per tab. A KE working in law enforcement noted that LSD detections are trending upwards in the later months of 2013; however, this is expected as peak detections of LSD occur during the festival season.

This KE also noted that LSD detections tend to be part of poly-drug detections and is not often found alone. Furthermore most of the LSD found in Australia is imported from overseas.

## 5.7 Cannabis

### Summary:

#### *Hydro*

- *Price*: \$20 per gram; \$300 per ounce, stable.
- *Potency*: Currently high, stable.
- *Availability*: Currently very easy to obtain, stable.

#### *Bush*

- *Price*: \$20 per gram; \$300 per ounce, stable.
- *Potency*: Currently high, stable.
- *Availability*: Currently easy to obtain, stable.
- KE were of the opinion that cannabis use is considered more acceptable by 'night-life' society such as less frequent alcohol and tobacco users.

From 2006, the EDRS included a more detailed section about cannabis and made a distinction between indoor-cultivated 'hydroponic' cannabis (hydro) and outdoor-cultivated 'bush' cannabis for price, potency and availability. In 2013, only participants who were able to distinguish between hydro and bush provided information about the price, purity and availability of cannabis.

### 5.7.1 Price

Table 20 presents the reported price for one ounce and one gram of hydro and bush cannabis.<sup>15</sup> Prices for hydro have remained relatively stable from 2012 to 2013, while the price per ounce of bush appears to have increased in 2013 (Table 20).

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<sup>15</sup> Data regarding the price of hash or hash oil is not presented here due to small numbers reporting.

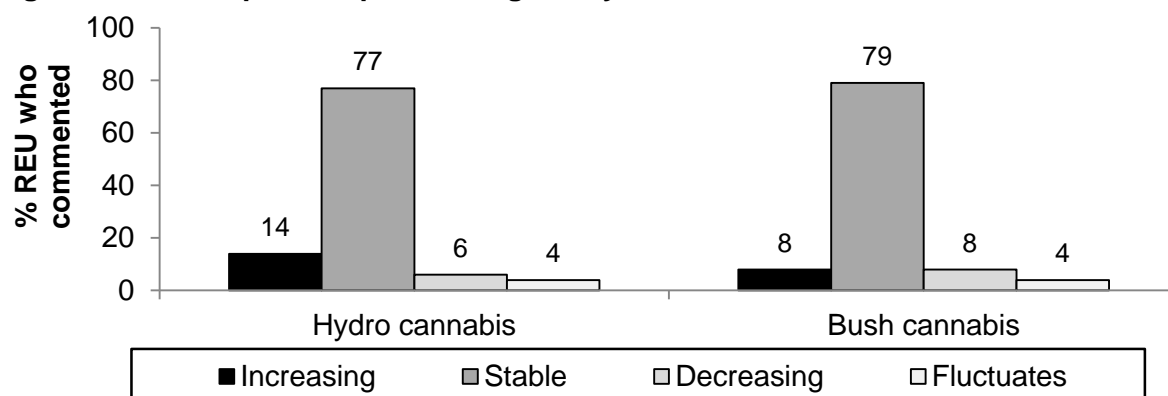
**Table 20: Price of hydroponic and bush cannabis purchased by RPU, NSW 2009-2013**

Cannabis variable	2009	2010	2011	2012	2013
<i>Hydro</i>	n=55	n=40	n=46	n=39	<b>n=37</b>
Median price per ounce (\$)	295	300	300	290	<b>300</b>
(range)	(100-350)	(150-450)	(230-400)	(160-350)	<b>(250-450)</b>
Median price per gram (\$)	20	20	20	20	<b>20</b>
(range)	(10-25)	(20)	(10-20)	(10-25)	<b>(10-100)</b>
<i>Bush</i>	n=29	n=19	n=19	n=27	<b>n=16</b>
Median price per ounce (\$)	200	235	290	265	<b>300</b>
(range)	(150-300)^	(150-300)^	(200-300)^	(150-300)^	<b>(200-400)</b>
Median price per gram (\$)	20	20	20	20	<b>20</b>
(range)	(7.5-20)	(5-25)	(10-20)	(10-20)	<b>(10-25)</b>

**Source: EDRS regular psychostimulant user interviews 2009-2013**

^ Small numbers reporting, interpret with caution

Participants were asked about changes to the price of hydro and bush over the preceding six months. The vast majority reported that it had been stable both for hydro (77%) and bush (79%). A small proportion of RPU (14%) reported the price of hydro to be increasing (Figure 57).

**Figure 57: RPU reports of price change of hydro and bush cannabis\*, NSW 2013**

**Source: EDRS regular psychostimulant user interviews 2013**

Note: Don't know responses removed from analyses

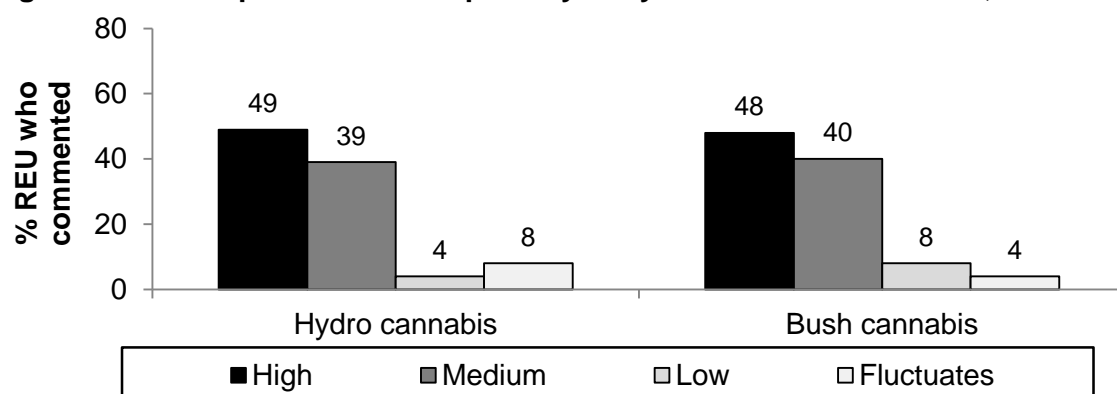
\* Of those who commented (n=51 for hydro, n=24 for bush)

### 5.7.2 Potency

Figure 58 presents participants' perceptions of the current potency of hydro and bush cannabis. Just under half of those who commented reported that hydro was currently of

'high' potency (49%). In 2013 48% of commenters rated bush as having a high potency which is a notable increase from 23% in 2012.

**Figure 58: RPU reports of current potency of hydro and bush cannabis\*, NSW 2013**

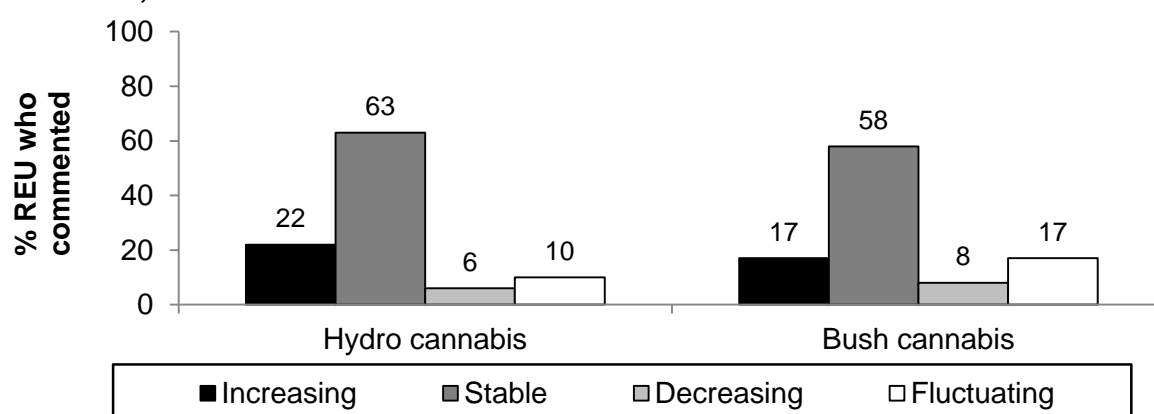


**Source: EDRS regular psychostimulant user interviews 2013**

\*Of those who commented (n=51 for hydro, n=25 for bush)

Participants were asked to comment on changes in the potency of cannabis over the preceding six months. Respondents agreed that the potency of hydro and bush had remained relatively stable over this time (Figure 59).

**Figure 59: RPU reports of change in potency of hydro and bush cannabis over the last six months\*, NSW 2013**



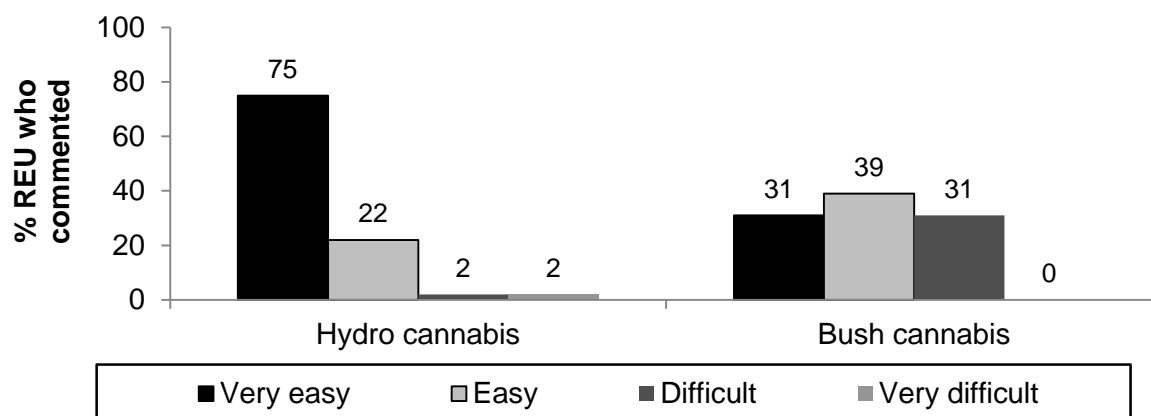
**Source: EDRS regular psychostimulant user interviews 2013**

\*Of those who commented (n=51 for hydro, n=24 for bush)

### 5.7.3 Availability

Figure 60 presents data on the RPU-reported current availability of hydro and bush. The majority of respondents (75%) believed that hydro was currently 'very easy' to obtain. The largest proportion of respondents reported that bush availability was easy (39%); however, notable proportions of participants rated bush as 'very easy' or 'difficult' to obtain (31% respectively).

**Figure 60: RPU reports of current availability of hydro and bush cannabis\*, NSW 2013**

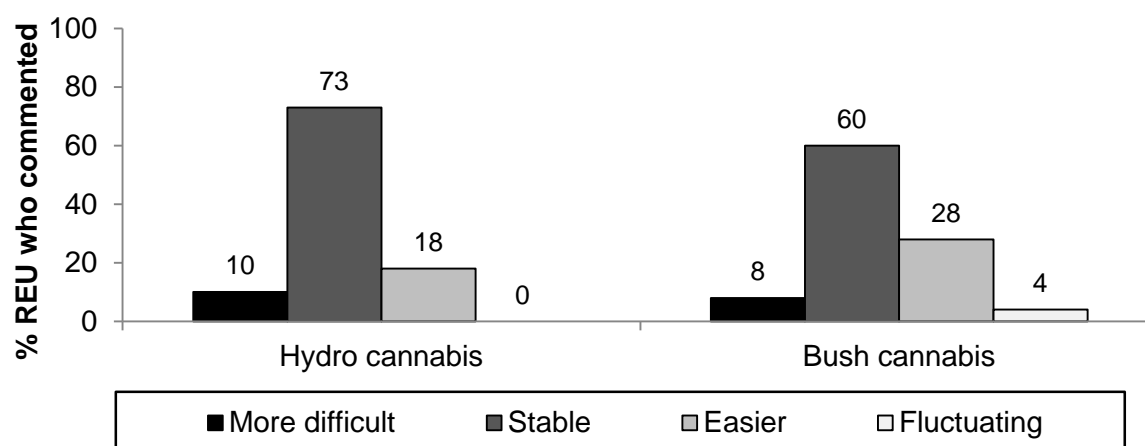


**Source: EDRS regular psychostimulant user interviews 2013**

\* Of those who commented (n=51 for hydro, n=26 for bush)

The majority of those who commented reported that the availability of both hydro (73%) and bush (60%) had remained stable over the preceding six months (Figure 61). However, smaller proportions reported that both hydro (18%) and bush (28%) was easier to obtain.

**Figure 61: RPU reports of change in availability of hydro and bush cannabis over the last six months\*, NSW 2013**



**Source: EDRS regular psychostimulant user interviews 2013**

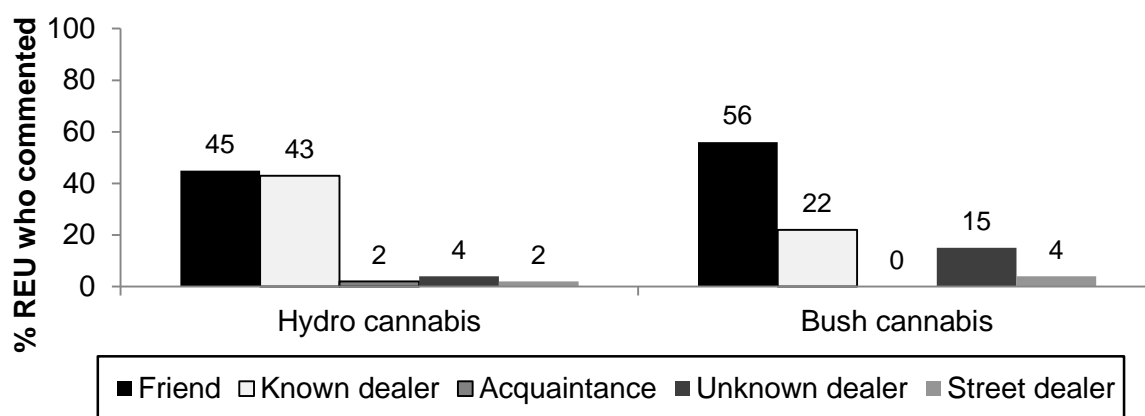
\* Of those who commented (n=51 for hydro, n=25 for bush)

#### *Source person and source location*

RPU were asked to comment on purchasing cannabis over the six months prior to the interview. Both hydro (45%) and bush (56%) were most commonly purchased from friends;

however, sizeable minorities purchased hydro and bush from a known dealer (43% and 22% respectively) and an unknown dealer (4% and 15% respectively) (Figure 62).

**Figure 62: People from whom hydro and bush cannabis was last purchased\* by RPU, NSW 2013**

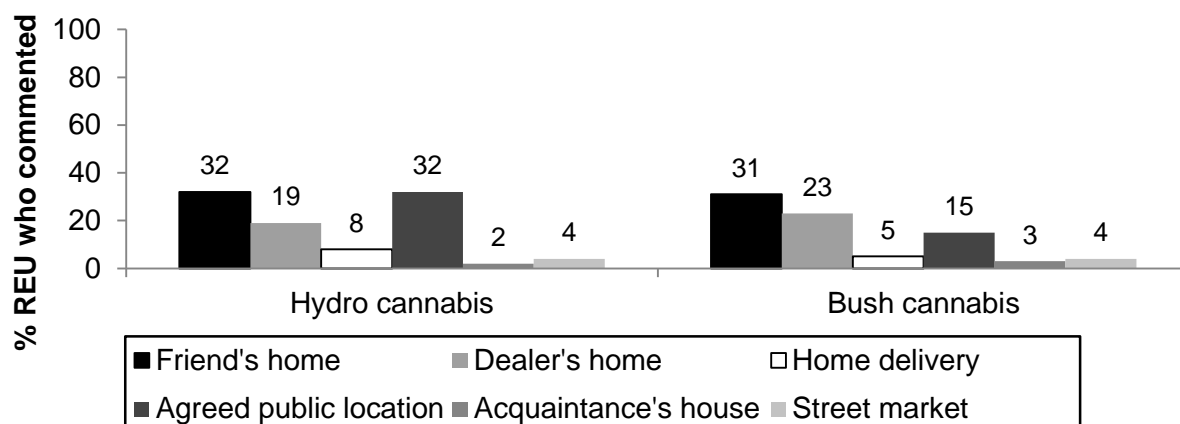


**Source: EDRS regular psychostimulant user interviews 2013**

\*Of those who commented (n=53 for hydro, n=27 for bush)

Both forms of cannabis were most commonly purchased at a friend's home or agreed public location; however, respondents also often purchased at the dealer's home or had it delivered to their own home (Figure 63).

**Figure 63: Locations at which hydro and bush cannabis was last purchased\* among RPU, NSW 2013**



**Source: EDRS regular psychostimulant user interviews 2013**

\*Of those who commented (n=53 for hydro, n=27 for bush)

### **Key expert comments**

One KE working around rural NSW commented that access was high due to the large areas of bushland in which individuals could grow cannabis.

A KE working in law enforcement commented that cannabis has remained stable in 2013 in terms of price and availability. Although seizure data for outdoor cultivated and hydroponic cannabis were comparable, this individual noted that outdoor cannabis is seasonally grown and if this type was grown all year round, outdoor cannabis would surpass hydroponic cannabis in terms of availability. Furthermore, this KE noticed that growers are becoming much more technologically advanced, producing more automated set ups that require less maintenance.

