

New South Wales

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**NSW TRENDS IN ECSTASY AND RELATED DRUG
MARKETS 2016
Findings from the
Ecstasy and Related Drugs Reporting System
(EDRS)**

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**NEW SOUTH WALES
TRENDS IN ECSTASY AND RELATED DRUG
MARKETS
2016**



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

Laura Vogl, Antonia Karlsson and Courtney Breen

National Drug and Alcohol Research Centre
University of New South Wales

Australian Drug Trends Series No. 173

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ABBREVIATIONS

1,4-B	1,4-butanediol
25I-NBOMe	2-4-iodo-2,5-dimethoxyphenyl- <i>N</i> -2-methoxyphenylmethylethanamine
2C-B	4-bromo-2,5-dimethoxyphenethylamine
2C-E	2,5-dimethoxy-4-ethylphenethylamine
2C-I	2,5-dimethoxy-4-iodophenethylamine
5-IAI	5-Iodo-2-aminoindane
5-MeO-DMT	5-methoxy-dimethyltryptamine
ABCI	Australian Bureau of Criminal Intelligence
ABS	Australian Bureau of Statistics
ACC	Australian Crime Commission
ACIC	Australian Criminal Intelligence Commission
ACON	AIDS Council of NSW
ACPR	Australasian Centre for Policing Research
ACT	Australian Capital Territory
ADIS	Alcohol and Drug Information Service
AFP	Australian Federal Police
Health	Australian Government Department of Health
AIHW	Australian Institute of Health and Welfare
ATS	Amphetamine type stimulant
ATSI	Aboriginal and/or Torres Strait Islander
AUDIT	Alcohol Use Disorders Identification Test
BBVI	Blood-borne viral infections
BOCSAR	Bureau of Crime Statistics and Research
BZP	1-benzylpiperazine
CNS	Central nervous system
DASSA	Drug and Alcohol Services South Australia
DMT	Dimethyl tryptamine
DOB	2,5-dimethoxy-4-bromoamphetamine
DOI	Death on impact; 2,5-dimethoxy-4-iodoamphetamine
DOM	2,5-dimethoxy-4-methylamphetamine
DXM	Dextromethorphan
EDRS	Ecstasy and Related Drug Reporting System
ERD	Ecstasy and related drugs
FDS	Family Drug Support
GBL	Gamma-butyrolactone
GHB	Gamma-hydroxybutyrate
GLBT	Gay/lesbian/bisexual/transgender
GP	General practitioner
HBV	Hepatitis B virus
HCV	Hepatitis C virus
HIV	Human immunodeficiency virus
HPV	Human papillomavirus
IDRS	Illicit Drug Reporting System
IDU	Injecting drug user(s)

IPS	Illicit psychostimulant
K10	Kessler Psychological Distress Scale
KE	Key expert(s)
LBQ	Lesbian, bisexual and queer
LSD	<i>d</i> -lysergic acid diethylamide
Md	Median
MDA	3,4-methylenedioxyamphetamine
MDAI	5,6-methylenedioxy-2-aminoindane
MDEA	3,4-methylenedioxyethylamphetamine
MDMA	3,4-methylenedioxymethamphetamine
MDPV	3,4-methylenedioxypyrovalerone; ivory wave
MDS AODTS	Minimum Data Set for Alcohol and Other Drug Treatment Services
MPTP	1-methyl-4-phenyl-1,2,5,6-tetrahydropyridine
MXE	Methoxetamine
N	(or n) Number of participants
NDARC	National Drug and Alcohol Research Centre
NDLRF	National Drug Law Enforcement Research Fund
NDSHS	National Drug Strategy Household Survey
NHMD	National Hospital Morbidity Database
NIDIP	National Illicit Drug Indicators Project
NNDSS	National Notifiable Diseases Surveillance System
NPS	New psychoactive substances
NSP	Needle and syringe program(s)
NSW	New South Wales
OD	Overdose
OCD	Obsessive compulsive disorder
OTC	Over the counter
PASW	Predictive Analytics Software
PDI	Party Drugs Initiative
PIED	Performance and image enhancing drugs
PMA	Para-methoxyamphetamine
PNS	Peripheral nervous system
PPA	Price, purity and availability
QOL	Quality of life
RBT	Random breath test
REU	Regular ecstasy users
ROA	Route of administration
RPU	Regular psychostimulant user(s)
SDS	Severity of Dependence Scale
SNOMED CT	Systematized Nomenclature of Medicine Clinical Terms
SPSS	Statistical Package for the Social Sciences
STI	Sexually transmitted infection(s)
SWASH	Sydney Women and Sexual Health Survey
THC	Delta-9-tetrahydro-cannabinol
TMA	3,4,5-trimethoxyamphetamine
WHO	World Health Organisation

GLOSSARY OF TERMS

25I-NBOMe	A psychedelic drug and derivative of the substituted phenethylamine psychedelic 2C-I
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
Eightball	3.5 grams
GBL	Acronym for gamma-butyrolactone. It is a GHB precursor and substitute, which metabolises into GHB in the stomach
GHB	Acronym for gamma-hydroxybutyrate. 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
Halfweight	0.5 gram
Illicit	Illicit refers to pharmaceuticals obtained from a prescription in someone else's name (e.g. through buying them from a dealer or obtaining them from a friend or partner)
Indicator data	Sources of secondary data used in the EDRS (see Method section for further details)
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 <i>d</i> -lysergic acid diethylamide. It is a powerful hallucinogen
MDA	Acronym for 3,4-methylenedioxyamphetamine. It is classed as a stimulant hallucinogen. It is closely related to MDMA (and is sometimes found in ecstasy pills); 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 amphetamine and cathinone 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
Session	A period of continuous use without sleeping in between
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

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 2016 NSW Trends in Ecstasy and Related Drug Markets report represents the seventeenth 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) 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

- 103 RPU were sampled in the 2016 EDRS (70 male and 33 female).
- Participants were young (mean age = 21 years), with one-third (34%) holding a tertiary qualification (a significant decrease from 2015; 50%).
- About one-fifth (21%) identified as Gay Lesbian Bisexual Transgender (GLBT).
- These demographics have remained relatively stable over time, with the exception of a decrease in full-time students and an increase in weekly income.

Drug use history and current drug use

- Participants had experience with a wide range of drugs, having used a median of 12 different drug types during their lifetime and 10 different drug types in the past six months.
- Ecstasy (29%) and cannabis (23%) were the main drugs of choice among RPU.
- Three percent reported having ever injected a drug.
- Thirty-six percent of the group had recently binged on ERD. Those who had recently binged had done so on a median of five times in the past six months.

Ecstasy use

- Ecstasy was used on a median of 13 days over the past six months (i.e. fortnightly).
- Participants had used a median of 2 pills, 2 crystal MDMA caps and 2 non-descriptive ecstasy caps during a 'typical' occasion of use.
- Swallowing was the most commonly reported route of administration (ROA) for pills (96%), capsules (97%) and crystal MDMA (98%). Snorting was the most commonly reported ROA for powder (87%).

- There was a continued decrease in the recent use of pills and a continued increase in the recent use of the crystalline form from 2015 to 2016, whereby crystalline form ecstasy is the form most used.
- Ecstasy was most commonly last used at a nightclub (23%) and other private venues (23%).
- The use of ecstasy in the NSW general population has decreased from 2010 (3.0%) to 2013 (2.5%).
- KE confirmed the NSW data relating to the change in ecstasy forms, reporting a higher availability of the crystalline form.

Methamphetamine use

Speed

- Forty-nine percent of RPU had ever used speed and 18% had done so recently.
- Speed was used on a median of 2 days over the preceding six months and was snorted (68%) or swallowed (63%).
- The frequency and quantity of use was stable from 2015 to 2016.

Base

- One-fifth of the sample had ever used base and 5% had done so recently.
- Base was used on a median of one day over the preceding six months.
- The frequency of use was stable from 2015 to 2016.

Crystal

- One-fifth of the sample had ever used crystal and 15% had done so recently.
- Crystal methamphetamine was used on a median of 10 days over the preceding six months and was primarily smoked (n=14).
- The quantity of use was relatively stable from 2015 to 2016.
- The use of methamphetamine in the past year among the NSW general population remained stable from 2010 (1.6%) to 2013 (1.4%).
- KE reported an increase in the availability and purity of crystal methamphetamine, a lower or stable price.

Cocaine use

- The majority of the group (82%) had tried cocaine at least once, and 70% had used it recently.
- Cocaine was used on a median of 3.5 days over the preceding six months and the main ROA was snorting (69%).
- Recent use of cocaine among the NSW general population remained stable at 2.7% in 2013.

LSD use

- Eighty-one percent of the sample had tried LSD at least once and 65% had used it recently.
- LSD was used on a median of 3 days over the preceding six months.
- LSD was often used in outdoor settings in contrast to other psychostimulants.
- About two-thirds (65%) of the 2016 sample reported recent use of stable from 2015 (60%).

Ketamine use

- Fifty-seven percent of the sample had tried ketamine during their lifetime and half (50%) had used it recently.
- Ketamine was used on a median of 3 days over the preceding six months and all participants, with the exception of one, reported snorting as the ROA (98%).
- Lifetime use of use of ketamine among the Australian general population increased from 2010 to 2013, but recent use remained stable.

GHB use

- Twenty-seven percent of the sample had tried GHB at least once and one-fifth (20%) had used it recently.
- GHB was used on a median of 6 days over the preceding six months.
- Lifetime and recent use of GHB among the NSW general population remained low.

Cannabis use

- Almost every participant had tried cannabis at least once during their lifetime (99%) and the vast majority (85%) had used it recently.
- Cannabis was used on a median of 24 days (i.e. once per week) over the preceding six months.
- The lifetime and recent use of cannabis among RPU remained relatively stable over time.
- About half of recent users, reported weekly or more frequent use with 11% reporting daily cannabis use.
- The use of cannabis in the past year among the NSW general population remained stable at 9.5% in 2013.

Other drug use

Alcohol

- All of the 2016 NSW RPU reported lifetime and recent use of alcohol
- KEs reported alcohol to be the main drug of concern.

Tobacco

- Ninety-seven percent of RPU had used tobacco at least once in their lifetime and 87% had smoked within the past six months.

E-cigarettes

- Sixty-one percent of RPU had used e-cigarettes at least once in their lifetime and 38% had used within the past six months.

Inhalants

- Amyl nitrite had been used by 77% RPU in their lifetime and 59% in the past 6 months.
- Nitrous oxide had been used by 70% in their lifetime and 58% reported recent use. Lifetime and recent use of Nitrous oxide has increased significantly from 2015 to 2016.
- The lifetime use of nitrous oxide has risen from 2012 (45%) to 2016 (70%).
- The recent use of nitrous oxide has also risen from 2012 (12%) to 2016 (56%).

Heroin and other opiates

- Eight RPU reported lifetime use of heroin and four reported recent heroin use. Nineteen participants reported recent use of illicitly obtained other opiates, and eleven participants reported recent use of licitly obtained other opiates.

Over the counter drugs

- Nine participants reported recent use of over the counter simulants (non-medical use) and 26% reported using over the counter codeine recently (non-pain use).

Benzodiazepines

- Forty-eight percent of the group had recently used benzodiazepines. Illicit use (recent use, 46%) was more common than licit use (recent use, 5%). Recent illicit use has increased significantly since 2015 (29%).

Antidepressants

- In 2016 RPU were only asked about illicit antidepressant use. Two participants reported ever using illicitly and only one recently.

Psilocybin mushrooms

- Thirty-six percent of the sample reported using mushrooms recently.

MDA

- Twelve percent of the sample reported using MDA in the past six months.

New psychoactive substance (NPS) use

- In 2016, 44% of EDRS participants reported recent NPS use.
- Only 1% reported using a synthetic cannabinoid in the last six months.
- The most commonly used psychoactive substances were 2C-B, DMT and DXM.

Ecstasy price, purity and availability (PPA)

Pills, powder and capsules:

- *Price:* \$25 per capsule; the majority reporting recent price stability.
- *Purity:* Variable reports.
- *Availability:* Currently easy to very easy to obtain and stable.

Crystal MDMA

- *Price:* \$25 per cap, \$190 per gram.
- *Purity:* Currently medium–high.
- *Availability:* Currently easy to obtain and stable.

Methamphetamine PPA

- Small numbers (n<10) commented on the price, purity and availability of speed and crystal methamphetamine.
- Small numbers (n<10) commented on the price of crystal methamphetamine.
- The majority of those able to comment on the purity of crystal methamphetamine reported it was high and all reported that it was very easy or easy to obtain.

Cocaine PPA

- *Price:* \$300 per gram, stable.
- *Purity:* Variable reports.
- *Availability:* Easy to very easy and stable.

LSD PPA

- *Price:* \$20 per tab, stable.
- *Purity:* Medium–high, stable.
- *Availability:* Variable reports; 29% reported LSD as very easy to obtain and a further 29% reported as easy to obtain in 2016 (compared to 18% and 24% respectively in 2015).

Ketamine PPA

- *Price*: \$200 per gram and stable.
- *Purity*: Medium–high and stable.
- *Availability*: Variable reports.

GHB PPA

- *Price*: \$10 per ml.
- *Purity*: Medium–high.
- *Availability*: Easy to access, stable.

Cannabis PPA

Hydro

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

Bush

- *Price*: \$20 per gram; \$280 per ounce, stable.
- *Potency*: Currently medium, stable.
- *Availability*: Variable reports.

Health-related issues

Stimulant dependence

- Over one-quarter (28%) of RPU scored 3 or above on the ecstasy severity of dependence scale (SDS), indicative of problematic dependent ecstasy use.
- Five participants obtained a score of 4 or above indicative of methamphetamine dependence.

Overdose, deaths and hospital admissions

- About half (49%) of participants reported having overdosed on a stimulant drug throughout their lifetime.
- About half (45%) reported having ever overdosed on a depressant drug.
- There has been an upward trend in deaths where methamphetamine was detected post mortem in 2015/16.
- Hospital admissions in which methamphetamine and cocaine were the principal diagnosis appear to be increasing over time in NSW.

Service usage

- Over one-quarter of respondents reported that they had at least one visit to a health service related to drug use in the past six months. GPs and emergency departments visits were the two main services accessed.
- There has been an upward trend in calls to helplines relating to crystal methamphetamine.

Mental health

- Forty four percent of RPU had recently experienced a mental health problem, higher than general population estimates. Mood and anxiety disorders were most commonly reported.

- Thirty-four percent of the group reported high to very high psychological distress as measured by the Kessler Psychological Distress Scale (K10), higher than population norms (15%).

Risk behaviour

- Seventy-four percent of RPU reported that they had driven a vehicle in the preceding six months, and of these, 27% had driven while over the BAC limit.
- Among those who had driven recently, 51% had done so while under the influence of drugs.
- Three participants had ever injected a drug and none had done so recently.
- Over half (59%) of the sample had recently had penetrative sex with a casual partner. Forty three percent of participants did not use a sexual barrier on the last occasion, when intoxicated, and 20% did not when sober. The main reasons were either that they did not want to use a barrier, they were using a contraceptive pill or a barrier was not available.
- The majority (70%) of participants reported harmful alcohol consumption as measured by the Alcohol Use Disorders Identification Test (AUDIT).

Law enforcement-related issues

- Thirty-nine percent of RPU had committed a crime within the past month; most commonly drug dealing and property crimes.
- Seventeen participants had reportedly been arrested over the past year.
- Data from the Bureau of Crime Statistics and Research indicate an upward trend in arrests for methamphetamines and cocaine over the last few years.

Special topic of interest

NPS supply and purchasing patterns

- Fifty percent of the NSW sample reported using a NPS in the 12 months preceding interview.
- Of those who had used a NPS in the previous 12 months, 60% nominated a 'friend' as their main source, followed by an 'acquaintance' and 'shop' (10%, respectively).
- Nineteen percent had supplied NPS to others in the preceding 12 months, with all participants admitting supplying NPS to 'friends'.
- Of those who provided NPS to others, 75% reported 'sharing' with friends and 45% reported 'giving it away for free.'

Online purchasing

- Over their lifetime, 23% of the NSW sample reported that they had purchased an illicit drug online, with 18% having done so in the previous 12 months.
- Of those who commented, 44% reported that less than 25% of their drugs were purchased online.
- No participants reported purchasing all of their drugs online.
- Five participants purchased drugs online in order to supply their friends, two participants intended to sell the drugs for a profit, and four participants intended to supply the drugs to friends, as well as to make a profit.
- Illicit drugs were primarily purchased from the 'dark web' marketplaces.
- Fourteen participants reported buying traditional illicit substances online as opposed to the NPS; of these, ten participants reported buying ecstasy and/or LSD (respectively).

- In terms of their level of knowledge regarding the 'dark net' and online marketplaces, the majority of participants reported that they had obtained drugs through a friend, who had purchased them from the dark net.

Video gaming and gambling

- Seventy-five percent of the NSW sample reported playing video games in the six months prior to interview on a median of 20 days.
- The median amount of time spent playing video games was two hours per day.
- Seventeen percent of those who played video games in the six months preceding interview believed that they had an issue with video gaming.
- Fifty-three percent of the NSW sample had gambled on a median of five days in the preceding six months.
- Eighteen percent of those who gambled in the six months preceding interview believed that they had a problem with gambling.

INTRODUCTION

The Ecstasy and Related Drugs Reporting System (EDRS) is an ongoing monitoring system funded in 2016 by the Australian Government under the Substance Misuse Prevention and Service Improvement Grants Fund. It utilises a similar methodology to the Illicit Drug Reporting System (IDRS), an ongoing data collection system monitoring of the markets of heroin, methamphetamine, cannabis and cocaine. It was identified that the IDRS did not capture the use of ecstasy and related drugs, as these were used infrequently among the target population of the IDRS – people who inject drugs (PWID).

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

Regular ecstasy users (REU) were identified as an appropriate sentinel population to investigate ERD markets. In 2012, it became apparent that the ecstasy market was changing with a greater representation of illicit psychostimulant users who didn't necessarily use ecstasy. Therefore the criteria were broadened to include regular 'psychostimulant' users (RPU).

The term 'ecstasy and related drugs' includes any drug routinely used in the context of entertainment venues, such as nightclubs or dance parties, however this may also include private parties or outdoor areas. 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 2016 NSW Trends in Ecstasy and Related Drug Markets report provides information regarding ecstasy and related drug trends in Sydney.

Aims

The aims of the 2016 NSW EDRS were to:

1. Describe the demographic characteristics of a sample of RPU interviewed in Sydney in 2016;
2. Examine the patterns of ERD use of this sample, including lifetime and recent use of over 20 licit and illicit drugs;
3. Document the current price, purity and availability of ERD in Sydney, including locations and persons scored from and locations of use;
4. Examine the incidence and nature of ecstasy and other drug-related harms, including physical and mental health-related harms, stimulant and depressant overdose rates and sexual risk behaviours;
5. Identify emerging trends in the ERD market that may require further investigation; and
6. Compare key findings of this study with those reported in previous years.

METHOD

The 2016 EDRS used the methodology trialled in the feasibility study (Topp, Breen 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 or online surveys 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.

Survey of regular psychostimulant users (RPU)

The sentinel population chosen to monitor trends in ERD markets consisted of people who engaged in the regular use of 'ecstasy' or other related drugs. 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 2.5% of the population aged 14 years or older reporting past-year use of ecstasy in the 2013 *National Drug Strategy Household Survey* (Australian Institute of Health and Welfare 2011).

The ecstasy (pills/powder/capsules sold purporting to contain MDMA) market has existed in Australia 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 and Darke 2001).

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 – 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 2.10: New psychoactive substance use. 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 but one NSW 2016 participant had used ecstasy in the six months prior to survey and the vast majority (81%) had used ecstasy regularly (6 times; roughly monthly usage), indicating the NSW EDRS results comprise a large amount of data from REU.

A total of 103 RPU residing in the Sydney metropolitan region were interviewed for the 2016 NSW EDRS. Participants were recruited through a purposive sampling strategy (Kerlinger 1986), which included advertisements in entertainment street press, gay and lesbian newspapers, university campuses, social media, interviewer contacts, and 'snowball'

procedures (Biernacki and Waldorf 1981). 'Snowballing' is a means of sampling 'hidden' populations which relies on peer referral, and is widely used to access illicit drug users both in Australian (Solowij, Hall et al. 1992, Ovendon and Loxley 1996, Boys, Lenton et al. 1997) and international studies (Dalgarno and Shewan 1996, Forsyth 1996, Peters, Davies et al. 1997). Initial contact was established through press 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.

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 psychostimulants at least six times during the preceding six months, and have been a resident of the Sydney metropolitan region for the past 12 months. 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 confidential and anonymous, and that the study would involve a face-to-face interview that would take approximately one hour. 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 or other discrete public places, 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.

Measures

Participants were administered a structured interview schedule based on a national study of ecstasy users conducted by NDARC in 1997 (Topp, Hando et al. 1998, Topp, Hando et al. 2000), which incorporated items from a number of previous NDARC studies of users of ecstasy (Solowij, Hall et al. 1992) and powder amphetamine/methamphetamine (Darke, Cohen et al. 1994) (Hando and Hall 1993, Hando, Topp 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 ROA;
- drug market characteristics: the price, purity and availability;
- 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;
- general trends in ERD markets, such as new drug types, new drug users and perceptions of police activity; and
- areas of special interest including online marketplaces, NPS supply and purchasing patterns and video gaming and gambling.

Data Analysis

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 χ^2 . All analyses were conducted using SPSS for Windows, Version 24.0 (SPSS inc. 2016). 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 Drug Trends and NDARC websites:

<http://www.drugtrends.org.au/>
<https://ndarc.med.unsw.edu.au/group/drug-trends>

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. 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.

KE were administered a qualitative interview schedule derived from a previous study of cocaine use (Hando, Flaherty et al. 1997), with the focus dependent on the KE's area of expertise. It included sections on drug use patterns, drug availability, criminal behaviour, health issues and police activity. The KE interview was conducted over the phone or completed online.

A total of eleven KE were interviewed in 2016. The majority of interviews took approximately 20–30 minutes to conduct. Notes were taken during the interview and the responses were analysed and sorted for recurring themes. Interviews were conducted online, in person or via telephone between August–December 2016. KE represented a wide range of occupations, which fell into two major categories: law enforcement and health care provision.

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

Other indicators

The EDRS participant survey results are used as the primary basis on which to estimate drug trends. The participants provide the most comparable information on drug price, availability and use patterns in all jurisdictions and over time.

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, O'Brien et al. 1997).

Data sources that have been included in this report are:

- National Drug Strategy Household Survey;
- Australian Criminal Intelligence 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

1 DEMOGRAPHICS

Key points

- 103 RPU participated in the 2016 EDRS survey (70 male and 33 female).
- Participants were young (mean age = 21 years), predominantly male (68%) and heterosexual (79%).
- The RPU interviewed were well educated with one-third (34%) holding a tertiary qualification and 43% current students.
- These demographics have remained relatively stable over time, with the exception of a decrease in the number of participants with tertiary qualifications and those who combine work with study.

1.1 Overview of the EDRS participant sample

There were 103 RPU sampled in the 2016 NSW EDRS. Table 1 presents the demographics of the sample across time. The mean age of the 2016 sample was 21 years (median 20, range 17–33). A majority (68%, $n=70$) of the participants interviewed were male; however, there were no significant differences in age when comparing males and females.

The vast majority (98%, $n=101$) spoke English as their first language and were born in Australia (79%, $n=81$). A minority (1%, $n=1$) identified as being of Aboriginal and/or Torres Strait Islander (ATSI) descent. Most participants identified as heterosexual (79%, $n=81$), followed by 7% gay ($n=7$), 1% lesbian ($n=1$) and 12% bisexual ($n=12$). Most participants reported being currently single (57%, $n=59$) and were residing in their parents' or family's house (62%, $n=64$), or rental accommodation (34%, $n=35$).

The median number of years of school education completed was 12 years (range 9–12), and 85% ($n=88$) had completed high school education (year 12 or above). Many had completed either a trade or technical qualification (17%, $n=17$) or a university or college degree (18%, $n=18$), and 43% ($n=44$) were currently engaged in some form of study (i.e. full-time student, work and study, part-time student). One-quarter (24%, $n=25$) of the sample reported being currently employed on a full-time basis, and 7% ($n=7$) of participants were currently unemployed. Median weekly income for this group was \$400 per week (range \$15–\$1,731), and wage or salary was reported as the main source of income in the last month for the majority of participants (77%, $n=79$). Only one participant in 2016 reported that they were currently in any form of drug treatment.

Significant differences in demographics from 2015 to 2016 were a:

- Decrease in the proportion of participants with tertiary qualifications (50% to 34%; $p < .05$; 95% CI: 0.03, 0.29)
- Decrease in the proportion of participants combining work and study (18% to 8%; $p < .05$; 95% CI: 0.01 – 0.20)

The latter difference can be explained by an increase in the number of participants involved in full-time study (20% to 34%, $p=0.053$; CI: 0.10, 0.25).

Table 1: Demographic characteristics of RPU, NSW 2011–2016

	2011 (N=100)	2012 (N=100)	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (N=103)
Mean age (years)	24	25	23	24	23	21
% Male	77	64	75	71	71	68
% English speaking background	98	98	96	97	96	98
% Aboriginal and/or Torres Strait Islander	1	2	1	2	2	1
% Sexual Identity						
Heterosexual	76	82	78	85	78	79
Gay male	9	8	10	6	11	7
Lesbian	7	5	1	2	2	1
Bisexual	7	4	9	7	6	12
Other	1	1	2	–	3	2
Mean years of school education	12	12	12	12	12	12
% Tertiary qualifications	40	39	33	39	50	34↓
% Employment						
Full-time	26	27	19	21	24	24
Part-time/casual	19	21	19	22	27	24
Full-time student	11	10	40	38	20	33
Part-time student	4	2	4	1	2	2
Work and Study	15	22	1	12	18	8↓
No income	–	–	1	–	1	1
Not employed	25	17	16	6	8	7
Median weekly income (\$)	350 (67–2,400)	350 (0–1,700)	300 (0–2,500)	400 (0–2,500)	500 (10–4,500)	400 (15–1731)
% Accommodation						
Own house/flat	4	4	3	5	2	2
Rented house/flat	49	49	40	38	41	34
Family home	31	45	54	53	52	62
Boarding house/hostel	6	1	–	1	2	–
Shelter/refuge	–	1	1	–	1	–
Other	–	–	2	3	2	2
% Prison history	–	4	1	3	2	2
% Currently in drug treatment	3	3	1	3	–	1

Source: NSW EDRS RPU interviews 2011–2016

↑Significant increase ($p < 0.05$)

↓Significant decrease ($p < 0.05$)

2 CONSUMPTION PATTERN RESULTS

Key points

- Participants had experience with a wide range of drugs, having used a median of 12 different drug types during their lifetime and 10 different drug types in the past six months.
- Ecstasy (29%), cannabis (23%) and alcohol (19%) were the main drugs of choice among RPU.
- Three percent reported having ever injected a drug.
- Thirty-six percent of the group had recently binged on ERD. Those who had recently binged had done so on a median of five times in the past six months.

2.1 Drug use history and current drug use

Participants of the NSW 2016 sample were asked about their lifetime (i.e. having ever used) and recent (i.e. use in the last six months) use of a broad range of illicit drugs, alcohol, and tobacco (Table 2).

The drugs most likely to have 'ever' been used and to have been used in the preceding six months were alcohol (lifetime 100%, recent 100%), cannabis (lifetime 99%, recent 85%), tobacco (lifetime 97%, recent 87%), ecstasy pills (lifetime 88%, recent 51%) and crystal MDMA (lifetime 83%, recent 81%). This has remained relatively stable over the past five years.

Polydrug use is common in the EDRS sample. Participants reported having used a wide range of substances at least once in their lifetime (Median [*Md*] = 12, 6–22) and a large number of drug types recently (*Md* = 4–18). These values have remained stable over time.

In 2016, there were a number of significant changes from 2015 in the lifetime and recent use of certain drugs. In regards to lifetime use, there was a significant increase in the use of nitrous oxide ($p < 0.01$). There were significant decreases in the use of antidepressants ($p < 0.000$) and steroids ($p < 0.05$).

In regards to recent use, there were significant increases from 2015 to 2016 in the use of ketamine ($p < 0.000$), nitrous oxide ($p < 0.01$), antipsychotic medication ($p < 0.05$) and 'other opiates' ($p < 0.05$). There was a significant decrease in the use of ecstasy pills ($p < 0.05$) and antidepressants ($p < 0.05$).

Table 2: Lifetime and recent (last six months) use and frequency of drug use for RPU, NSW 2011–2016

Variable	2011 (N=100)	2012 (N=100)	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (N=103)
Median no. drug types ever used	12	12	10	10	11	12
Median no. drug types used recently	8	7	7	7	8	10
% Ever injected a drug	13	20	8	11	8	3
% Injected drug recently	8	13	6	5	5	0
Alcohol						
% ever used	100	98	100	100	100	100
% recent use	99	95	94	100	96	100
Days recent use (Md; range)	48 (5–180)	48 (2–180)	43 (1–180)	48 (1–174)	39 (2–180)	48 (2–160)
Cannabis						
% ever used	97	99	97	98	100	99
% recent use	83	86	90	85	91	85
Days recent use (Md; range)	48 (1–180)	48 (1–180)	40 (1–180)	30 (1–180)	48 (1–180)	24 (1–180)
Tobacco						
% ever used	95	96	95	92	96	97
% recent use	92	91	84	80	85	87
Days recent use (Md; range)	180 (1–180)	180 (4–180)	72 (1–180)	78 (1–180)	90 (1–180)	72 (1–180)
E-cigarettes						
% ever used	Data not available until 2014			48	64	61
% recent use				34	41	38
Days recent use (Md; range)				3 (1–180)	3 (1–180)	2 (1–180)
Ecstasy pills						
% ever used	100	100	100	100	96	88
% recent use	99	99	99	89	69	51↓
Days recent use (Md; range)	12 (1–72)	12 (3–120)	12 (2–50)	9 (1–50)	9 (1–48)	3 (1–48)
Ecstasy powder						
% ever used	35	42	42	27	33	24
% recent use	21	20	29	15	19	15
Days recent use (Md; range)	4 (1–24)	5 (1–24)	2 (1–12)	4 (2–72)	3 (1–24)	4 (1–72)
Ecstasy caps						
% ever used	78	78	73	86	77	77
% recent use	55	57	59	76	64	68
Days recent use (Md; range)	2 (1–120)	4 (1–24)	3 (1–30)	5 (1–53)	6 (1–24)	9.5 (1–48)
Crystal MDMA						
% ever used	Data not available until 2013		37	69	75	83
% recent use			28	61	68	81
Days recent use (Md; range)			1 (1–12)	5 (1–70)	7 (1–52)	7 (1–96)

Table 2: Lifetime and recent (last six months) use and frequency of drug use for RPU, NSW 2011–2016 (cont.)

Variable	2011 (N=100)	2012 (N=100)	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (N=103)
<i>Methamphetamine powder (speed)</i>						
% ever used	67	67	56	48	54	49
% recent use	32	31	25	21	27	18
Days recent use (Md; range)	3 (1–40)	2 (1–180)	2 (1–12)	2 (1–15)	3 (1–15)	2 (1–24)
<i>Methamphetamine base</i>						
% ever used	41	38	21	25	25	21
% recent use	16	9	4	6	4	5
Days recent use (Md; range)	2 (1–20)	2 (1–30)	1 (1–5)	5 (1–10)	3.5 (1–9)	1 (1–2)
<i>Methamphetamine crystal (ice)</i>						
% ever used	37	32	21	23	25	22
% recent use	19	18	11	13	12	15
Days recent use (Md; range)	6 (1–96)	8 (1–96)	4 (1–48)	10 (1–150)	3.5 (1–96)	10 (1–100)
<i>Cocaine</i>						
% ever used	84	81	64	89	85	82
% recent use	59	57	42	67	61	70
Days recent use (Md; range)	4 (1–120)	3 (1–90)	2 (1–10)	3 (1–60)	4 (1–50)	305 (1–72)
<i>LSD</i>						
% ever used	75	84	71	67	77	81
% recent use	46	43	51	43	60↑	65
Days recent use (Md; range)	2 (1–48)	3 (1–24)	2 (1–24)	2 (1–50)	2 (1–20)	3 (1–48)
<i>Mushrooms</i>						
% ever used	58	57	48	48	67↑	60
% recent use	25	21	25	21	37↑	36
Days recent use (Md; range)	2 (1–16)	2 (1–5)	2 (1–7)	2 (1–20)	1 (1–10)	2 (1–6)
<i>MDA</i>						
% ever used	22	28	28	21	28	20
% recent use	8	16	23	12	15	12
Days recent use (Md; range)	3 (1–12)	3 (1–24)	3 (1–15)	3 (1–30)	1 (1–3)	2 (1–7)
<i>Ketamine</i>						
% ever used	56	48	36	43	47	57
% recent use	39	24	24	23	24	50↑
Days recent use (Md; range)	2 (1–100)	3 (1–12)	2 (1–10)	2 (1–32)	1.5 (1–8)	3 (1–72)

Table 2: Lifetime and recent (last six months) use and frequency of drug use for RPU, NSW 2011–2016 (cont.)

Variable	2011 (N=100)	2012 (N=100)	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (N=103)
GHB						
% ever used	30	22	21	23	22	27
% recent use	16	11	11	12	11	20
Days recent use (Md; range)	2 (1–125)	2 (1–90)	3 (1–30)	2 (1–10)	3 (1–24)	6 (1–80)
Amyl nitrite						
% ever used	75	70	64	65	72	77
% recent use	40	37	45	46	50	59
Days recent use (Md; range)	3 (1–72)	3 (1–180)	5 (1–160)	3 (1–30)	4 (1–48)	2 (1–90)
Nitrous oxide						
% ever used	41	46	38	43	50	70↑
% recent use	13	12	20	26	37	56
Days recent use (Md; range)	3 (1–180)	4 (1–21)	3 (1–20)	3 (1–30)	3 (1–60)	5 (1–30)
Benzodiazepines*						
% ever used	57	57	45	50	58	66
% recent use	34	30	25	35	35	48
Days recent use (Md; range)	10 (1–180)	6 (1–180)	3 (1–30)	3 (1–49)	2 (1–24)	5 (1–109)
Antidepressants**						
% ever used	27	24	19	20	22	4↓
% recent use	9	11	9	8	10	1
Days recent use (Md; range)	36 (1–180)	60 (1–180)	3 (1–180)	180 (1–50)	120 (2–180)	5 (5)
Antipsychotics*						
% ever used	Data not available until 2013		6	8	11	15
% recent use			2	1	3	13↑
Days recent use (Md; range)			12 (1–22)	7 (7)	1 (1)	2 (1–180)
Pharmaceutical stimulants*						
% ever used	50	62	59	54	62	71
% recent use	20	25	35	24	39↑	50
Days recent use (Md; range)	5 (1–180)	2 (1–102)	4 (1–180)	3 (1–180)	3 (1–48)	6 (1–180)
Heroin						
% ever used	13	14	9	8	8	8
% recent use	2	9	3	2	2	4
Days recent use (Md; range)	76 (1–150)	53 (2–180)	12 (2–24)	5 (2–8)	1 (1)	1.5 (1–10)
Methadone						
% ever used	5	11	6	2	2	1 (n=1)
% recent use	1	8	4	–	–	–
Days recent use (Md; range)	4 (4)	53 (2–180)	7 (1–24)	–	–	–

Table 2: Lifetime and recent (last six months) use and frequency of drug use for RPU, NSW 2011–2016 (cont.)

Variable	2011 (N=100)	2012 (N=100)	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (N=103)
<i>Buprenorphine</i>						
% ever used	3	4	2	2	3	3
% recent use	1	2	1	1	–	1
Days recent use (Md; range)	30 (30)	11 (6–15)	30 (30)	80 (80)	– –	4 (4)
<i>OTC codeine</i>^{&}						
% ever used	57	26	18	19	27	37
% recent use	39	12	9	11	17	26
Days recent use (Md; range)	6 (1–177)	5 (2–15)	1 (1–30)	1 (1–20)	2 (1–30)	2 (1–30)
<i>OTC stimulants</i>^{&}						
% ever used	43	18	12	6	16	14
% recent use	27	4	3	2	6	9
Days recent use (Md; range)	5 (1–20)	5 (2–15)	11 (4–11)	3 (2–3)	3 (1–5)	3 (1–14)
<i>Other opiates</i>[*]						
% ever used	34	17	26	25	29	42
% recent use	14	5	11	12	14	28[↑]
Days recent use (Md; range)	3 (1–30)	12 (1–30)	5 (1–180)	2 (2–3)	1 (1–3)	2.5 (1–20)
<i>Steroids</i>						
% ever used	5	1	4	6	8	1[↓]
% recent use	1	–	1	2	3	–
Days recent use (Md; range)	60 (60)	– –	20 (20)	102 (24–180)	48 (6–48)	– –

Source: NSW EDRS RPU interviews 2011–2016

Note: OTC – ‘over the counter’

* Includes licitly and illicitly obtained

.. 2011–2015 data includes both licit and illicit antidepressants, 2016 data only includes illicit antidepressant use

& Non-medicinal/non-pain use

↑ Significant increase ($p < .05$)

↓ Significant decrease ($p < .05$)

2.1.1 Drug of Choice and Drug Used Most Often

Participants were asked their drug of choice (i.e. their favourite or preferred drug). Proportions in 2016 remained similar to 2015, with close to one-third reporting ecstasy (29%) as their main drug of choice, close to one-quarter (23%, $n=24$) reporting cannabis and one-fifth (19%, $n=20$) reporting alcohol. Smaller proportions of the sample nominated other drugs such as LSD, cocaine and GHB (11%, 5% and 4% respectively) and ketamine and mushrooms (2% respectively) as their drug of choice. In comparison to 2015, more of the participants in 2016 favoured cannabis over alcohol as their drug of choice.

They were also asked what drug they used most often in the last month. These results were noticeably different to drug of choice with 41% ($n=42$) reporting alcohol as the drug used most often in the last month, 26% ($n=27$) reporting cannabis and 17% ($n=17$) reporting ecstasy. Smaller proportions nominated GHB (4%, $n=4$), cocaine, ketamine and LSD (3%, $n=3$ respectively) and crystal methamphetamine (2%, $n=2$).

2.1.2 Bingeing Behaviour

The EDRS defines bingeing as the use of one or multiple drugs for 48 hours or more on a continuous basis without sleep. Thirty-six percent (n=37) of the NSW sample reported bingeing on psychostimulants in the last six months and had done so on a median of 5 occasions during that time period (range 1–40). The median length of the longest binge was 72 hours (range 48–144). Among participants who reported bingeing, the majority had used ecstasy (89%, n=33), tobacco, (81%, n=30) or more than 5 standard drinks of alcohol (81%, n=30). Large proportions had used cocaine (54%, n=20), cannabis (43%, n=16), and energy drinks (41%, n=15). Other drug-use during binge episodes included ketamine (35%, n=13), LSD (32%, n=12), GHB (30%, n=11), crystal methamphetamine (30%, n=11), speed and nitrous oxide (19%, n=7 respectively).

2.1.3 Injecting Drug Use

Three percent of the sample (n=3) reported having ever injected a drug, none of whom had injected in the last month. The percentage having ever injected remained low from 2013–2016, with some evidence of a gradual decline in numbers (2013: 8%; 2014: 11%; 2015: 8%; and 2016: 3%). Further information about intravenous use of drugs in the current sample can be found in Section 5.2: Injecting risk behaviour.

2.1.4 New Psychoactive Substance Use

A significant proportion of participants reported using drugs from the class of 'new psychoactive substances' such as 2C-B (4-bromo-2,5-dimethoxyphenethylamine), DMT (dimethyl tryptamine) and synthetic cannabinoids. First included in 2010 and continued in 2016, the EDRS included a separate section that investigates the prevalence rates and consumption of these substances in this sample. Results can be found in section 2.10: New psychoactive substance (NPS) use.

2.2 Ecstasy use

Key points

- Ecstasy was used on a median of 13 days over the past six months (i.e. fortnightly).
- Participants had used a median of 2 pills, 2 crystal MDMA caps and 2 non-descriptive ecstasy caps during a 'typical' occasion of use.
- Swallowing was the most commonly reported ROA for pills (96%), capsules (97%) and crystal MDMA (98%). Snorting was the most commonly reported ROA for powder (87%).
- There was a significant decrease in the lifetime and recent use of pills from 2015 to 2016.
- The increasing trend in the recent use of crystal MDMA continued in 2016, with 81% reporting recent use in 2016 (68% in 2015).
- Similar proportions reported last using ecstasy in public (51%) and private (49%) venues.
- The use of ecstasy in the NSW general population decreased from 2010 (2.9%) to 2013 (2.4%).
- KE confirmed the NSW data relating to the changes in ecstasy forms.

'Ecstasy' is the name often used for 3,4-methylenedioxymethamphetamine (MDMA). MDMA is classed as a hallucinogenic amphetamine intended to produce euphoric and empathogenic effects. The results presented in this section relate to the participants' use and knowledge of 'ecstasy' or MDMA. Participants were asked about their use of a range of forms of ecstasy including; ecstasy pills (pills sold purporting to contain MDMA), ecstasy capsules (capsules sold purporting to contain MDMA), ecstasy powder (often sold in sachets) and crystal ecstasy. Although ecstasy users generally prefer/ intend to obtain MDMA, the pills/tablets, powder, and caps sold as ecstasy may contain a range of substances that do not include MDMA. They may 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, paracetamol or nothing at all.

EDRS participants were asked about their use of a range of forms of ecstasy including; ecstasy pills (pills sold purporting to contain MDMA), ecstasy capsules (capsules sold purporting to contain MDMA), ecstasy powder (often sold in sachets) and crystal ecstasy (Table 3).

Table 3: The four forms of ecstasy reported in the EDRS

Pills	Ecstasy powder pressed into a tablet form, often with a logo or picture imprint on one or both sides.
Powder	Loose powder MDMA or similar substances.
Crystal	The crystalline form of MDMA, which is considered more potent and 'cleaner' than pills or powder.
Caps	Hard-shelled capsules containing ecstasy powder or crystal MDMA.

2.2.1 Ecstasy use among RPU

Table 4 outlines the use of ecstasy among RPU. All participants in the 2016 NSW EDRS sample had used ecstasy in their lifetime. With the exception of one participant, where there was no available data, they had all used ecstasy in the six months prior to survey. The vast majority (81%, n=83) had used ecstasy regularly (i.e. 6 times indicating monthly use) in the

prior six months. Participants had used ecstasy for the first time at a median of 17 years of age (range 13–25).

Ecstasy was used on a median of 13 days (range 1–113) over the preceding six months. Twenty percent (n=20) of those who reported using ecstasy had done so less than monthly, 24% (n=25) reported using ecstasy between monthly and fortnightly, 31% (n=32) between fortnightly and weekly and 20% (n=21) had used weekly or more over the preceding six months.

Table 4: General patterns of ecstasy use among RPU, NSW 2011–2016

	2011 (N=100)	2012 (N=100)	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (N=103)
Median age first used ecstasy	17	17	18	18	18	17
Median days used ecstasy last 6 mths	13	12.5	13	16	12	13
Use ecstasy weekly or more (%)	26	18	21	26	22	20
Ecstasy 'favourite' drug (%)	32	38	34	39	34	29
Recently binged on ecstasy (%)	31	24	25	14	23	32

Source: NSW EDRS RPU interviews 2011–2016

Eighteen percent (n=18) reported that all of their friends had used ecstasy recently. Fifty percent (n=51) reported that most of their friends had used ecstasy recently, 18% (n=18) reported that about half of their friends used ecstasy and 16% (n=16) reported that 'a few' of their friends used ecstasy. None of the participants reported having 'no friends' who had used ecstasy in the last 6 months.

Forms of ecstasy

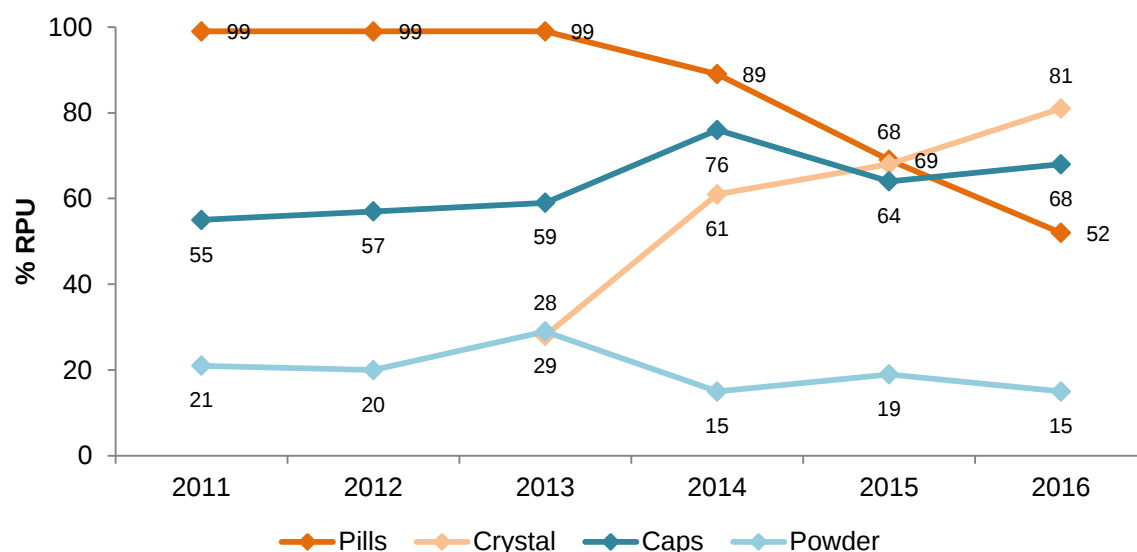
Participants were asked about their use of the different forms of ecstasy (pills, powder, capsules and crystals (Figure 1). From Figure 1 it is clear, from 2010 to 2013, the use of ecstasy forms remained stable, but since 2013 there have been changes in the patterns of use of the different forms.

From 2015 (96%) to 2016 (88%) there was been a significant decline in the proportion of participants having ever used pills ($p<0.05$, 95% CI 0.04, 0.30). Recent use of pills also declined significantly between 2015 (69%) and 2016 (52%) ($p<0.05$, 95% CI 0.04, 0.30).

During the same time period, and since the introduction of questions on crystal MDMA in the 2013 survey, there has been a significant increase in participants having ever used crystal MDMA from 2013 (37%) to 2016 (83%) ($p<0.05$, 95% CI 0.33, 0.56). There is also a significant increase in recent use from 2013 (28%) to 2016 (81%) ($p<0.05$, 95% CI (0.33, 0.56). The proportion having ever used or recently using crystal MDMA remained stable from 2015 to 2016.

The proportion of those recently using ecstasy capsules has increased from 35% in 2010 to 68% in 2016.

Figure 1: Recent use of ecstasy forms, RPU, NSW, 2011–2016



Source: NSW EDRS RPU interviews 2011–2016

Ecstasy pills

Table 5 provides data for the use of ecstasy pills in the NSW 2016 sample. There is a significant decrease in the proportion reporting having ever used or recently used since 2015. In addition, there is a non-significant decrease in the median number of day's ecstasy pills were used in the last 6 months. Average quantity of pills used in a session and number used in a heavy session has remained stable. The most commonly reported ROA of ecstasy pills was swallowing (96%), followed by snorting (53%) with 11% reporting they had shelved or shafted ecstasy in the past six months.

Table 5: Ecstasy pill use among RPU, NSW, 2011–2016

	2011 (N=100)	2012 (N=100)	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (N=103)
% ever used	100	100	100	100	96	88↓
Age of initiation (<i>Md</i>)	17	17	18	18	18	17
% used recently	99	99	99	89	69↓	52↓
Days recent use (<i>Md</i> ; range)	12 (1–72)	12 (3–120)	12 (2–50)	9 (1–50)	9 (1–48)	3 (1–48)
Pills used in an average session (<i>Md</i> ; range)	2 (1–12)	2 (1–15)	2 (1–6)	2 (1–8)	2 (0.5–11)	2 (0.5–9)
Pills used in a heavy session (<i>Md</i> ; range)	5 (1–23)	4 (1–20)	4 (1–12)	4 (1–15)	4 (1–20)	3 (0.5–40)

Source: NSW EDRS RPU interviews 2011–2016

↓Significant decrease ($p < .05$)

Ecstasy powder

Table 6 provides data for the use of ecstasy powder in NSW. Nearly one-quarter of the sample have used in their lifetime and 15% in the last 6 months. The median age of first use

was 18 years old. Participants had used on a median of 4 days in the last 6 months (range 1–72 days). Use of powder has remained stable over the preceding six years. Among those that used ecstasy powder (n=15), the most commonly reported ROA was snorting (87%) followed by swallowing (67%).

Table 6: Ecstasy powder use among RPU, NSW, 2011–2016

	2011 (N=100)	2012 (N=100)	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (N=103)
% ever used	35	42	42	27	33	24
Age of initiation (<i>Md</i>)	20	20	19	20	20	18
% used recently	21	20	29	15	19	15
Days recent use (<i>Md</i> ; range)	4 (1–24)	5 (1–24)	2 (1–12)	4 (2–72)	3 (1–24)	4 (1–72)
Grams used in an average session (<i>Md</i> ; range)	–	–	0.5 (0.1–3)	0.65 [^] (0.1–2)	0.35 [^] (0.1–3)	0.88[^] (0.3–1.5)
Grams used in a heavy session (<i>Md</i> ; range)	–	–	0.5 (0.25–4.5)	1 [^] (0.2–4)	0.5 [^] (0.2–5)	1[^] (0.8–3)

Source: NSW EDRS RPU interviews 2011–2016

[^] n<10 interpret with caution

Crystal MDMA

Table 7 provides data for the use of crystal MDMA in NSW. Since the addition of questions on crystal MDMA in the 2013 survey, there has been a notable increase in both the lifetime and recent use of crystal MDMA. Additionally, there has been a gradual increase in the grams used in a heavy session. All other variables remained stable. The vast majority (98%) of crystal MDMA users reported swallowing crystal MDMA and 63% reported snorting it. Two participants reported they had shelved or shafted ecstasy capsules in the past six months and one participant smoked it.

Table 7: Crystal MDMA/Ecstasy Rock use among RPU, NSW, 2013–2016

	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (N=103)
% ever used	37	69	75	83
Age of initiation (<i>Md</i>)	20	20	19	18
% used recently	28	61	68	81
Days recent use (<i>Md</i> ; range)	1 (1–12)	5 (1–70)	7 (1–52)	7 (1–96)
Caps used in an average session (<i>Md</i> ; range)	1 (1–2)	2 (0.1–4)	2.5 (1–9)	2 (0.5–9)
Caps used in a heavy session (<i>Md</i> ; range)	2 (1–2)	2.5 (0.1–9)	4 (1–18)	3 (1–30)
Grams used in an average session (<i>Md</i> ; range)	0.5 [^] (0.15–1)	0.35 (0.1–1)	0.45 (0.1–3.5)	0.45 (0.1–2.0)
Grams used in a heavy session (<i>Md</i> ; range)	0.5 [^] (0.15–2)	0.7 (0.2–1.5)	0.85 (0.2–6)	1.00 (0.2–3.50)

Source: NSW EDRS RPU interviews 2011–2016

[^] n<10 interpret with caution

Note: Data not available until 2013

Ecstasy capsules

Table 8 provides data for the use of ecstasy caps in NSW. The pattern of having ever used ecstasy capsules has remained relatively stable since 2011, with over three-quarters having ever used. Recent use of ecstasy capsules has remained stable from 2015. The median number of days of recent use of ecstasy capsules is stable at 2 capsules. The most commonly reported ROA of ecstasy capsules was swallowing (97%) and snorting (50%), with three participants reporting they had shelved or shafted ecstasy capsules in the past six months.

Table 8: Ecstasy capsule use among RPU, NSW, 2011–2016

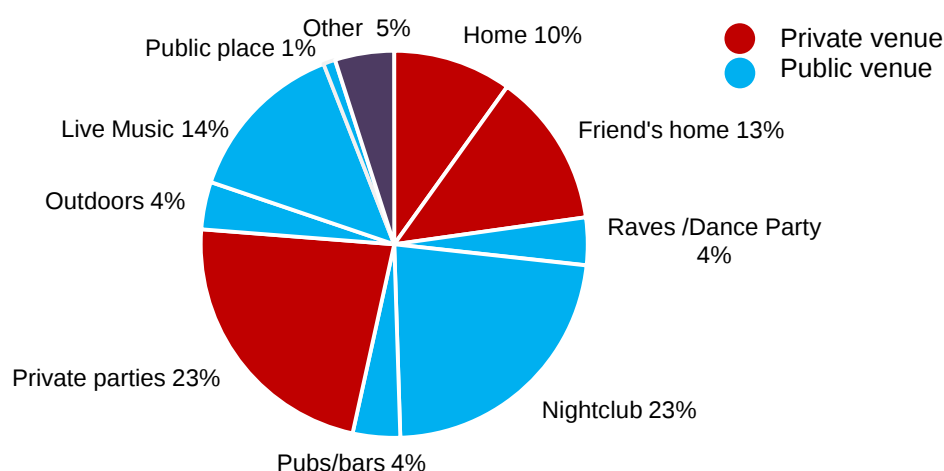
	2011 (N=100)	2012 (N=100)	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (N=103)
% ever used	78	78	73	86	77	77
Age of initiation (<i>Md</i>)	19	19	19	19	19	18
% used recently	55	57	59	76	64	68
Days recent use (<i>Md</i> ; range)	2 (1–120)	4 (1–24)	3 (1–30)	5 (1–53)	6 (1–24)	9.5 (1–48)
Capsules used in an average session (<i>Md</i> ; range)	1 (0.33–6)	1 (0.5–6)	1 (1–4)	2 (0.75–5)	2 (1–5)	2 (1–10)
Capsules used in a heavy session (<i>Md</i> ; range)	2 (0.33–16)	2 (1–9)	2 (1–5)	2 (1–8)	3 (1–30)	4 (1–30)

Source: NSW EDRS RPU interviews 2011–2016

2.2.2 Locations of ecstasy use

Participants were asked where they spent the most time while intoxicated the last time they used ecstasy pills, powder or capsules (Figure 2). Of the seventy-one participants who reported the venue, the most popular venues were nightclubs (23%, n=16) and private parties (23%, n=16). Just over half of the RPU (51%, n=36) reported a public location compared to a private venue (45%, n=32).

Figure 2: Location of last ecstasy use among RPU, NSW 2016



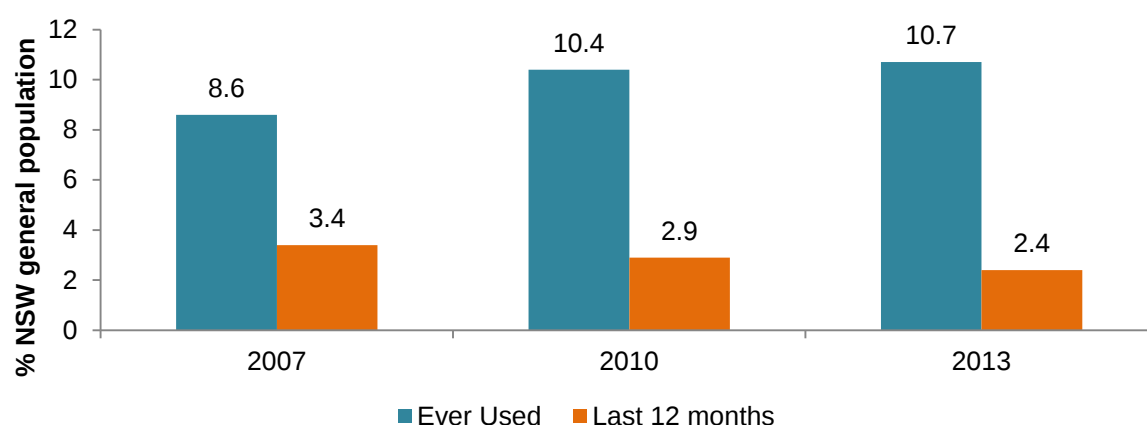
Source: NSW EDRS RPU interviews 2016

2.2.3 Use of ecstasy in other populations

General Population

Figure 3 presents data collected for the National Drug Strategy Household Survey (NDSHS) for NSW from 2007 to 2013. Over this time, the reported lifetime prevalence of ecstasy use among the general population in NSW (aged 14 years and over) increased from 8.6% to 10.7%. The 2013 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 past-year use of ecstasy in NSW (2.4%) was comparable with the national figure.

Figure 3: Percentage of sample reporting lifetime and last 12-month use of ecstasy in the NSW general population, 2007–2013



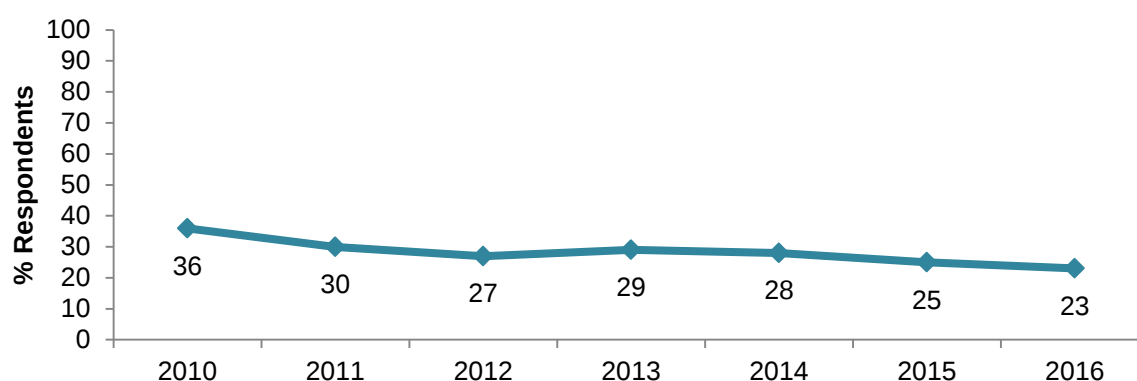
Source: Australian Institute of Health and Welfare (2008, 2011, 2014)

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 2016, with 3,015 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. Please see the attached link for further information regarding methods and publications: (<https://csr.h.arts.unsw.edu.au/research/projects/gay-community-periodic-surveys/>)

Figure 4 shows the proportion of men surveyed who had used ecstasy in the past six months. In 2016, a little more than one-fifth (23%) of the sample reported having recently used ecstasy. The authors reported that, since the 2012 survey, there had been a significant decline in the reported use of ecstasy; however, there was not a significant difference between 2015 and 2016 (Hull, Mao et al. 2016).

Figure 4: Proportion of gay men in Sydney reporting last six month use of ecstasy, 2010–2016

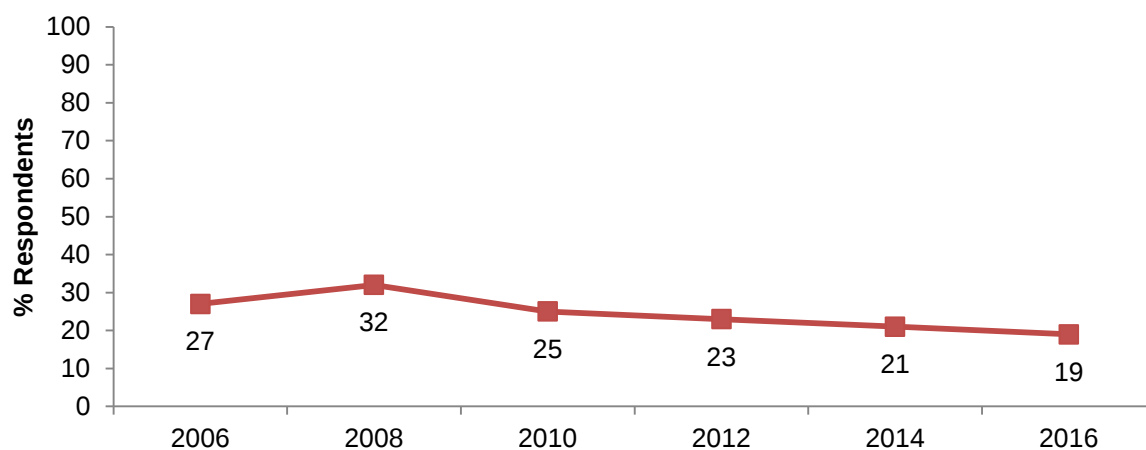


Source: Sydney Gay Community Periodic Survey 2010–2016

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, Richters & Parkhill, 2015). SWASH is a unique and important source of health-related information pertaining to Australian LBQ women. The most recently published survey was completed in 2016 with 623 women participating. Figure 5 shows the proportion of women surveyed who had used ecstasy in the past six months. In 2016, one-fifth (19%) of the sample reported having recently used ecstasy. There has been a downward trend in ecstasy use from 2008 to 2016.