Looking at seizure data this KE was involved in, it was reported that outdoor grown cannabis is predominantly grown in regional Sydney/NSW while hydroponic cannabis was more prominent around the metropolitan areas.

## 6 HEALTH-RELATED TRENDS ASSOCIATED WITH ERD USE

### **Summary:**

#### *Overdose, deaths and hospital admissions*

- One-third of participants reported having overdosed on a stimulant drug throughout their lifetime.
- Under one-fifth reported having ever overdosed on a depressant drug.
- Deaths associated with ecstasy, ketamine and cannabis have remained stable in the past year. A slight increase was observed in deaths associated with methamphetamines in 2011/12, however this has returned to levels previously in 2012/13.
- Hospital admissions in which amphetamine or cocaine was the principal diagnosis appeared to have remained stable in NSW. Hospital admissions where cannabis was the principal diagnosis appeared to be increasing over time.

#### *Service usage*

- Only 16% of respondents reported that they had recently accessed a medical or health service in relation to their drug use.
- Calls to ADIS and FDS regarding ecstasy and cocaine have gradually increased from 2012 to 2013. Calls regarding amphetamines, ketamine, GHB and LSD have remained relatively stable from 2011 to 2012.

#### *Mental health*

- Participants commonly reported that their drug use caused repeated social problems (19%), resulted in exposure to risk of injury (21%) and/or interfered with responsibilities (36%). Recurrent drug-related legal problems were uncommon (3%).
- One-third of the group had recently experienced a mental health problem. Mood and anxiety disorders were most commonly reported.
- Participants completed the K10. One-third of the group fell into the 'high' or 'very high' distress categories.

### 6.1 Ecstasy dependence

It has been traditionally believed that dependence on MDMA (the active ingredient in ecstasy) is unlikely given the relatively infrequent use patterns exhibited by ecstasy users (i.e. fortnightly or weekly). However, there is nonetheless evidence from animal research of a



dependence potential for MDMA which is relatively attenuated and displays unique characteristics compared with other drugs. Little work has been done to characterise a dependence syndrome among ecstasy users (Bruno et al., 2009).

In 2013, participants were 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). Twenty-one percent of RPU recorded a score of 3 and above. The cut off 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). Ten percent of EDRS participants scored 4 or above.

The median SDS score was 1 (range 0-10). One-third of participants (33%) obtained a score of zero on the ecstasy SDS, and just over one-quarter (26%) obtained a score of 1 on the scale; that is, the majority of respondents reported no or few symptoms of dependence in relation to ecstasy use. These findings are supported by responses of the majority of participants (69%) reporting 'never or almost never' thinking that their use of ecstasy was out of control and 83% reporting that they would find it 'not difficult to stop or miss a prospective dose of ecstasy'.

## 6.2 Overdose and drug-related fatalities

Participants were asked if they had ever overdosed on a stimulant drug or a depressant drug. In both instances, 'overdose' was defined as presenting with symptoms consistent with either stimulant toxicity (e.g. nausea and vomiting, chest pains, tremors, increased body temperature or heart rate, seizure, extreme paranoia, anxiety, panic or agitation, hallucinations, excited delirium) or symptoms consistent with a depressant overdose (e.g. reduced level of consciousness, respiratory depression, turning blue, collapsing). As such, the following sections are based on participants' understanding of these definitions and their opinions as to whether they had overdosed.

### 6.2.1 Stimulant overdose

Approximately one-third (35%) of participants reported having overdosed on a stimulant drug throughout their lifetime. Participants reported having experienced a median of 2 overdoses (range 1-10), and that their last overdose had occurred a median of 3 months ago (range 1-144). One-quarter (25%) of participants reported having overdosed on a stimulant drug within the preceding 12 months. Among these, the most common location of their last overdose was at a nightclub (44%), followed by a friend's home (20%). Smaller proportions reported having overdosed in other locations. Overall, stimulant overdoses occurred more frequently in public (72%) than private (28%) settings. The majority of participants (68%) believed that they did not have a sober person present to assist them the last time they overdosed on a stimulant drug.

Those who had recently overdosed (i.e. within the last year) were asked to identify the main drug to which they attributed their last overdose and also to identify other drugs they had used. Ecstasy was the drug most commonly reported to have caused the overdose (52%) followed by pharmaceutical stimulants (12%). Most participants (84%) who had recently experienced a stimulant overdose had been using multiple drugs on that occasion. The most common additional drug used was alcohol (n=15), followed by cannabis (n=6) and amyl nitrate (n=4).

Amongst those who overdosed within the preceding year, the most common symptoms reported included vomiting (n=5), increased body temperature (n=5) and extreme anxiety (n=3). Two-fifths (40%) of those who had recently overdosed on a stimulant drug did not receive any treatment. The majority of remaining participants were watched or monitored by their friends (93%), jumped in a cold shower (7%), drank water (7%) or went to sleep (7%). Only four participants reported seeking information about stimulant overdose or treatment after their most recent stimulant overdose; three people sourced information from the internet and one person received information from friends or acquaintances.

Participants were asked how long they had been partying prior to overdosing on the last occasion. The median number of hours participants had been partying was 4 (range 1-24). Approximately half of the participants reported that the overdose had occurred on a normal night out (52%) rather than during a heavy session.

Roughly four-fifths (81%) of the NSW RPU sample reported a change in drug use following the experience of taking a bad/adulterated pill. Of these, 76% reported that they changed their drug use by using pills more carefully such as taking less to begin with, finding out more about a pill and taking more precautions. Three participants reported changing their drug use behaviour by using less during a session.

### 6.2.2 Depressant overdose

Under one-fifth (16%) of the current sample of RPU reported having ever overdosed on a depressant drug, which was significantly lower than 2012 (39%,  $p < .001$ ). Those who had overdosed reported having done so on a median of 2 occasions (range 1-24) with the most recent having occurred a median of 15.5 months prior to the interview (range 1-360). Seven participants reported having overdosed on a depressant drug within the year preceding the interview.

Of those who overdosed on a depressant drug within the twelve-months prior to being interviewed, six participants attributed their most recent overdose to alcohol and the remaining participant attributed their overdose to GHB. The majority of those who had recently overdosed on a depressant drug reported not having used any other drugs on that occasion ( $n=4$ ). Among those who had used other drugs, two individuals had used ecstasy, one had used cannabis and one had used heroin.

Participants were asked where they were when they last overdosed within the past 12 months. The majority had overdosed at a nightclub ( $n=3$ ) or a private location such as at home ( $n=2$ ) or a friend's home ( $n=1$ ). Another participant reported last overdosing at work. Four of the seven participants reported that there had not been a sober person present at the time of overdose who was able to assist them.

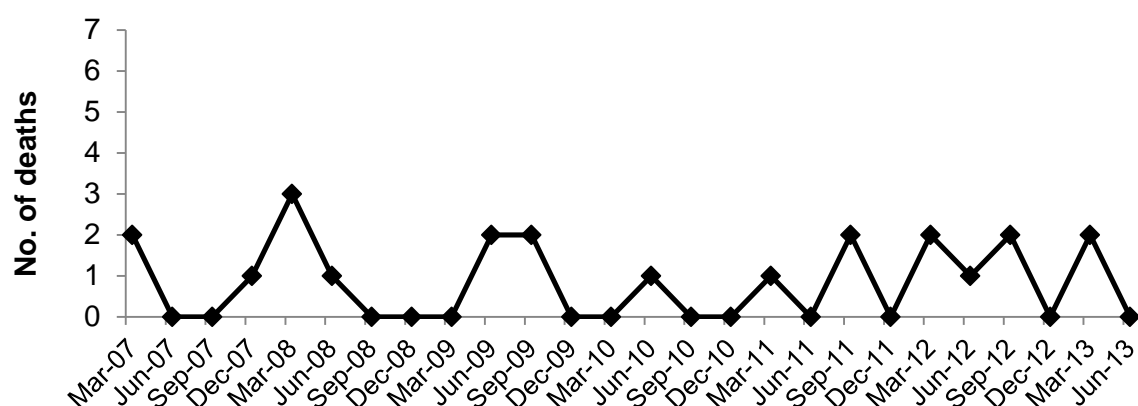
The most commonly reported symptoms of a depressant overdose among this group were losing consciousness (43%) and vomiting (29%). Most participants ( $n=4$ ) that had recently experienced a depressant overdose reported that they did not receive any formal treatment or care on the last occasion. Those who had received assistance were monitored or watched by friends ( $n=3$ ). None of the participants sought information about drug overdose or treatment following their depressant overdose.

Participants reported that on their last occasion of overdosing on a depressant drug, they had been partying for a median of 6 hours (range 1-13). All participants who commented reported that the overdose had occurred on a heavy session rather than on a normal night out.

### 6.2.3 Ecstasy

The number of suspected drug-related deaths where ecstasy was detected was low and appeared to have remained relatively stable over time, generally fluctuating between one or two each quarter (Figure 64). The detection of MDMA, however, does not imply that MDMA was causally related to the death, as there may have been other drugs present post-mortem.

**Figure 64: Number of deaths of individuals suspected of drug use, in which MDMA was detected post-mortem, March 2007 to June 2013**



**Source: Forensic Toxicology Laboratory database, Division of Analytical Laboratories**

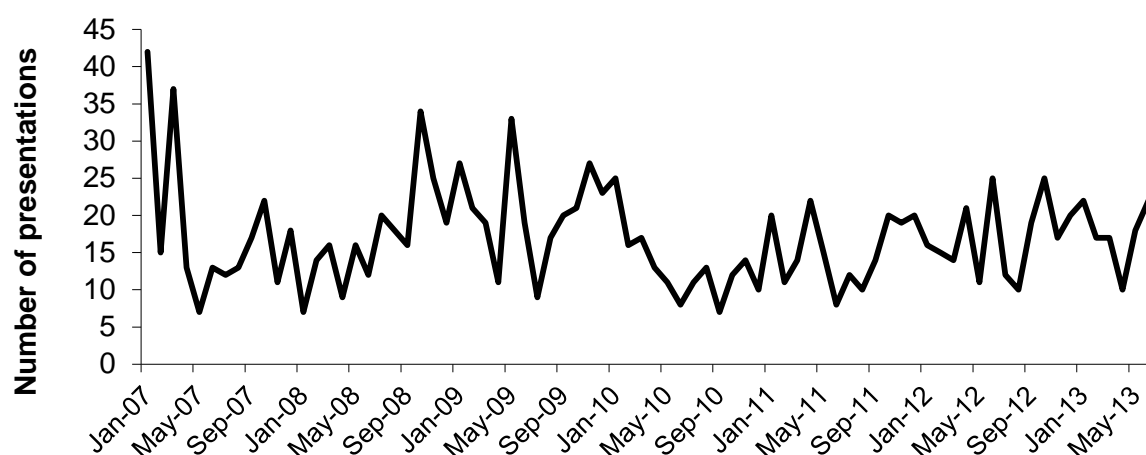
Note: These numbers relate to deaths in which ecstasy was detected; however, there may have also been other drugs present

Since the introduction of the Systematized Nomenclature of Medicine Clinical Terms (SNOMED CT) coding structure in Australia, it is now possible to extract the number of emergency department presentations for ecstasy poisonings in NSW. These would previously have been coded under amphetamine type stimulants presentations. In 2011/12, there were 33 emergency department presentations for ecstasy poisonings.

#### 6.2.4 Methamphetamine

While the total number of amphetamine overdose presentations to NSW emergency departments has fluctuated over time, there appeared to be a generally declining trend over the past 10 years (Figure 65). However, a slight upward trend in presentations was recorded between July 2011 and June 2012.

**Figure 65: Amphetamine overdose presentations to NSW emergency departments, January 2007 to June 2013**



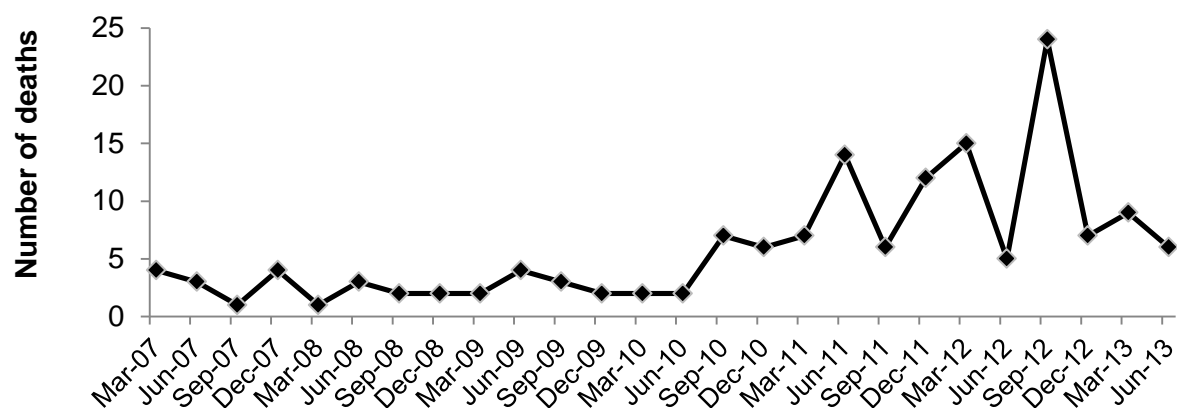
**Source: Emergency Department Information System, NSW Ministry of Health**

Note: Figures refer to overdose only and do not include presentations for use disorders

The number of deaths of individuals suspected of drug use where amphetamines were detected post-mortem in NSW appears to have increased from late-2010 onward, however,

they still remain under 20 per quarter (Figure 66). These figures do not include methylenedioxymethamphetamine, methylenedioxyamphetamine, or p-methoxyamphetamine. Also excluded are pseudoephedrine and ephedrine, as only deaths related to illicit amphetamines are presented.

**Figure 66: Number of deaths of individuals suspected of drug use, in which illicit amphetamines were detected post-mortem, March 2007 to June 2013**



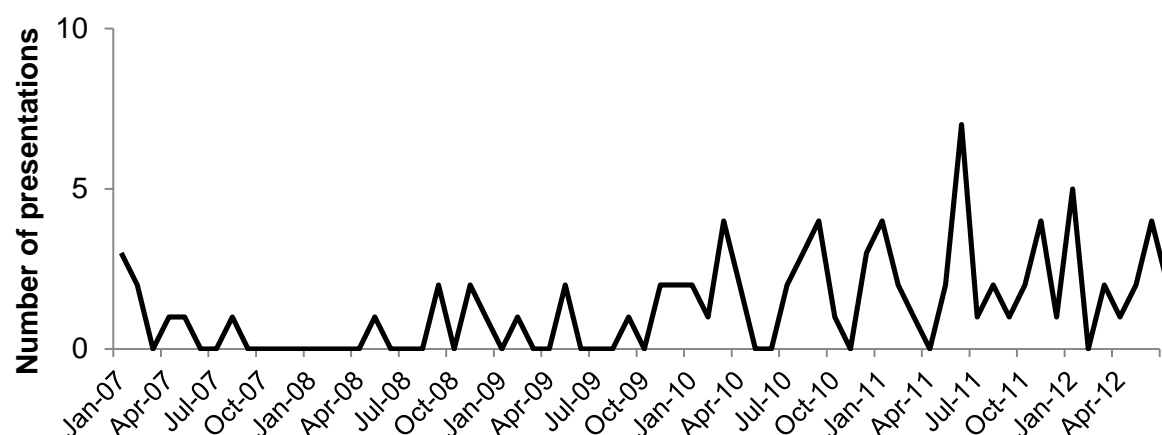
**Source: Forensic Toxicology Laboratory database, Division of Analytical Laboratories**

Note: These numbers relate to deaths in which amphetamines, including methamphetamine, were detected; however, there may have also been other drugs present

## 6.2.5 Cocaine

Since mid-2008, there has been a slight upward trend in the number of cocaine overdose presentations to NSW emergency departments. However, these figures remain low with fewer than five presentations per month (Figure 67).

**Figure 67: Cocaine overdose presentations to NSW emergency departments, January 2007 to June 2013**

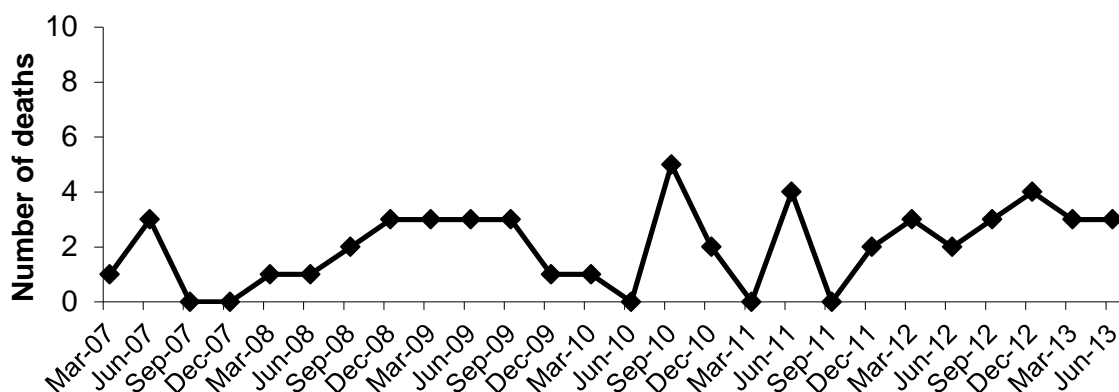


**Source: Emergency Department Information System, NSW Ministry of Health**

Note: Figures refer to overdose only and do not include presentations for use disorders

The number of deaths of suspected drug users where cocaine was detected post-mortem has remained low over time (Figure 68). A total of seven cocaine related deaths were recorded between July 2011 and June 2012.