Figure 5: Proportion of LBQ women in Sydney reporting last six month ecstasy use, 2008–2016



Source: Sydney Women and Sexual Health Survey 2008–2016

Illicit Drug Reporting System

A separate monitoring system investigating trends in the use of ecstasy in people who inject drugs (PWID) 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 (IDRS), and reports and bulletins are available from the NDARC or Drug Trends websites (<http://www.drugtrends.org.au/>; <http://ndarc.med.unsw.edu.au/project/illicit-drug-reporting-system-idrs>).

Key expert comments

KEs reported that people caught in possession of ecstasy were usually found at festivals, nightclubs and CBD areas, and the average age of ecstasy users ranged from 18 to 25 years.

Three KE reported that they saw more crystalline forms of MDMA rather than ecstasy pills or capsules. There is a misperception among users that the crystal form of MDMA is 'better' and 'safer' as it is more 'pure'.

According to one KE, there is some 'highly potent ecstasy available, currently in cap form'.

KE reported that the usual ROA for ecstasy was via swallowing.

2.3 Methamphetamine use

Key points

Speed

- Forty-nine percent of RPU had ever used speed and 18% had done so recently.
- Speed was used on a median of 2 days over the preceding six months and was primarily either snorted (68%) or swallowed (53%).
- The frequency and quantity of use was stable from 2015 to 2016.

Base

- One-fifth of the sample had ever used base and 5% had done so recently.
- Base was used on a median of 1 day over the preceding six months.
- The frequency of use was based on a very small number of participants, but it remains stable from 2015 to 2016.

Crystal

- One-fifth (22%) of the sample had ever used crystal and 15% had done so recently.
- Crystal was used on a median of 10 days over the preceding six months and was primarily smoked (n=14).
- The quantity of crystal methamphetamine use was relatively stable from 2015 to 2016.
- The use of methamphetamine in the past year among the NSW general population remained stable from 2010 (1.6%) to 2013 (1.4%).
- KE reported an increase in the availability and purity of crystal methamphetamine, a lower or stable price.

Amphetamine is a potent central nervous system stimulant, which can be used for a number of reasons such as the treatment of attention deficit hyperactivity disorder (ADHD), narcolepsy and obesity, as a cognitive enhancer and as a recreational stimulant. The physiological effects of amphetamines include confidence, alertness, euphoria and excitability, but can also include restlessness, tenseness and aggressiveness.

Methamphetamine is structurally similar but unique to amphetamine. Amphetamine is a phenethylamine molecule with an added methyl group; methamphetamine has an additional methyl group to amphetamine. It is this 'double-methylation', a result of a different manufacturing process, which gives methamphetamine its stronger effect on the body.

In the EDRS, methamphetamine is used synonymously for both methamphetamine and amphetamine use. Methamphetamine can be found in a variety of forms, the most common are speed, base and crystal methamphetamine (Table 9).

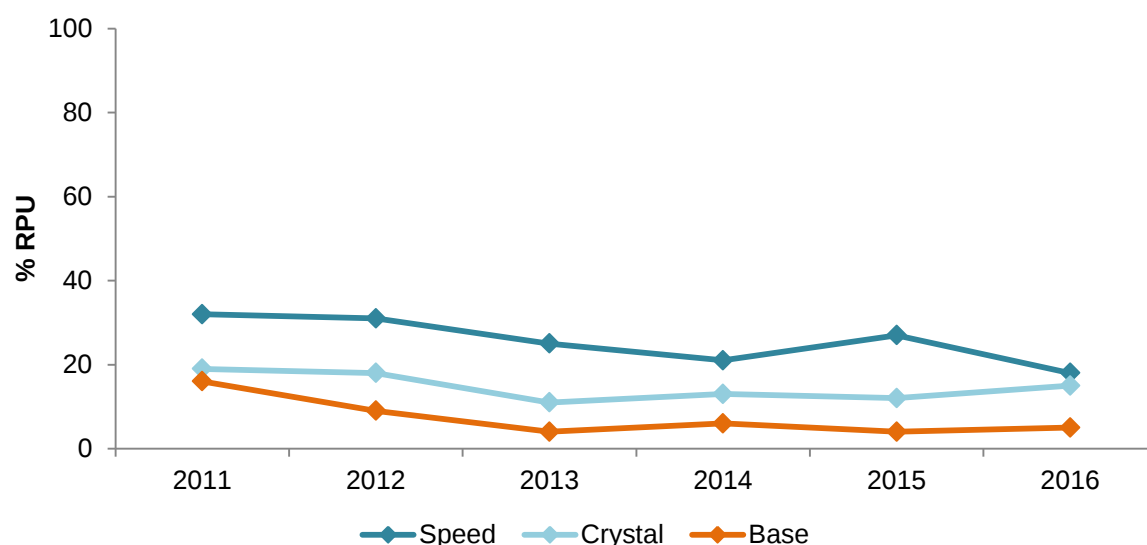
Table 9: The three forms of methamphetamine reported in the EDRS

Speed	Usually found as white powder but can be bought as pills. Most frequently snorted or swallowed.
Base	A brown oily or gluggy-like substance more pure than powder. Mainly used for swallowing or injecting.
Crystal	The crystalline form of methamphetamine and the most potent. Most commonly smoked or injected.

2.3.1 Methamphetamine use among RPU

Over time, the use of all forms of methamphetamine has remained stable. Participants report speed to be the most commonly used form, followed by crystal and base (Figure 6).

Figure 6: Recent use of methamphetamine forms, RPU, NSW, 2011–2016



Source: NSW EDRS RPU interviews 2011–2016

Methamphetamine powder (speed)

Table 10 provides data for the use of speed in the EDRS NSW samples from 2011–2016. The proportion of participants reporting lifetime use of speed has decreased from 67% in 2011 to 49% in 2016. The proportion reporting recent use was 18% in 2016. The age at which participants first used speed has remained stable at a median of 19 years in 2016. Of those who recently used, participants reported using speed on a median of 2 days in the last six months (range 1– 24); the majority (89.5%) reported using speed less than monthly, and the remainder (10.5%) reported using between fortnightly and weekly.

Most recent users quantified their 'typical' use in terms of 'grams' (n=5) or 'points' (n=2). The median amount used in a typical or average use episode in the preceding six months was either 0.5 grams (range 0.2–1) or 0.75 points (range 0.5–1). Six users quantified their 'heavy' use in 'grams', and two users in 'points'. The median amount used in the heaviest use episode was either 0.75 grams (range 0.2–1) or 1.75 points (range 0.5–3). The two most common ROA for speed users in the preceding six months was snorting (68%, n=13) and swallowing (53%, n=10); one participant reported smoking.

Table 10: Methamphetamine powder use among RPU, NSW, 2011–2016

	2011 (N=100)	2012 (N=100)	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (n=103)
% ever used	67	67	56	48	54	49
Age of initiation (<i>Md</i>)	18	18	18	19	18	19
% used recently	32	31	25	21	27	18
Days recent use (<i>Md</i> ; range)	3 (1–40)	2 (1–180)	2 (1–12)	2 (1–15)	3 (1–15)	2 (1–24)
Grams used in an average session (<i>Md</i> ; range)	0.5 (0.2–1.5)	1 (0.25–2)	0.5^ (0.05–1)	1^ (0.25–2)	1.5^ (0.2–3)	0.5^ (0.2–1)
Grams used in a heavy session (<i>Md</i> ; range)	0.6 (0.25–4)	1.25 (0.25–4)	1^ (0.5–3)	2^ (0.25–3.5)	0.5 (0.2–5.5)	0.75 (0.2–1)

Source: NSW EDRS RPU interviews 2011–2016

^ n<10 interpret with caution

Methamphetamine base

Table 11 provides data for the use of base in the EDRS NSW samples from 2011–2016. Between 2010 (53%) to 2013 (21%) there was a substantial decline in the proportion of participants reporting lifetime use of base. This figure has remained relatively stable since this time, with 21% reporting lifetime use in 2016. Recent use of base has also dropped from 16% in 2011 to 5 participants (5%) in 2016. The age at which participants first used base has marginally declined in 2016 to a median of 17 years. Of those who recently used (n=5), participants reported using base on a median of 1 day in the last six months (range 1– 2); all recent users reported using base less than monthly. Due to low numbers (n<5), grams / points in an average or heavy session has not reported.

Of the 5 participants who did report recent use of methamphetamine base: 1 participant reported smoking, 2 reported snorting and 4 reported swallowing the drug.

Table 11: Methamphetamine base use among RPU, NSW, 2011–2016

	2011 (N=100)	2012 (N=100)	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (N=103)
% ever used	41	38	21	25	25	21
Age of initiation (<i>Md</i>)	19	20	21	19	19	17
% used recently	16	9	4	6	4	5
Days recent use (<i>Md</i> ; range)	2 (1–20)	2^ (1–30)	1^ (1–5)	4.5^ (1–10)	3.5^ (1–9)	1^ (1–2)
Points used in an average session (<i>Md</i> ; range)	2^ (0.1–5)	1^ (0.1–2)	N/A*	N/A*	N/A*	N/A*
Points used in a heavy session (<i>Md</i> ; range)	2^ (0.1–10)	2^ (0.5–3)	N/A*	N/A*	N/A*	N/A*

Source: NSW EDRS RPU interviews 2011–2016

^ n<10 interpret with caution

*Data not reported as n<5.

Crystal methamphetamine

Table 12 provides data for the use of crystal methamphetamine in the EDRS NSW samples from 2011–2016. The proportion of participants reporting lifetime use of crystal methamphetamine decreased from 37% in 2011 to approximately one-fifth (21%) in 2013. This has remained relatively stable since this time, with 22% reporting lifetime use in 2016.

Recent use of crystal methamphetamine has remained stable at 15% in comparison to all previous years (2011–2015). The age at which participants first used crystal has also remained stable at a median of 20 years in 2016. Of those who recently used, participants reported using crystal methamphetamine on a median of 10 days in the last six months (range 1–100); four participants reported using crystal methamphetamine less than monthly, 5 reported using between monthly and fortnightly, 3 between fortnightly and weekly and 3 more than weekly. No participants reported daily use of crystal methamphetamine.

The majority of recent users quantified their 'typical' use in terms of 'points' (n=14). The median amount used in a typical or average use episode in the preceding six months was 1.75 points (range 0.25–3). Eleven users quantified their 'heavy' use in 'points', with the median amount used in the heaviest use episode being 3 points (range 0.25–5). The most common ROA for crystal methamphetamine users in the preceding six months was smoking (93%; n=14). Other ROA included swallowing (n=2), snorting (n=1) and injecting (n=1).

Table 12: Crystal methamphetamine use among RPU, NSW, 2011–2016

	2011 (N=100)	2012 (N=100)	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (N=103)
% ever used	37	32	21	23	25	22
Age of initiation (<i>Md</i>)	21	22	24	20	19	20
% used recently	19	18	11	13	12	15
Days recent use (<i>Md</i> ; range)	6 (1–96)	8 (1–96)	4 (1–48)	10 (1–150)	3.5 (1–96)	10 (1–100)
Points used in an average session (<i>Md</i> ; range)	2 (0.5–6)	1.25 (0.25–3)	2 (0.5–4)	1 (0.4–2)	2^ (1–3)	1.75 (0.25–3)
Points used in a heavy session (<i>Md</i> ; range)	3 (0.5–12)	3 (0.3–5)	2 (0.5–4)	2^ (0.5–5)	2^ (0.5–3)	3 (0.25–5)

Source: NSW EDRS RPU interviews 2011–2016

^ n<10 interpret with caution

2.3.2 Locations of methamphetamine use

Participants were asked what venue they spent most their time intoxicated during the last session of use. Of the three participants who commented on methamphetamine powder (speed), they reported three different locations; 'home', 'pub/bar' and a 'private party'.

Eleven participants reported on the venue they spent most time intoxicated the last time they used crystal methamphetamine. The most common locations were 'home' (n=4) and 'friends home' (n=4). Single participants reported being 'outdoors', 'work' and a 'hotel'.

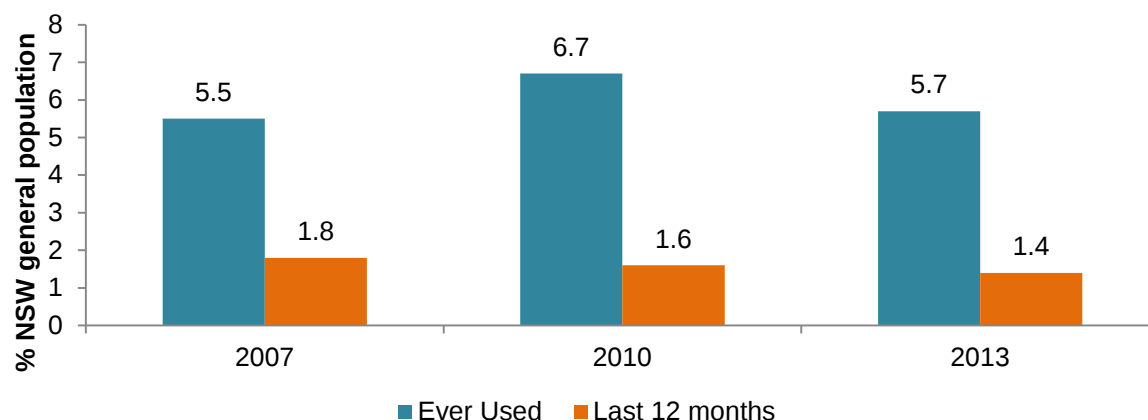
None of the RPU in 2016 provided information on the venue they spent most their time intoxicated whilst using base.

2.3.3 Methamphetamine use in other populations

General population

Figure 7 presents data from the NDSHS and shows the proportion of the general population in NSW (aged 14 years and over) who reported lifetime and recent (i.e. past year) use any form of methamphetamine (Australian Institute of Health and Welfare 2011).

Figure 7: Percentage of sample reporting lifetime and last 12-month use of methamphetamines in the NSW general population, 2007–2013

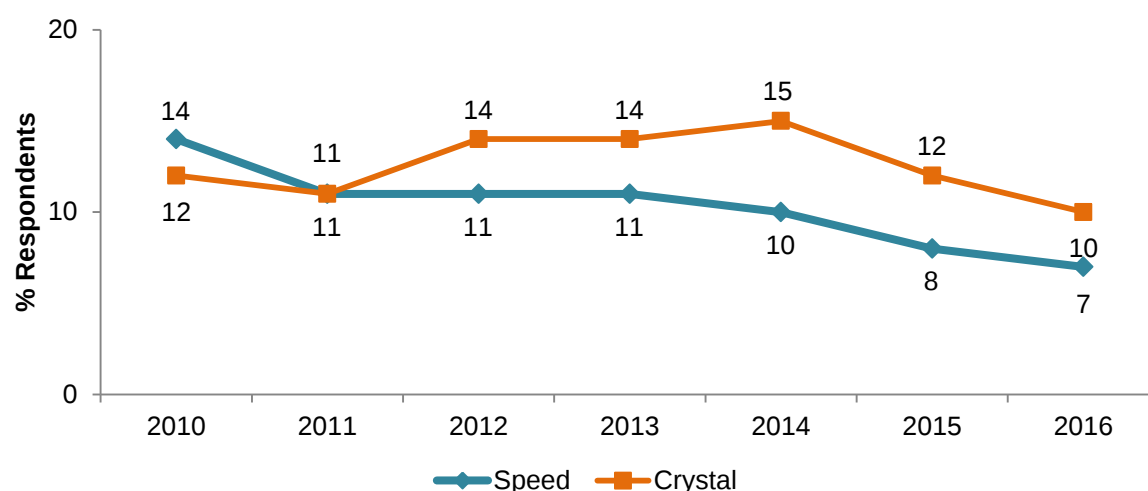


Source: Australian Institute of Health and Welfare (2008, 2011, 2014)

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 8). In 2016, 7% of men surveyed had used speed and 10% had used crystal. The authors reported a significant linear decrease in both speed and crystal use from 2010–2016. HIV-positive men are disproportionately more likely to report using crystal methamphetamine compared with HIV-negative men (30.6% vs. 10.4% in 2016) and any injecting drug use (18.5% vs. 2.9%) (Hull et al., 2016).

Figure 8: Proportion of gay men in Sydney reporting last 6-month speed and crystal use, 2010–2016

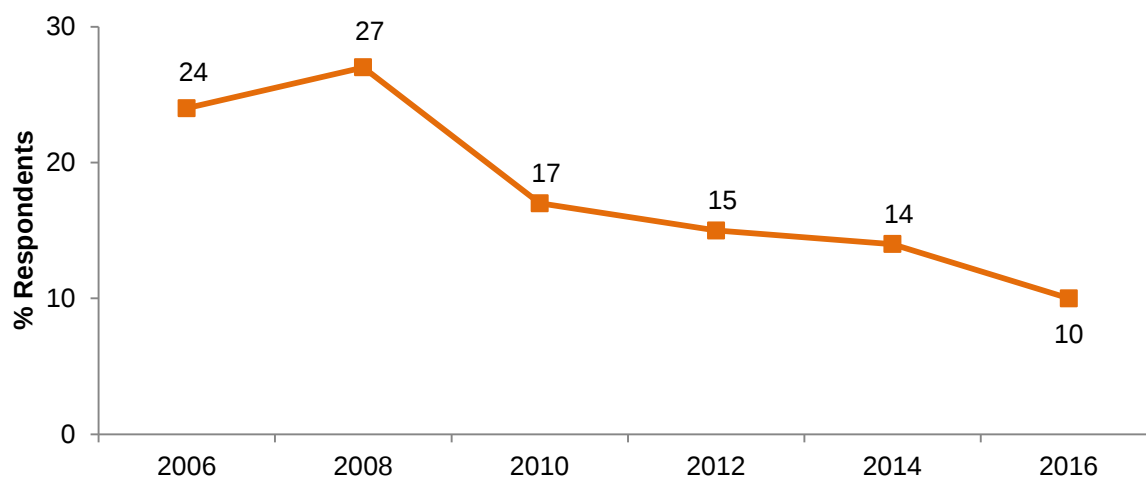


Source: Sydney Gay Community Periodic Survey 2010–2016

Sydney Women and Sexual Health Survey

The Sydney Women and Sexual Health Survey (Figure 9) showed the proportion of LBQ women surveyed who had used methamphetamine in the past six months. In 2016, 10% of women interviewed had used methamphetamine, which was a significant decrease from 2014 (14%). (Mooney–Somers, Deacon, Richters & Parkhill, 2015).

Figure 9: Proportion of LBQ women in Sydney reporting last 6-month methamphetamine use, 2006–2016



Source: Sydney Women and Sexual Health Survey 2008–2016

Illicit Drug Reporting System

A separate monitoring system investigating trends in the use of methamphetamine in people who inject drugs (PWID) has been conducted in NSW since 1996, in VIC and SA since 1997 and nationally since 2000. This is called the Illicit Drug Reporting System (IDRS) and reports and bulletins are available from the NDARC and Drug Trends websites (<http://ndarc.med.unsw.edu.au/project/illicit-drug-reporting-system-idrs>; <http://www.drugtrends.org.au/>).

Key expert comments

Most KE reported that the majority of methamphetamine users were male, mostly unemployed with high rates of contact with the justice system.

There was concern regarding the prevalence of mental health issues among methamphetamine users including depression, psychosis and paranoia, chaotic behaviour and aggression. Physical deterioration resulting from methamphetamine use, sleep deprivation, malnutrition, weight loss, hygiene issues, dental issues and skin issues were noted.

KE stressed the need for more treatment services to reduce use and harms associated with methamphetamine use.

Law enforcement KE stated that there was continued organised crime involvement, especially in terms of importation of the finished product and domestic manufacture of methamphetamine.

2.4 Cocaine use

Key points

- The majority of the RPU (82%) had tried cocaine at least once, and 70% had used it recently.
- Cocaine was used on a median of 3.5 days over the preceding six months and the main ROA was snorting (69%).
- Recent use of cocaine among the NSW general population remained stable at 2.7% in 2013.

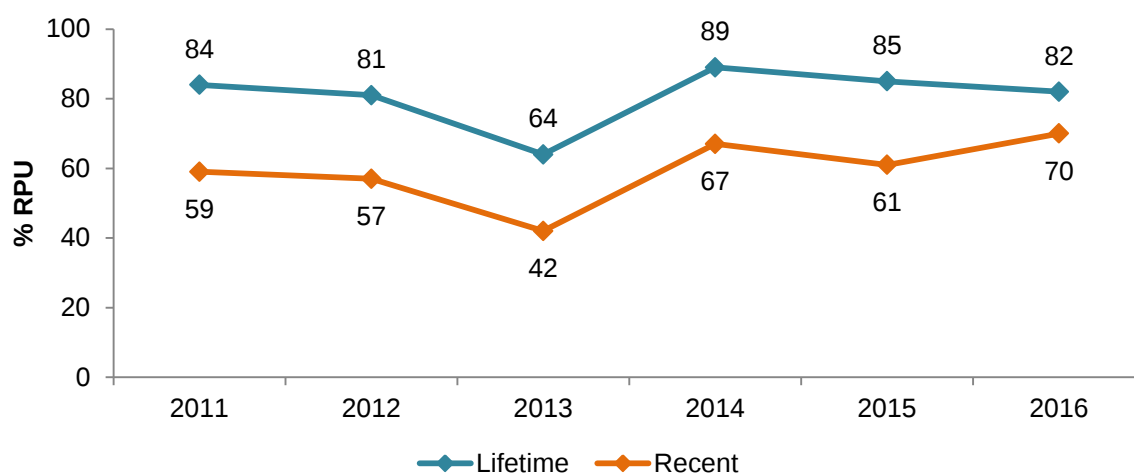
Cocaine is a colourless or white crystalline alkaloid which (similar to methamphetamine) acts as a stimulant. Cocaine hydrochloride, a salt derived from the cocoa plant, is the most common form of cocaine available in Australia. 'Crack' is a form of freebase cocaine (hydrochloride removed) which is particularly pure; however, it is infrequently encountered in this country (Australian Crime Commission, 2015).

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 law enforcement KE note that lidocaine, glucose, lactose, baking soda and even talcum powder have been found in analysed seizures of cocaine.

2.4.1 Cocaine use among RPU

The majority (82%) of RPU in 2016 report having used cocaine in their lifetime, with 70% reporting recent use

Figure 10: Lifetime and recent use of cocaine, RPU, NSW, 2011–2016



Source: NSW EDRS RPU interviews 2011–2016

Table 13 provides data for the use of cocaine in the EDRS NSW samples from 2011–2016. The age at which participants first used cocaine has remained stable at a median of 18 years in 2016. Those who had used cocaine over the preceding six months had done so on a median of 3.5 days (range 1–72); 67% reported using cocaine less than monthly, 10% had done so between monthly and fortnightly, 15% had done so between fortnightly and weekly, and the remaining 4 participants had used cocaine more than weekly. None of the RPU in the 2016 survey reported daily use.

Most recent users quantified their 'typical' use in terms of 'grams' (n=34) or 'lines' (n=35). The median amount used in a typical or average use episode in the preceding six months

was either 0.5 grams (range 0.2–2) or 3 lines (range 0.5–10). Thirty-six users quantified their 'heavy' use in 'grams' and 31 in 'lines'. The median amount used in the heaviest use episode was either 1 gram (range 0.20–7) or 3 lines (range 1–13). The most common ROA was snorting (69%), followed by swallowing (6%).

Table 13: Cocaine use among RPU, NSW, 2011–2016

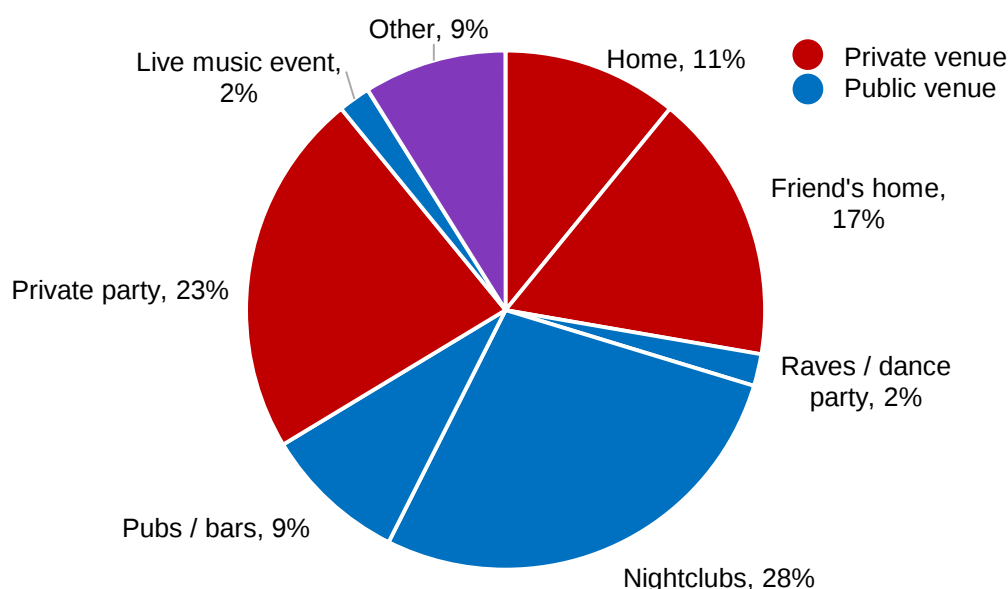
	2011 (N=100)	2012 (N=100)	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (N=103)
% ever used	84	81	64	89	85	82
Age of initiation (<i>Md</i>)	18	19	19	19	19	18
% used recently	59	57	42	67	61	70
Days recent use (<i>Md</i> ; range)	4 (1–120)	3 (1–90)	2 (1–10)	3 (1–60)	4 (1–50)	3.5 (1–72)
Grams used in an average session (<i>Md</i> ; range)	0.5 (0.1–3)	0.5 (0.1–1)	0.5 (0.1–2)	0.65 (0.05–1.5)	0.5 (0.12–4)	0.5 (0.2–2)
Grams used in a heavy session (<i>Md</i> ; range)	1 (0.1–6.5)	1 (0.1–5)	0.5 (0.1–6)	1 (0.05–4)	1 (0.25–4)	1 (0.20–7)

Source: NSW EDRS RPU interviews 2011–2016

2.4.2 Locations of cocaine use

Participants were asked where they spent the most time while intoxicated the last time they used cocaine (Figure 11).

Figure 11: Location of last cocaine use among RPU, NSW 2016



Source: NSW EDRS RPU interviews 2016

The 'place' where people spent the most time when they were last intoxicated included 'nightclubs' (28%, n=13), 'private parties' (23%, n=11), 'friend's homes' (17%, n=8) and 'home' (11%, n=5). Less common places included 'pubs/bars' (9%, n=4) and 'other' locations (9%, n=4). Single participants nominated the place where they spent the most time when last intoxicated to be 'live music event/ concert / festival' and 'raves/doofs/dance parties'.

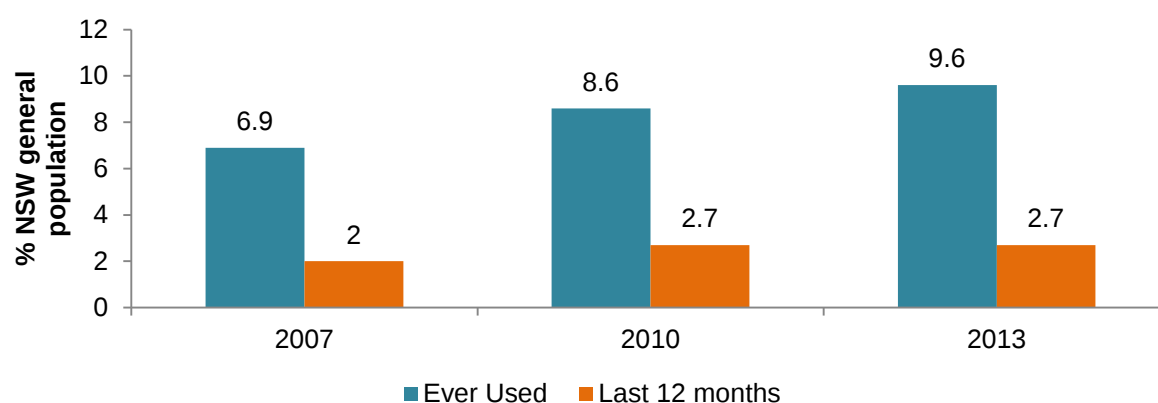
A marginally larger proportion of participants (51%, n=24) had used cocaine in a private venue compared to a public venue (40%, n=19).

2.4.3 Cocaine use in other populations

General population

Data from the NDSHS on reported lifetime and recent use of cocaine in the NSW general population is presented in Figure 12. There has been an upward trend in the proportions reporting lifetime use in NSW. The proportions who reported past 12 month use of cocaine has remained stable.

Figure 12: Percentage of sample reporting lifetime and last 12-month use of cocaine in the NSW general population, 2007–2013

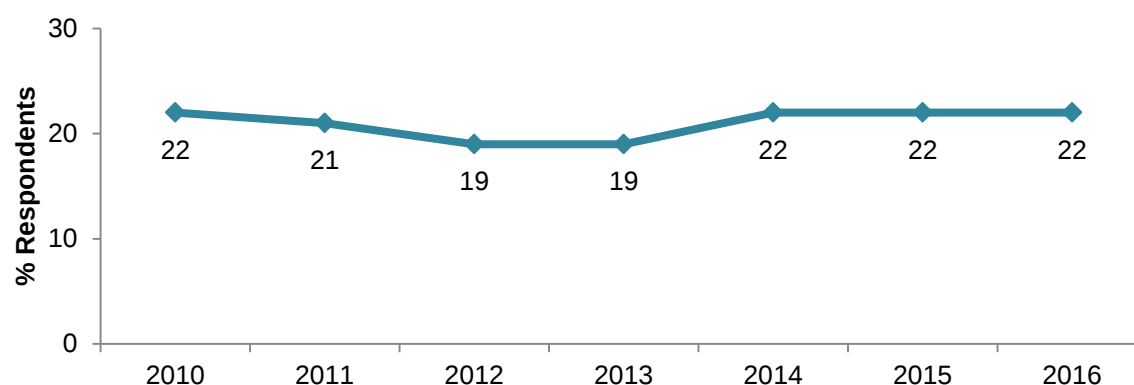


Source: Australian Institute of Health and Welfare (2008, 2011, 2014)

Sydney Gay Community Periodic Survey

In 2016, over one-fifth of gay men interviewed for the survey reported the recent use of cocaine (Figure 13). The authors reported no significant change in the proportion of participants that used cocaine from 2015 to 2016 however, there was a significant linear increase since 2012 (Hull et al., 2016).

Figure 13: Proportion of gay men in Sydney reporting last 6-month use of cocaine, 2010–2016

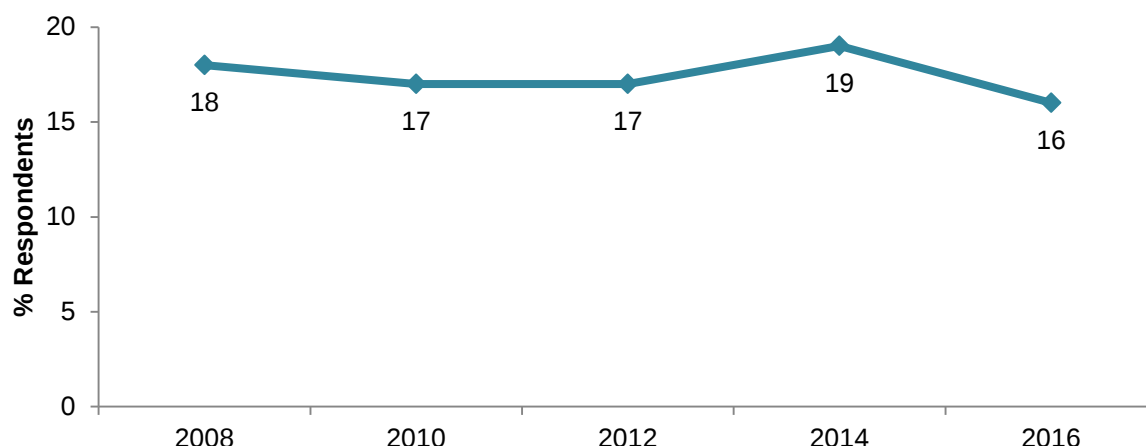


Source: Sydney Gay Community Periodic Survey 2010–2016

Sydney Women and Sexual Health Survey

The Sydney Women and Sexual Health Survey (Figure 14) reports the proportion of LBQ women surveyed who had used cocaine in the past six months. In 2016, 16% of LBQ women had recently used cocaine (Mooney-Somers, Deacon, Richters & Parkhill, 2015).

Figure 14: Proportion of LBQ women in Sydney reporting last 6-month cocaine use, 2008–2016



Source: Sydney Women and Sexual Health Survey 2008–2016

Illicit Drug Reporting System

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

Key expert comments

KE reported that cocaine was mainly detected at parties and clubs in the inner city, but there were no changes in terms of user demographics.

The number of cocaine seizures has increased but not significantly, and only very small quantities are found.

Law enforcement KE reported that cocaine was mainly detected in affluent areas with the average age of users being 30 years old.

Cocaine was reported to be the third most detected drug behind cannabis and crystal methamphetamine.

2.5 LSD use

Key points

- Eighty-one percent of the sample had tried LSD at least once and 65% had used it recently.
- LSD was used on a median of 3 days over the preceding six months.
- LSD was often used in outdoor settings in contrast to other psychostimulants.
- About two-thirds (65%) of the 2016 sample reported recent use of stable from 2015 (60%).

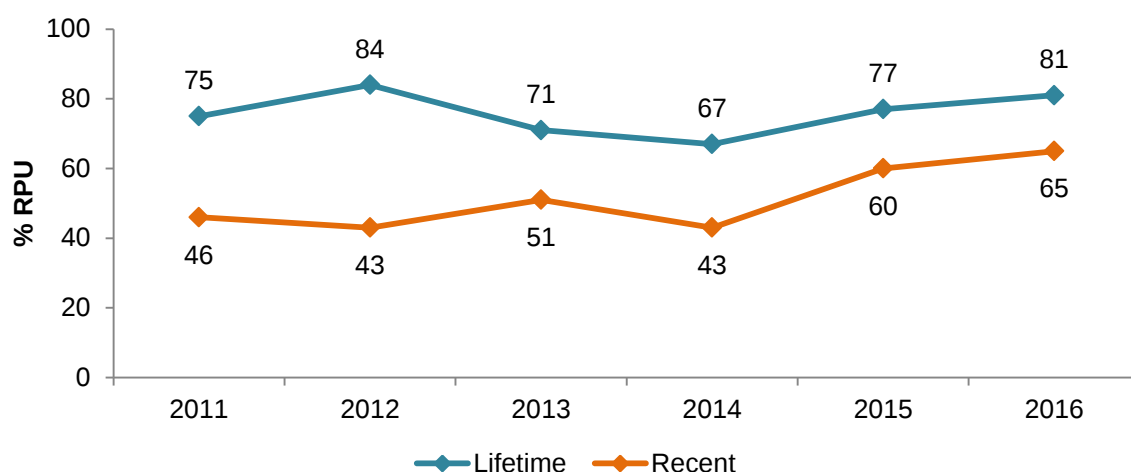
Lysergic acid diethylamide is commonly known as LSD, 'trips' or 'acid'. It is a powerful hallucinogen which can produce significant changes in perception, mood and thought. Only a small amount is needed to cause visual hallucinations and distortions. These experiences are known as 'trips'. Unpleasant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

2.5.1 LSD use among RPU

The lifetime use of LSD among RPU has remained stable since 2011. The proportion of recent users was relatively stable from 2011 (46%) to 2014 (43%). In 2015 this proportion increased significantly from the previous years to 60% reporting recent use ($p < .05$). The increasing trend in recent use continued into 2016 (65%), but was not significantly higher than 2015. To date, 2016 saw the highest proportion of recent LSD users since the EDRS commenced (Figure 15).

Figure 15: Lifetime and recent use of LSD, RPU, NSW, 2011–2016



Source: NSW EDRS RPU interviews 2011–2016

Table 14 provides data for the use of LSD in the EDRS NSW samples from 2011–2016. The age at which participants first used LSD has remained stable at a median of 18 years in 2016. Those who had used LSD over the preceding six months had done so on a median of 3 days (range 1–48). Approximately, three-quarters (n=49) of the recent LSD users reported using less than monthly, 18% (n=12) reported using between monthly and fortnightly, 4 participants between fortnightly and weekly, and one participant reported using weekly or more often.

Eighty-four percent of recent user quantified their 'typical' use in terms of 'tabs' or 'pills/tabs' (n=56). The median amount used in a typical or average use episode in the preceding six months was 1 tab (range 0.25–4). Eighty-two percent (n=55) of recent users quantified their 'heavy' use in 'tabs' or 'pills/tabs'. The median amount used in the heaviest use episode was 2 tabs (range 0.3–10). Swallowing was reported to be the ROA for all recent LSD users.

Table 14: LSD use among RPU, NSW, 2011–2016

	2011 (N=100)	2012 (N=100)	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (N=103)
% ever used	75	84	71	67	77	81
Age of initiation (<i>Md</i>)	18	18	18	19	43	18
% used recently	46	43	51	43	60	65
Days recent use (<i>Md</i> ; range)	2 (1–48)	3 (1–24)	2 (1–24)	2 (1–50)	2 (1–20)	3 (1–48)
Tabs used in an average session (<i>Md</i> ; range)	1 (0.25–5)	1 (0.5–2)	1 (0.25–7.5)	1 (0.5–4)	1 (0.25–3)	1* (0.25–4)
Tabs used in a heavy session (<i>Md</i> ; range)	1 (0.25–20)	1 (0.5–5)	1.5 (0.5–10)	1 (0.5–5)	1 (0.5–5)	2* (0.30–10)

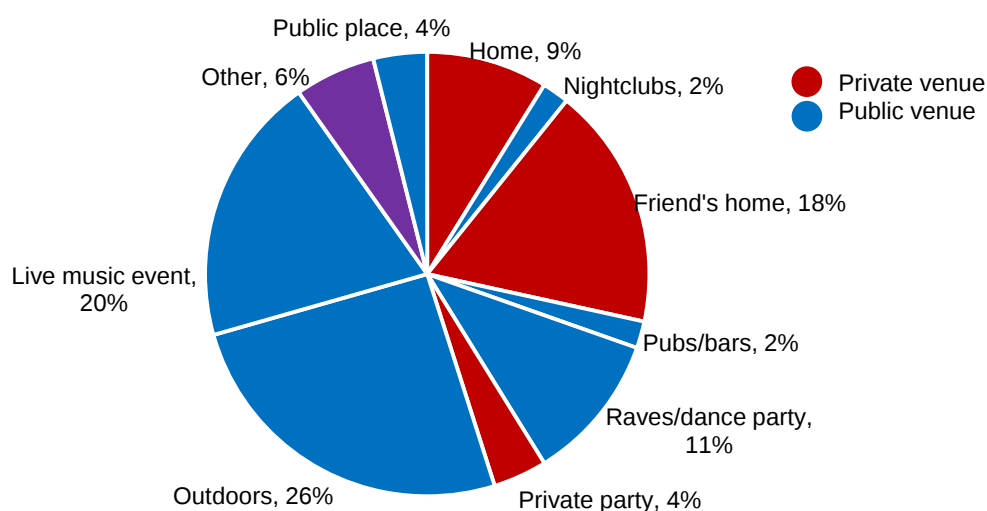
Source: NSW EDRS RPU interviews 2011–2016

* These figures includes participants that endorsed the category 'tabs' and 'pills/tabs'

2.5.2 Locations of LSD use

Participants were asked where they spent the most time while intoxicated the last time they used LSD (Figure 16). Fifty-five participants responded to this question. Nearly two-thirds (64%, n=35) had used LSD in a public venue and 31% (n=17) in a private venue.

Figure 16: Location of last LSD use among RPU, NSW 2016



Source: NSW EDRS RPU interviews 2016

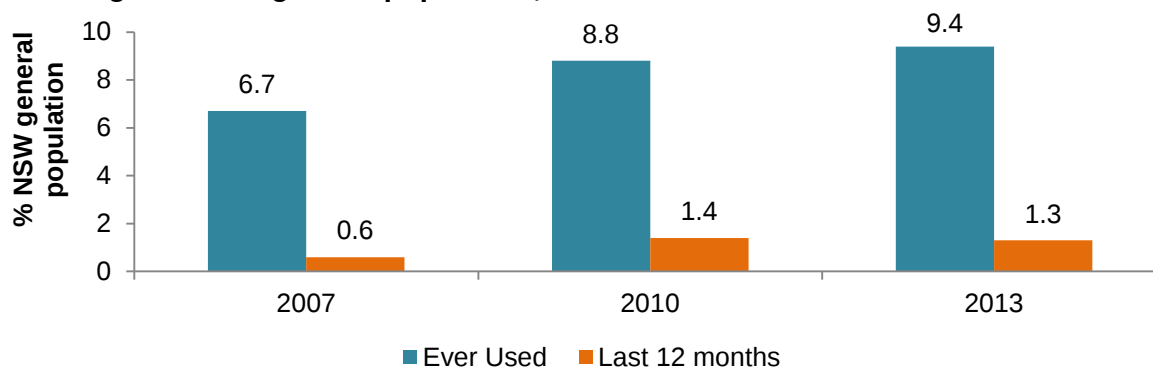
More specifically, from Figure 16 it is evident that 26% (n=14) reported being 'outdoors', followed by 20% (n=11) at a 'live music event/concert/festival' and 18% (n=10) at a 'friend's home'. A smaller number of participants reported being at locations such as 'raves/doofs/dance parties' (11%, n=6), 'home' (9%, n=5), 'private parties' (4%, n=2) and 'public places' (street/park) (4%, n=2). Single participants reported last being intoxicated at a 'nightclub' and 'pub/bar'. Three participants reported the location as 'other' (6%).

2.5.3 LSD use in other populations

General population

Figure 17 presents NDSHS data across time on the lifetime and past 12-month use of hallucinogens in the Australian general population among participants aged 14 years or over. There were no significant differences in the proportions reporting both lifetime and past year use of hallucinogens from 2010 to 2013 (Australian Institute of Health and Welfare, 2014). One percent of the NSW NDSHS sample reported past 12-month use of a hallucinogen in the 2013 NDSHS.

Figure 17: Percentage of sample reporting lifetime and last 12-month use of hallucinogens in the general population, 2007–2013



Source: Australian Institute of Health and Welfare (2008, 2011, 2014)

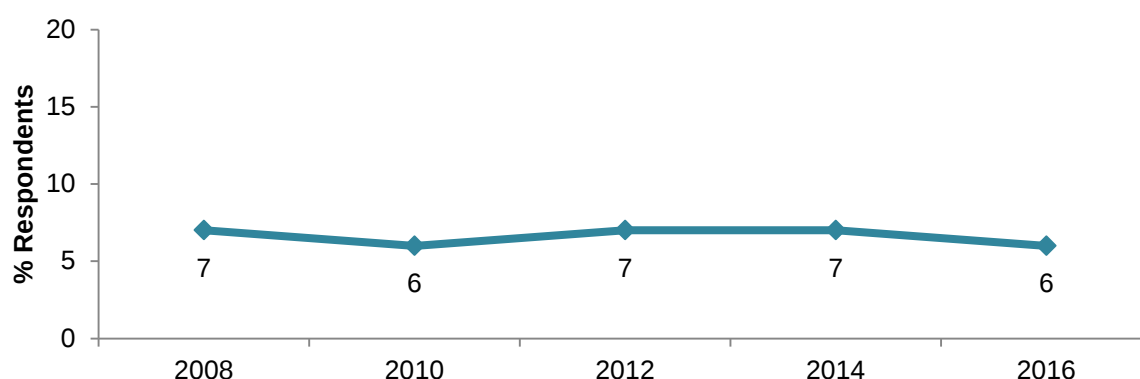
Sydney Gay Community Periodic Survey

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

Sydney Women and Sexual Health Survey

Figure 18 shows the proportion of women surveyed who had used LSD in the past six months. This figure had remained relatively stable since 2008, with 6% of the group reporting recent LSD use in 2016 (Mooney-Somers, Deacon, Richters & Parkhill, 2015).

Figure 18: Proportion of LBQ women in Sydney reporting last 6-month LSD use, 2008–2016



Source: Sydney Women and Sexual Health Survey 2008–2016

Illicit Drug Reporting System

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

Key expert comments

One KE working in the health sector reported that they had only occasionally seen LSD taken at LGBTI parties, and that he had witnessed one individual “really peaking after taking some strong LSD”.

Another KE working in law enforcement reported that the average age of LSD users has decreased in 2016 to 26 years (dropping from 27 years in 2015).

Hallucinogen detections dropped slightly to 185 detections in 2016 (from 198 detections in 2015), as reported by one KE.

2.6 Ketamine use

Key points

- Fifty-seven percent of the sample had tried ketamine during their lifetime and half (50%) had used it recently.
- Ketamine was used on a median of 3 days over the preceding six months and all participants, with the exception of one, reported snorting as the ROA (98%).
- Lifetime use of use of ketamine among the Australian general population increased from 2010 to 2013, but recent use remained stable.

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. When used recreationally, 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'.

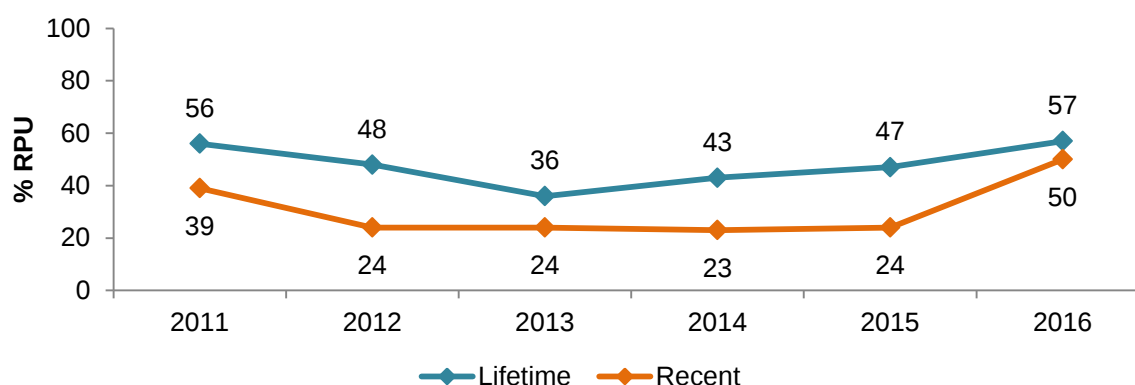
As ketamine is complicated to manufacture, and precursor chemicals are difficult to obtain, it is unlikely that it is produced in clandestine laboratories. The majority of ketamine used by RPU is probably diverted from veterinary sources or imported from overseas, making supply irregular compared with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

2.6.1 Ketamine use among RPU

Lifetime use of ketamine trended downward from 2010 to 2013, after which point lifetime use started to increase. In 2016, lifetime use of Ketamine was reported by 57% of the sample, which is similar to the level of lifetime use in 2011. Recent use was relatively stable from 2012 to 2015, however in 2016 there has been a significant increase in recent use ($p < 0.05$, 95% CI 0.11, 0.37) during this period.

Figure 19 shows the lifetime and recent use of ketamine during this period.

Figure 19: Lifetime and recent use of ketamine, RPU, 2011–2016



Source: NSW EDRS RPU interviews 2011–2016

Table 15 provides data for the use of ketamine in the EDRS NSW samples from 2011–2016. The age at which participants first used ketamine remained stable at a median of 19 from 2011 to 2015; age of first use was not collected in the 2016 survey. Those who had used ketamine over the preceding six months had done so on a median of 3 days (range 1–72); just over half (53%; n=27) had used less than monthly, with small percentages reporting between fortnightly and monthly use (8%, n=4), weekly to fortnightly (8%, n=4) and greater than weekly (6%, n=3).

Most recent users quantified their 'typical' use in terms of 'bumps' (n=25) or 'grams' (n= 12). Only 7 participants (14%) reported their use in 'lines'. The median amount used in a typical or average use episode in the preceding six months was either 2 bumps (range 0.5–10) or 0.5 grams (range 0.15–1) or 1 line (range 0.5–5.5). Similar numbers of participants reported their 'heavy' use in 'bumps' (n=22), grams (n=17) and 'lines' (n=6). The median amount used in the heaviest use episode was either 3 bumps (range 1–15) or 1 gram (range 0.15–4) or 1 line (range 0.5–6). All participants with the exception of one reported that the most common ROA was snorting the ketamine (98%, n=50), with one participant reporting swallowing in the last 6 months.

Table 15: Ketamine use among RPU, NSW, 2011–2016

	2011 (N=100)	2012 (N=100)	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (N=103)
% ever used	56	48	36	43	47	57
Age of initiation (<i>Md</i>)	20	20	21	20	19	∞
% used recently	39	24	24	23	24	50
Days recent use (<i>Md</i> ; range)	2 (1–100)	3 (1–12)	2 (1–10)	2 (1–32)	1.5 (1–8)	3 (1–72)
Bumps used in an average session (<i>Md</i> ; range)	2 (1–10)	2 (1–10)	2 (1–5)	2 (1–5)	1 (0.1–5.5)	2 (0.5–10)
Bumps used in a heavy session (<i>Md</i> ; range)	3 (1–10)	2 (1–12)	2 (1–10)	2 (1–6)	2 (0.25–10)	3 (1–15)

Source: NSW EDRS RPU interviews 2011–2016

∞Data not collected in the 2016 survey

2.6.2 Locations of ketamine use

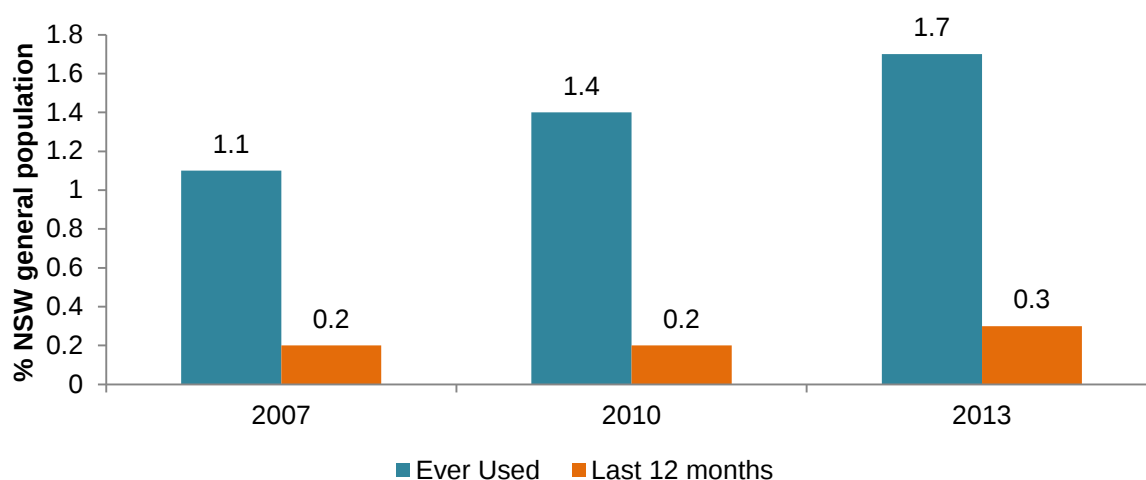
There was also considerable variation in where these participants (n=26) had spent the most time on the last occasion of intoxication from ketamine. Over one-quarter (27%, n=7) had spent the time at a 'friend's home'. A similar, but lesser percentage, had spent the time at a 'rave/doof/dance parties' (23%, n=6). Other locations included 'home' (15%, n=4), 'private parties' (15%, n=4), 'nightclubs' (8%, n=2) and 'live music event/concert/festival' (8%, n=2). One participant (4%) reported being in a 'pub/bar'.

2.6.3 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, 2005). While there was a significant increase in the proportion reporting lifetime ketamine use in the 2013, the proportion reporting use within the past year remained low and stable (Australian Institute of Health and Welfare, 2014; (Figure 20). In 2013 lifetime use of ketamine in the NSW general population was 2% and recent use was similar to national figures (0.3%).

Figure 20: Percentage of sample reporting lifetime and last 12-month use of ketamine in the Australian general population, 2007–2013

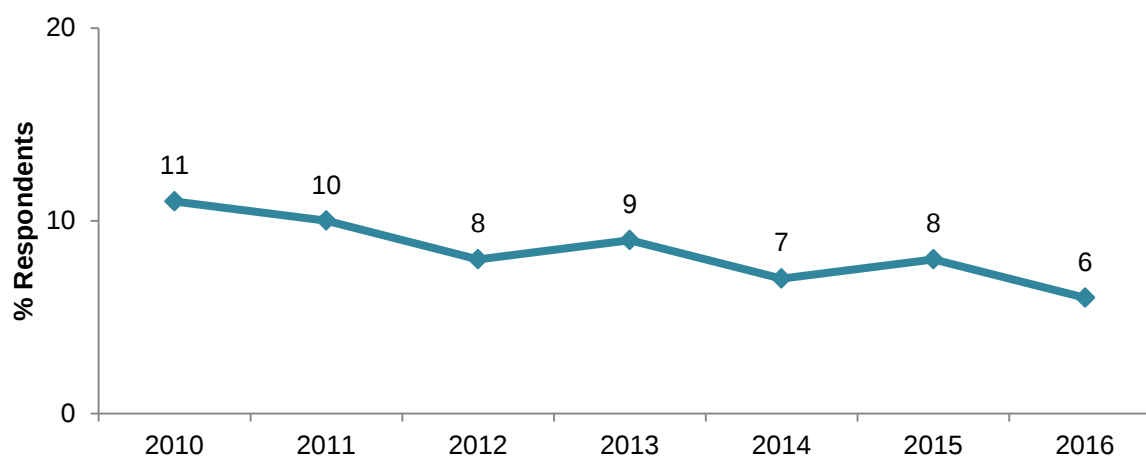


Source: Australian Institute of Health and Welfare (2008, 2011, 2014)

Sydney Gay Periodic Survey

Figure 21 shows the proportion of men surveyed who had used ketamine in the past six months. There was a significant decrease reported from 2015 to 2016. The authors reported a significant decline in the use of ketamine among their sample from 2012 to 2016 (Hull et al., 2016).

Figure 21: Proportion of gay men in Sydney reporting last 6-month ketamine use, 2010–2016

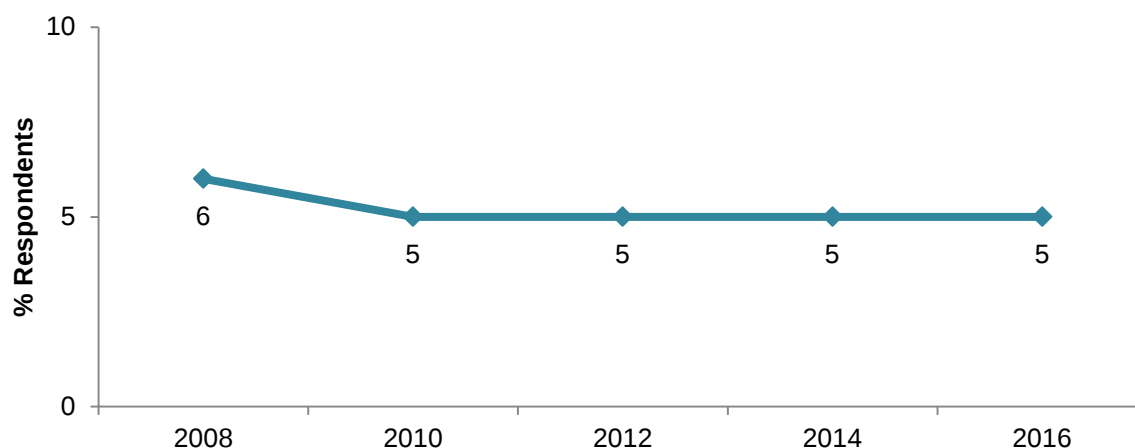


Source: Sydney Gay Community Periodic Survey 2010–2016

Sydney Women and Sexual Health Survey

Figure 22 shows the proportion of women surveyed who had used ketamine in the past six months. In 2016, 5% of this group reported recent use of ketamine, which has remained relatively stable since 2008 (Mooney-Somers, Deacon, Richters & Parkhill, 2015).

Figure 22: Proportion of LBQ women in Sydney reporting last 6-month ketamine use, 2008–2016



Source: Sydney Women and Sexual Health Survey 2008–2016

Key expert comments

Only one KE could comment on ketamine availability, but could not provide any information beyond stating that the market for ketamine is low and stable.

This KE stated that ketamine is a 'niche market', and is not a main concern for NSW Police.

2.7 GHB use

Key points

- Twenty-seven percent of the sample had tried GHB at least once and one-fifth (20%) had used it recently.
- GHB was used on a median of 6 days over the preceding six months.
- Lifetime and recent use of GHB among the NSW general population remained low.

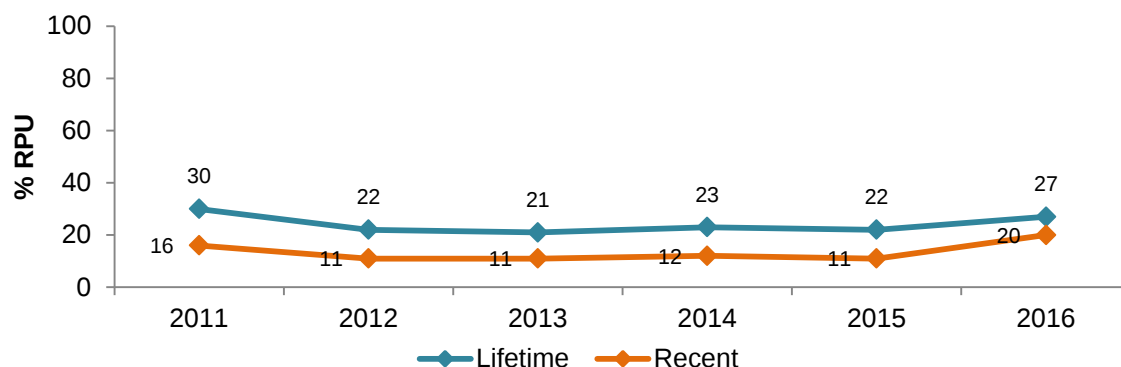
Gamma-hydroxybutyrate (GHB) has been researched and used for a number of clinical purposes including as an anaesthetic (Kam & Yoong, 1998; Nicholson & Balster, 2001). In 1964, GHB was introduced in Europe as an anaesthetic agent particularly for children (Laborit, 1964; Vickers, 1968) but was not widely 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 Australia, common street names for GHB 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.

2.7.1 GHB use among RPU

From 2012 to 2015, lifetime and recent use of GHB remained stable. In 2016 there is a non-significant increase in both lifetime (27%, n=28) and recent use (20%, n=21) of GHB (Figure 23).