**Figure 68: Number of deaths of individuals suspected of drug use, in which cocaine was detected post-mortem, March 2007 to June 2013**



**Source: Forensic Toxicology Laboratory database, Division of Analytical Laboratories**

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

### 6.2.6 Ketamine

Deaths of suspected drug users where ketamine was detected post-mortem remain very low. Data from the Forensic Toxicology Laboratory Database at the Division of Analytical Laboratories showed that 14 of these deaths had occurred between January 1999 and June 2013.

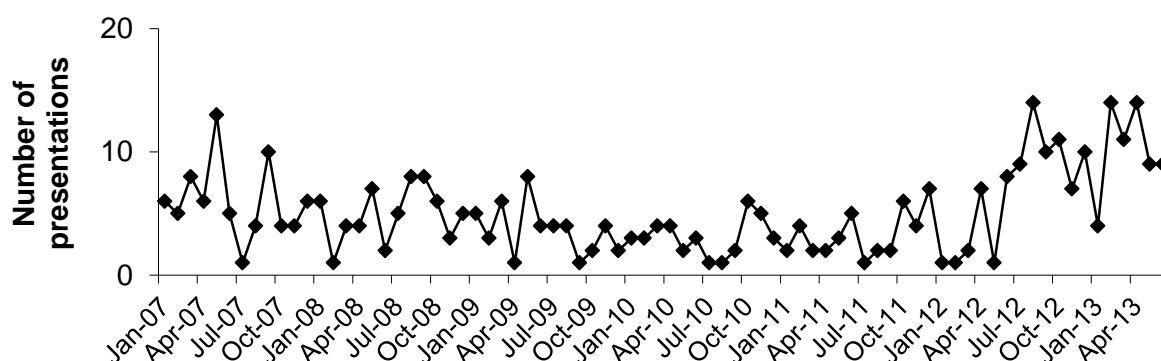
### 6.2.7 GHB

Data from the Forensic Toxicology Laboratory Database at the Division of Analytical Laboratories showed that, since 2000, only four deaths had occurred where GHB was detected post-mortem. There were no deaths during 2012/13 where GHB was detected.

### 6.2.8 Cannabis

The number of cannabis toxicity presentations to emergency departments have remained relatively low and stable, at ten or less per month since mid-2007 (Figure 69).

**Figure 69: Cannabis toxicity presentations to NSW emergency departments, January 2006 to June 2013**



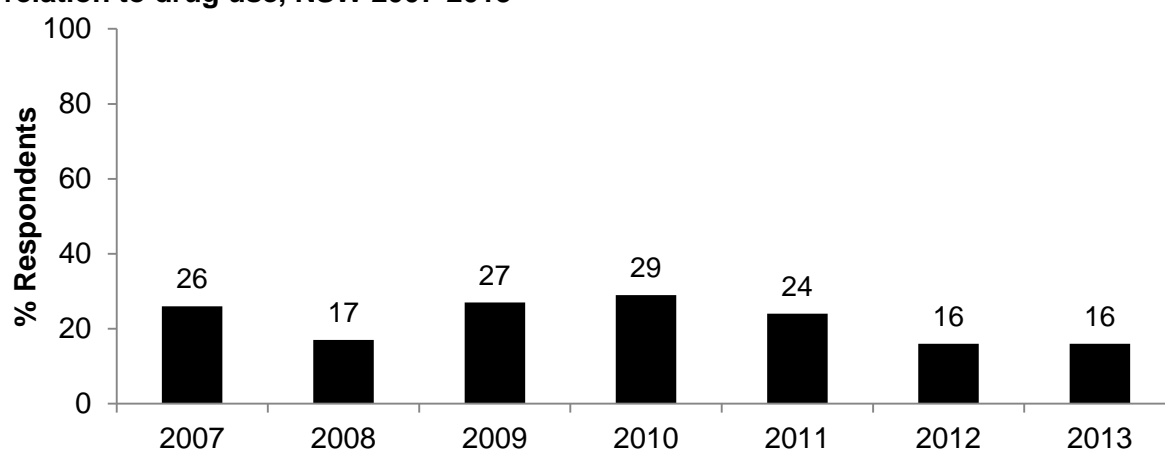
**Source: Emergency Department Information System, NSW Ministry of Health**

Note: Figures refer to overdose only and do not include presentations for use disorders

### 6.3 Help-seeking behaviour

Participants were asked if they had accessed any medical or health services in relation to their alcohol and/or drug use in the last six months. Sixteen percent of RPU interviewed in 2013 reported that they had done so. It is concerning to note that the 2012 and 2013 samples had the lowest recorded proportion of RPU who recently accessed medical or health services in the last six years (Figure 70).

**Figure 70: Proportion of RPU who recently accessed a medical/health service in relation to drug use, NSW 2007-2013**

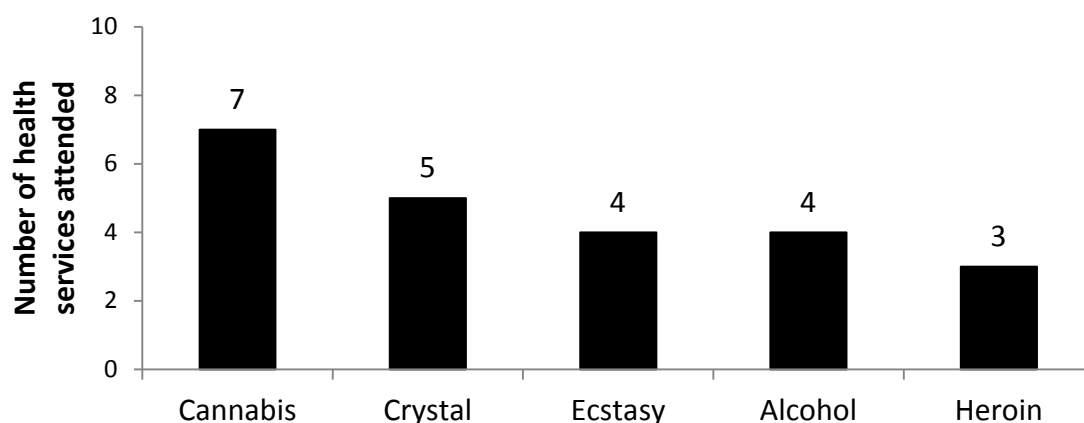


**Source: EDRS regular psychostimulant user interviews 2007-2013**

Thirteen individuals reported they had thought about contacting services or health professionals for reasons related to drug use. When asked why they did not contact a service or health professional, four participants could not be bothered, another four reported that they 'worked it out on their own' and three participants reported that it 'wasn't a priority'.

Participants were asked if they have attended any health services in the past six-months. For those who attended a health service for a drug concern, the most frequent drug concern was cannabis (seven cases) followed closely by crystal methamphetamine (five cases). Lower numbers were reported for ecstasy (four cases), alcohol (four cases) and heroin (three cases) (Figure 71).

**Figure 71: Medical/health services visited by RPU in relation to the specific drugs of concern, NSW 2013<sup>^</sup>**



**Source: EDRS regular psychostimulant user interviews 2013**

<sup>^</sup>Drugs with less than three recorded visits are not presented in the graph.

Note: Participants were able to provide multiple answers.

## 6.4 Drug treatment

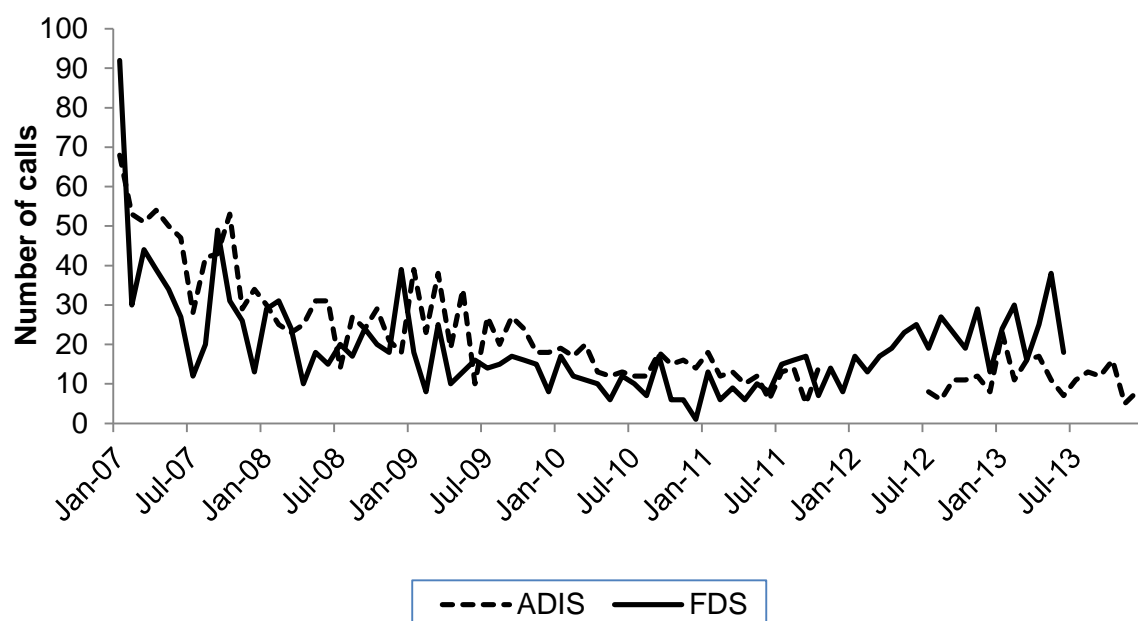
### 6.4.1 Ecstasy

The NSW Alcohol and Drug Information Service (ADIS) provides a telephone information and referral service in NSW. ADIS data reflect calls in which ecstasy was the primary drug of concern. Similarly, the NSW Family Drug Support (FDS) provides over-the-phone support and referrals. FDS data represent all calls in which ecstasy was mentioned.

Figure 72 shows the number of calls received by ADIS and FDS regarding ecstasy from January 2006. Although there appeared to be a downward trend in calls relating to ecstasy to both services since early 2007, there seems to have been an increase in the number of ecstasy related calls recorded by FDS from late-2011.



**Figure 72: Number of inquiries regarding ecstasy received by ADIS and FDS, January 2007 to December 2013**

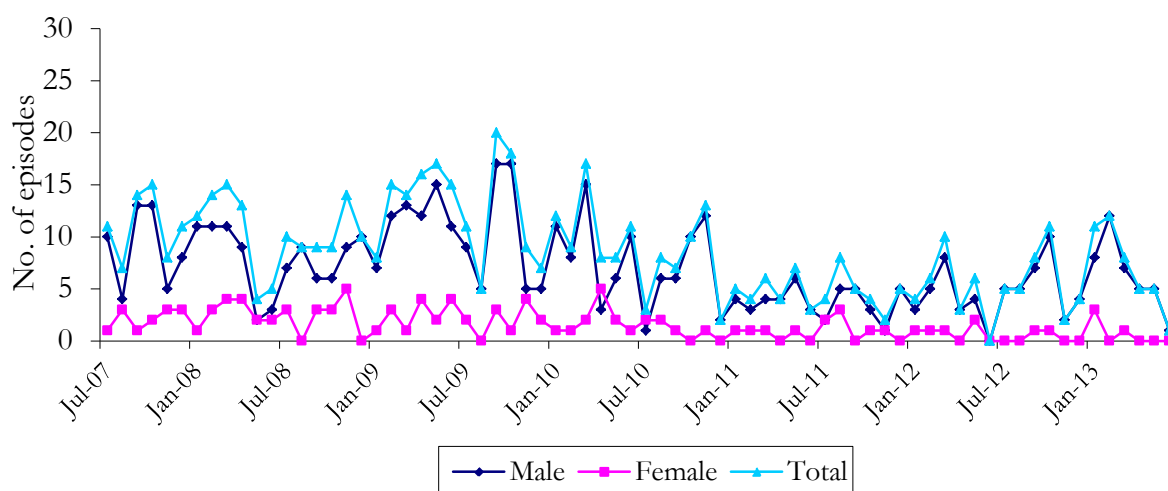


**Source: NSW Alcohol and Drug Information Service and NSW Family Drug Support**

Note: FDS data for May 2006 and June 2006 were not available. ADIS data after October 2011 were not available.

The number of closed treatment episodes based on the date of commencement where the principal drug of concern was ecstasy has been declining since late-2009 (Figure 73). Men accounted for most of the treatment episodes.

**Figure 73: Number of ecstasy treatment episodes by gender, NSW July 2007 to June 2013**



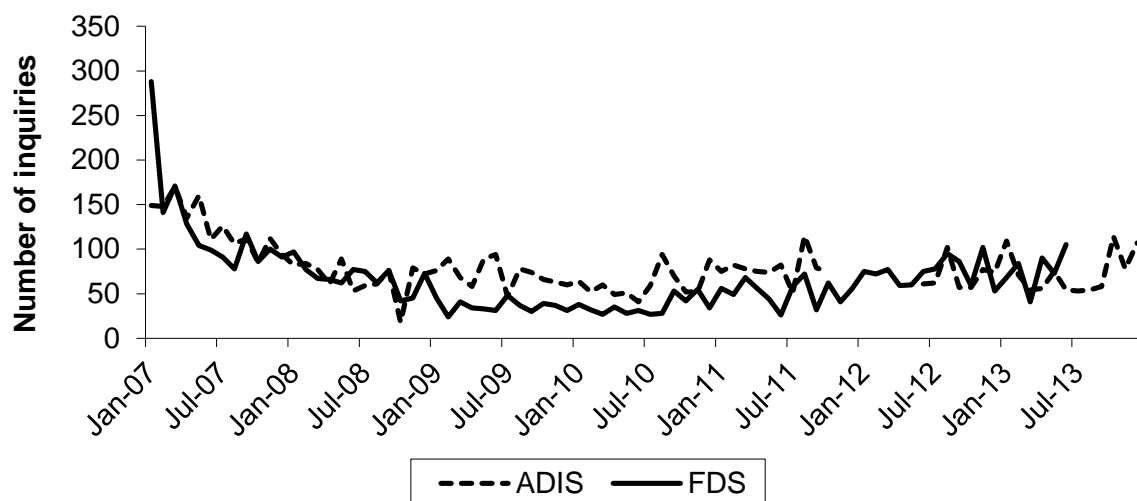
**Source: NSW MDS AODTS, NSW Ministry of Health**

Note: The NSW Minimum Data Set for Alcohol and Other Drug Treatment Services (MDS AODTS) is based on closed treatment episodes and so some episodes may be excluded if they did not finish in the given period. Figures are presented by the commencement date for treatment.

### 6.4.2 Methamphetamine

Figure 74 shows the number of calls to the ADIS and FDS lines regarding methamphetamines. The number of enquiries to both ADIS and FDS appears to have gradually increased since early 2010.

**Figure 74: Number of inquiries to ADIS and FDS regarding amphetamines, January 2007 to December 2013**

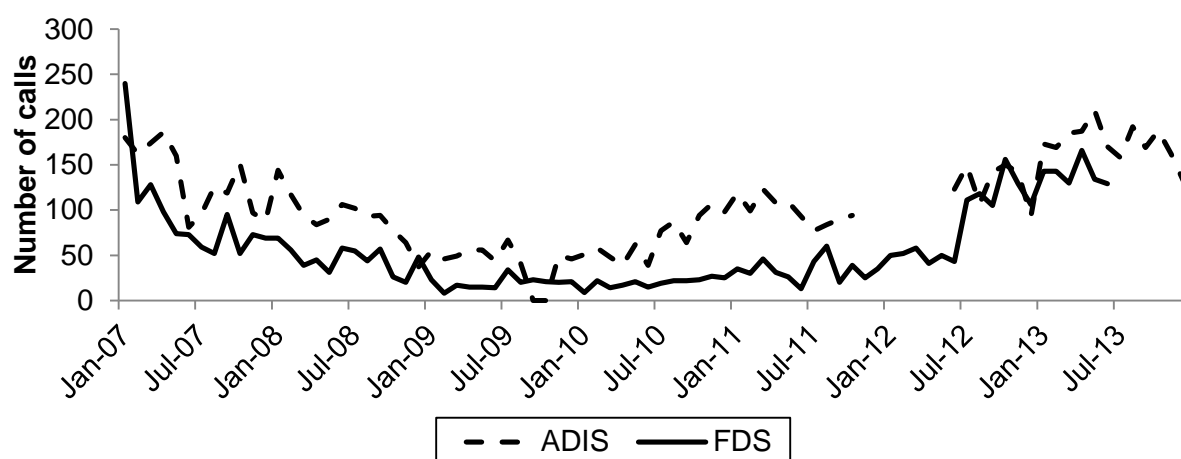


**Source: NSW Alcohol and Drug Information Service and Family Drug Support**

Note: FDS data refer to calls where any mention of amphetamines was made. ADIS data refer to the number of calls where amphetamines were mentioned as any drug of concern. FDS data for May 2006 and June 2006 were not available. ADIS data for October 2011 to May 2012 were not available.