Figure 23: Lifetime and recent use of GHB among NSW RPU, 2011–2016



Source: NSW EDRS RPU interviews 2011–2016

Table 16 provides data for the use of GHB in the EDRS NSW samples from 2011–2016. Recent users (20%, n=21) reported using on a median of 6 days (range 1–80) in the previous 6 months. Those who had used GHB over the preceding six months had done so on a median of 6 days (range 1–80). In term of the frequency of use, 52% (n=11) used GHB less than monthly, 4 participants (19%) reported using GHB between fortnightly and monthly, 2 (10%) between weekly and fortnightly and 4 (19%) greater than weekly.

Eighteen of the 21 participants quantified their 'average' and 'heavy' use in terms of 'mls'. The median amount used in a typical or average use episode in the preceding six months

was 5.5 ml (range 1–100) and the median amount used in a heavy use episode was 8.5 ml (range 1–100).

Table 16: GHB use among RPU, NSW, 2011–2016

	2011 (N=100)	2012 (N=100)	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (N=103)
% ever used	30	22	21	23	22	27
Age of initiation (<i>Md</i>)	21	26	21	24	22	∞
% used recently	16	11	11	12	11	20
Days recent use (<i>Md</i> ; range)	2 (1–4)	2 (1–90)	1 (1–30)	1.5 (1–10)	3 (1–24)	6 (1–80)
ml used in an average session (<i>Md</i> ; range)	2^ (1–4)	2^ (2–30)	4^ (2–8)	2^ (1–5)	4^ (1.2–5)	5.5 (1–100)
ml used in a heavy session (<i>Md</i> ; range)	4^ (1–10)	4.5^ (2–80)	4.5^ (2–10)	2^ (1.5–6)	4^ (1.2–8)	8.5 (1–100)

Source: NSW EDRS RPU interviews 2011–2016

^ n<10 interpret with caution

∞ Data not collected in the 2016 survey

2.7.2 Locations of GHB use

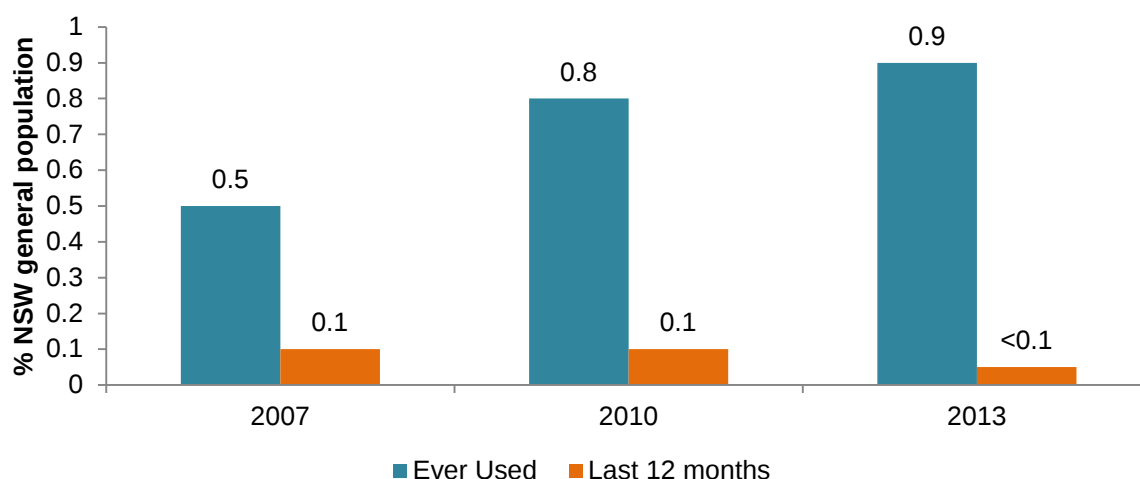
Participants were asked where they spent the most time while intoxicated the last time they used GHB. Fifteen participants responded to this question and reported varied venues including, 'friend's home' (27%, n=4), 'nightclubs' (27%, n=4), 'home' (13%, n=2) and 'private parties' (13%, n=2). Single participants reported 'raves/doofs/dance parties', 'outdoors' and 'live music event/concert/festival'. Almost equal numbers had last been intoxicated in a public (n=7) or private (n=8) venue.

2.7.3 GHB use in other populations

General population

From 2010 to 2013 the recent use of GHB among the Australian general population aged 14 years and over significantly decreased to under 0.1%. The proportions reporting lifetime use remained stable at 0.9% (Figure 24; Australian Institute of Health and Welfare, 2014). The 2013 NDSHS NSW data is similar to national data with 1% reporting lifetime use of GHB and <0.1% reporting use in the past year.

Figure 24: Percentage of sample reporting lifetime and last 12-month use of GHB in the Australian general population, 2007–2013

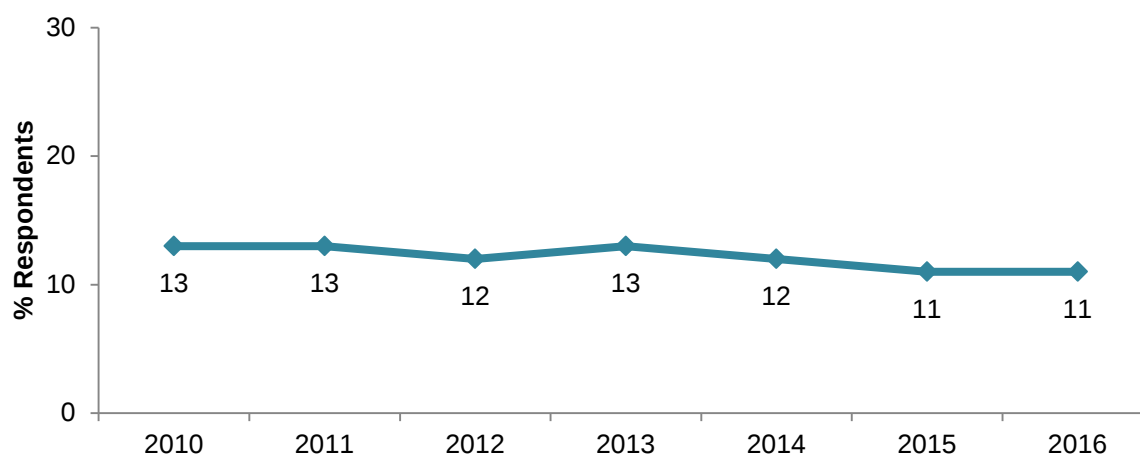


Source: Australian Institute of Health and Welfare (2008, 2011, 2014)

Sydney Gay Community Periodic Survey

In 2016, over one-tenth of gay men interviewed for the survey reported the recent use of GHB (Figure 25). The authors reported no significant decrease in the proportion of participants that used GHB from 2015 to 2016, however there was a significant decreasing linear trend since 2012 (Hull et al., 2016).

Figure 25: Proportion of gay men in Sydney reporting last 6-month use of GHB, 2010–2016

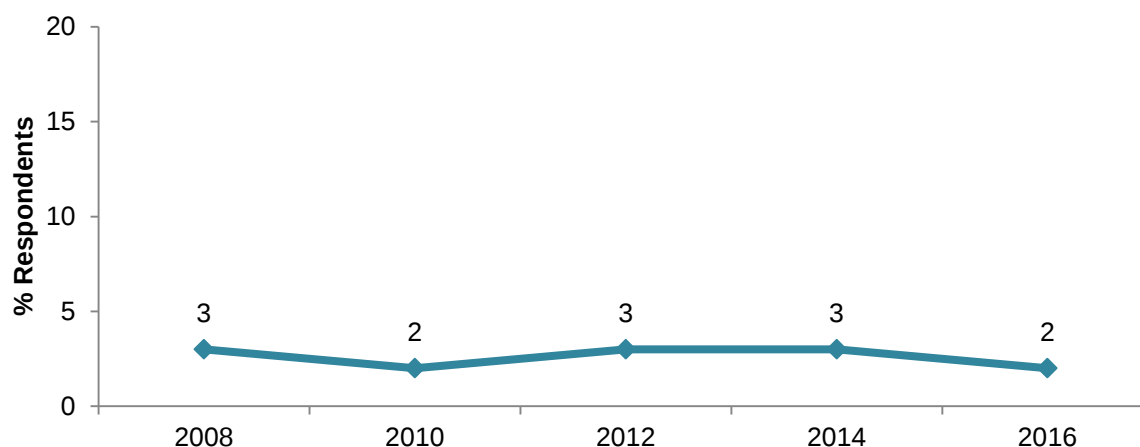


Source: Sydney Gay Community Periodic Survey 2010–2016

Sydney Women and Sexual Health Survey

The Sydney Women and Sexual Health Survey (Figure 26) reports the proportion of LBQ women surveyed who had used GHB in the past six months. This figure has remained relatively stable across time with 2% reporting recent GHB use in 2014 (Mooney-Somers, Deacon, Richters & Parkhill, 2015).

Figure 26: Proportion of LBQ women in Sydney reporting last 6-month GHB use, 2008–2016



Source: Sydney Women and Sexual Health Survey 2008–2016

Key expert comments

One KE working in the law enforcement sector could comment on the use of GHB. This KE stated that GHB is mostly used in liquid form and often found in conjunction with crystal methamphetamine.

The same KE commented that GHB is mostly found at music festivals and historically during the Mardi Gras period.

2.8 Cannabis Use

Key points

- Almost every participant had tried cannabis at least once during their lifetime (99%) and the vast majority (85%) had used it recently.
- Cannabis was used on a median of 24 days (i.e. once per week) over the preceding six months.
- The lifetime and recent use of cannabis among RPU remained relatively stable over time.
- About half of recent users, reported weekly or more frequent use with 11% reporting daily cannabis use.
- The use of cannabis in the past year among the NSW general population remained stable at 9.5% in 2013.

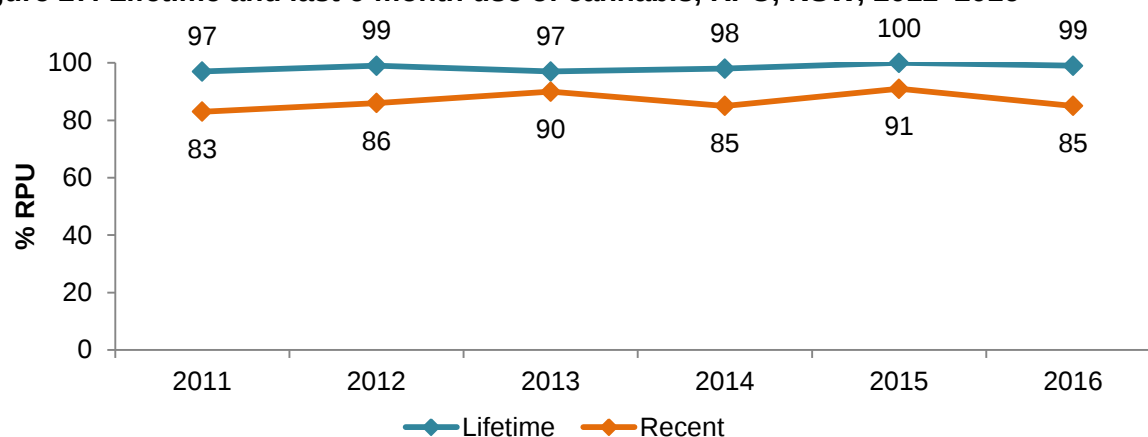
The most commonly recognised active chemicals found in cannabis are delta-9-tetrahydrocannabinol (THC) and cannabidiol (CBD); however, according to Russo (2013), 483 active substances have been identified from the cannabis plant.

Cannabis in Australia is mainly harvested from two common types of plant, *Cannabis sativa* and *Cannabis Indica* (Australian Crime Commission, 2015). While cannabis can be grown in almost any climate, it is being increasingly cultivated by means of indoor hydroponic technology. In Australia the most commonly used form of cannabis is marijuana: hydroponic (hydro) and bush-grown (bush) plants. Other forms of cannabis include hashish (hash) and hash oil (National Drug and Alcohol Research Centre, 2008), although, these are less widely used. Cannabis remains the dominant illicit drug in Australia in terms of arrests, seizures and use (Australian Crime Commission, 2015).

2.8.1 Cannabis use among RPU

The lifetime and recent use of cannabis has remained high and relatively stable from 2011 to 2016. This consistency over the years is evident in Figure 27. In 2016, 99% (n=102) of participants reported lifetime use and 85% (n=88) reported using cannabis in the last 6 months. In 2016, nearly one-quarter (23%, n=24) of the sample reported that cannabis was their drug of choice.

Figure 27: Lifetime and last 6-month use of cannabis, RPU, NSW, 2011–2016



Source: NSW EDRS RPU interviews 2011–2016

Table 17 provides data for the use of cannabis in the EDRS NSW samples from 2011–2016. The age at which participants first used cannabis has remained stable at a median of 15 years in 2016. Those who had used cannabis over the preceding six months had done so on a median of 24 days (range 1–180). Of those who reported recent use: 97% (n=85) reported smoking, 44% (n=39) reported swallowing, and 42% (n=37) reported inhaling / vaporising the cannabis. In terms of frequency of use, 25% (n=22) of recent cannabis users reported using less than monthly, 21% (n=18) reported using between weekly and monthly and 49% (n=43) reported using more frequently than weekly. Of recent cannabis users, 11% (n=9) reported daily use of cannabis.

Participants were asked how much they smoked in their last episode of use. Thirty-one participants quantified their use in terms of cones, 24 in terms of joints and 26 in terms of grams. The median amount used in the last episode was either 2 cones (range 0.5–20), 1 joint (range 0.50–4) or 1 gram (range 0.2–3).

Of the 37 participants who reported that they binged on a drug/s (i.e. used a stimulant or related drug for 48 hours or more with no sleep), 43% (n=16) reported cannabis to be one of the drugs included in the binge.

Table 17: Cannabis use among RPU, NSW, 2011–2016

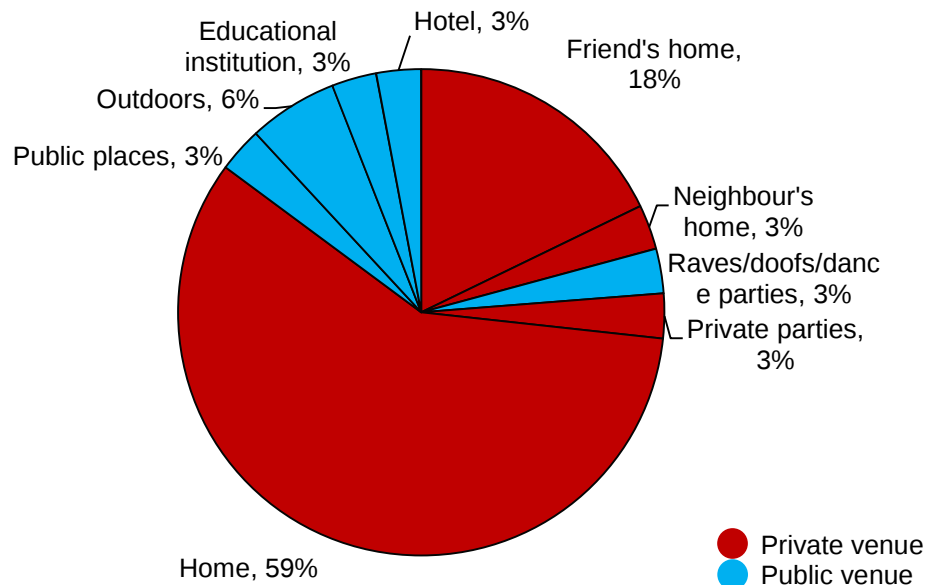
	2011 (N=100)	2012 (N=100)	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (N=103)
% ever used	97	99	97	98	100	99
Age of initiation (<i>Md</i>)	15	15	15	16	16	15
% used recently	83	86	86	90	91	85
Days recent use (<i>Md</i> ; range)	48 (1–180)	48 (1–180)	40 (1–180)	30 (1–180)	48 (1–180)	24 (1–180)
Cones used in last session (<i>Md</i> ; range)	4 (1–34)	5 (1–30)	4 (1–35)	2 (1–40)	3 (0.5–12)	2 (0.50–20)
Joints used in last session (<i>Md</i> ; range)	1 (0.1–5)	1 (0.25–5)	1 (0.25–7)	1 (0.5–4)	1 (0.25–4)	1 (0.50–4)
Grams used in last session (<i>Md</i> ; range)	Data not available until 2014			1 (0.1–4)	1 (0.1–4)	1 (0.20–3)

Source: NSW EDRS RPU interviews 2011–2016

2.8.2 Locations of cannabis use

Participants were asked where they spent the most time while intoxicated the last time they used cannabis, separated into hydroponic (Figure 28) and bush-grown (Figure 29) cannabis.

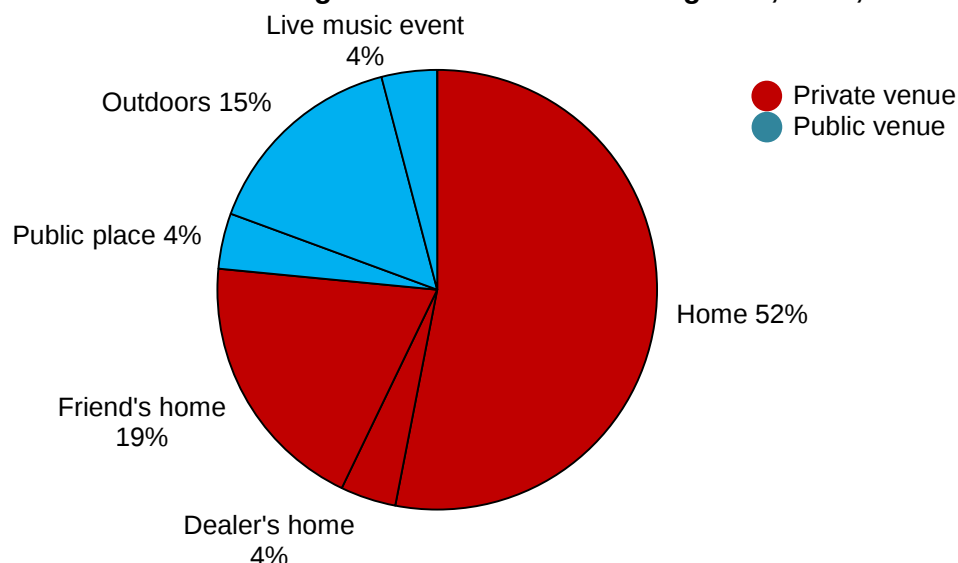
Figure 28: Location of last hydroponic cannabis use among RPU, NSW, 2016



Source: NSW EDRS RPU interviews 2016

Of those who reported (n=34) on the 'venue' where they spent the most time intoxicated when they last used hydro, 59% (n=20) reported being at 'home' and 18% (n=6) at a 'friend's home'. A small number of participants reported other locations including 'outdoors' (6%, n=2), 'raves/doofs/dance parties' (3%, n=1), 'private parties' (3%, n=1), 'public place (street/park)' (3%, n=1) or 'educational institution' (3%, n=1), 'hotel' (3%, n=1) and 'neighbour's house' (3%, n=1). Overall, considerably more participants reported the last venue where they were intoxicated to be a private (82%, n=28), rather than public location (18%, n=6).

Figure 29: Location of last bush-grown cannabis use among RPU, NSW, 2016



Source: NSW EDRS RPU interviews 2016

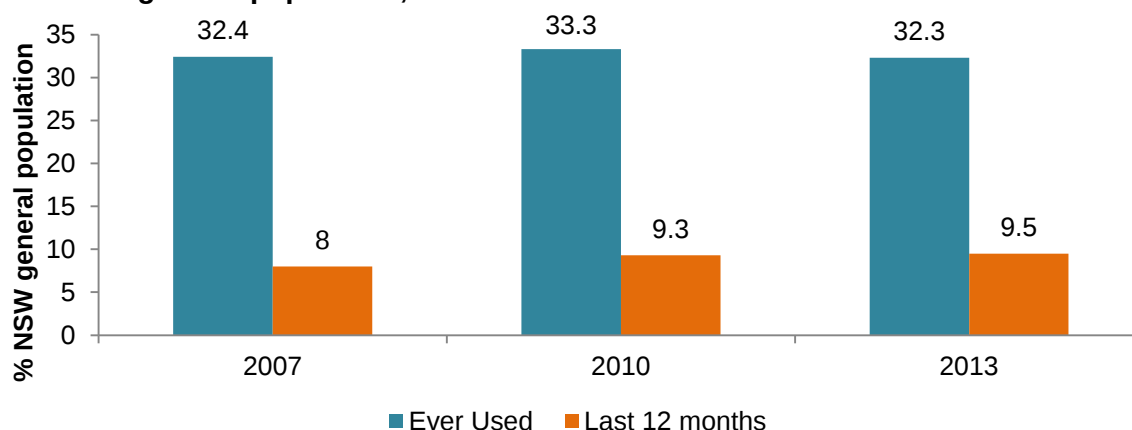
Of those who reported (n=27) on the 'venue' where they spent the most time intoxicated when they last used bush, 52% (n=14) reported being at 'home', 19% (n=5) reported being at a 'friend's home' and 15% (n=4) reported being 'outdoors'. Single participants reported other locations including, 'dealer's home', 'public place (street/park)' or 'live music event/concert/festival'. One participant could not remember the last location. Overall, the majority of participants were in a private (74%, n=20), rather than public location (22%, n=6).

2.8.3 Cannabis use in other populations

General population

The proportion of the Australian general population aged 14 years or over reporting past year use of cannabis (10.2%) and the proportions reporting lifetime use (34.8%) has remained stable in 2013 (Australian Institute of Health and Welfare, 2014). NSW general population data reflects national trends (Figure 30).

Figure 30: Percentage of sample reporting lifetime and last 12-month use of cannabis in the NSW general population, 2007–2013

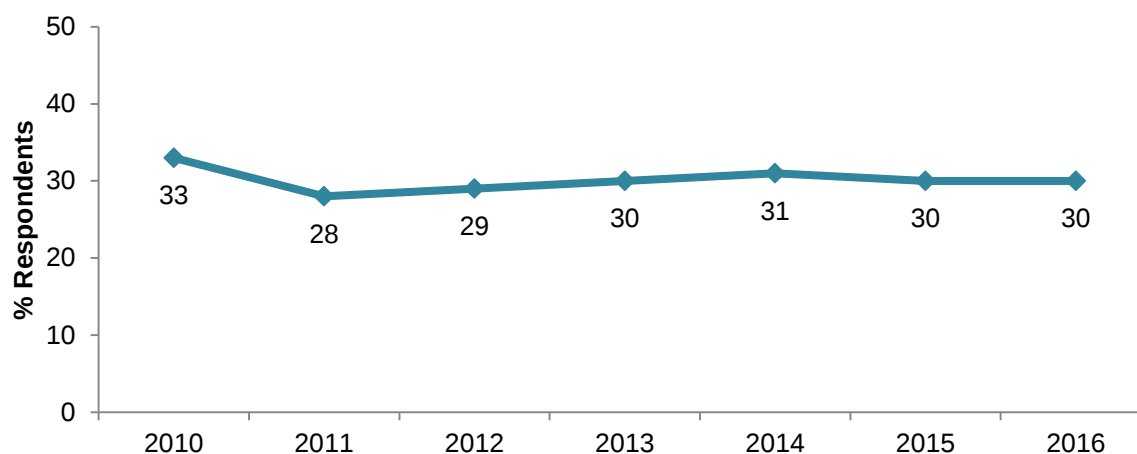


Source: Australian Institute of Health and Welfare (2008, 2011, 2014)

Sydney Gay Community Periodic Survey

In 2016, 30% of gay men interviewed for the survey reported the recent use of cannabis (Figure 31). The authors reported no significant change in the proportion of participants that used cannabis from 2015 to 2016. There was no significant linear trend reported (Hull et al., 2016).

Figure 31: Proportion of gay men in Sydney reporting last 6-month use of cannabis, 2010–2016

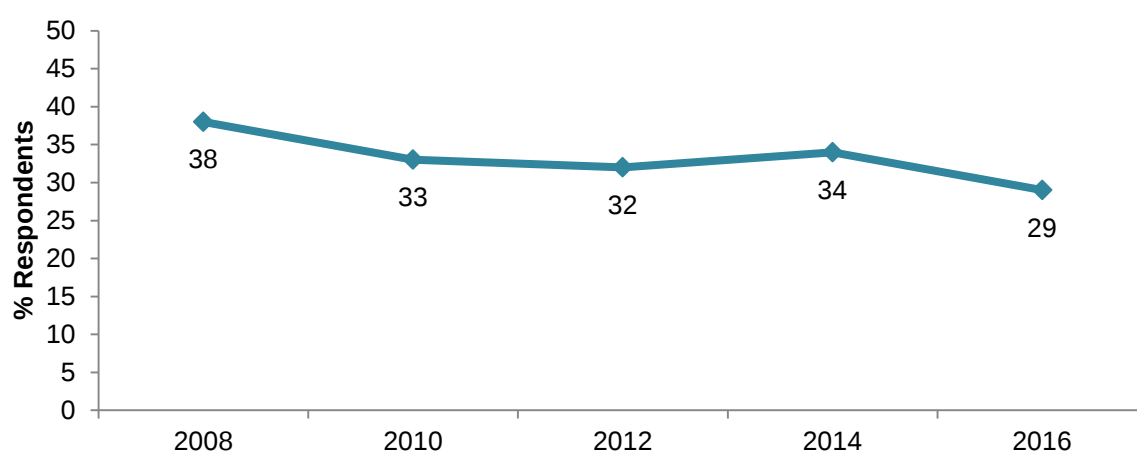


Source: Sydney Gay Community Periodic Survey 2010–2016

Sydney Women and Sexual Health Survey

Figure 32 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, Richters & Parkhill, 2015).

Figure 32: Proportion of LBQ women in Sydney reporting last 6-month cannabis use, 2008–2014



Source: Sydney Women and Sexual Health Survey 2008–2014

Note: In 2016 natural cannabis and synthetic cannabis were asked about separately. The 2016 reflect the proportion of natural cannabis. Of the 20 respondents that used synthetic cannabis, 19 also used natural cannabis.

Illicit Drug Reporting System

A separate monitoring system investigating trends in the use of cannabis in PWID has been conducted in NSW since 1996, in VIC and SA since 1997 and nationally since 2000. This is called the Illicit Drug Reporting System (IDRS), and reports and bulletins are available from the NDARC website (<http://www.drugtrends.org.au/our-methods/idrs/>).

Key expert comments

KE commented that cannabis seizures have increased in 2015/16 by 4.5%, with 21,064 reported seizures.

One KE reported one-off detections of new cannabis strains, 'Fresian Duck Foot' and 'Blue Dream'. These plants resemble weeds until they start flowering.

Also of note was that one KE reported that there was one confirmed seizure in the past 12 months in the Sydney metro area of cannabis resin ('honey oil butane').

For this client group, one KE reported that all cannabis users met at least some criteria for substance abuse disorder. Cannabis use was associated with poor mental health, mostly in terms of high comorbid anxiety and depression.

Increased levels of violence towards parents were also reported by KE, which is a change from 2014/15.

2.9 Other drug use

Key points

Alcohol

- All of the 2016 NSW RPU reported lifetime and recent use of alcohol
- KEs reported alcohol to be the main drug of concern.

Tobacco

- Ninety-seven percent of RPU had used tobacco at least once in their lifetime and 87% had smoked within the past six months.

E-cigarettes

- Sixty-one percent of RPU had used e-cigarettes at least once in their lifetime and 38% had used within the past six months.

Inhalants

- Amyl nitrite had been used by 77% RPU in their lifetime and 59% in the past 6 months.
- Nitrous oxide had been used by 70% in their lifetime and 58% reported recent use. Lifetime and recent use of Nitrous oxide has increased significantly from 2015 to 2016.
- The lifetime use of nitrous oxide has risen from 2012 (45%) to 2016 (70%).
- The recent use of nitrous oxide has also risen from 2012 (12%) to 2016 (56%).

Heroin and other opiates

- Eight RPU reported lifetime use of heroin and four reported recent heroin use. Nineteen participants reported recent use of illicitly obtained other opiates, and eleven participants reported recent use of licitly obtained other opiates.

Pharmaceutical stimulants

- Seventy-one percent of the sample reported using pharmaceutical stimulants in their lifetime and half (50%) reported doing so recently.

Over the counter drugs

- Nine participants reported recent use of over the counter simulants (non-medicinal use) and 26% reported using over the counter codeine recently (non-pain use).

Benzodiazepines

- Forty-eight percent of the group had recently used benzodiazepines. Illicit use (recent use, 46%) was more common than licit use (recent use, 5%). Recent illicit use has increased significantly since 2015 (29%).

Antidepressants

- In 2016 RPU were only asked about illicit antidepressant use. Two participants reported ever using illicitly and only one recently.

Psilocybin mushrooms

- Thirty-six percent of the sample reported using mushrooms recently.

MDA

- Twelve percent of the sample reported using MDA in the past six months.

2.9.1 Licit drug use

Alcohol

The entire NSW sample reported lifetime and recent use of alcohol. For 19% (n=20) of the sample, alcohol was their main drug of choice.

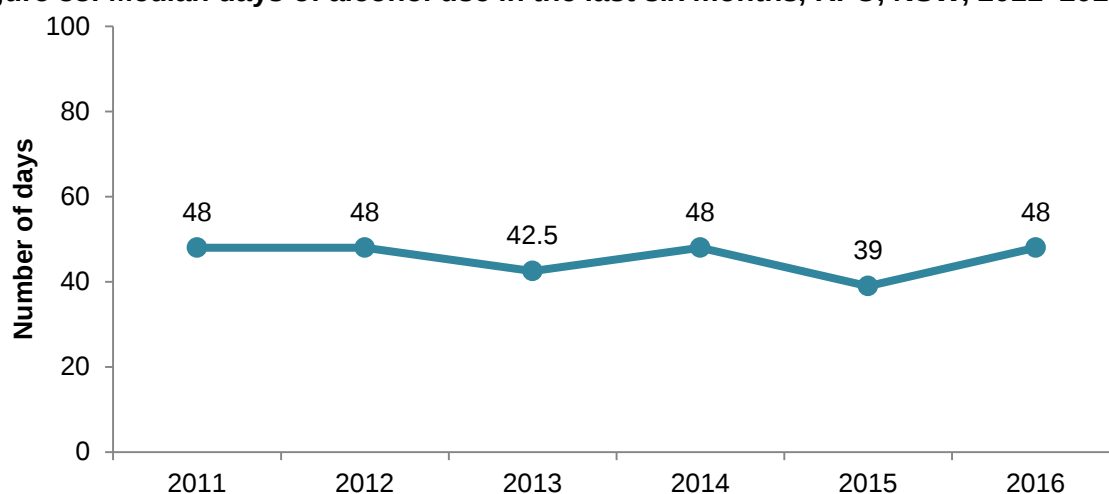
Participants had first used alcohol at a median age of 14 years (range 4–19). The median number of days participants reported using alcohol in the last six months was 48 days (range 2–160); 13% (n=13) reported using alcohol less than monthly, a further 12% (n=12) reported using alcohol less than weekly, 21% (n=22) between 1–2 times a week, 21% (n=22) between 2–3 times a week and the remaining 33% (n=34) three or more times a week. None of the participants reported daily use of alcohol.

Thirty-six percent (n=37) of the participants reporting having binged on stimulant and related drugs in the last 6 months. Of these 37 participants, 2 reported including less than 2 standard drinks of alcohol and a further 81% (n=30) reported having more than 5 standard drinks.

Figure 33 presents the median days of use of alcohol by NSW RPU, which has been relatively stable over this time.

See section 5.4: Problematic alcohol use among RPU, for a discussion of harmful alcohol use among RPU in NSW.

Figure 33: Median days of alcohol use in the last six months, RPU, NSW, 2011–2016

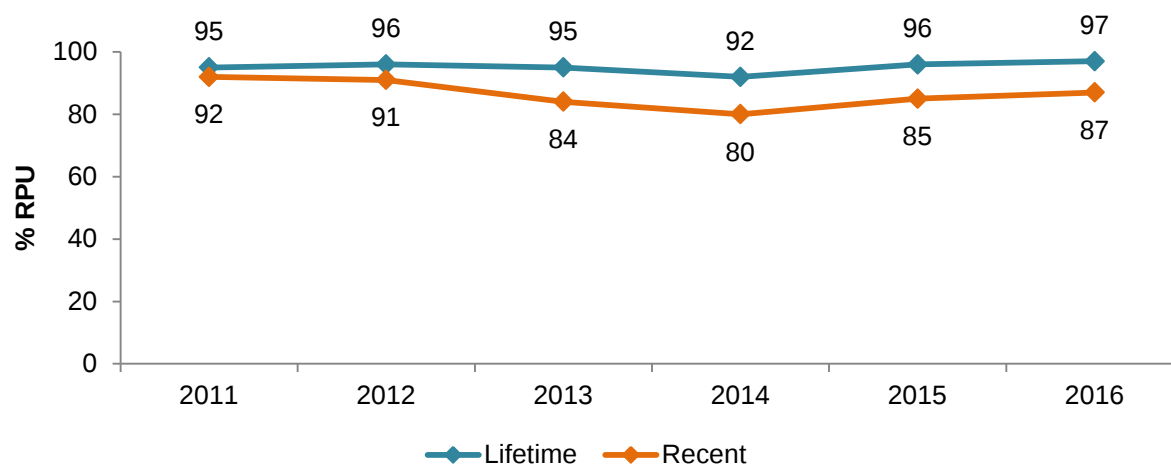


Source: NSW EDRS RPU user interviews 2011–2016

Tobacco

The vast majority (97%; n=100) of RPU interviewed in 2016 reported lifetime tobacco use and most (87%, n=90) reported recent use. Tobacco was first used at a median age of 15 (range 8–21). Tobacco had been used on a median of 72 days (range 1–180) over the preceding six months and 34% (n=31) were daily smokers. The proportion of RPU using tobacco in their lifetime has remained relatively stable over time (see Figure 34).

Figure 34: Lifetime and last 6-month use of tobacco, RPU, NSW, 2011–2016

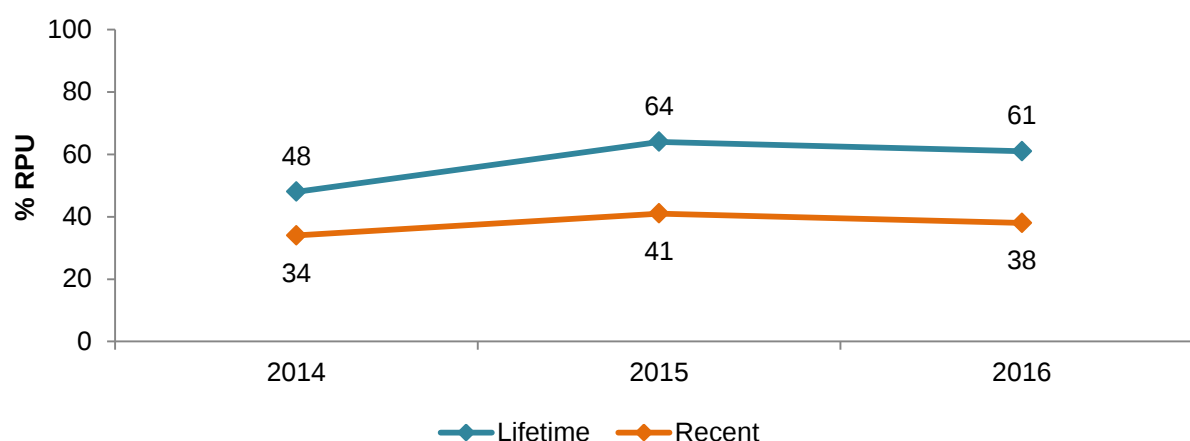


Source: NSW EDRS RPU interviews 2011–2016

E-cigarettes

Over half (61%; n=63) of RPU interviewed in 2016 reported having used an e-cigarette in their lifetime. Just over one-third had used an e-cigarette in the last 6 months (38%, n=39). In the last 6 months, e-cigarettes were used for a median of 2 days (range 1–180). Questions on e-cigarettes have been included in the EDRS survey since 2014; since this time the lifetime and recent use has been relatively stable (see Figure 35).

Figure 35: Lifetime and last 6-month use of e-cigarettes, RPU, NSW, 2014–2016



Source: NSW EDRS RPU interviews 2014–2016

2.9.2 Inhalants

Amyl nitrite

Seventy-seven percent of RPU (n=79) interviewed had ever used amyl nitrite and 59% (n=61) of the sample had used it over the preceding six months. Those who had recently used it had done so on a median of 2 days (range 1–90) over the preceding six months. The majority of recent users of amyl nitrite either used it on a less than monthly basis (77%, n=47). Six and a half percent (n=4) of those who reported recent use, used weekly or more often.

None of the 103 participants reported that amyl nitrate was their drug of choice, but 3 participants did report including it when bingeing on drugs in the last 6 months.

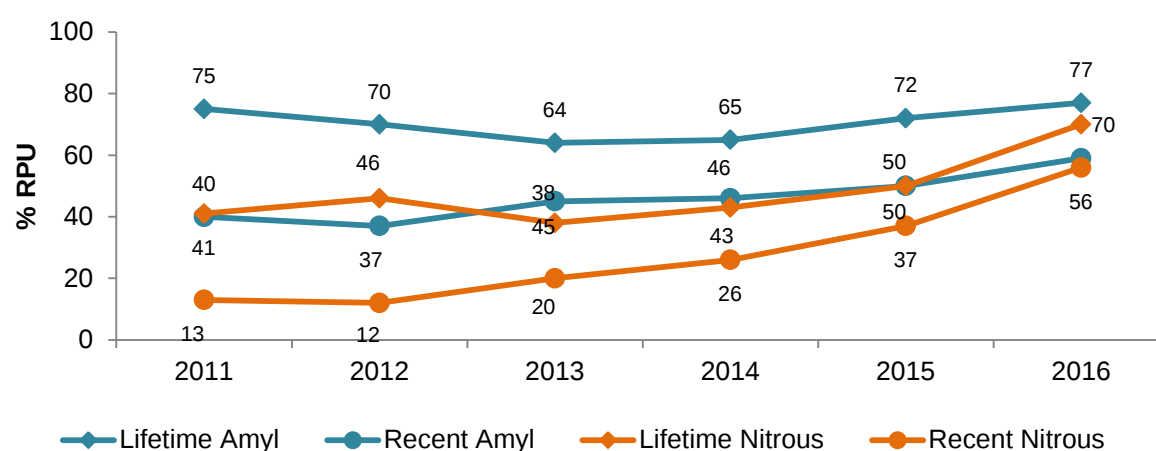
Nitrous oxide

Seventy percent of the sample (n=72) reported having ever used nitrous oxide, which is a significantly greater percentage than in the 2015 sample of RPU (50%, n=50) ($p < 0.05$, 95% CI 0.06, 0.32). Likewise, 58% reported recent use, in comparison with 37% of the 2015 sample of RPU ($p < 0.05$, 95% CI 0.05, 0.32). Among those who had used it over the last six months, nitrous oxide had been used on a median of 5 days (range 1–30) during this time. On an average occasion of use, participants (n=54) reported using a median of 5 bulbs (range 1–75) and on the occasion where they had used the most in the past 6 months, they (n=54) reported using a median of 12 bulbs (range 1–500). More than half of the recent users of nitrous oxide used it on a less than monthly basis (58%) or between monthly and fortnightly (23%).

None of the 103 participants nominated nitrous oxide as their drug of choice. Seven participants reported including it when bingeing on drugs in the past 6 months.

Figure 36 shows the upward trend in having ever used or recent use of nitrous oxide from 2013 to 2016. Other usage patterns have remained relatively stable.

Figure 36: Lifetime and last 6-month use of amyl nitrite and nitrous oxide, RPU, NSW, 2011–2016



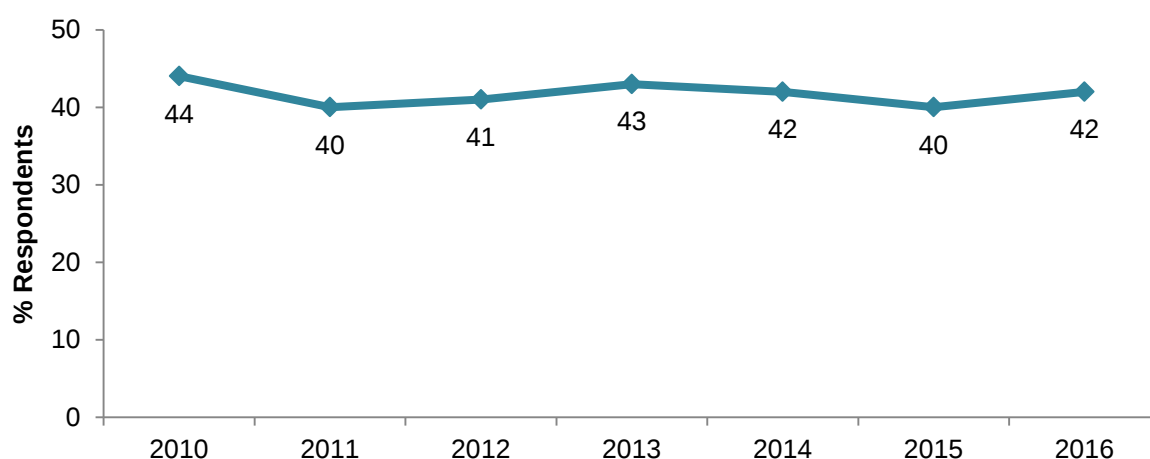
Source: NSW EDRS RPU interviews 2011–2015

Inhalant use in other populations

Data from the NDSHS report the past year use of inhalants in the NSW general population aged 14 years and older has remained low at 0.8%, and lifetime use was 4.2% in 2013 (Australian Institute of Health and Welfare, 2014).

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 37). Two-fifths (42%) of participants in 2015 reported recently using amyl nitrite, which has remained stable across time (Hull et al., 2016).

Figure 37: Proportion of gay men in Sydney reporting last 6-month use of amyl nitrite, 2010–2016



Source: Sydney Gay Community Periodic Survey 2010–2016

2.9.3 Heroin and other opiates

Heroin

Eight participants reported that they had ever used heroin and four reported using it in the preceding six months. Two of the recent participants reported smoking and 2 reported injecting as the method of use. Three of the four recent users of heroin used it on a less than monthly basis and the other participant who reported recent heroin had used on 10 days in the past 6 months.

Methadone and buprenorphine

Only one participant reported the lifetime use of methadone and none had reported using it over the preceding six months. Three participants reported lifetime use of buprenorphine and of those one had used it within the past six months.

Other opiates

Sixteen percent of respondents (n=16) had ever used licitly obtained opiates (other than heroin, methadone or buprenorphine), and 11 of these participants reported recent use. Endone was the main brand used (n=4), with others including Panadeine Forte (n=1) and tramadol (generic) (n=1). The median number of days used in the last 6 months was 3 days (range 1–20). Of the 11 who reported recent use, they all reported swallowing the licit opioid. One person also reported injecting as the ROA and one reported snorting.

Approximately one-third (32%, n=33) of the sample reported having ever used other illicitly obtained opiates and 18% (n=19) had used them over the six months prior to the interview. Those who had used illicit opioids over the preceding six months had done so on a median

of 2 days (range 1–20). The main ROA for recent users was swallowing (90%, n=17), but some recent users also reported smoking (n=1) and snorting (n=2).

Illicit Drug Reporting System

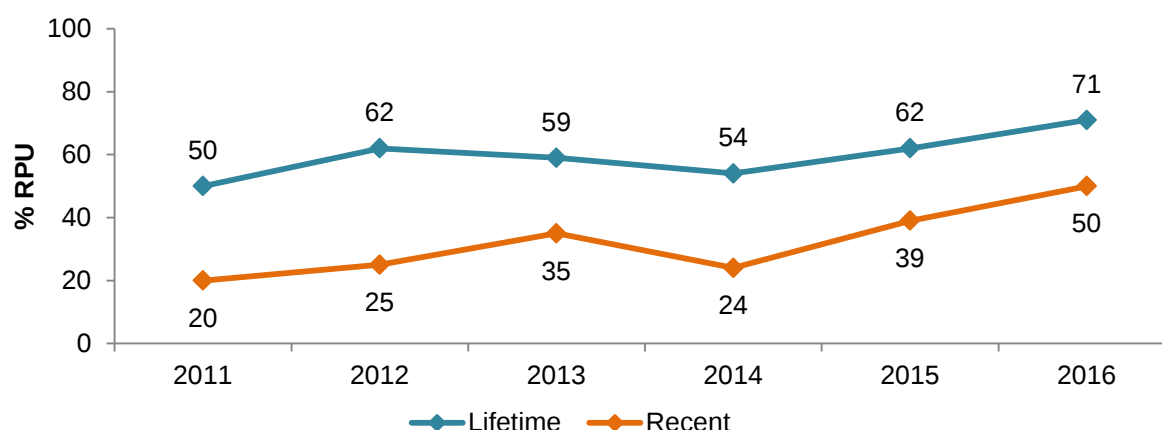
A separate monitoring system investigating trends in the use of heroin and other opiates in PWID has been conducted in NSW since 1996, in VIC and SA since 1997 and nationally since 2000. This is called the Illicit Drug Reporting System (IDRS), and reports and bulletins are available from the NDARC website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

2.9.4 Pharmaceutical drugs

Prescription pharmaceutical stimulants

Seventy-one percent of the participants (n=73) in 2016 reported having ever used pharmaceutical stimulants and 50% (n=51) had done so within the six months preceding the interview. Whilst there had been a significant increase in recent use from 2014 to 2015, the increase between 2015 and 2016 is not significant. Lifetime use of pharmaceutical stimulants has in recent years (2014–2016) gradually increased. Likewise, recent use has slowly increased across the same time period with the exception of a drop in recent use in 2014 (see Figure 38).

Figure 38: Lifetime and last 6-month use of pharmaceutical stimulants, RPU, NSW, 2011–2016



Source: NSW EDRS RPU interviews 2011–2016

Licit pharmaceutical stimulants

Seventeen participants (16.5%) had reported using licitly obtained pharmaceutical stimulants in their lifetime and 9 had done so in the last six months. Those who had recently used them had done so on a median of 96 days (range 7–180) over the preceding six months. Whilst all recent users reported swallowing the licit stimulants, 2 participants also reported snorting them. For the 9 participants who reported recent use, in the past 6 months they reported using a median of 2.5 pills (range 2–4) in a typical session and a median of 6 tablets (range 4–10) on the heaviest occasion of use in the last 6 months. Any interpretation made on the amount used in a 'typical' or 'heavy use' occasion figures needs to be done with caution as these figures are based on a very low number of participants. Of the 9 reporting recent use, 7 participants used the stimulants as prescribed and 2 participants reported use, which was contrary to the prescribed use. As recent use number are based on n<10 any interpretation needs to be made with caution.

Illicit pharmaceutical stimulants

Sixty-four percent of participants (n=66) had ever used illicitly obtained pharmaceuticals and 44% (n=45) had done so over the preceding six months. Those who had recently used them had done so on a median of 4 days (range 1–30) over the preceding six months. While the majority of those who had recently used illicitly obtained pharmaceutical stimulants had swallowed them (84%), 42% had also recently snorted them. The median number of tablets used in an average session was 2 (range 1–10), and on the heaviest occasion 2 (range 1–20).

Over the counter stimulants (non-medicinal use only)

Fourteen participants reported having ever used over the counter stimulants (such as Sudafed and Codral) for non-medicinal use and only 9 participants had used them recently. Over the last 6 months, the median days of use was 3 (range 1–14). For all who reported recent use (n=9) they all reported swallowing, with one person also reporting snorting. As recent use number are based on n<10 any interpretation needs to be made with caution.

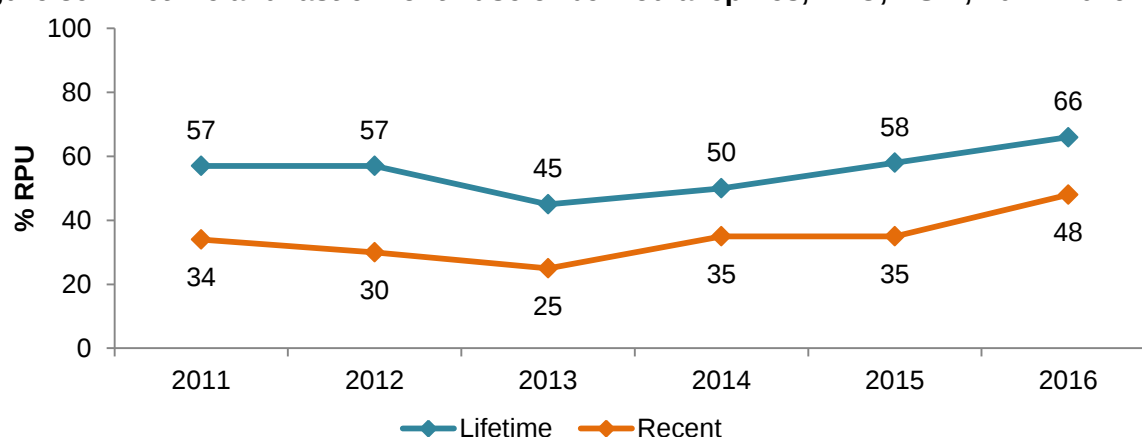
Over the counter codeine (non-pain use)

Thirty-seven percent of the sample (n=38) reported having ever used over the counter codeine-containing products for non-pain use and 26% (n=27) reported having done so over the preceding six months. For those who had used in the last 6 months, they reported using for a median of 2 days (range 1–30) over this period and 'swallowing' was the only reported ROA.

Benzodiazepines

Sixty-six percent (n=68) of the sample reported having ever used any benzodiazepines and 48% (n=49) reported having done so recently. This is a marginal increase in the figures from 2015 (see Figure 39). Recent users reported using for a median of 5 days (range 1–109) in the past 6 months.

Figure 39: Lifetime and last 6-month use of benzodiazepines, RPU, NSW, 2011–2016



Source: NSW EDRS RPU interviews 2011–2016

Licit benzodiazepines

Fifteen percent of RPU (n=15) reported having ever used licitly obtained benzodiazepines and 5% (n=6) had done so recently. Recent users, of whom there were few (n=6), had used on a median of 5 days (range 1–21) in the past 6 months. Five participants who reported using recently reported swallowing as the ROA and one also reported having snorted the drug. The three licit benzodiazepines used were alprazolam, diazepam and temazepam. As recent use number are based on n<10 any interpretation needs to be made with caution.

Illicit benzodiazepines

Sixty-percent of the sample of RPU (n=62) had ever used illicitly obtained benzodiazepines and 46% (n=47) had done so over the preceding six months. In comparison to the 2015 sample (29%), there has been a significant increase in the proportion of the sample who reported recent use of illicit benzodiazepines ($p<0.05$ 95% CI 0.024, 0.282). Nearly all (98%, n=46) the RPU who reported recent illicit benzodiazepine use reported swallowing the drug; three recent users reported snorting and one participant reported smoking. Illicit benzodiazepines had been used on a median of 4 days (range 1– 89) over the last 6 months by recent users. Over half of recent users (57%, n=27) reported they had used illicitly obtained benzodiazepines on a less than monthly basis, 17% (n=8) reported between monthly and fortnightly and the same percentage (17%) reported using between fortnightly and weekly. Only four participants reported using weekly or more often and no-one in the sample reported daily use. The main benzodiazepine used illicitly were diazepam (49%, n=23) and alprazolam (23%, n=11).

Antidepressants

In the 2016 survey, RPU were no longer asked to report on licit antidepressant use. They were only asked about illicit use.

Illicit antidepressants

Two participants reported having ever used illicit antidepressants and one reported having used them over the past six months. This participant swallowed the drug and used for 5 days in the past 6 months.

2.9.5 Other illicit drugs

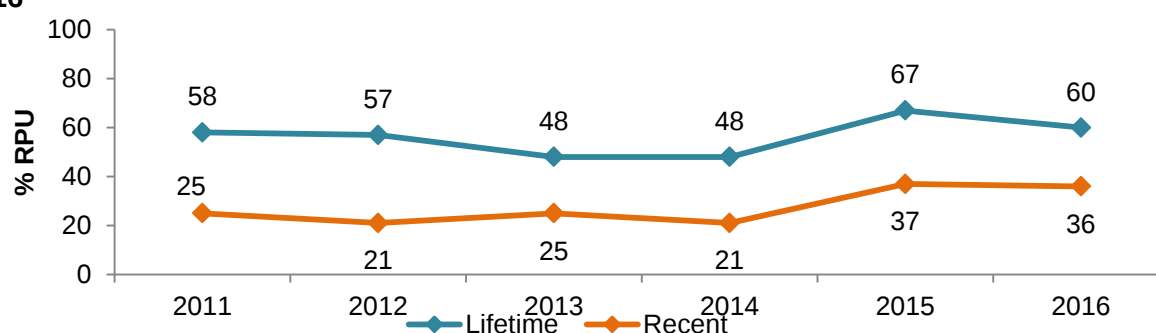
Psilocybin mushrooms

Sixty-percent (n=62) of the RPU interviewed in 2016 reported having ever used mushrooms and 36% (n=37) had done so over the preceding six months; both these figures were relatively similar to 2015 figures, which were significantly higher than 2014 proportion. While the proportion reporting having ever used did decline from 2015, there remains in 2016 a significantly greater proportion reporting recent use than in 2014 (21% $p<0.05$ 95% CI 0.02 , 0.26).

For those who had used recently, the median number of days they used in the last 6 months was 2 (range 1–6). All recent users reported swallowing the psilocybin mushrooms as the ROA, 3 also reported smoking and 1 reported snorting the psilocybin mushroom. The majority (97%) of participants who had recently used mushrooms had done so on a less than monthly basis.

Lifetime use of psilocybin mushrooms has fluctuated a little over time with 60% reporting lifetime use in 2016. Recent use of psilocybin mushrooms (36%), has gradually and significantly increased since 2012 (21%, $p<0.05$, 95% CI 0.02, 0.26) (Figure 40). Similar proportions reported recent use in 2015 (37%) and 2016 (36%)

Figure 40: Lifetime and last 6-month use of psilocybin mushrooms, RPU, NSW, 2011–2016



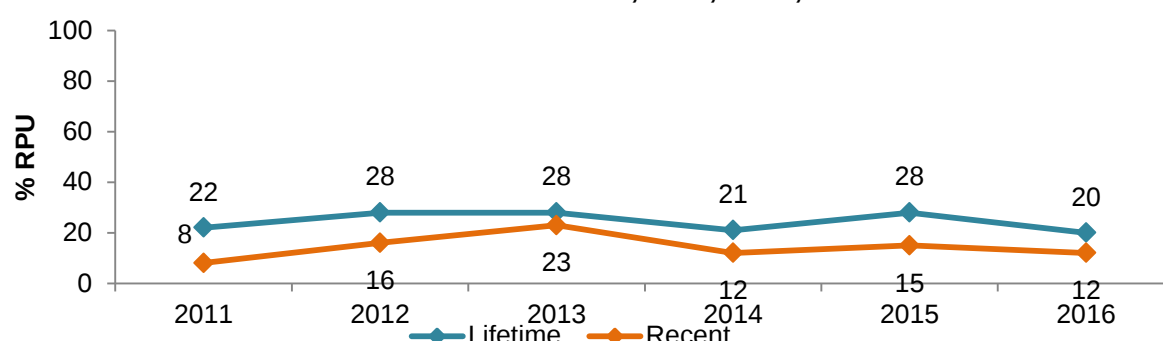
Source: NSW EDRS RPU interviews 2011–2016

MDA

Twenty percent (n=21) of participants in the 2016 EDRS reported having ever used MDA, and 12% (n=12) reported they had used it over the preceding six months. Recent users reported using MDA on a median of 2 days (range 1–7). The majority of recent user reported using less than monthly (83%, n=10). All recent users reported ‘swallowing’ as the ROA.

The proportion reporting ever and recent use of MDA has remained relatively stable over time (see Figure 41).

Figure 41: Lifetime and last 6-month use of MDA, RPU, NSW, 2011–2016



Source: NSW EDRS RPU interviews 2011–2016

Performance and image enhancing drugs (PIEDs)

In the 2016 NSW RPU sample, one participant reported having ever used steroids, but had not used in the last 6 months.

Key expert comments

Alcohol was considered a drug of concern by KE.

One KE reported that binge drinking was a concern, particularly among young women. The low cost, availability and alcohol advertising were considered to contribute to consumption.

A couple KEs reported that steroid use had increased recently among users they had contact with. KEs commented on the lack of understanding among steroid users and the lack of services, therefore leading to an ill-informed group of users, putting their safety at risk.

One KE described steroid users as ‘young people from an established background to look good and macho.’

2.10 New psychoactive substance (NPS) use

Key points

- In 2016, 44% of EDRS participants reported recent NPS use.
- Only 1% reported using a synthetic cannabinoid in the last six months.
- The most commonly used psychoactive substances were 2C-B, DMT and DXM.

From 2010 onward, the EDRS began to systematically investigate a group of drugs known as 'new psychoactive substances' (NPS; also known as research chemicals, analogues, legal highs, herbal highs, party pills). This class of drugs includes illegally synthesised chemicals, pharmaceuticals, naturally occurring chemicals, plant-based substances, and synthetic cannabinoids. Although the term 'new' is used to define this group of drugs, they are more so non-traditional or non-established substances. These drugs can be classified as outlined in Figure 42. The 'class' the 'individual drugs' belong to can be difficult to label, hence for clarity they have been grouped by either chemical structure or effect class.

Figure 42: New psychoactive substances investigated by the EDRS

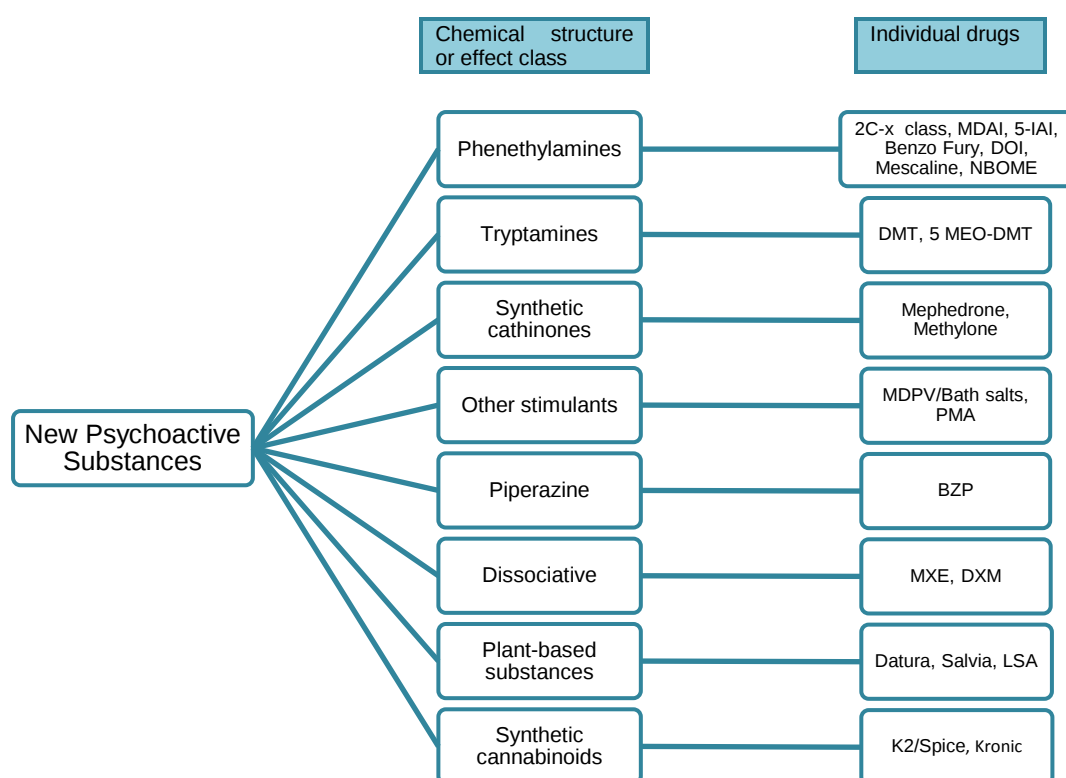


Table 18 provides a very brief introduction to these drugs. Interested readers are directed toward online sources such as Erowid (<http://www.erowid.org/splash.php>) and Drugscope (<http://www.drugscope.org.uk/>) for more comprehensive information on these drugs.