Figure 75 presents calls to ADIS and FDS coded as those where ice/crystal specifically had been mentioned. Calls to ADIS have been increasing from mid-2009 onward, while call numbers to FDS have increased since mid-2011.

**Figure 75: Number of enquiries to ADIS and FDS regarding ice/crystal alone, January 2007 to December 2013**

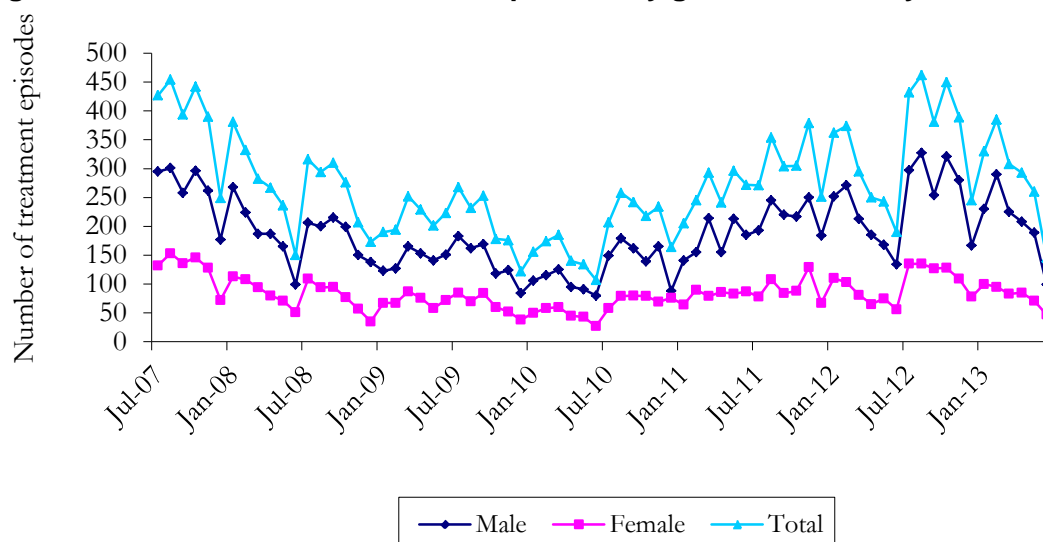


**Source: NSW Alcohol and Drug Information Service and Family Drug Support**

Note: Data is presented on calls coded as relating to crystal. Calls may not fall exclusively into either category and it is possible that there is some overlap. FDS data for May 2006 and June 2006 were not available. ADIS data for October 2011 to May 2012 were not available.

The number of closed treatment episodes based on date of commencement where amphetamine was the principal drug of concern has remained relatively stable from mid-2010 onward (Figure 76). There appeared to be a rise in the number of treatment episodes reported in mid-2011. Men continued to account for a greater proportion of these treatment episodes compared to women.

**Figure 76: Number of ATS treatment episodes by gender, NSW July 2007 to June 2013**



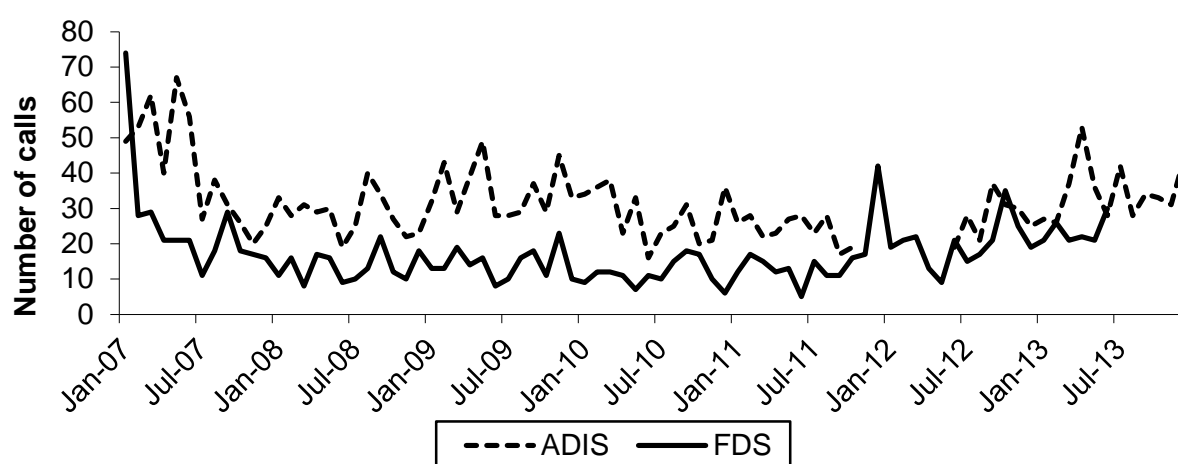
**Source: NSW MDS AODTS, NSW Ministry of Health**

Note: The NSW Minimum Data Set for Alcohol and Other Drug Treatment Services (MDS AODTS) is based on closed treatment episodes and so some episodes may be excluded if they did not finish in the given period. Figures are presented by the commencement date for treatment.

### 6.4.3 Cocaine

Figure 77 shows the number of calls to the ADIS and FDS lines regarding cocaine. Calls to both ADIS and FDS appear to have remained relatively stable from early-2008, with the exception of the notable spike in calls to FDS recorded at the end of the 2011 and ADIS calls in mid-2013.

**Figure 77: Number of inquiries to ADIS and FDS regarding cocaine, January 2007 to December 2013**



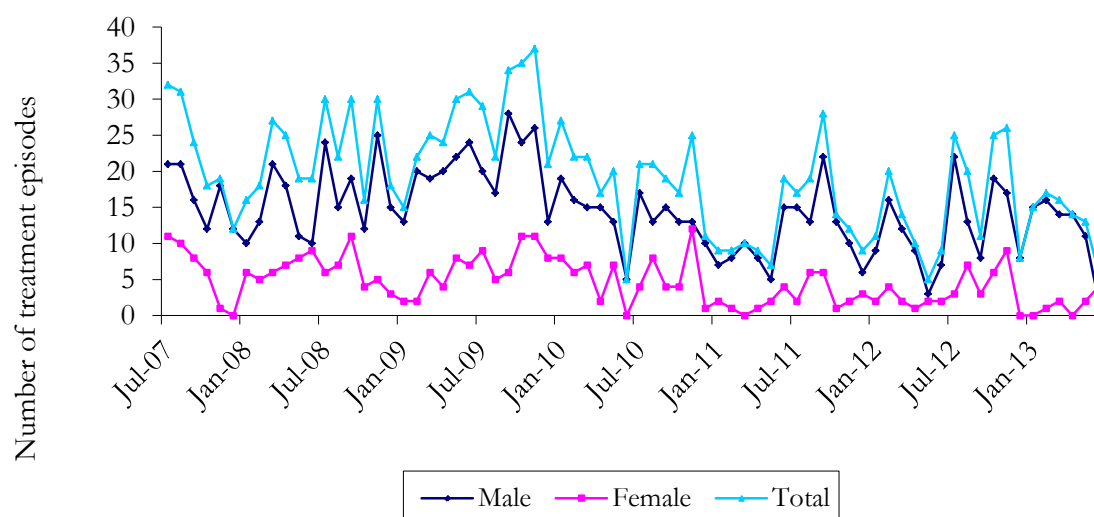
**Source: NSW Alcohol and Drug Information Service and Family Drug Support**

Note: FDS data refer to calls where any mention of cocaine was made. FDS is based in NSW but data may include some calls from interstate. ADIS data include calls made in NSW and ACT and refer

to the number of calls where cocaine was mentioned as any drug of concern. FDS data for May 2006 and June 2006 were not available. ADIS data for October 2011 to May 2012 were not available.

The number of closed treatment episodes based on date of commencement where cocaine was the principal drug of concern appeared to fluctuate from mid-2011 to early-2013 (Figure 78). Males continued to account for the vast majority of all treatment episodes.

**Figure 78: Number of cocaine treatment episodes by gender, NSW July 2007 to June 2013**



**Source: NSW MDS AODTS, NSW Ministry of Health**

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

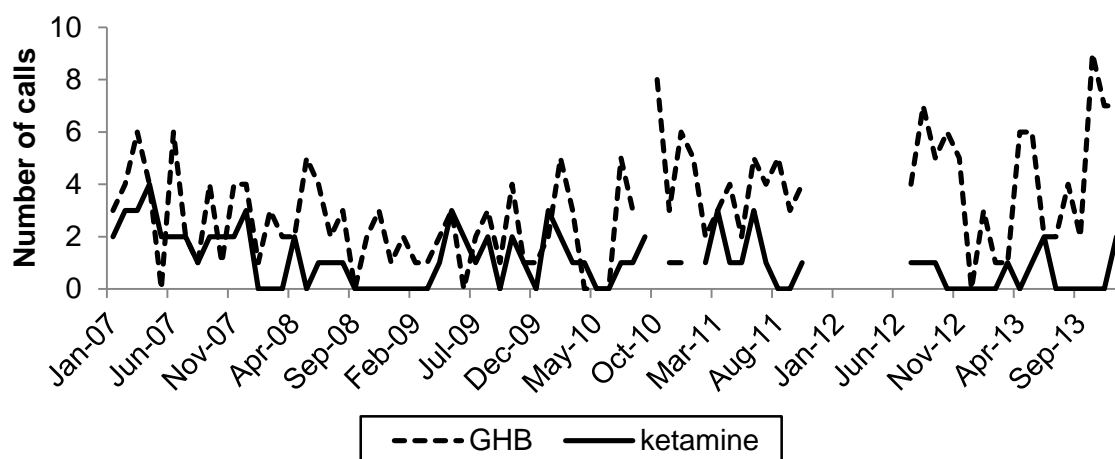
#### 6.4.4 Ketamine

Treatment-seeking for problems with ketamine use is low compared to other drugs. Data from the NSW Minimum Dataset show during the period 2002 – 2013 there were twenty closed treatment episodes based on the date of commencement where the principal drug of concern was ketamine (NSW MDS AODTS, NSW Ministry of Health). The NSW MDS is based on closed treatment episodes and so some episodes may be excluded if they did not finish in the given period.

##### *Calls to telephone helplines*

The number of calls to ADIS where ketamine was mentioned as a drug of concern continued to be low at less than 5 calls per month (Figure 79).

**Figure 79: Number of inquiries to ADIS regarding ketamine and GHB, January 2007 to December 2013**



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

Note: ADIS data include calls made in NSW and ACT and refer to the number of calls where ketamine or GHB was mentioned as any drug of concern. ADIS data for October 2011 to May 2012 were not available.

#### 6.4.5 GHB

Data from the NSW Minimum Dataset show that during the period 2002 - 2013 there have been forty six treatment episodes where GHB was the principal drug of concern (NSW MDS DATS, NSW Ministry of Health). There were no GHB episodes recorded in the 2012/13 period. The NSW MDS is based on closed treatment episodes and so some episodes may be excluded if they did not finish in the given period.

##### *Calls to telephone helplines*

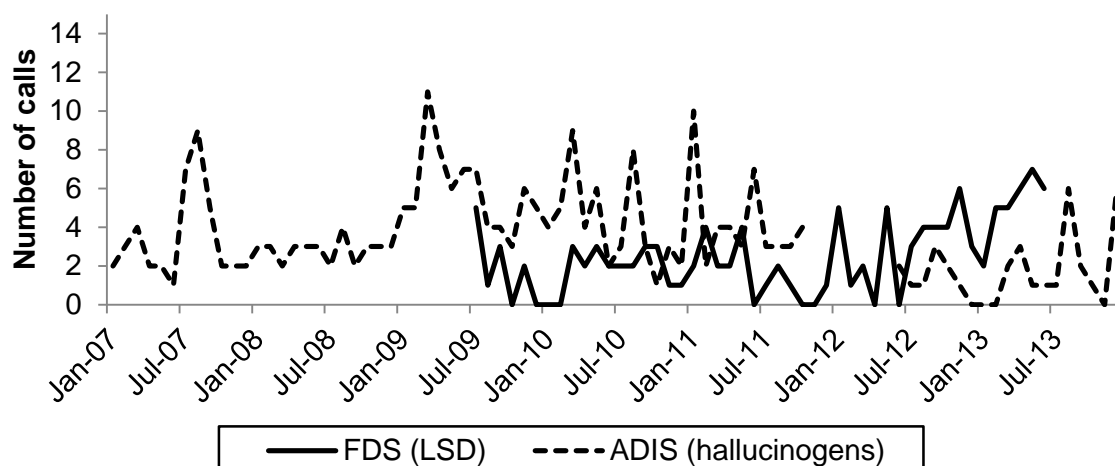
Calls to ADIS where GHB was mentioned have been fluctuating over time although they continue to be fairly low at less than ten per month (Figure 79).

#### 6.4.6 LSD

##### *Calls to telephone helplines*

Calls to ADIS and FDS where hallucinogens were mentioned as a drug of concern has fluctuated over time, although these figures have remained low at generally less than ten calls per month (Figure 80).

**Figure 80: Number of inquiries to ADIS and FDS regarding hallucinogens, January 2007 to December 2013**



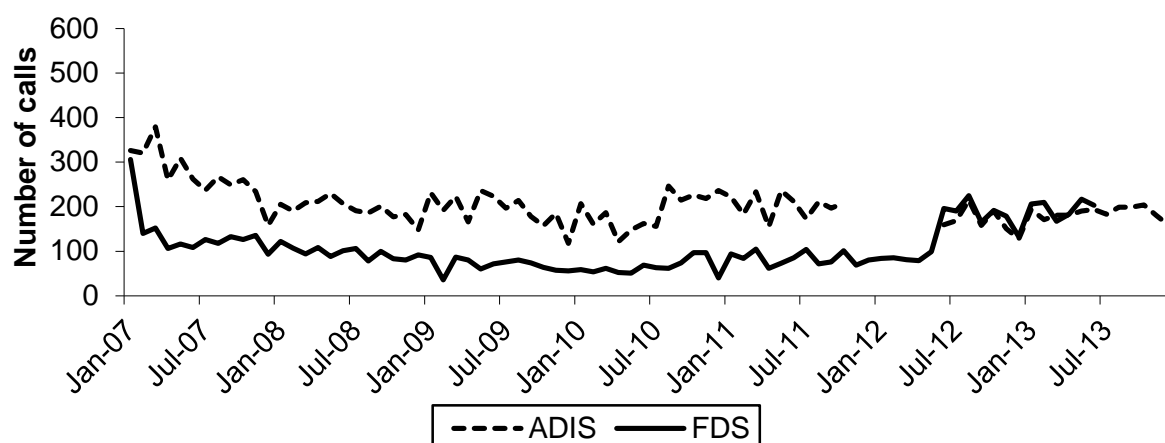
**Source: NSW Alcohol and Drug Information Service and Family Drug Support**

Note: FDS data refer to calls where any mention of cocaine was made. FDS is based in NSW but data may include some calls from interstate. ADIS data include calls made in NSW and ACT and refer to the number of calls where hallucinogens were mentioned as any drug of concern. ADIS data for October 2011 to May 2012 were not available. ADIS data for 2012/13 incorporates data for both hallucinogens and LSD.

#### 6.4.7 Cannabis

Figure 81 presents data on calls to the ADIS and FDS services where cannabis was mentioned as a drug of concern. The numbers of calls to ADIS and FDS have remained fairly stable since 2009; however, a notable increase in calls to FDS was recorded at mid-2012.

**Figure 81: Number of enquiries to ADIS and FDS regarding cannabis, January 2007 to December 2013**

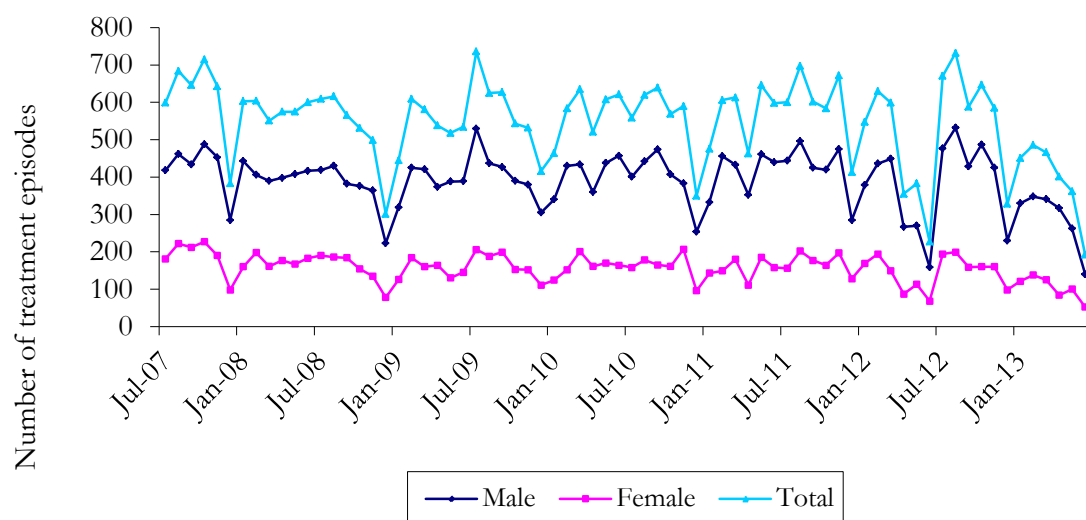


**Source: NSW Alcohol and Drug Information Service and Family Drug Support**

Note: FDS data refer to calls where any mention of cocaine was made. FDS is based in NSW but data may include some calls from interstate. ADIS data include calls made in NSW and ACT and refer to the number of calls where hallucinogens were mentioned as any drug of concern. ADIS data for October 2011 to May 2012 were not available.