Table 18: An introduction to new psychoactive substances reported in the EDRS

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.
NBOMe	2,5-dimethoxy-N-2-methoxybenzylphenethylamine	A psychedelic drug with stimulant effects. Similar to the 2C-X family, NBOMe has common variants including 25I-, 25B- and 25C-.	Chemically related to 2C-I, 25I-NBOMe is a potent psychedelic available in powder, tablet and liquid formulations.
DOI (death on impact)	2,5-dimethoxy-4-iodoamphetamine	A psychedelic drug with stimulant effects	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.
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-6-ylpropan-2-amine	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 stimulation and euphoria, though not enough reliable human data has been recorded to say much with certainty.

Tryptamines			
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.
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 but has been reportedly sold in powder form.
Synthetic cathinones			
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).
Methyl one	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.
Other stimulants			
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).
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, 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.

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.
Dissociative			
MXE	Methoxetamine	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.
Plant based substances			
Datura	Commonly <i>Datura innoxia</i> and <i>Datura stramonium</i> . Contains Atropine and Scopolamine. Also known as Angel's Trumpet	Atropine is a potent anticholinergic agent. Scopolamine is a CNS depressant and has antimuscarinic properties	The plant's effects make the user feel drowsy, drunk-like and detached from things around them. They can also bring on hallucinations. Doses are difficult to judge and can cause unconsciousness and death.
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.
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.

Synthetic cannabinoids			
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.

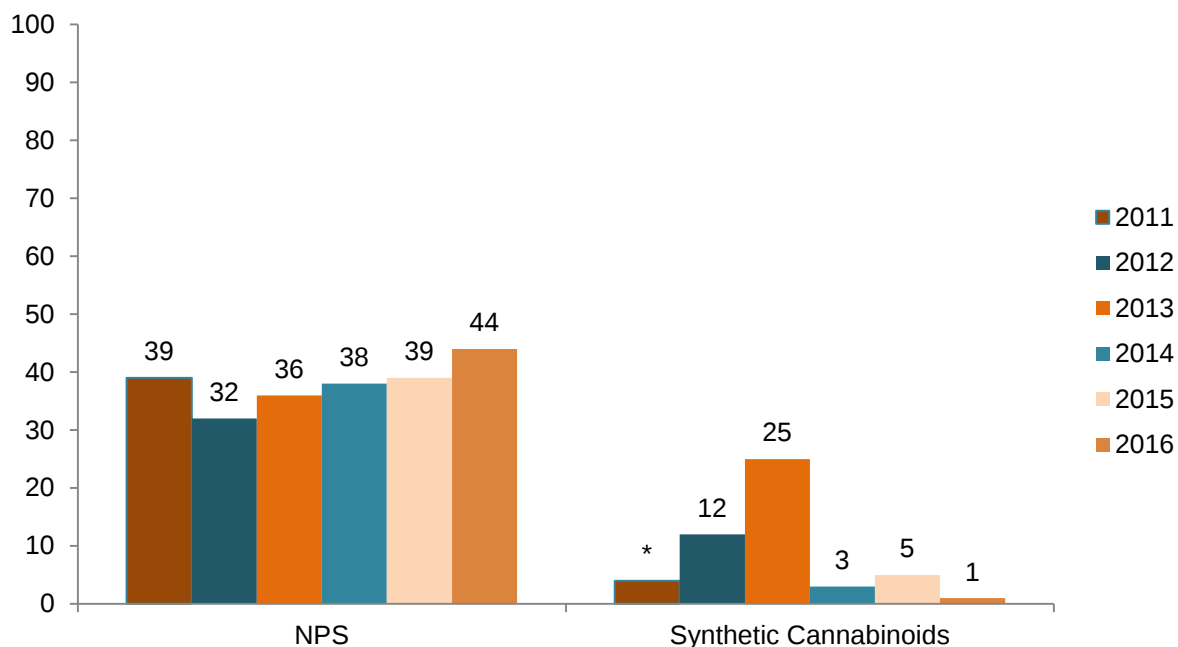
Note: the information contained in the above table was sourced from <http://www.erowid.org/splash.php> and <http://www.drugscope.org.uk/>

2.10.1 NPS use among RPU

Among the 2016 NSW EDRS sample, 69% (n=71) reported having ever used NPS and 23% (n=24) reported having ever used a synthetic cannabinoid. Figure 43 shows the recent use of NPS and synthetic cannabinoids across the last six years. Just over two-fifths of RPU (44%, n=45) reported using NPS in the last six months, which has remained stable since 2011. Only 1% (n=1) reported using synthetic cannabinoids in the last 6 months.

The most common psychoactive substances used among NSW RPU in the preceding six months were 2C-B (18%, n=18), DMT (15%, n=15) and DXM (12%, n=12). One percent of the sample reported using synthetic cannabinoids in the last 6 months, a stable figure from 2014, which decreased significantly from 2013 ($p < .05$).

Figure 43: Last 6-month use of NPS and synthetic cannabinoids, 2011–2016



Source: NSW EDRS RPU interviews 2011–2016

Table 19 presents the proportion of RPU reporting lifetime and recent NPS use across time.

Table 19: New psychoactive substance use among RPU, NSW, 2011–2016

New psychoactive substances	2011 (N=100)	2012 (N=100)	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (N=103)
<i>Phenethylamines</i>						
2C-I % ever used % recent use	5 1	4 1	11 6	9 3	9 4	6 0
2C-B % ever used % recent use	22 9	35 17	37 25	40 21	31 13	32 18
2C-E % ever used % recent use	10 8	2 2	3 1	6 1	7 4	3 1
NBOMe % ever used % recent use	Data not available until 2013		5* 4*	10 9	20 6	13 6
DOI (death on impact) % ever used % recent use	1 1	– –	– –	– –	– –	– –
Mescaline % ever used % recent use	13 4	8 1	10 2	4 –	4 1	4 –
5-IAI % ever used % recent use	Data not available until 2012	1 –	– –	– –	– –	2 –
Benzo Fury / 6-APB % ever used % recent use	Data not available until 2012	1 1	3 1	– –	1 –	4 3
MDAI % ever used % recent use	Data not available until 2012	2 –	2 –	– –	1 1	– –
4-FA % ever used % recent use	Data not available until 2016					3 3

Table 19: New psychoactive substance use among RPU, NSW, 2011–2016 (continued)

New psychoactive substances cont.	2011 (N=100)	2012 (N=100)	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (N=103)
Tryptamines						
DMT						
% ever used	21	15	16	21	22	26
% recent use	8	11	9	11	10	15
5-MeO-DMT						
% ever used	4	–	2	1	3	5
% recent use	1	–	1	1	1	5
4-AcO-DMT	Data not available until 2016					
% ever used						1
% recent use						1
Synthetic cathinones						
Mephedrone						
% ever used	17	4	11	7	12	5
% recent use	4	–	1	–	2	–
Methylone						
% ever used	4	10	3	8	3	3
% recent use	3	8	1	3	1	1
Other stimulants						
MDPV / Ivory Wave						
% ever used	–	–	1	1	–	–
% recent use	–	–	–	1	–	–
PMA						
% ever used	5	3	2	4	4	3
% recent use	2	–	–	3	3	1
Piperazine						
BZP						
% ever used	11	4	5	–	–	2
% recent use	2	–	–	–	–	–
Dissociatives						
Methoxetamine / MXE						
% ever used	Data not available until 2012	2	–	1	3	7
% recent use		2	–	–	2	6
DXM						
% ever used	13	10	11	1	13	20
% recent use	6	2	7	–	8	12

Table 19: New psychoactive substance use among RPU, NSW, 2011–2016 (continued)

New psychoactive substances cont.	2011 (N=100)	2012 (N=100)	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (N=103)
Plant-based substances						
Datura						
% ever used	9	6	3	1	4	3
% recent use	1	–	1	–	2	2
Salvia						
% ever used	15	10	7	5	6	9
% recent use	1	1	1	–	2	5
LSA						
% ever used	5	3	10	2	6	7
% recent use	1	–	2	1	3	1
Ayahuasca	Data not available until 2016					
% ever used						2
% recent use						1
Synthetic cannabinoids						
Kronic	Data not available until 2013					
% ever used			19	14	17	DNA
% recent use			8	2	2	
K2 / Spice						
% ever used	1	Data not available	17	9	10	DNA
% recent use	1		8	1	2	
Other synthetic cannabinoids						
% ever used	3	23	46	12	19	21
% recent use	3	12	25	–	2	1
Synthetic Benzodiazepines						
Etizolam	Data not available until 2016					
% ever used						4
% recent use						3
Other						
Capsule (contents unknown)						
% ever used	Data not available until 2012	14	27	14	16	DNA
% recent use		8	9	5	4	
Herbal high						
% ever used	Data not available until 2012	26	35	16	25	21
% recent use		13	13	4	8	5

Source: NSW EDRS RPU interviews 2011–2016

* Numbers of NBOMe in 2013 were tallied from individuals who marked NBOMe in the 'other' NPS category. NBOMe was introduced as a separate category in the 2014 survey.

Synthetic cannabinoids, K2 / Spice and Kronic

- In 2011, 'K2 / Spice' and 'Other synthetic cannabinoids' were separate categories.
- In 2012, 'synthetic cannabinoids' incorporated both 'K2 / Spice' and 'Other synthetic cannabinoids' categories.
- In 2013, 'Synthetic cannabinoids' incorporated 'Kronic', 'K2 / Spice' and 'Other synthetic cannabinoids' categories. Kronic and K2 / Spice were coded separately in 2013.
- In 2016 other synthetic cannabinoids included Kronic, K2/Spice.

NPS adverse effects

Fifty percent (n=51) of the RPU sample reported that they had used an NPS in the past year, the ones they reported they used most often were DMT (26%, n=13), 2C-x (20%, n=10) and DXM (10%, n=5). Among past year NPS consumers, 15% (n=15) reported that they had experienced an unexpected adverse effect on their last occasion of use. The most common adverse effects reported were nausea/vomiting (33%, n=5), restless/anxious (33%, n=5) and paranoia (27%, n=4) (Table 20). In NSW none of the participants who reported NPS use (n=51) in the last year reported seeking emergency medical help for an NPS in the past year.

Table 20: Unexpected adverse effects among past-year NSW NPS consumers, 2016

2016 n=103	
Unexpected adverse effect %	15 (n=15)
Type of adverse effect %	(n=15)
Paranoia	27
Nausea/vomiting	33
Restless/anxious	33
Heart racing or erratic	20
Visual hallucinations	13
Panic	20
Shaky hands/fingers	13
Auditory hallucinations	20
Overheating	7
Chest pain	13
Shortness of breath	13
Fingers/toes cold or numb	7
Angry or aggressive	7
Skin discoloured (blue/red)	7
Skin rash	7
Other	40

Source: NSW EDRS RPU interviews 2011–2016

– Data not published due to small numbers commenting (n<10)

Key expert comments

One KE from the health sector reported on the use of NPS, specifically, Kronic. According to this KE, Kronic was being sold in a local shop prior to three well-publicised collapses and near death experiences.

3 DRUG MARKET: PRICE, PURITY, AVAILABILITY AND SUPPLY

3.1 Ecstasy/MDMA

Key points

Pills, powder and capsules:

- *Price:* \$25 per capsule; the majority reporting recent price stability.
- *Purity:* Variable reports.
- *Availability:* Currently easy to very easy to obtain and stable.

Crystal MDMA

- *Price:* \$25 per cap, \$190 per gram.
- *Purity:* Currently medium–high.
- *Availability:* Currently easy to obtain and stable.

3.1.1 Price

Ecstasy pills, powder and caps

The price and stability of the prices of ecstasy pills and capsules is reported in Table 21. Changes in the survey questions means these figures have been reported in a different and more precise format to previous years.

Almost half (49%, n=50) of the sample were able to comment on the price of ecstasy pills in Sydney. The median price was reported by users to be \$25 per tablet (range \$20–60). Of those who could report in price variability (n=19), the majority (63%, n=12) reported that the price of pills had remained stable, with smaller percentages reporting an increase (16%, n=3), or a fluctuating (16%, n=3) market. Only 1 participant had experienced a decrease in price.

Fifty-nine percent (n=61) of the sample was able to comment on the price of ecstasy capsules (commonly referred to as caps). The median price of caps reported was \$25 each (range \$14–40). Consistent with reported pill prices, the majority of participants (68%, n=30) who could report on capsule price variations (n=44) reported that the price had remained stable. Nine participants (n=21%) reported a decrease in price and the remainder (11%, n=5) reported fluctuations (in the price of caps). Interestingly, no one had experienced a price increase.

Table 21: Price of ecstasy purchased by RPU, NSW, 2011–2016

	2011 (n=97)	2012 (n=96)	2013 (n=96)	2014 (n=83)	2015 (n=84)	2016 (n=50) Pills	2016 (n=44) Caps
Md price ecstasy** (\$) (range)	25 (7–50)	25 (5–50)	25 (20–50)	25 (11–60)	25 (10–70)	N/A	
Md price per pill/cap (\$) (range)						25 (20–60)	25 (14–40)
Price change for ecstasy (%):**							
Increased	28	24	0	12	19	16	0
Stable	58	56	91	63	58	63	68
Decreased	8	8	5	7	8	5	21
Fluctuated	6	11	5	18	14	16	11
Price change for pill/cap (%):							
Increased						16	0
Stable						63	68
Decreased						5	21
Fluctuated						16	11

Source: NSW EDRS RPU interviews 2011–2016

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

**Data collected from 2011–2015 did not differentiate between pills, powder and caps; hence for 2011–2015 the ecstasy includes pills, powder and caps grouped together. As of 2016, the different forms have been distinguished in the survey questions. In 2016, the price and price stability for each form (pill, powder and capsule) has been collected separately and is now reported in the relevant row. The combined perceived price stability for pills, powder and caps has also been reported in the same was as previous years. The price and price stability of powder alone has not been included as the number of participants who could report on this form was unreliably low (n=3).

Crystal/Rock MDMA

Approximately two-thirds of participants (64%, n=66) were able to comment on the price of crystal MDMA in Sydney. The median price was reported by users to be \$190 per gram (range \$120–300; n=31), \$20 per point (range \$15–30; n=9) or \$25 per cap (range \$13–40; n=39). Sixty-five percent (n=43) reported that the price of crystal MDMA had remained stable; however, 18% reported that the price had decreased, 12% reported the price to be fluctuating. Only 5% (n=3) reported a price increase over the last 6 months.

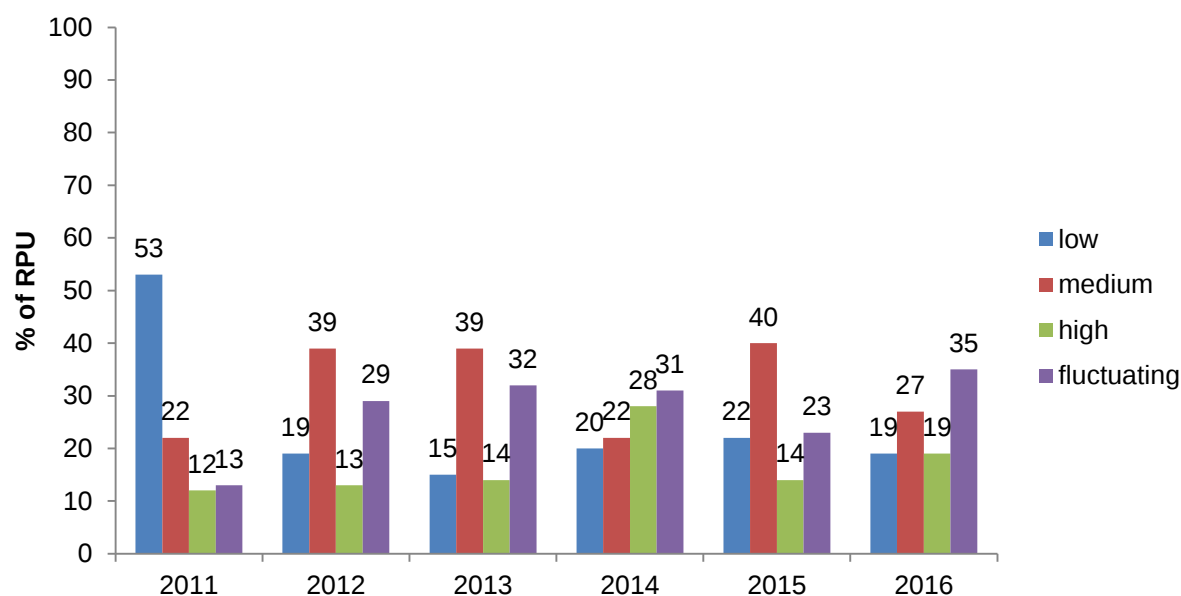
3.1.2 Purity

RPU reports

Ecstasy pills, powder and caps

Figure 44 presents RPU reports of ecstasy purity across time. In 2016, one-third (35%, n=24) of the sample reported that the current purity of ecstasy was 'fluctuating', or that it was 'medium' (27%, n=18). Comparable proportions reported ecstasy purity as being 'low' (19%, n=68), or 'high' (19%, n=13). These figures have varied considerably over time.

Figure 44: RPU reports of current ecstasy pills, powder and capsule purity, NSW, 2011–2016

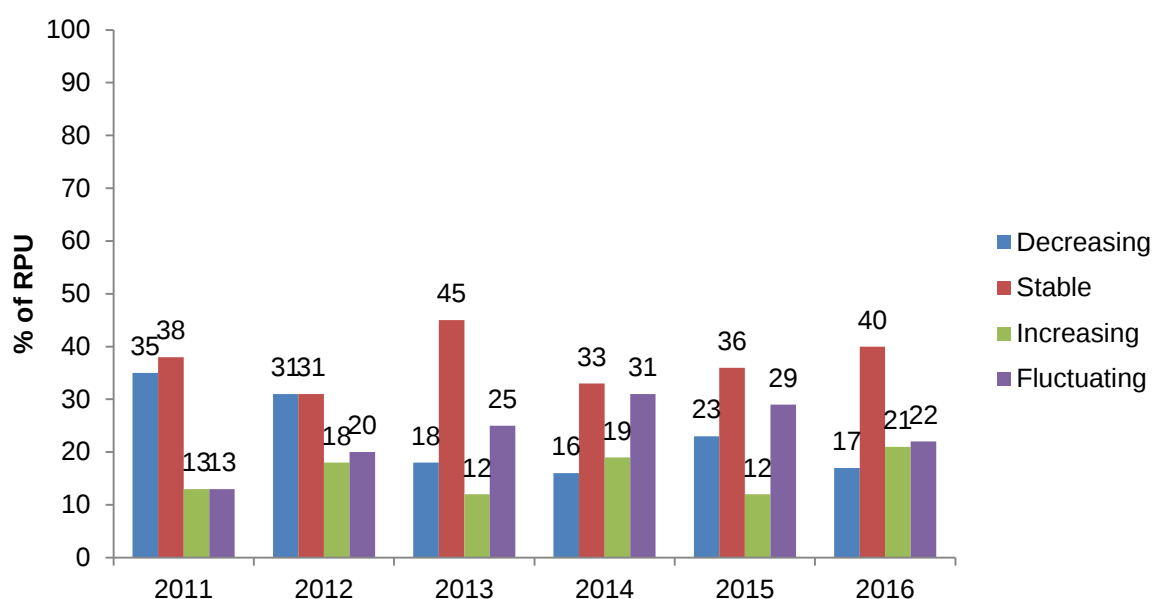


Source: NSW EDRS RPU interviews 2011–2016

Figure 45 presents RPU reports of 'perceived' changes in the purity of ecstasy over the six months prior to the interview from 2011 to 2016. In most years, the highest proportion of RPU report the purity to be stable, but there is considerable variability in reports on changes in purity over the last 6 months.

In 2016, 40% (n=23) of the sample reported that the purity of ecstasy remained stable, 22% (n=13) reported that the purity of ecstasy has fluctuated, and 21% (n=12) reported it had increased. The remaining 17% (n=10) reported that purity of ecstasy had decreased.

Figure 45: RPU reports of change in ecstasy pills, powder and capsule purity, NSW, 2011–2016



Source: NSW EDRS RPU interviews 2011–2016

Crystal/Rock MDMA

In 2016, the majority of the sixty-one participants who were able to answer reported that the current purity of crystal MDMA was either 'high' (44%) or 'medium' (30%). Twenty three percent (n=14) of participants reported that the purity had fluctuated. Forty-seven participants commented on the change of crystal MDMA purity over the six months prior to interview. Of these, 49% (n=23) reported the purity as remaining 'stable' and one-fifth (21%, n=10) reported it as 'fluctuating', with a further 19% (n=9) reporting it was increasing and 11% (n=5) reporting a decrease.

Seizure data

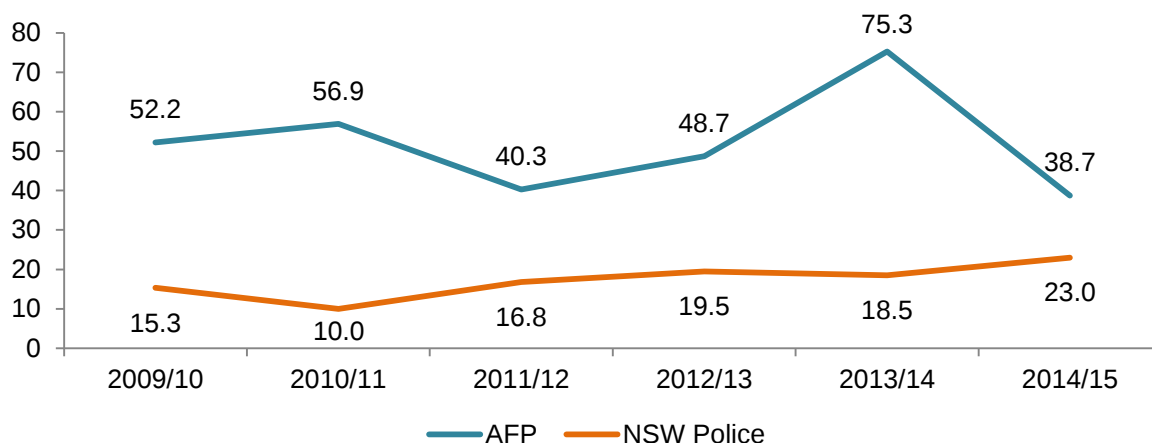
RPU estimates of purity are necessarily subjective and depend, among other factors, on users' tolerance levels. Laboratory analyses of the purity of seizures of ecstasy provide objective evidence regarding purity changes. However, it is also important to note the limitation of the purity figures calculated 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 Criminal Intelligence Commission (ACIC), formerly the Australian Crime Commission (ACC) and Australian Bureau of Criminal Intelligence (ABCI). The ACC reports both federal and state police seizure data, including number and weight of seizures. In 1999/2000, 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. The majority of phenethylamine seizures presented by the ACC relate to ecstasy.

The median purity of phenethylamine seizures analysed by the Australian Federal Police (AFP) has increased since 2011/12, while purity of seizures analysed by NSW Police have remained stable at a lower level. In 2014/15, phenethylamine purity levels were based on 584 seizures analysed by NSW Police, and 15 seizures analysed by the AFP. Purity data was not available for 2015/16.

Figure 46: Median purity of phenethylamine seizures analysed in NSW, 2009/10–2014/15

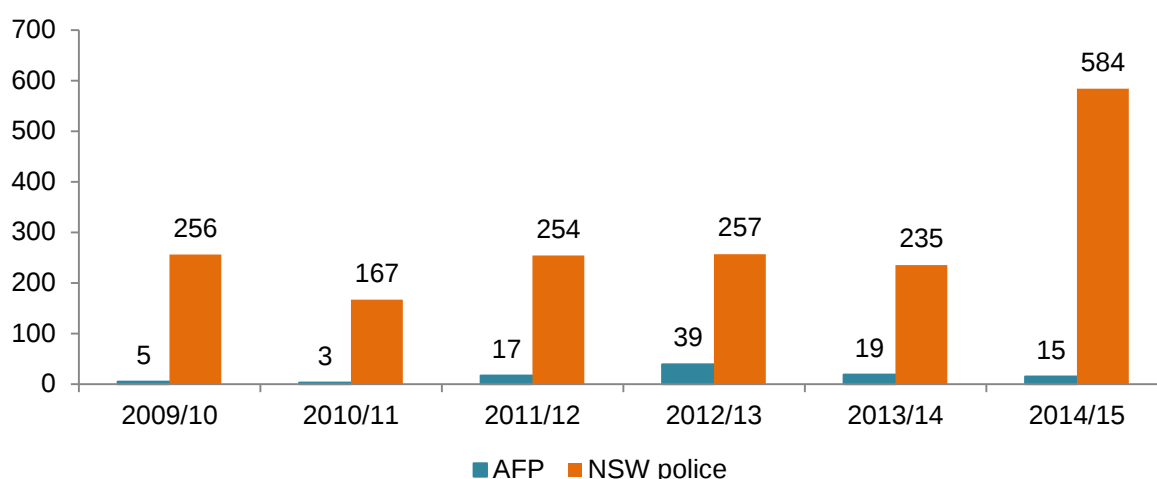


Source: Australian Crime Commission (2011, 2012, 2013, 2014, 2015), (Australian Criminal Intelligence Commission (2016)

NB: The majority of phenethylamine seizures relate to ecstasy. Purity levels are only representative of seizures which are analysed

Since the 2009/10 period, the number of phenethylamine seizures analysed by NSW Police and the AFP has remained stable (Figure 47). In 2014/15, there were a total of 2,598 MDMA seizures detected by NSW Police, with a total weight of 3,935 kilograms (data not shown).

Figure 47: Number of phenethylamine seizures analysed in NSW, 2009/10–2014/15



Source: Australian Crime Commission (2011, 2012, 2013, 2014, 2015), Australian Criminal Intelligence Commission (2016)

3.1.3 Availability

Ecstasy pills, powder and capsules

The majority (90%) of RPU interviewed in 2016 reported that it was currently 'easy' (43%) or 'very easy' (47%) to obtain ecstasy pills, powder or caps (see Table 22). Sixty-two percent (n=43) of respondents indicated that the availability of ecstasy had remained 'stable' over the preceding six months, 20% reported 'easier' availability, but 17 % (n=12) reported it was more difficult to access ecstasy. These reports have been relatively stable over time.

Table 22: Reports of availability of ecstasy pills, powder and caps in the past six months by RPU, NSW, 2011–2016

	2011 (N=100)	2012 (N=100)	2013 (N=100)	2014 (N=100)	2015 (N=83)	2016 (N=72)
Current availability:						
% very easy	51	42	50	46	34	47
% easy	37	46	41	47	49	43
	2011 (N=100)	2012 (N=100)	2013 (N=100)	2014 (N=100)	2015 (N=80)	2016 (N=69)
Availability change:						
% stable	72	62	58	61	63	62
% easier	13	18	32	18	19	20

Source: NSW EDRS RPU interviews 2011–2016

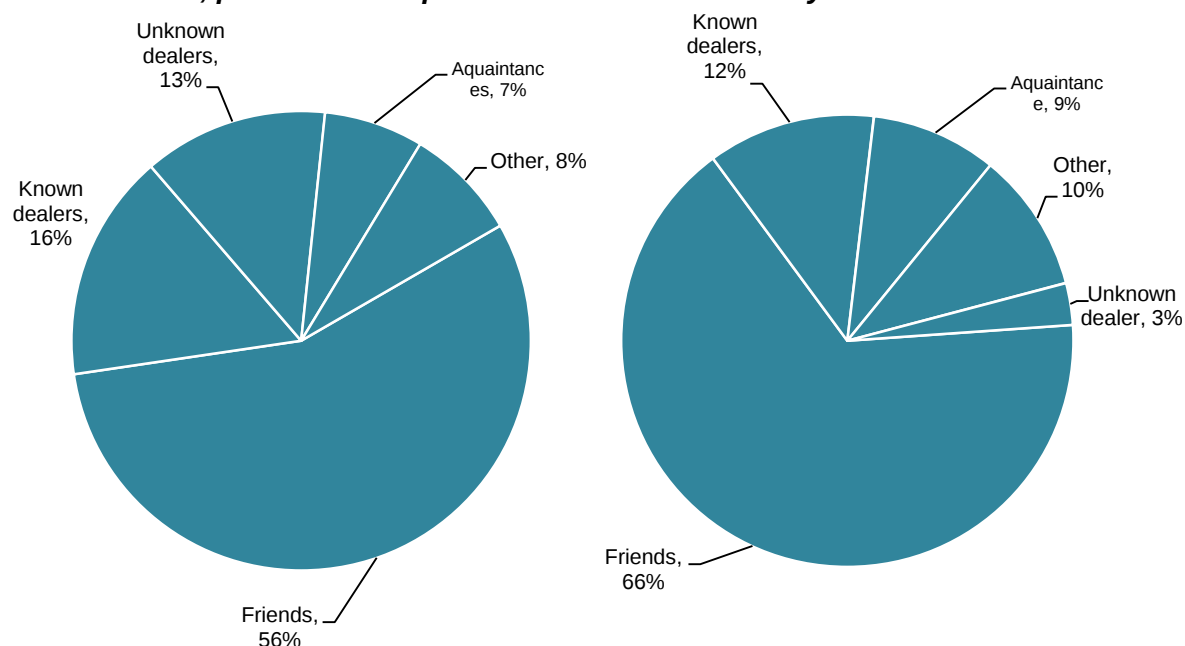
Crystal/MDMA Rock

Of those who commented on the current availability of crystal MDMA (n=66), almost all reported that crystal MDMA (98.5%, n=65) was either 'easy' (50%) or 'very easy' (49%) to obtain. Finally, of those who could comment on the changing availability of crystal MDMA (n=65) in the last six months, two-thirds (66%, n=43) thought the ease of access was 'stable', a further 30% (n=19) reported it was 'easier', with very few reporting access as 'more difficult' (n=2) or 'fluctuating' (n=1).