Figure 82 shows the number of closed treatment episodes based on the date of commencement where the principal drug of concern was cannabis, by gender. These data remained relatively stable in 2011 and declined throughout early to mid-2012.

**Figure 82: Number of cannabis treatment episodes by treatment type, NSW July 2007 to June 2013**



**Source: NSW MDS AODTS, NSW Ministry of Health**

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

## 6.5 Other self-reported problems associated with ERD use

Participants were asked about a range of other problems associated with their drug use. Participants were asked if, in the past six months, their drug use had caused repeated problems with family, friends or people at work or school; if they had any recurrent drug-related legal problems; if they had recurrently found themselves in situations where they were under the influence of any drug and could have gotten themselves or others hurt, or put themselves or others at risk; or if their drug use had recurrently interfered with their responsibilities at home, work or school (Table 21).

- One-fifth (19%) reported that their use of drugs had caused repeated problems with family, friends or people at work or school in the six months prior to the interview. This was significantly lower than 2012 reports (33%,  $p < .05$ ). Cannabis was the drug most commonly identified as causing these problems, followed by ecstasy, alcohol and crystal methamphetamine.
- Only 3% of participants reported experiencing recurring legal problems due to drug use. These were primarily attributed to cannabis, followed by alcohol.
- One-fifth (21%) of the sample reported recurrently finding themselves in situations where they were under the influence of a drug and could have caused injury either to themselves or others, or put themselves or others at risk. Respondents most commonly identified cannabis as the main drug causing these problems followed by alcohol and ecstasy. Lower proportions reported crystal, GHB and heroin as the main drug causing these problems.
- Over one-third of the 2013 sample (36%) reported that their drug use had recurrently interfered with their responsibilities at home, at work or at school. Cannabis was the drug most commonly associated with these problems followed by ecstasy and alcohol. Lower proportions reported crystal and heroin as the main drug causing these problems.

Overall, it was evident that a sizeable proportion of RPU experienced problems associated with their drug use across multiple domains and that these were most commonly associated with the use of cannabis, ecstasy and alcohol. In 2012, alcohol was the most common drug reported to cause problems among RPU. However in the 2013 sample of NSW RPU, cannabis was the most frequent problem drug across all four categories of social, legal, risk and responsibility problems.

**Table 21: Self-reported drug-related problems among RPU, NSW 2013**

Problems in the following areas (last 6 mths):	Any drug (N=100)	Alcohol	Cannabis	Ecstasy	Crystal	GHB	Heroin
Social (%)	19	11	63	21	5	-	-
Legal (%)	3	33	67	-	-	-	-
Risk (%)	21	29	43	14	5	5	5
Responsibility (%)	36	19	42	25	6	-	6

Source: EDRS regular psychostimulant user interviews 2013

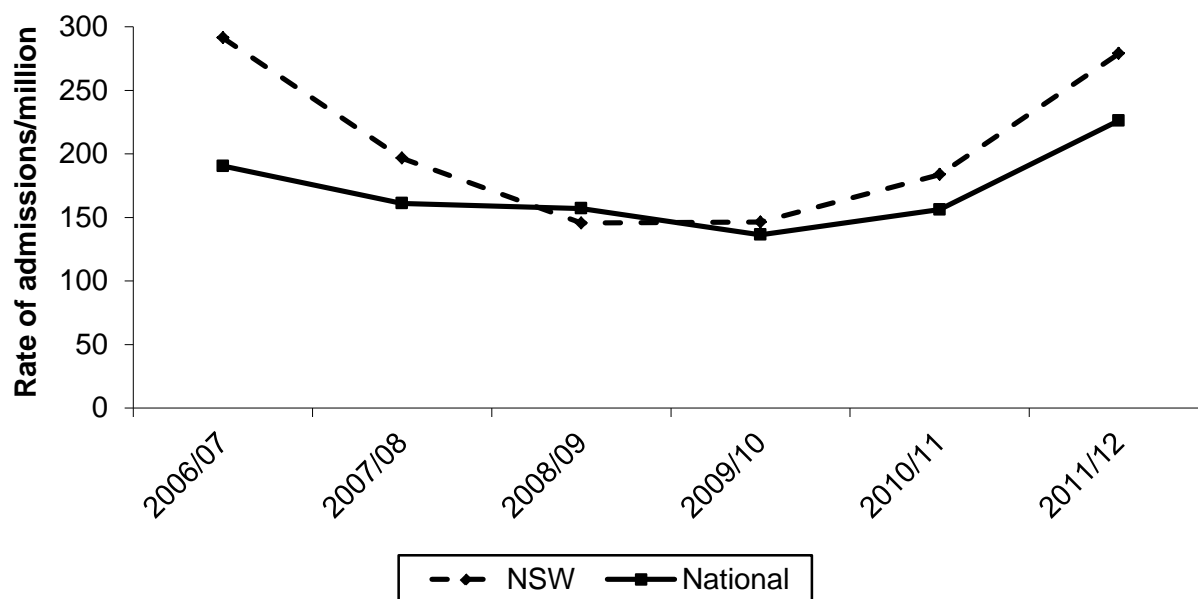


## 6.6 Hospital admissions

### 6.6.1 Methamphetamine

The rate per million of inpatient hospital admissions among persons aged 15-54 years in which amphetamines were the principal diagnosis is shown in Figure 83 below. A principal diagnosis is defined as having been chiefly responsible for occasioning the patient's episode of care in hospital. Both NSW and national rates appear to have increased from 2009/10 to 2011/12.

**Figure 83: Number per million persons of principal amphetamine-related hospital admissions among persons aged 15-54, NSW and nationally, 2006/07-2011/12\***



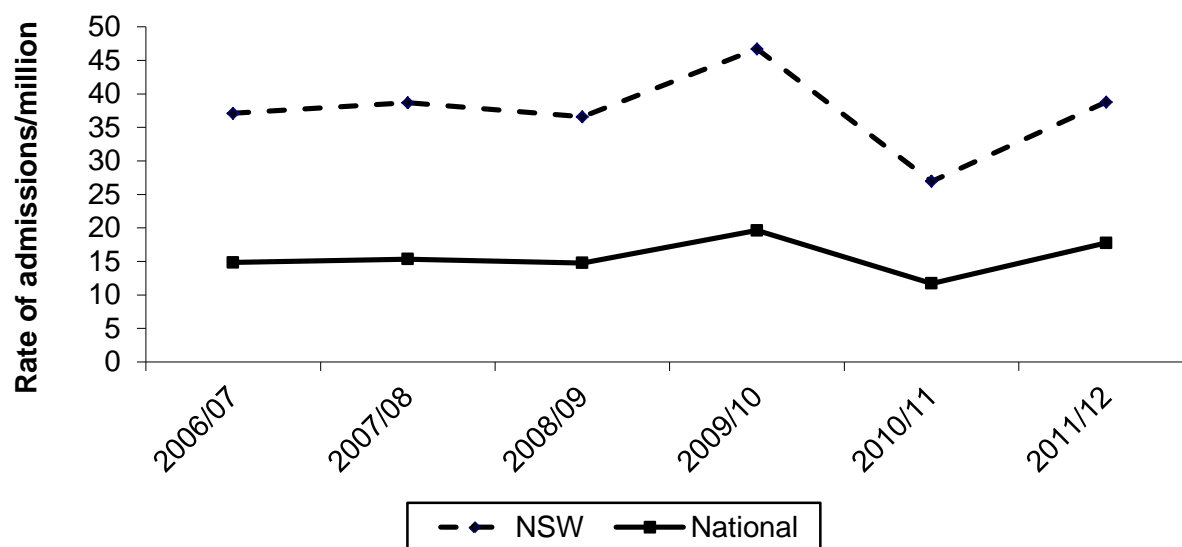
**Source: National Hospital Morbidity Database, AIHW; Roxburgh & Burns (in press)**

\*Data for 2011/12 and 2012/13 were unavailable at time of publication

### 6.6.2 Cocaine

The rates of inpatient hospital admissions where cocaine was the principal diagnosis per million people aged 15-54 years are shown in Figure 84. Both the NSW and national rates appear to have remained stable from 2009/10 to 2011/12.

**Figure 84: Number per million persons of principal cocaine-related hospital admissions among persons aged 15-54, NSW and nationally, 2006/07-2011/12\***



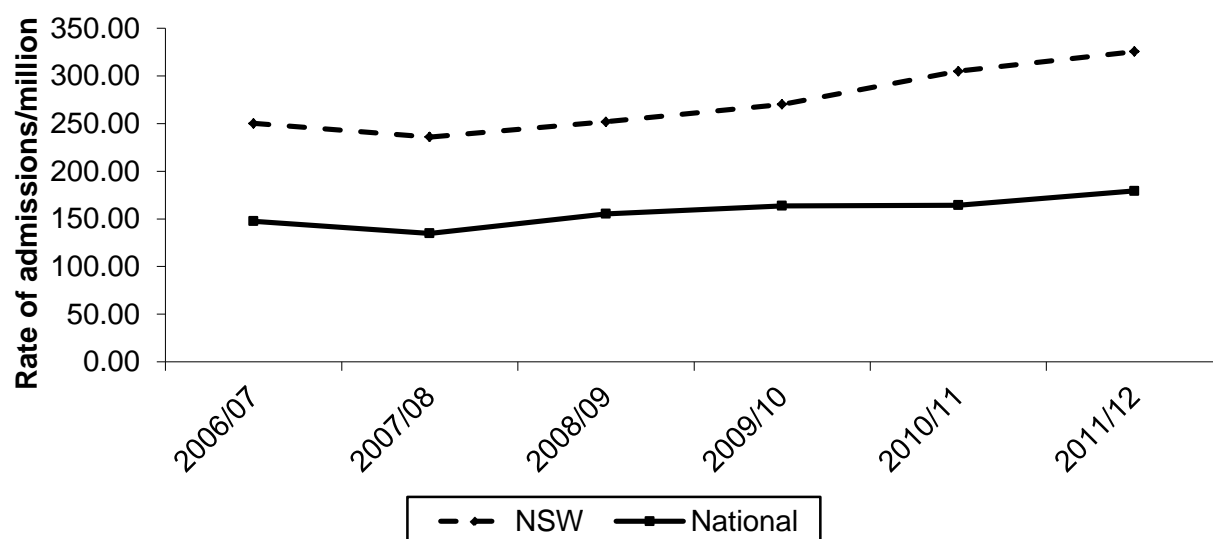
**Source: National Hospital Morbidity Database, AIHW; Roxburgh & Burns (in press)**

\*Data for 2010/11 and 2011/12 were unavailable at time of publication

### 6.6.3 Cannabis

Figure 85 shows the rates of hospital admissions where cannabis was the principal diagnosis per million people aged 15-54 years. Rates in NSW remained higher than nationally, and had been so for the duration of the study. Since 2000/01, NSW accounted for between 50-60% of Australian inpatient hospital admissions where cannabis was the principal diagnosis. These rates appear to be rising over time.

**Figure 85: Number per million persons of inpatient hospital admissions where cannabis was the principal diagnosis aged 15-54 years, NSW and nationally, 2006/07-2011/12\***



**Source: National Hospital Morbidity Database, AIHW; Roxburgh & Burns (in press)**

\*Data for 2010/11 and 2011/12 were unavailable at time of publication

## 6.7 Mental health and psychological distress

### 6.7.1 Self-reported mental health

Participants were asked whether they had experienced any mental health problems over the previous six months (Table 22). Almost one-third (30%) of the group had recently experienced a mental health problem, a figure which is slightly higher than that recorded among the general population of a similar age range (16-24 years (26%) and 25-34 years (25%)) (Australian Bureau of Statistics, 2007). Mood and anxiety disorders were those most commonly reported by far. Three-fifths (63%) of those who experienced a mental health problem sought assistance from a health professional, and almost one-third (32%) had been prescribed medication (most commonly antidepressants).

Trends over time in self-reported mental health problems and help-seeking behaviours around these are presented in Table 22. Overall, these figures appear relatively stable from 2012 to 2013; however, there are two notable trends. First, there was an increase in the proportion of respondents who self-reported anxiety and paranoia as recent mental health problems to levels previously observed prior to 2012. Second, there was a distinct decrease in the proportion of respondents who were prescribed medication for their mental health problem in the previous 12 months compared to 2012 which has returned to comparable levels to 2011 and prior years.

**Table 22: Mental health problems among RPU, NSW 2009-2013**

Variable	2009 (N=100)	2010 (N=100)	2011 (N=100)	2012 (N=100)	<b>2013 (N=100)</b>
Any mental health problem recently (%)	28	22	26	30	<b>30</b>
<i>Of these (%):</i>					
Depression	57	55	73	53	<b>67</b>
Anxiety	43	46	46	47	<b>70</b>
Panic	18	-	4	7	<b>10</b>
Bipolar Disorder	4	9	8	7	-
Mania	-	-	-	7	-
Paranoia	11	-	8	3	<b>23</b>
Personality Disorder	-	-	-	3	-
Schizophrenia	-	-	4	-	-
Drug-Induced Psychosis	-	-	4	-	<b>3</b>
Obsessive Compulsive Disorder	-	5	-	-	-
Sought help from health professional (%)	43	62	62	67	<b>63</b>
Prescribed medication <sup>^</sup> (%)	29	45	35	73	<b>32</b>

**Source: EDRS regular psychostimulant user interviews 2009-2013**

<sup>^</sup> Percentage of all of those who had recently experienced a mental health problem

### 6.7.2 Kessler Psychological Distress Scale (K10)

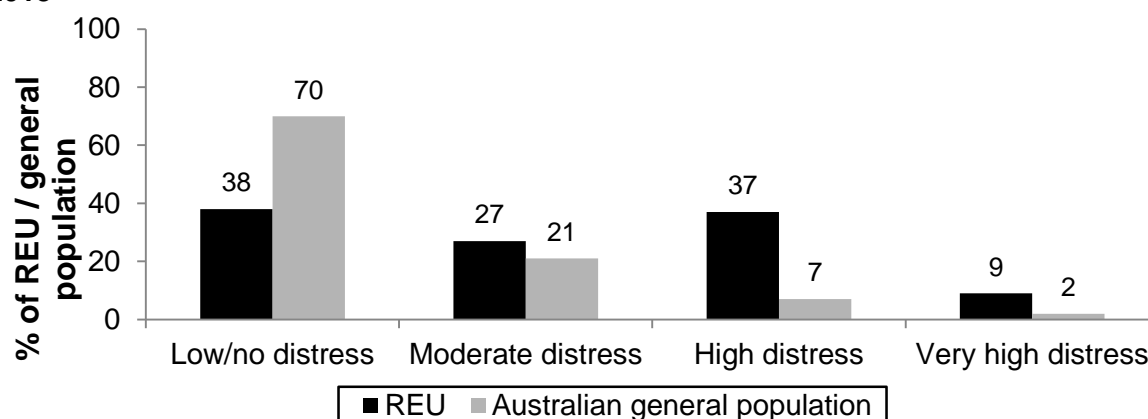
From 2006, the EDRS has included the 10-item Kessler Psychological Distress Scale (K10) (Kessler et al., 2002), which is a questionnaire designed to measure the level of distress and severity associated with psychological symptoms in population surveys. The minimum score

is 10 and the maximum is 50. Scores ranging from 10-15 are classified as 'low/no distress', 16-21 'moderate distress', 21-29 'high distress' and 30-50 'very high distress' (Australian Institute of Health and Welfare, 2008a).

The median score for participants was 18 (range 10-45). The majority of participants' scores fell into the 'low/no distress' (38%) and 'moderate distress' (27%) categories. However, the remaining one-third fell into the 'high distress' (27%) or 'very high distress' (9%) categories (Figure 86).

Figure 86 compares the spread of RPU scores across these four categories with those of the general Australian population. While more than two-thirds of the general population fell into the low/no distress category, only 38% of RPU in the current sample fell into this category. This places a much higher proportion of RPU into the categories indicative of at least some level of psychological distress. Overall, RPU appear to experience a higher level of psychological distress than the wider Australian public.

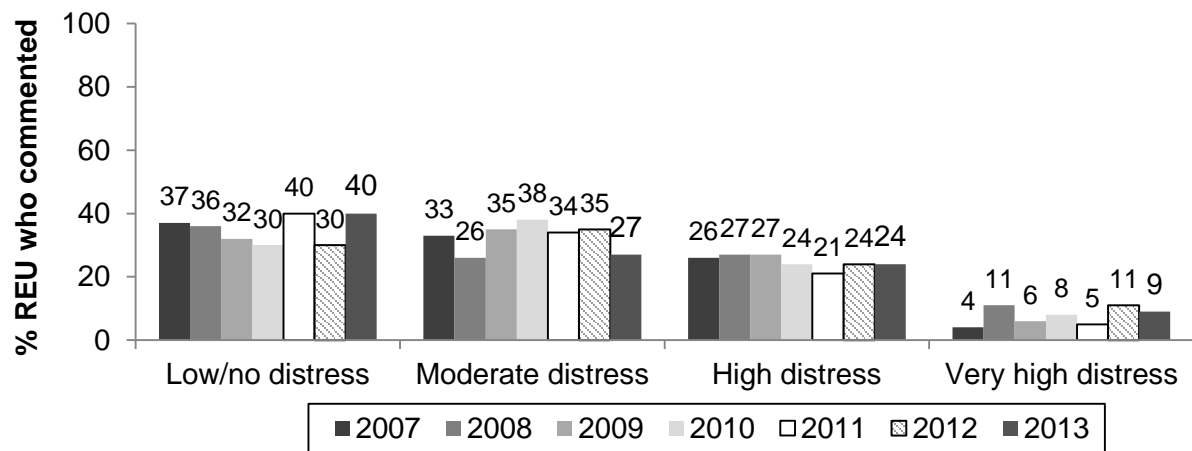
**Figure 86: K10 scores for RPU compared with the general Australian population, NSW 2013**



Source: EDRS regular psychostimulant user interviews 2013; Australian Institute of Health and Welfare (2011)

Figure 87 presents data across time on the proportions of each sample from 2007 to 2013 that fell into each distress category. While data appear to have remained relatively stable over time, there was a notable decrease in the proportion of respondents scoring 'moderate distress' in 2013 compared to prior years.

**Figure 87: K10 scores across time for RPU, NSW 2007-2013**



**Source: EDRS regular psychostimulant user interviews 2007-2013**

## 7 RISK BEHAVIOUR

### Summary:

- Eight participants had ever injected a drug and six had done so recently.
- Three-fifths of the sample had recently had penetrative sex with a casual partner. Twelve percent of participants did not use a sexual barrier on the last occasion, when intoxicated, and 14% did not when sober. The main reasons were either that the other partner was using contraception, participants didn't want to or that protection was not available.
- Three-fifths of the sample had recently driven a vehicle. Of these, one-quarter had done so while over the legal blood alcohol limit and under half had driven after having taken an illicit drug.
- Participants completed the Alcohol Use Disorders Identification Test (AUDIT). One-third (66%) of the group fell in the 'harmful drinking' range.

### 7.1 Injecting risk behaviour

Eight participants had ever injected a drug and only six had done so within the past six months, a significant drop from 20 participants in 2012 ( $p < .01$ ). Among those who had ever injected, the median number of drug types injected<sup>16</sup> was 2 (range 1-10) and, among recent injectors, the median number of drug types injected was 1.5 (range 1-4) (Table 23).

**Table 23: Injecting risk behaviour among RPU, NSW 2010-2013**

Variable	2010 (N=100)	2011 (N=100)	2012 (N=100)	2013 (N=100)
Ever injected (%)	22	13	20	8
Median number of drugs ever injected <sup>^</sup> (range)	4 (1-15)	3 (1-9)	5 (1-10)	2 (1-10)
Injected last 6 mths (%)	15	8	13	6
Median number of drugs injected last 6 mths <sup>#</sup> (range)	2 (1-7)	2 (1-4)	2 (1-7)	1.5 (1-4)

**Source: EDRS regular psychostimulant user interviews 2010-2013**

<sup>^</sup> Of those who had ever injected

<sup>#</sup> Of those who had injected in the last 6 months

<sup>16</sup> This figure was calculated without combining licit and illicit benzodiazepines, pharmaceutical stimulants or antidepressants and may be higher than previous years where these drug types had been combined.

## 7.1.1 Lifetime injectors

### *Patterns of lifetime injecting drug use*

The median age of initiation for respondents who had ever injected was 20 years (range 13-45). A wide range of drug types had ever been injected; however, those most frequently reported were crystal, heroin, cocaine and speed, base and ecstasy pills (Table 24). The most common drug first injected was heroin (n=3). Respondents also reported first injecting ecstasy, speed, crystal, cocaine and ketamine (n=1 respectively).

**Table 24: Injecting drug use history among RPU injectors, NSW 2011-2013**

Drug variable	Ever injected (%)			Ever injected (n)		
	2011	2012	2013	2011	2012	2013
Crystal	39	75	<b>63</b>	5	15	<b>5</b>
Heroin	31	60	<b>63</b>	4	12	<b>2</b>
Cocaine	31	60	<b>50</b>	4	12	<b>1</b>
Speed	31	65	<b>50</b>	4	13	-
Base	31	45	<b>50</b>	4	9	-
Ecstasy pills	15	40	<b>50</b>	2	8	<b>1</b>
Methadone	15	15	-	2	3	-
Other opiates	8	25	<b>13</b>	1	5	-
LSD	8	-	<b>13</b>	1	-	-
Ketamine	8	30	<b>25</b>	1	6	-
MDA	8	5	-	1	1	-
Buprenorphine	8	15	<b>13</b>	1	3	<b>1</b>
Benzodiazepines (licit)	-	5	-	-	1	-
Benzodiazepines (illicit)	-	5	<b>13</b>	-	1	-
Ecstasy capsules	-	15	<b>13</b>	-	3	<b>1</b>
Alcohol	8	5	<b>13</b>	1	1	-
Ecstasy powder	-	15	-	-	3	-
Pharmaceutical stimulants (illicit)	8	10	-	1	2	-
Antidepressants (licit)	-	5	-	-	1	-

**Source: EDRS regular psychostimulant user interviews 2011-2013**

## 7.1.2 Recent injectors

### *Patterns of recent injecting drug use*

Participants who had injected a drug in the six months prior to the interview (n=6) reported having injected any drug a median of 18 times (range 2-25) over this period. Participants were asked about the last time they had injected a drug. Crystal methamphetamine (n=3) and heroin (n=2) were the two drugs most commonly last injected. Most participants who had injected recently had done so in their own home (n=3); others reported injecting at a friend's home, a public toilet or a medically supervised injecting centre (n=1 respectively).

### *Injecting risk behaviour*

No respondents reported having used a needle after someone else in the past six months. All six participants had used spoons/mixing containers after someone else.

### *Context of injecting*

All participants reported usually injecting with others over the preceding six months, most commonly regular sex partners (n=4); however, the remaining two participants reported injecting with casual sex partners. Two of the six recent injectors had injected while under the influence of ecstasy and other drugs over the past six months and three had injected while 'coming down' from ecstasy or related drugs.

### *Obtaining needles*

Respondents were asked to identify where they had obtained needles from over the preceding six months. Needles were obtained from needle and syringe program vending machines (n=4) and chemists (n=2).

## 7.1.3 Injecting drug use in other populations

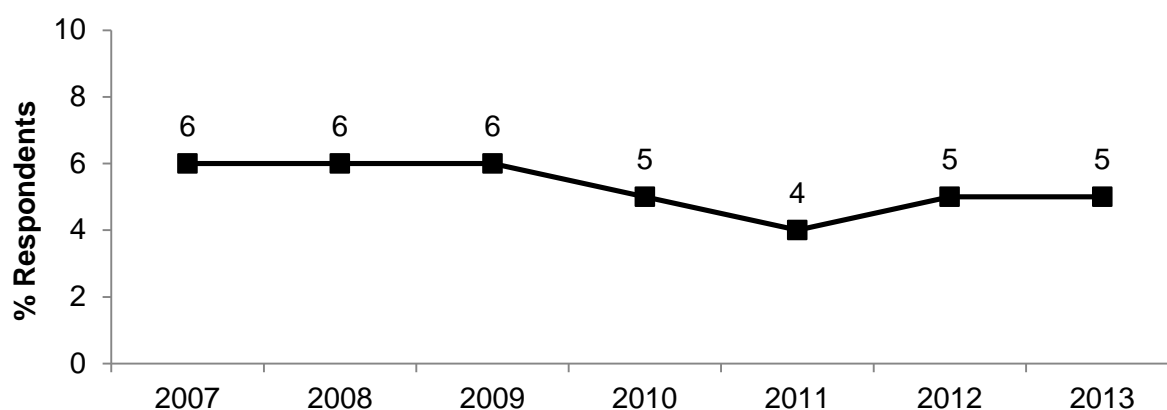
### *General population*

The 2010 National Drug Strategy Household Survey report indicates that the proportion of the general population in NSW aged 14 years or over who had injected a drug in the past 12 months had remained relatively stable at 0.4% (versus 0.5% in 2007).

### *Sydney Gay Community Periodic Survey*

Data collected from the Sydney Gay Community Periodic Survey showed that, across sampling years, less than one-in-ten had injected any drug in the six months prior to interview (Figure 88). In 2013, 5% of the sample had recently injected any drug.

**Figure 88: Proportion of gay men in Sydney reporting recent injecting drug use, 2007-2013**



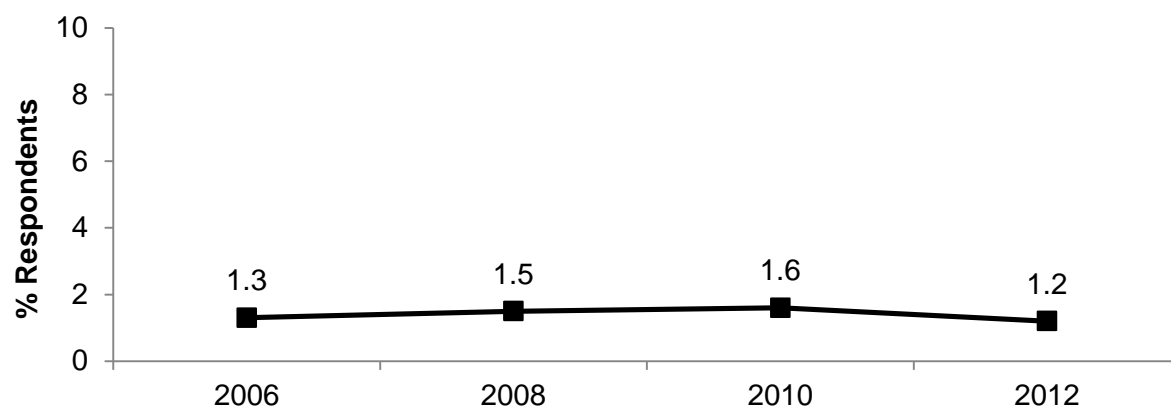
Source: Sydney Gay Community Periodic Survey 2007-2013



*Sydney Women and Sexual Health Survey*

Data collected from the Sydney Women and Sexual Health Survey showed that recent injecting drug use is relatively low and stable among this group, with 1.2% of the sample injecting any drug in the six months prior to interview (Figure 89) (Mooney-Somers, Deacon, Comfort, Richters & Parkhill, 2013).

**Figure 89: Proportion of LBQ women in Sydney reporting recent injecting drug use, 2006-2012**



Source: Sydney Women and Sexual Health Survey 2006-2012

## 7.2 Sexual risk behaviour

Participants were asked questions about their recent sexual activity, particularly with regards to penetrative sex. This was defined as 'penetration by penis or fist of the vagina or anus'. Given the sensitive nature of these questions, participants were given the option of self-completing this section of the questionnaire.

Approximately three-fifths (57%) of the sample reported having had penetrative sex with at least one casual partner (i.e. someone who was not a regular partner) over the preceding six months. Of the 57 participants who reported penetrative sex with a casual partner, 46 participants (81%) reported having done so while under the influence of alcohol or drugs (Table 25). The drugs most commonly used were ecstasy, alcohol, cannabis, amyl nitrate and LSD.

**Table 25: Trends in sexual activity with casual partners in the past six months among RPU, NSW 2010-2013**

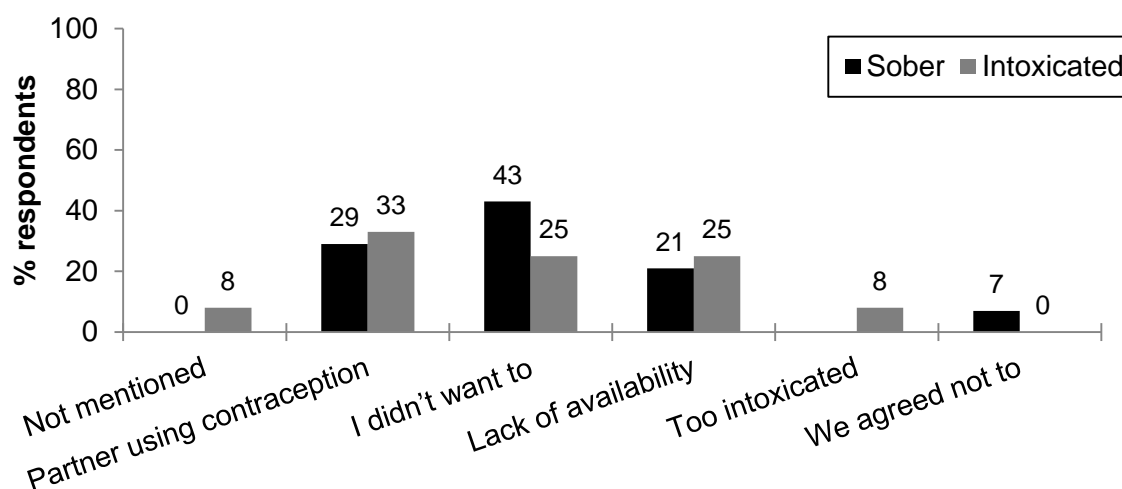
Variable	2010 (N=100)	2011 (N=100)	2012 (N=100)	2013 (N=100)
Casual penetrative sex (%)	60	73	71	57
<i>No. of sexual partners (%):*</i>				
1 person	35	18	19	30
2 people	10	19	17	18
3-5 people	37	41	24	33
6-10 people	12	12	7	16
10+ people	7	8	4	4
Penetrative sex with casual partner while on drugs	n=47	n=64	n=65	n=46
<i>Drugs used (%):</i>				
Ecstasy	55	48	63	63
Alcohol	72	81	48	57
Cannabis	47	48	43	35
Cocaine	11	23	17	9
Crystal	6	14	9	-
LSD	9	9	3	11
Amyl nitrite	6	5	6	13
Ketamine	9	5	6	4
Speed	6	5	6	2
GHB	9	3	5	2
Base	9	2	-	-
Benzodiazepines	4	2	5	-
Pharmaceutical stimulants	-	-	5	-
Heroin	7	2	2	-

**Source: EDRS regular psychostimulant user interviews 2010-2013**

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

Participants were also asked whether they had used a protective sexual barrier the last time they had penetrative sex with a casual partner. The majority of the sample had done so when they were sober (70%) and while under the influence of drugs or alcohol (76%). The major reasons for not using protection were that the sexual partner was using contraception, participants did not want to use them or protective barriers were not available (Figure 90).

**Figure 90: Reasons for not using protective barriers among RPU, NSW 2013**



Source: EDRS regular psychostimulant user interviews 2013

### 7.3 Driving risk behaviour

Participants were asked a series of questions regarding driving and the use of alcohol and other drugs (Table 26). Three-fifths (62%) of participants in 2013 had driven a car, motorcycle or other vehicle in the preceding six months. Of these participants who had driven, one-quarter (24%) had done so over the legal blood alcohol limit.<sup>17</sup> Those who had driven over the legal limit reported having done this on a median of 2 occasions (range 1-10) in the preceding six months. Half (50%) of those who had driven during the last six months had been subject to a roadside breath test within that time. No participants reported having tested over the legal blood alcohol limit.

Just under half (46%) of those who had recently driven had done so after using an illicit drug on a median of 4.5 occasions (range 1-60). The drugs most commonly used prior to driving included cannabis (86%) and ecstasy (43%).

**Table 26: Drug driving in the last six months among RPU, NSW 2009-2013**

Variable	2009 (N=100)	2010 (N=100)	2011 (N=100)	2012 (N=100)	2013 (N=100)
Driven a car in the past six months (%)	75	65	57	65	<b>62</b>
Driven over the limit of alcohol* (%)	40	37	38	65	<b>24</b>
Driven after taking an illicit drug* (%)	68	59	55	59	<b>46</b>
<i>Of those who had driven after taking a drug:</i>					
Drug (%)	n=50	n=38	n=31	n=38	n=28
Cannabis	64	68	68	74	<b>86</b>
Ecstasy	60	40	48	40	<b>43</b>
Cocaine	8	13	19	11	-
LSD	6	5	7	11	<b>7</b>
Crystal	4	5	3	11	-
Heroin	-	-	-	5	-
Ketamine	4	3	3	3	-
GHB	-	-	3	3	-
Benzodiazepines	-	3	7	3	<b>4</b>
MDA	-	-	-	3	<b>7</b>
Nitrous oxide	-	-	-	3	-
Speed	8	5	7	2	-
Base	8	-	3	2	-
Mushrooms	2	-	7	-	<b>4</b>
Amyl nitrite	-	-	-	-	-

**Source: EDRS regular psychostimulant user interviews 2009-2013**

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

Participants were asked a series of questions focusing on the last occasion on which they drove after taking an illicit drug. The drugs most commonly reported as having been taken

<sup>17</sup>Participants reported according to their own perception of their blood alcohol content.

on the last occasion were cannabis (68% of respondents), ecstasy (39%) and LSD (7%). Participants reported having driven a median of 2 hours (range 0-15) after taking an illicit drug.

When asked how they thought their recent use of drugs had impacted on their driving ability on the last occasion, just under half believed that they had been impaired (7% 'quite impaired' and 39% 'slightly impaired'). One-third (32%) believed that there had been no impact on their driving ability and more than one-fifth believed that it had been 'slightly improved'. Three participants have previously been tested by a police roadside drug testing van, of which one had tested positive for cannabis.

## 7.4 Problematic alcohol use among RPU

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

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

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

The median score on the AUDIT for the NSW 2013 sample was 10 (range 0-28). The majority (66%) of RPU scored in the harmful range (i.e. total score of 8 or more). There was no significant difference between male and female median scores (9 versus 11). The AUDIT guidelines (Babor et al., 2001) indicate four 'zones' into which total scores on the test can be divided. In the current sample, one-third (34%) scored in zone 1 (low risk drinking or abstinence), almost half (48%) scored in zone 2 (alcohol in excess of low-risk guidelines), one-tenth (10%) scored in zone 3 (harmful or hazardous drinking) and the remaining eight percent scored in zone 4 (possible alcohol dependence – may be referred for evaluation and possible treatment).

## 8 LAW ENFORCEMENT-RELATED TRENDS ASSOCIATED WITH ERD USE

### Summary:

- Eight percent of RPU had reportedly been arrested over the past year.
- Over one-quarter of RPU had committed a crime within the past month; most commonly drug dealing and property crimes.
- The number of arrests for ecstasy use/possession seemed to have decreased since mid-2013. However, the opposite was seen for amphetamines and cocaine, showing an increased number of arrests from mid-2013.

### 8.1 Reports of criminal activity among RPU

Less than one-tenth (8%) of RPU interviewed in 2013 had reportedly been arrested over the preceding 12 months. There had been two arrests for use/possession of illicit substances, property crime, violent crime and drunk and disorderly behaviour, respectively. One individual was arrested for driving under the influence of alcohol.

Almost one-fifth (18%) of participants had dealt drugs in the month leading up to the interview. Of these, the majority of respondents (n=13) had done so less than once a week. Over one-fifth (22%) of RPU had committed a property crime over the last month; again, mostly less than once per week (n=16). Three participants engaged in violent crime in the past month, all of which did so on less than a weekly basis. No participants reported engaging in fraud in the last month.

Table 27 presents data across time on both self-reported criminal activity and arrests among samples of RPU. In 2013, over one-quarter of participants reported having committed any crime in the month preceding the interview. Drug dealing has been the most commonly reported crime across time; however, in 2013 the most commonly reported activity was property crime. Nonetheless these data have been relatively stable from 2012 to 2013.

**Table 27: Criminal activity reported by RPU, NSW 2007-2013**

Variable	2007 (N=100)	2008 (N=100)	2009 (N=99)	2010 (N=100)	2011 (N=100)	2012 (N=100)	2013 (N=100)
<i>Any criminal activity in the last month</i>	23	24	36	35	44	33	<b>27</b>
Drug dealing	15	15	21	26	26	20	<b>18</b>
Property crime	13	11	18	18	26	18	<b>22</b>
Fraud	1	2	3	4	1	4	-
Violent crime	2	1	8	4	5	4	<b>3</b>
<i>Arrested last 12 months</i>	14	5	11	24	14	14	<b>8</b>

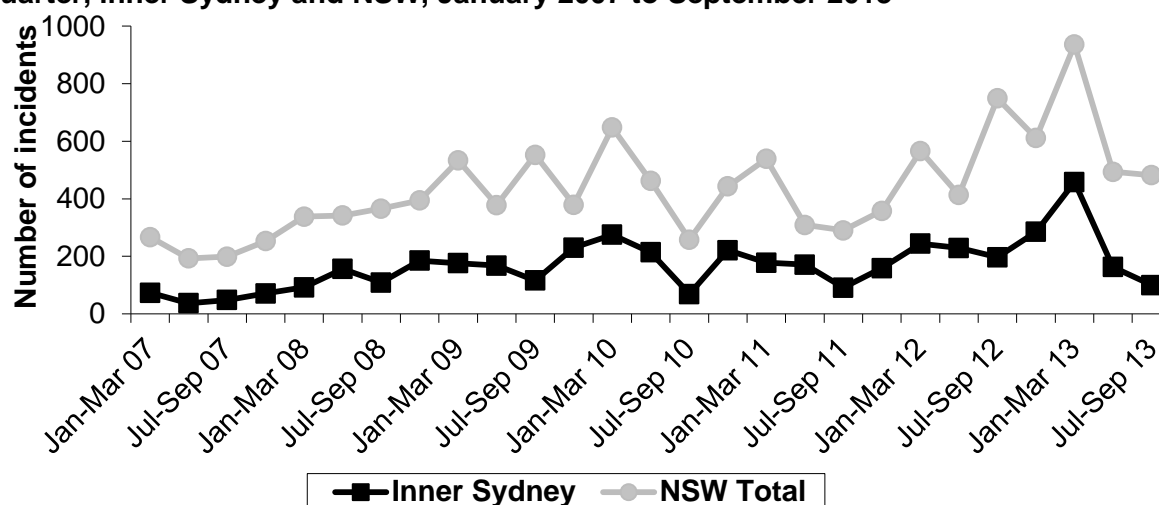
Source: EDRS regular psychostimulant user interviews 2007-2013

## 8.2 Arrests

### 8.2.1 Ecstasy

Figure 91 presents the number of police-recorded criminal incidents for ecstasy possession and use in inner Sydney and NSW. While number of incidents per month was highly variable, in the previous 12 months there appeared to be an increasing trend.

**Figure 91: Number of police incidents recorded for ecstasy possession/use per quarter, inner Sydney and NSW, January 2007 to September 2013**

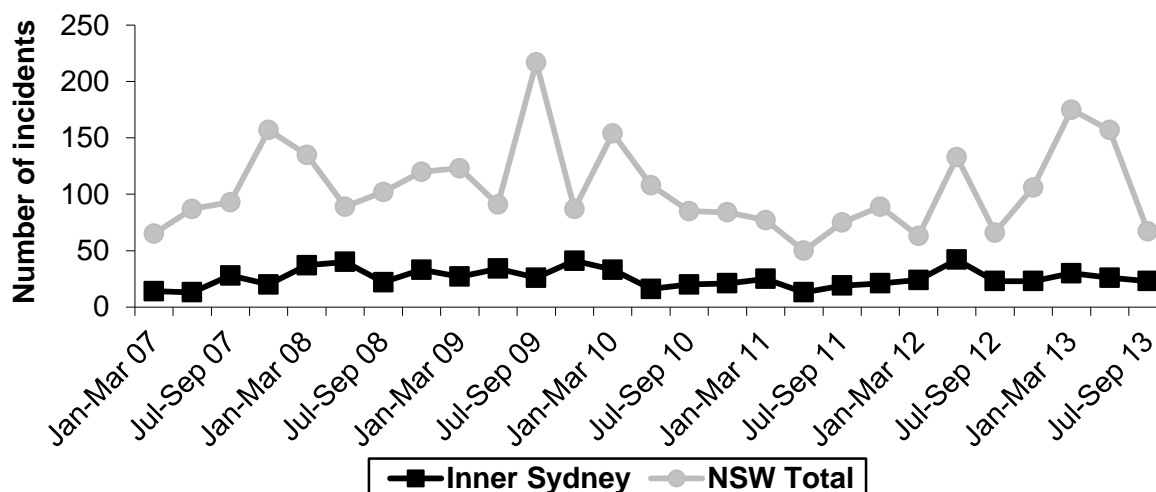


Source: NSW Bureau of Crime Statistics and Research (BOCSAR)

Figure 92 presents the number of police-recorded incidents for ecstasy dealing and trafficking for inner Sydney and NSW. The number of incidents involving dealing or trafficking of ecstasy has been fluctuating and no noticeable trends can be seen in the past seven years.

**Figure 92: Number of police incidents recorded for ecstasy deal/traffic per quarter, inner Sydney and NSW, January 2007 to September 2013**



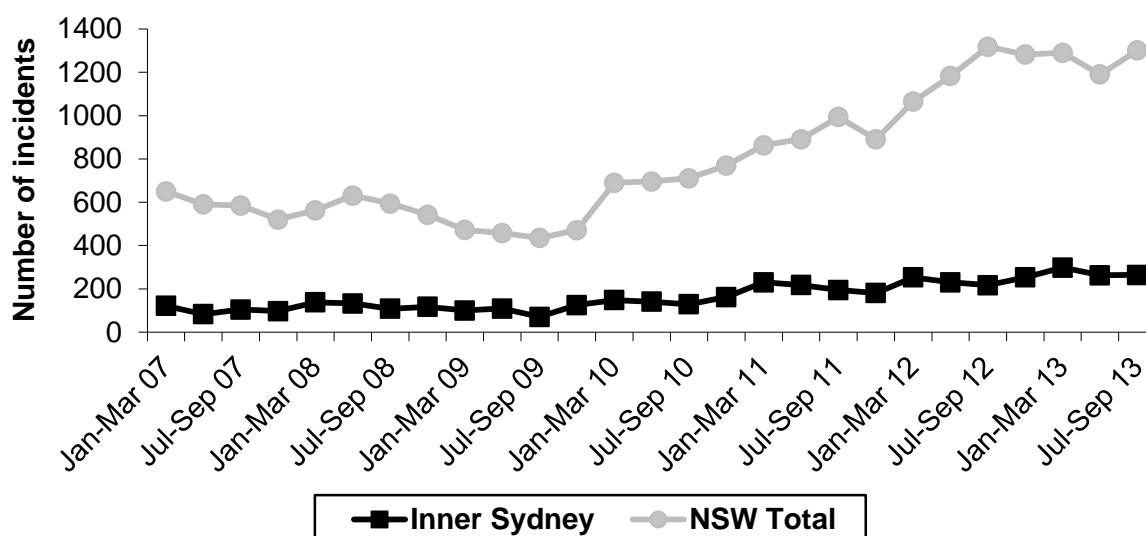


Source: NSW Bureau of Crime Statistics and Research (BOCSAR)

### 8.2.2 Methamphetamine

Figure 93 shows the recorded incidents of amphetamine possession or use for inner Sydney and NSW. There appears to have been an increase in the number of arrests in NSW from late 2009 onward. Figures for the inner Sydney region also show a slight increasing trend over this time.

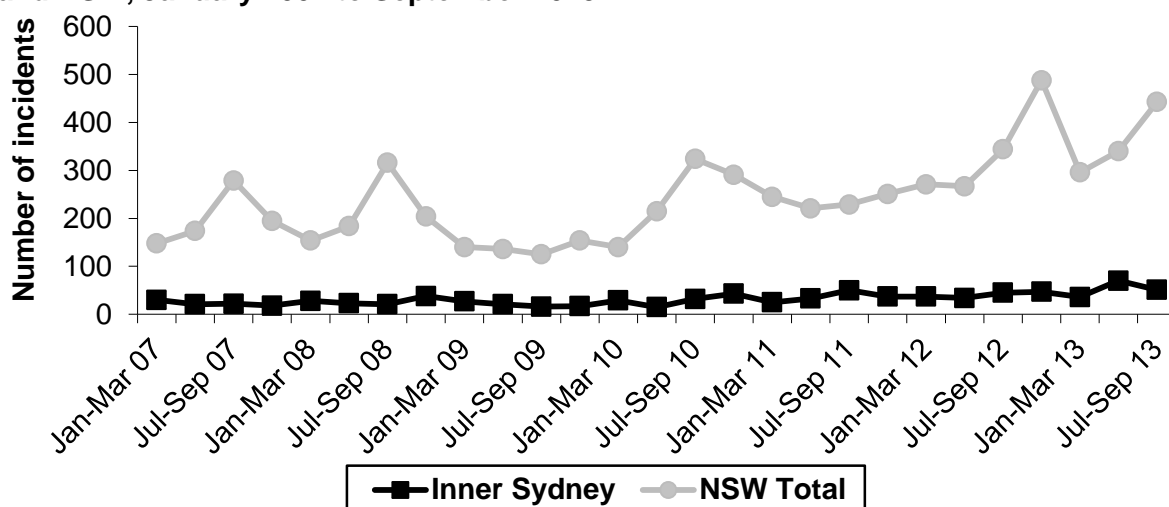
**Figure 93: Recorded incidents of amphetamine possession/use per quarter, inner Sydney and NSW, January 2007 to September 2013**



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

Figure 94 shows the number of police-recorded criminal incidents for amphetamine dealing or trafficking in inner Sydney and NSW. After increasing from mid-2009 to late-2010, these figures began to fall slightly in 2011, but have increased in NSW in the last 12 months. In contrast, figures have remained relatively stable in the inner Sydney region over this time.

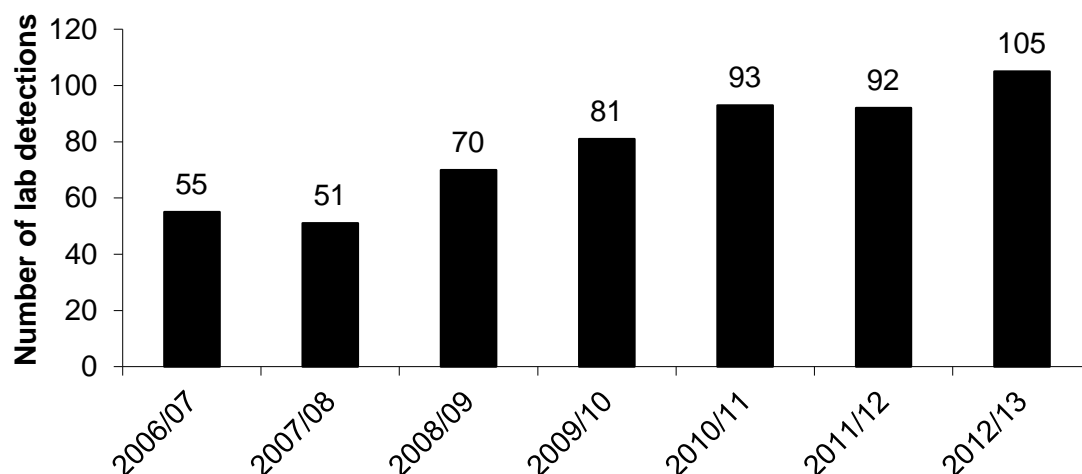
**Figure 94: Recorded incidents of amphetamine deal/traffic per quarter, inner Sydney and NSW, January 2007 to September 2013**



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

The number of clandestine methamphetamine and MDMA laboratories detected in NSW has trended upwards from 2007/08 to 2012/13. In the 2012/13 financial year, there were 105 detections in NSW (Figure 95).

**Figure 95: Number of clandestine methamphetamine and MDMA laboratories detected by NSW police 2006/07-2012/13**



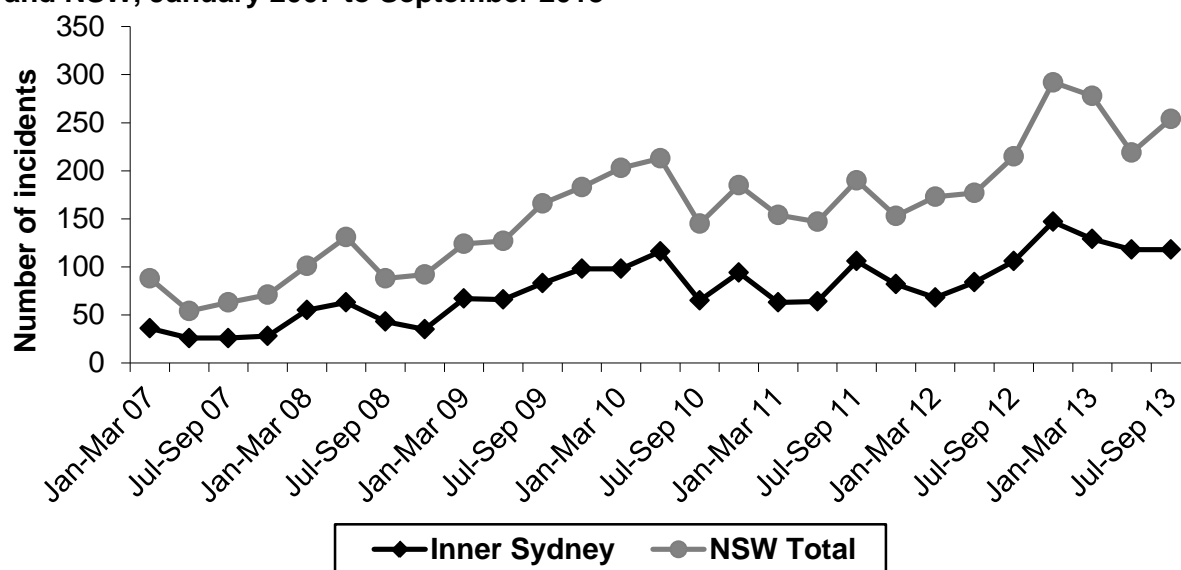
Source: NSW Police Force

Note: Data may include active, non-active and historical laboratories as well as storage sites.

### 8.2.3 Cocaine

The number of police-recorded incidents for cocaine possession/use have been increasing since approximately mid-2007 (Figure 96). Incidents reported in inner Sydney represent approximately half of all incidents recorded in NSW, and have continued to do so over time.

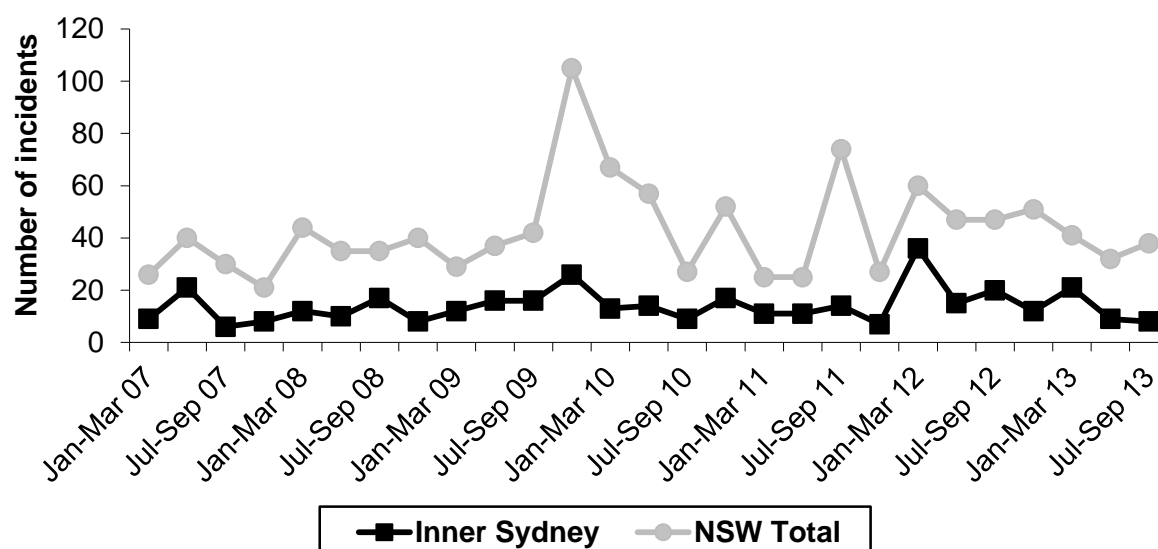
**Figure 96: Recorded incidents of cocaine possession/use per quarter, inner Sydney and NSW, January 2007 to September 2013**



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

Figure 97 shows the number of police-recorded criminal incidents for cocaine dealing or trafficking in the inner Sydney region and NSW. There appeared to be a spike in the number of arrests made in NSW in late-2009; however, these figures returned to prior levels by mid-to late-2010 and continued to remain relatively stable into 2012. A noticeable spike in cocaine dealing or trafficking incidents in inner Sydney was recorded in early 2012; however, these figures have now returned to prior levels.

**Figure 97: Recorded incidents of cocaine deal/traffic per quarter, inner Sydney and NSW, January 2007 to September 2013**



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

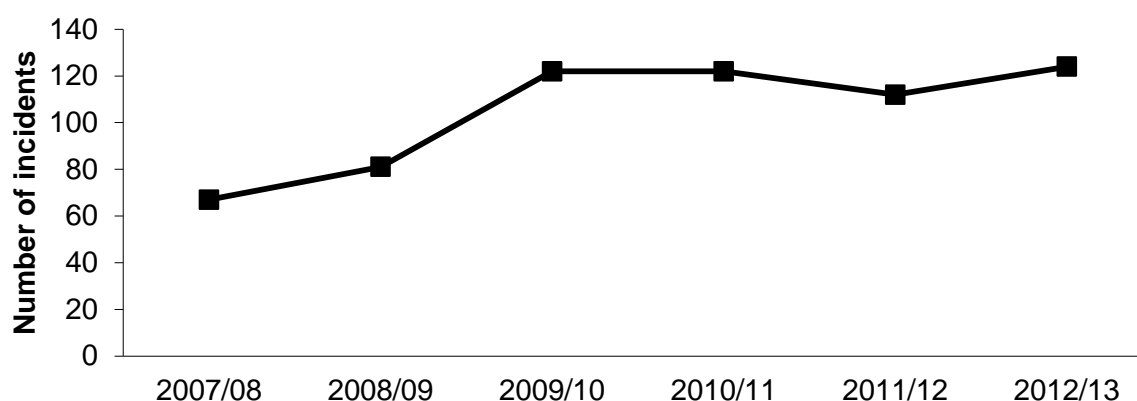
### 8.2.4 Ketamine

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

### 8.2.5 GHB

GHB, GBL and 1,4-B are controlled substances in Australia, and possession of them is an offence. GHB has been separately recorded in the NSW Police database since 2007. In 2012/13 there were 124 cases of police apprehensions for possession or supply of GHB (Figure 98).

**Figure 98: Recorded incidents of police apprehensions for possession or supply of GHB**



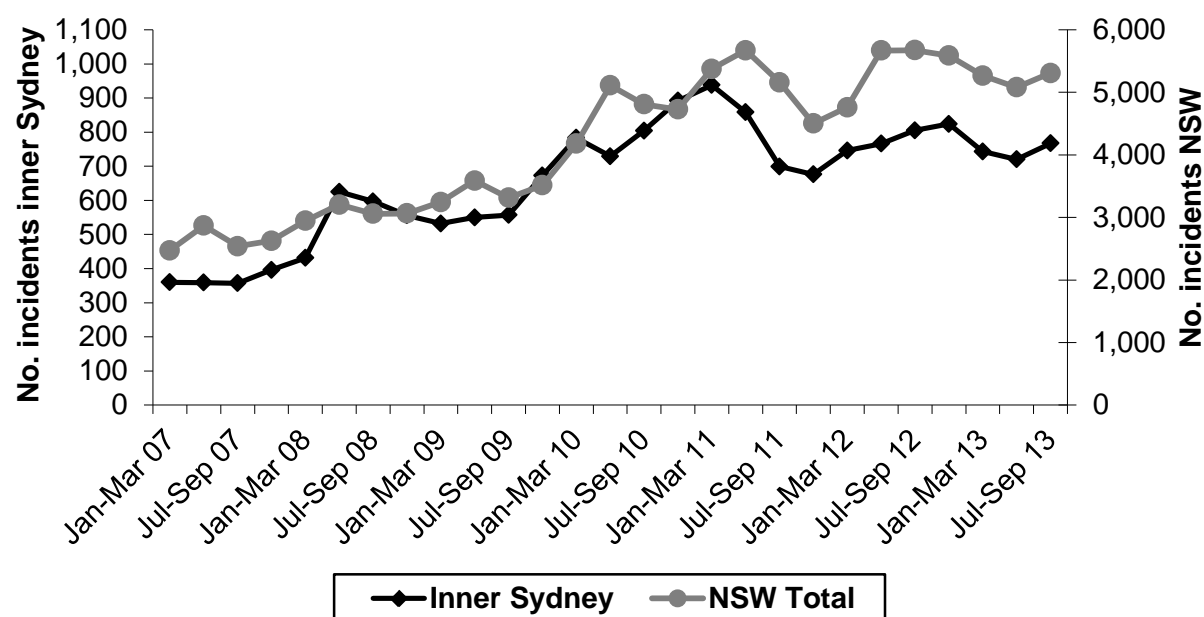
Source: NSW Police

Very few GHB/GBL labs have been detected in NSW in the past six years. Since 2005/06, three GHB/GBL labs have been identified (one in 2005/06, one in 2009/10 and one in 2011/12). None have been detected in 2012/13.

### 8.2.6 Cannabis

Figure 99 shows the number of police-recorded incidents of cannabis possession/use per quarter in the inner Sydney region and NSW. The number of incidents reported in inner Sydney appeared to increase from mid-2007 to early-2011, reflecting a general increase noted across the same timeframe in NSW as a whole. However, both inner Sydney and state-wide figures appeared to decline mid-2011, which was followed by an increase in 2012. Figures have remained relatively stable since mid-2012.

**Figure 99: Recorded incidents of cannabis possession/use per quarter, inner Sydney and NSW, January 2007 to September 2013**



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

### 8.2.7 2C-B

There were no NSW data available on the number of possession or supply offences of 2C-B or other NPS. However, it has been confirmed that four 2C-B labs have been detected in recent years (one in 2008/09, one in 2011/12 and two in 2012/13).

## 9 SPECIAL TOPICS OF INTEREST

### Summary:

#### *Exposure to injecting*

- Forty-four percent of participants have friends/acquaintances that have injected a drug.
- One-fifth of the sample have been offered to inject a drug in the past 12-months.
- Over one-tenth of the sample have seriously considered injecting a drug.

#### *NPS health effects*

- The main reasons why participants had taken 2C-B in the past 6-months were because it was 'good value for money' and it produced a 'better high' and 'fewer side effects' than traditional stimulants such as ecstasy.
- The most commonly reported experienced effects of 2C-B were euphoria, the urge to talk, the urge to move, increased energy and seeing things that were not there.

### 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 route of administration. 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, more than two-fifths (44%) of NSW EDRS participants reported knowing a few friends or acquaintances that had injected an illicit drug in their lifetime, whilst half (51%) reported that they did not know of any person that had injected (Table 28). Of those who knew of a person/people who had injected previously, they were asked in the last 12 months what relationship they had with the people that had injected. The majority reported that their relationship to this person/people was a friend or acquaintance (61%), smaller proportions reported that they were family members (7%) or a partner (9%) or that recently (past 12 months) nobody they knew had recently injected a drug (32%). Also of this group that knew of lifetime injectors, they were asked if they had ever been directly exposed to the injecting practice i.e. in the vicinity of the injecting practice taking place to which just under one-third (30%) answered positively.

Smaller numbers of the whole sample reported having been offered drugs to inject (19%) in the last 12 months, and had ever seriously considered injecting a drug (13%). The main

reasoning for this sample for not injecting a drug was fear of needles (17%), do not use drugs that are injectable (i.e. cannabis, 11%), concerns about becoming dependent (14%) and the social stigma attached to injecting (12%). The main reasoning for this sample to consider injecting a drug was curiosity (15%), to have a stronger drug effect (12%), to get high/have fun (21%). However, two-fifths of the participants (42%) 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 (76%) endorsed '1' which was 'extremely unlikely'. Small numbers (5%) reported that they would be 'extremely likely' to inject a drug in the future.

**Table 28: Exposure to injecting, 2013**

<b>What proportion of your friends/ acquaintances have ever injected a drug illicitly?</b>	<b>N=100</b>
Most	1
About half	1
A few	42
None	51
I don't know	5
<b>Of those who know someone who has injected, who has injected (past 12 months)?</b>	<b>n=44</b>
A friend/acquaintance	61
A (non-partner) family member	7
Partner	9
No one	32
<b>Of those who know someone who has injected, have they ever injected around you?</b>	<b>n=44</b>
Yes	30
<b>Have you been offered drugs to inject in the past 12-months?</b>	<b>n=100</b>
Yes	19
<b>Have you ever seriously considered injecting a drug?</b>	<b>N=100</b>
Yes	13
No	83
I have already injected a drug	4

**Source: EDRS interviews 2013**

**Table 29: Reasons for considering injecting as an ROA, 2013**

<b>What would be your main reason for not injecting a drug? (%)</b>	<b>N=100</b>
Fear of needles	17
Not my preferred administration	4
Don't use drugs that are injectable	11
Concerns about dependence	14
Social stigma associated with injecting	12
Concerns about BBVI	6
I will continue to inject no matter what	1
Concern about injection related injury	4
I don't know how to inject myself	0
No access to injecting equipment	0
Did not enjoy/bad experience	0
Other	31
<b>What would be your main reason for injecting a drug? (%)</b>	<b>N=100</b>
Would not consider	42
Curiosity	15
To have stronger drug effect	12
Get high/have fun	21
Peer pressure/influence	0
Family use	0
Opportunity presented itself	1
Preferred route of administration	1
Other	8

**Source: EDRS interviews 2013**

## 9.2 NPS health effects

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, 2C-B, methylone and MDPV. Twenty-five participants reported using 2C-B, only one individual used mephedrone and methylone, and no participants reported using MDPV in the last six months.

Of those who had used the NPS in the last six months, participants were asked if they bought the particular NPS in a pre-packaged brand. Of those that used 2C-B (n=25), one participant purchased 2C-B as a pre-packaged brand. There were no reports of participants buying either methylone or mephedrone in pre-packaged brands.



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 mephedrone? Results are presented in percentages for those that answered it had 'some' influence, i.e. rated the motivation factor greater than zero. For 2C-B, the results would suggest that the value for money (92%), the comparative high (92%) and fewer side effects (92%) were the most influential factors when considering its use.

**Table 30: Factors that had some influence (rated greater than '0') on whether EDRS participants used NPS, 2013**

(%)	2C-B n=25
Legal to buy it	88
Easy to buy on the internet and delivered to my home	68
High level of purity compared to traditional illegal stimulants	84
It was good value for money	92
Better high compared to traditional illegal stimulants	92
Fewer side effects compared to traditional illegal stimulants	92
Single dose doesn't last too long	68
No other drug available to me at the time so I bought it	92

Source: EDRS interviews 2013

**Table 31: Level of tolerance and properties of addiction of 2C-B, 2013**

(%)	2C-B N=25
Usual dose has not had the same effect as when you first started	16
Taken (drug) in larger amounts than intended	20
Persistent desire or strong urge to take (drug)	12
Continued to take (drug) even though you've had physical or psychological problems	8
Spent a great deal of time getting (drug) or taking it or recovering	4
Have you given up important social, occupational or recreational activities because of (drug)	-
Have you been concerned about your use of (drug)	-
Have you taken (drug) or another stimulant to help relieve drug withdrawals	4
Wanted to cut down/take (drug) less often but not successful	-
Friends and family have expressed concern about your use of (drug)	4

Source: EDRS interviews 2013

Prevalence and frequency of drug effects were investigated in relation to mephedrone, 2C-B, methylone and MDPV. Due to small numbers reporting use of mephedrone, methylone and MDPV, only figures for 2C-B were reported. Effects that were not experienced by over 90% of participants that commented for 2C-B included: anger or aggression (92%), chest pain (92%), skin discolouration (92%) and skin rash (96%). The effects that were experienced 'most of the time' by the majority included: euphoria (56%), urge to talk (52%), urge to move (56%) and no appetite for food (92%).

**Table 32: Effects experienced for 2C-B, 2013**

(%)	2C-B			
	Never	Once	Sometimes	Most of the time
Euphoria	4	8	32	56
Increased energy	8	8	36	48
Improved concentration	60	8	16	16
Empathy with others	20	16	32	32
Urge to talk	8	4	36	52
Urge to move	8	12	24	56
Increased sexual desire	52	12	20	16
Restless or anxious	36	24	20	20
Angry or aggressive	92	4	4	-
Agitated	68	16	8	8
No appetite for food	-	4	4	92
You were forgetting things	36	4	28	32
Panicky	72	12	12	4
Paranoid	64	16	8	12
Blurred vision	28	8	36	28
Seeing things not there	28	8	16	48
Hearing things not there	56	8	20	16
Body sweating	36	8	24	32
Overheating	64	8	12	16
Heart racing or erratic	56	4	32	8
Shortness of breath	88	8	-	4
Headache	84	4	8	4
Chest pain	92	8	-	-
Clenching jaw, grinding teeth	16	16	36	32
Shaky hands, fingers	52	12	24	12
Fingers/toes were cold or numb	76	-	20	4
Skin discolouration (red/blue)	92	-	8	-
Skin rash	96	4	-	-
Vomiting	88	4	4	4
Headache	84	4	8	4
Hard to sleep	56	4	8	32

**Source: EDRS interviews 2013**

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'. 2C-B experiences that were intense were 'increased sexual desire' (50%), 'no appetite for food' (52%), and 'panicky' (71%).

**Table 33: Intensity of effects experienced for mephedrone and 2C-B, 2013**

(%)	2C-B		
	Mild	Moderate	Intense
Euphoria	29	46	25
Increased energy	26	65	9
Improved concentration	40	40	20
Empathy with others	40	35	25
Urge to talk	17	48	35
Urge to move	17	39	44
Increased sexual desire	8	42	50
Restless or anxious	13	38	50
Angry or aggressive	50 <sup>^</sup>	-	50 <sup>^</sup>
Agitated	13 <sup>^</sup>	63 <sup>^</sup>	25 <sup>^</sup>
No appetite for food	12	36	52
You were forgetting things	25	56	19
Panicky	14 <sup>^</sup>	14 <sup>^</sup>	71 <sup>^</sup>
Paranoid	33 <sup>^</sup>	22 <sup>^</sup>	44 <sup>^</sup>
Blurred vision	28	61	11

**Source: EDRS interviews 2013**<sup>^</sup>n<10 interpret with caution

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