3.1.4 Purchase of ecstasy

Participants were asked to nominate who they sourced the ecstasy (pills, powder or caps) or ecstasy crystal/MDMA rock on the last occasion of use. Of the 71 participants who reported obtaining ecstasy pills, powder or caps, over half obtained it from a friend (56%, n=40). Of the 65 participants who reported sourcing ecstasy crystal/MDMA rock, 66% (n=43) obtained it from a friend, with a lesser percentage (12%, n=8) obtaining it from a known dealer. The sources for where ecstasy (pills, powder and caps) and ecstasy crystal/rock MDMA were obtained on the last time of use are largely similar, with both mainly sourcing from friends and known dealers. The different sources where ecstasy was obtained on the last occasion of use are shown in Figure 48 for the participants who have used ecstasy (pills, powder and caps) and ecstasy crystal/rock MDMA.

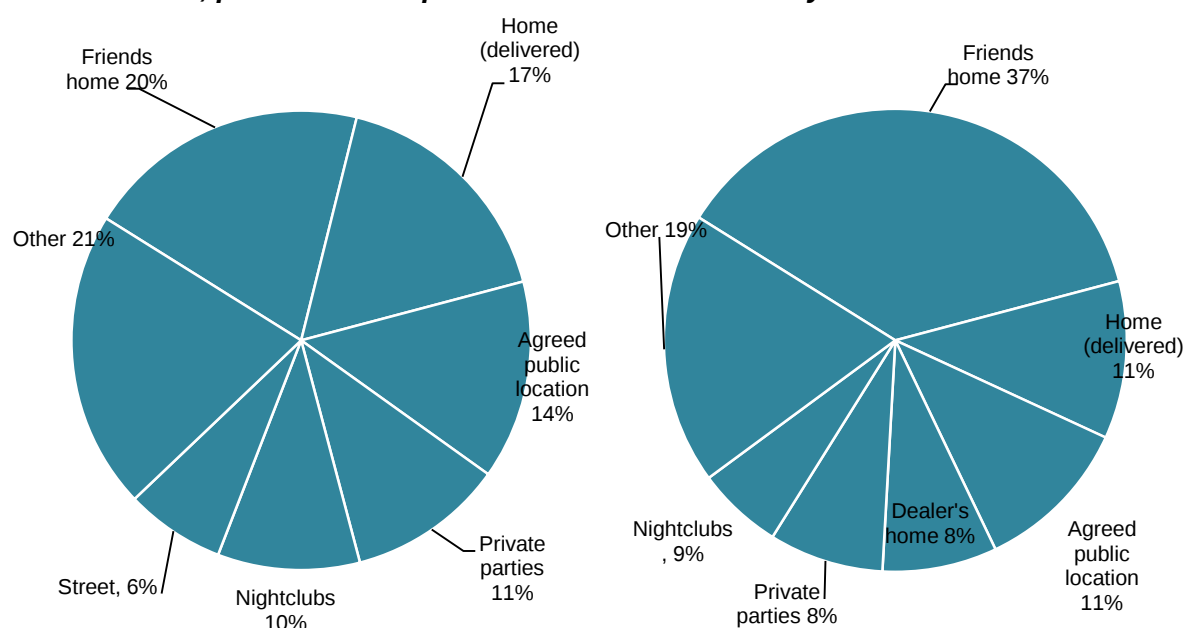
Figure 48: People from whom ecstasy was last purchased by RPU, NSW 2016
Pills, powder and caps ***Crystal/Rock MDMA***



Source: NSW EDRS RPU interviews 2016

Participants were also asked to nominate the location or venue where they last purchased ecstasy (see Figure 49). The largest proportions of participants obtained ecstasy pills, powder and caps or crystal/rock MDMA at a 'friend's home', 'home (delivered)' or an 'agreed public location'. The 'other' category labelled in the graphs below includes 'pubs/bars', 'acquaintance's home', 'dealer's home', and 'online'.

Figure 49: Locations at which ecstasy was last purchased among RPU, NSW 2016
Pills, powder and caps ***Crystal/Rock MDMA***



Source: NSW EDRS RPU interviews 2016

Key expert comments

KE reports on price were similar to RPU reports ranging from \$20–50 per tablet or capsule.

One KE from law enforcement noted an increase in MDMA and MDA lab detections. According to this KE, the majority of MDMA detections come from overseas, namely the Netherlands, known for its very high purity.

One health KE noted that there have been a few strong batches of MDMA recently. This person reported hearing that dealers often buy MDMA in bulk, making capsules themselves.

3.2 Methamphetamine

Key points

Small numbers ($n < 10$) commented on the price, purity and availability of speed and crystal methamphetamine.

Small numbers ($n < 10$) commented on the price of crystal methamphetamine.

The majority of those able to comment on the purity of crystal methamphetamine reported it was high and all reported that it was very easy or easy to obtain.

Given the low proportion of methamphetamine users in the 2016 sample, only a small number of participants were confident in answering questions on price, purity and availability for speed and crystal. None of the participants were confident in answering these questions with regard to 'base'.

Historically, methamphetamine has predominantly been imported into Australia (Topp & Churchill, 2002). However, in the last decade the number of clandestine laboratories (most of which manufacture ATS) detected nationally has increased from 390 in 2005–06 to 667 in 2013–14 (Australian Criminal Intelligence Commission, 2016). NSW accounted for 99 clandestine laboratory detections in 2014–15.

3.2.1 Price

Speed

Four participants reported on the price of speed in 'grams' over the six months prior to the interview. Only one participant provided the price in terms of 'points', and for this reason will not be reported. The median price reported the last time speed was purchased was \$145 per gram (range \$50–200). It should be noted that the lowest number of participants reported the price of speed in the most recent years (2013–2016) and thus these numbers should be interpreted with caution.

Of the participants who commented ($n=4$), three participants reported the price as stable over the preceding six months, with the other reporting fluctuations in price.

Base

None of the participants reported feeling confident reporting on the price of base in the 2016 NSW EDRS sample.

Crystal methamphetamine

Nine 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 \$40–100) and for a gram was \$350 (range \$250–550).

Of those who commented ($n=10$), eight participants (80%) reported that the price of crystal has remained stable over the last 6 months, one reported an increase and the other reported experiencing price fluctuation.

Table 23: Price of speed, base and crystal purchased by RPU, NSW, 2011–2016

	2011	2012	2013	2014	2015	2016
Speed	n=27	n=21	n=6	n=6	n=6	n=4
Md price per point (\$) (range)	32.5^ (15–50)	35^ (20–50)	50^ (–)	50^ (–)	27.5^ (10–70)	– –
Md price per gram (\$) (range)	80 (20–280)	75^ (20–450)	150^ (50–300)	150^ (30–500)	175^ (25–300)	145^ (50–200)
Base	n=12	n=7	n=2	n=1	n=2	n=0
Md price per point (\$) (range)	– –	50^ (40–60)	– –	– –	25^ (15–35)	– –
Md price per gram (\$) (range)	100^ (60–150)	170^ (160–180)	70^ (60–80)	100^ (–)	200^ (–)	– –
Crystal	n=16	n=15	n=7	n=7	n=7	n=9
Md price per point (\$) (range)	60 (16–100)	50 (40–100)	50 (40–100)	50^ (50–75)	50^ (50–70)	50^ (40–100)
Md price per gram (\$) (range)	– –	500^ (–)	500^ (–)	400^ (300–500)	– –	350^ (250–550)

Source: NSW EDRS RPU interviews 2011–2016

^Small numbers, interpret with caution.

3.2.2 Purity

RPU Reports

Speed

Only three participants commented on the purity of speed, which means any interpretation needs to be made with extreme caution. All three participants reported the purity as 'medium'. Only two participants commented on changes in purity and for this reason the rating has not been included.

Base

None of the participants reported feeling confident reporting on the purity of base in the 2016 NSW EDRS sample.

Crystal

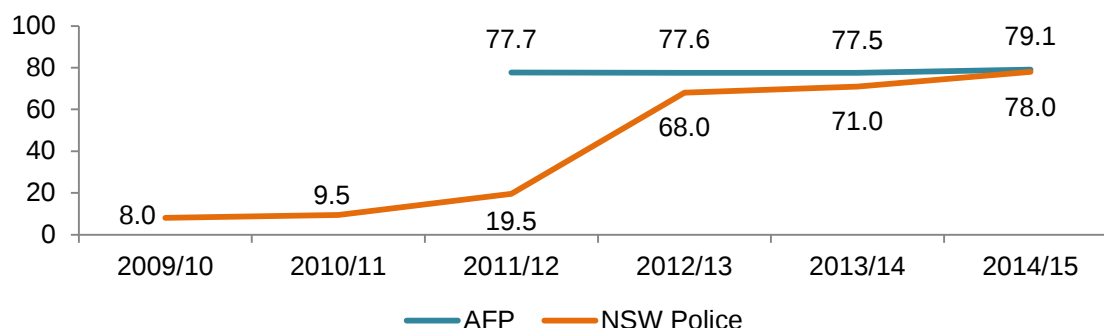
Ten participants commented on the current purity of crystal, seven (70%) rated it as having a 'high' purity, 2 a medium purity and one reported fluctuation in purity. Eight of these participants felt confident commenting on whether there had been any changes in purity in the past 6 months. Five participants (62.5%) reported the purity to have been stable, 2 reported increased purity and one reported fluctuations in the change of purity.

Seizure Data

Figure 50 shows the median purity of methamphetamine seizures analysed in NSW for the period July 2009 to June 2015. The median purity of methamphetamine seizures analysed by NSW Police rose from 19.5% in 2011/12 to 78% in 2014/15, which is close to the purity levels reported by the AFP. The AFP reported a median purity of 79.1% across the 2014/15

period which has remained stable since the 2011/12 period. Purity figures for 2014/15 are based on 1032 methamphetamine seizures analysed by NSW Police and 72 seizures analysed by the AFP. Purity data was not available for 2015/16.

Figure 50: Median purity of methamphetamine seizures analysed in NSW, 2009/10–2014/15

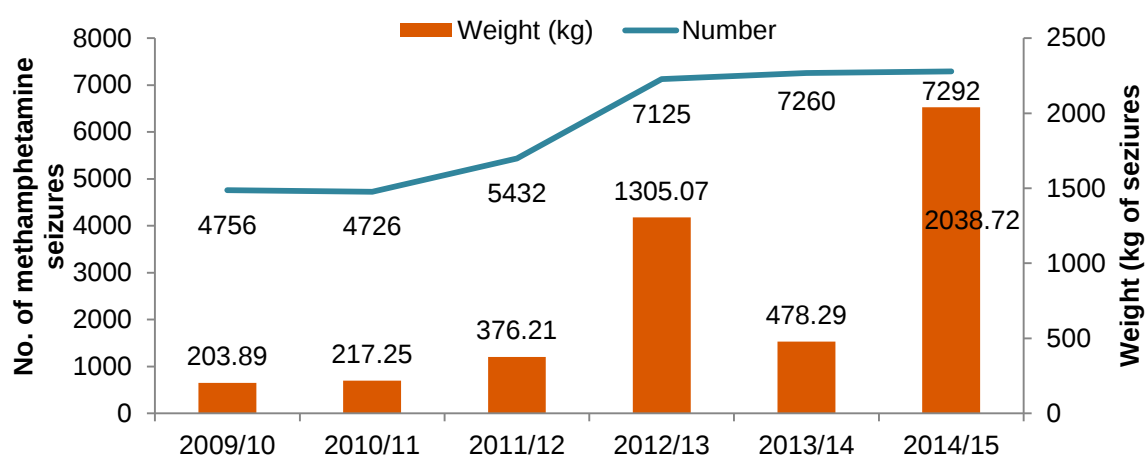


Source: Australian Crime Commission (2011, 2012, 2013, 2014, 2015), Australian Criminal Intelligence Commission (2016)

Note: Gaps in the series represent data that wasn't available. Purity levels are only representative of seizures which are analysed.

Both the number and weight of methamphetamine seizures has been relatively high in the past 3 years (Figure 51).

Figure 51: Number and weight of methamphetamine seizures detected by NSW Police, 2009/10–2014/15



Source: Australian Crime Commission (2011, 2012, 2013, 2014, 2015), Australian Criminal Intelligence Commission (2016)

Note: 2014/15 data was provided by NSW Police, while earlier data is extracted from the Illicit Drug Data Reports produced by the ACC.

3.2.3 Availability

Speed

Only four participants commented on the availability of speed and had varying experiences. Two reported it to be easy to obtain, one reported very easy, and one reported it was difficult. Given the low numbers, no real interpretation can be made from the available data. Likewise, although three participants reported that availability remained stable and one reported 'more difficulty', the low number of participants means no reliable interpretation/extrapolation can be made from this data.

Base

None of the participants reported feeling confident reporting on the availability of base in the 2016 NSW EDRS sample.

Crystal

Of the eleven participants who felt confident commenting on the availability of crystal methamphetamine in the past 6 months, ten participants (91%) reported it to be 'very easy' and one reported it to be 'easy'. Eight of the eleven participants believed that availability had become 'easier' over the past 6 months and 3 participants (27%) believed the availability had been 'stable' over this time period.

3.2.4 Supply

Participants were asked who and where they obtained their methamphetamines from the last time they obtained them.

Speed

Only three participants felt confident reporting who they obtained their speed from on the last occasion. The three sources were 'friends', 'known dealer' and 'acquaintance'.

Likewise the three locations where they obtained speed differed. The three locations were 'dealer's home', 'private party' and 'acquaintance's house'.

Base

None of the participants reported feeling confident reporting on the supply of base in the 2016 NSW EDRS sample.

Crystal

Eleven participants commented on who they obtained crystal from on the last occasion. Three had obtained the crystal from 'friends', 6 participants had obtained the crystal from a 'known dealer' and 2 had obtained the crystal from an 'unknown dealer'.

The physical locations for obtaining the crystal were the 'dealer's house' (n=3, 27%), 'friend's home' (n=4, 36%), 'street' (n=1, 8%) and an 'agreed public location' (n=3, 27%).

Key expert comments

The majority of health and law KE reported that crystal methamphetamine is in high demand and readily available.

Price reports were stable with KE generally reporting crystal methamphetamine to be \$50 per point.

Purity reports were mixed but were mostly reported to be high, with law enforcement KE reporting it to be 71% pure.

According to the law enforcement KEs, suppliers are all male, ranging from 40–60 years of age.

3.3 Cocaine

Key points

- *Price*: \$300 per gram, stable.
- *Purity*: Variable reports.
- *Availability*: Easy to very easy and stable.

3.3.1 Price

Forty-two participants were able to comment on the price of cocaine. The median price per gram was \$300 (range \$30–400). This figure has continued to remain stable for the past six years Table 24.

Nearly eighty percent (n=33) of those who commented on the price of cocaine believed it had remained stable over the preceding six months. Equal number reported increasing, decreasing and a fluctuating price (7%, n=3 respectively). This stability (of cocaine prices) has been reported by the majority of participants over the past 6 years.

Table 24: Price of cocaine purchased by RPU, NSW, 2011–2016

	2011 (n=42)	2012 (n=36)	2013 (n=28)	2014 (n=39)	2015 (n=38)	2016 (n=42)
<i>Md price per gram</i> (\$) (range)	300 (80–1000)	300 (220–350)	300 (200–370)	300 (40–400)	300 (200–450)	300 (30–400)
<i>Price change (%)</i> :						
Increased	19	14	–	15	6	7
Stable	69	70	91	69	66	79
Decreased	10	8	5	5	16	7
Fluctuated	2	8	5	10	13	7

Source: NSW EDRS RPU interviews 2011–2016

3.3.2 Purity

RPU Reports

Forty-four RPU were able to comment on the purity of cocaine (Table 25). Reports on current purity were varied, with 46% reporting ‘low’ purity, 25% (n=11) reporting ‘medium’ purity, 16% (n=7) reporting ‘high’ and 14% reporting ‘fluctuating’ purity. This data is not as heterogeneous as past years, but still suggests the current purity of cocaine is variable.

Ratings of the change in cocaine purity over the preceding six months show that 53% of participants reported the purity to be ‘stable’ over the past 6 months. A further 18% (n=7) reported ‘decreased’ purity, 24% (n=9) reported ‘fluctuating’ purity and only 5% (n=2) an ‘increase’ in purity.

Table 25: RPU reports of cocaine purity, NSW, 2011–2016

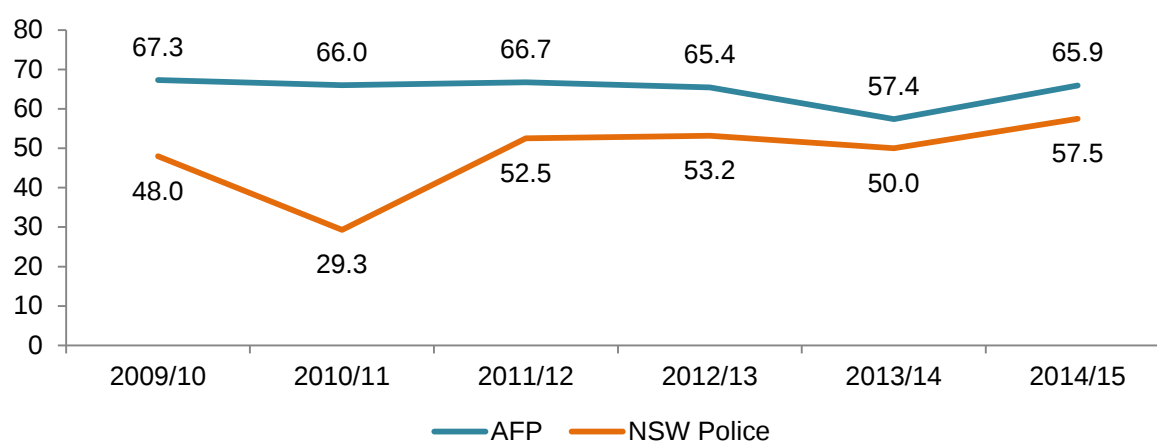
	2011 (N=47)	2012 (N=46)	2013 (N=29)	2014 (N=49)	2015 (n=32)	2016 (n=44)
Current purity (%) :						
Low	36	26	20	26	31	46
Medium	36	35	52	32	19	25
High	19	28	16	21	33	16
Fluctuates	9	11	12	21	17	14
Purity change (%) :						
Increased	12	12	5	6	17	5
Stable	37	61	52	45	43	53
Decreased	34	15	19	16	13	18
Fluctuated	17	12	24	32	27	24

Source: NSW EDRS RPU interviews 2011–2016

Seizure Data

The purity of cocaine samples analysed by both NSW Police and the AFP has remained relatively stable over the past 3 years. Purity figures for 2014/15 are based on 262 seizures analysed by the NSW Police and 37 seizures analysed by the AFP. Purity data was not available for 2015/16.

Figure 52: Median purity of cocaine seizures analysed in NSW, 2009/10–2014/15

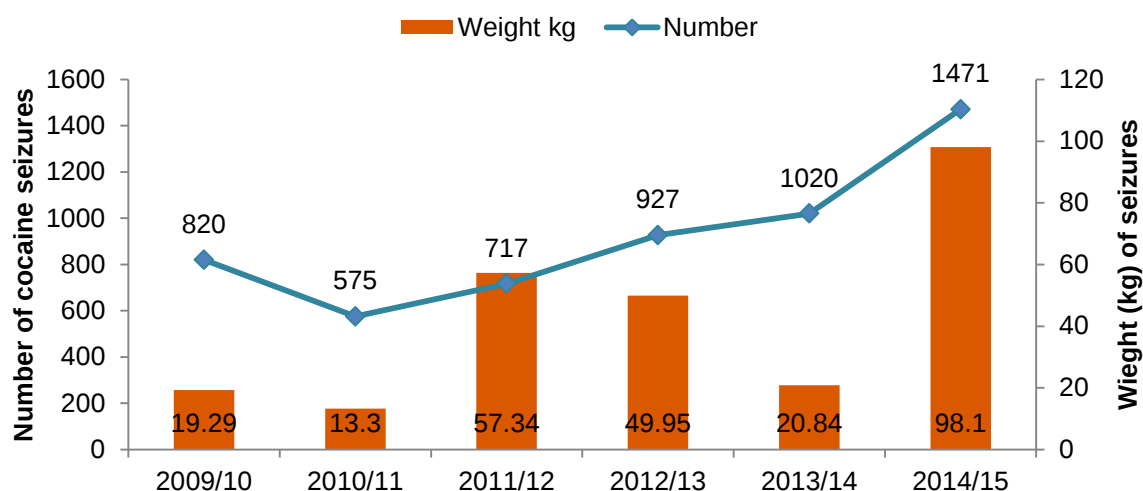


Source: Australian Crime Commission (2011, 2012, 2013, 2014, 2015), Australian Criminal Intelligence Commission (2016)

Note: Purity levels are only representative of seizures which are analysed.

The number of cocaine seizures detected by NSW Police has increased since 2010/11, and the total weight of these seizures in 2014/15 was relatively high (Figure 53).

Figure 53: Number and weight of cocaine seizures detected by NSW Police, 2009/10–2014/15



Source: Australian Crime Commission (2011, 2012, 2013, 2014, 2015), Australian Criminal Intelligence Commission (2016)

Note: 2014/15 data was provided by NSW Police, while earlier data is extracted from the Illicit Drug Data Reports produced by the ACC

3.3.2 Availability

Forty-six participants were able to comment on the availability of cocaine (Table 26). Of these, the majority (70%) believed cocaine was currently either 'easy' or 'very easy' to obtain. Over one-quarter (28%), however, reported that it was currently 'difficult' to obtain. These figures are comparable with those from 2015.

Nearly three-quarters of the RPU (74%, n=32) who commented on cocaine availability stated that the availability of cocaine had remained 'stable' over the preceding six months, with an equal percentage reporting it had become 'easier' or 'more difficult' (12%, n=5). Only one participant reported that the availability had 'fluctuated' over the past 6 months.

Table 26: RPU reports of cocaine availability, NSW, 2011–2016

	2011 (N=49)	2012 (N=44)	2013 (N=29)	2014 (N=44)	2015 (N=36)	2016 (N=46)
Current availability:						
Very easy (%)	31	25	21	30	30	11
Easy (%)	35	41	52	55	43	59
Difficult (%)	35	34	28	14	27	28
Very difficult (%)	–	–	–	2	–	2
Availability change:						
Easier (%)	15	21	22	16	31	12
Stable (%)	74	69	61	66	51	74
More difficult (%)	11	10	17	13	11	12
Fluctuated (%)	–	–	–	5	6	2

Source: NSW EDRS RPU interviews 2011–2016

3.3.3 Supply

Of those who commented on purchasing cocaine over the preceding six months (n=47), the majority had purchased it from a 'friend' (57%, n=27) or a 'known dealer' (19%, n=9). Smaller percentages reported sourcing the cocaine from an 'unknown dealer' (8%, n=4), 'acquaintances' (6%, n=3), and 'workmates' (4%, n=2). Single participants reported purchasing from 'relatives' and the 'online surface web'.

The most common location of last purchase was at a 'friend's home' (23%, n=11), followed by their 'own home' (19%, n=9) and 'private parties' (11%, n=5) and an 'agreed public location' (11%, n=5). Smaller proportions reported obtaining cocaine on the last occasion from the 'dealer's home' (9%, n=4), 'pubs/bars' (9%, n=4), 'nightclubs' (6%, n=3), and a further 6% reported the location as 'other'. Single participants also reported the location as the 'street', 'acquaintance's house' and 'live music/event/concert/festival'.

Key expert comments

KE reported the price of cocaine to be stable though with wide variation; ranging from \$150–350 for half a gram, and ranging from \$200–600 for one gram.

Law enforcement KE reported cocaine to be of medium purity.

It was generally acknowledged by KE that cocaine was available with the number of detections increasing, though small quantities were generally found.

3.4 LSD

Key points

- *Price*: \$20 per tab, stable.
- *Purity*: Medium–high, stable.
- *Availability*: Variable reports, but 29% reported LSD as very easy to obtain and a further 29% reported as easy to obtain in 2016 (compared to 18% and 24% respectively in 2015).

3.4.1 Price

Fifty-three participants reported on the price of LSD (Table 27). The median price last paid for a tab of LSD was \$20 (range \$10–40), which has remained stable over the last six years. The majority of those who commented (64%, n=33) reported that the price had remained stable over the preceding six months, with only a small portion reporting that the price was ‘increasing’ (8%, n=4), ‘decreasing’ (17%, n=9), or ‘fluctuating’ (12%, n=6). These figures have remained relatively stable compared to 2015.

Table 27: Price of LSD purchased by RPU, NSW, 2011–2016

	2011 (n=34)	2012 (n=37)	2013 (n=52)	2014 (n=38)	2015 (n=36)	2016 (n=53)
<i>Med price per tab</i> (\$) (range)	20 (6–30)	20 (12–40)	20 (8–50)	25 (8–40)	25 (5–100)	20 (10–40)
<i>Price change (%)</i> :						
Increased	24	5	9	21	3	8
Stable	67	86	76	71	74	64
Decreased	3	5	13	4	10	17
Fluctuated	6	3	2	4	13	12

Source: NSW EDRS RPU interviews 2011–2016

3.4.2 Purity

Fifty-two participants commented on the current purity of LSD (see Table 28). The largest proportion of participants (44%) reported that LSD was currently of ‘high’ purity. These figures are fairly consistent with 2015.

Participants who commented on the change in LSD purity over the last 6 months reported similar responses to previous years with the majority (58%) reporting a ‘stable’ purity and smaller numbers reporting LSD purity as ‘increasing’ (11%), ‘decreasing’ (11%), or ‘fluctuating’ (20%).

Table 28: RPU reports of LSD purity, NSW, 2011–2016

	2011 (n=39)	2012 (n=42)	2013 (n=46)	2014 (n=34)	2015 (n=32)	2016 (n=52)
<i>Current purity (%)</i> :						
Low	3	2	11	3	12	6
Medium	13	38	39	21	27	39
High	79	50	33	65	48	44
Fluctuates	5	10	33	12	12	12
<i>Purity change (%)</i> :						
Increased	16	11	9	18	8	11
Stable	71	64	44	54	52	58
Decreased	3	8	16	14	12	11
Fluctuated	10	17	30	14	28	20

Source: NSW EDRS RPU interviews 2011–2016

3.4.3 Availability

Fifty-six participants commented on the availability of LSD (Table 29). Although 58% (n=32) reported that LSD was either 'very easy' or 'easy' to obtain, a substantial proportion (42%, n=24) also reported it was 'difficult' or 'very difficult' to access.

Fewer participants felt confident commenting on whether the availability had changed over the past 6 months (n=52). Of these RPU, 62% (n=32) thought the availability over this time period had been stable, with a good percentage reporting it had become easier (23%, n=12). Smaller percentages reported the availability to be more difficult (12%, n=6) or fluctuating (4%, n=2). In comparison to 2015, more of the current RPU thought the availability was 'stable', rather than 'more difficult'.

Table 29: RPU reports of LSD availability, NSW, 2011–2016

	2011 (n=38)	2012 (n=45)	2013 (n=51)	2014 (n=40)	2015 (n=34)	2016 (n=56)
Current availability:						
Very easy (%)	34	22	14	20	18	29
Easy (%)	34	38	49	40	24	29
Difficult (%)	32	38	29	33	56	35
Very difficult (%)	–	2	8	8	3	7
Availability change:						
Easier (%)	22	15	11	10	21	23
Stable (%)	59	61	58	67	45	62
More difficult (%)	16	20	31	20	21	12
Fluctuated (%)	3	5	–	3	12	4

Source: NSW EDRS RPU interviews 2011–2016

3.4.4 Supply

Of those who commented on purchasing LSD over the preceding six months (n=55), the majority had purchased it from a friend (67%, n=37). Smaller percentages reported sourcing the LSD from a 'known dealer' (18%, n=10), 'acquaintance' (6%, n=3), 'unknown dealer' (6%, n=3) or the 'online dark net/deep web' (4%, n=2).

The most common location of last purchase was at a 'friend's home' (35%, n=19), followed by their 'own home' (15%, n=8), 'dealer's home' (11%, n=6), 'agreed public location' (11%, n=6), and a 'live music event/concert/festival' (9%, n=5). Three participants reported purchasing LSD from 'raves/doofs/dance parties'. Two participants reported purchasing on the last occasion at the 'pub/bar', 'private party', or 'online/posted'. A single participant reported obtaining at 'acquaintance's houses' and one couldn't recall the last location.

Key expert comments

One law enforcement KE was able to comment on the price of hallucinogens.

One sugar cube was generally reported to cost \$30 (range \$30–\$50).

If one was to buy between one and nine tabs, it would cost anywhere between \$8–50 per tablet, though if one was to buy ten tablets or more, it would cost \$20–30 per tablet.

3.5 Ketamine

Key points

- *Price*: \$200 per gram and stable.
- *Purity*: Medium to high and stable.
- *Availability*: Variable reports.

3.5.1 Price

Twenty-three participants reported feeling confident reporting on the price and price stability of ketamine, which is a substantially greater proportion than previous years, which is consistent with the significant increase of recent users in 2016. The median price reported for ketamine is \$200 per gram (range \$100–250; Table 30). Twenty-one participants commented on the change in ketamine price. Of these 62% (n=13) reported the price as 'stable', 19% (n=4) reported the price to have 'increased', and 19% (n=4) reported the price to have 'decreased'.

Table 30: Price of ketamine purchased by RPU, NSW, 2011–2016

	2011 (n=14)	2012 (n=8)^	2013 (n=5)^	2014 (n=7)^	2015 (n=3)^	2016 (n=23)
Med price per gram (\$) (range)	150 (50–200)	150^ (20–180)	200^ (15–200)	180^ (10–230)	220^ (180–250)	200 (100–250)

Source: NSW EDRS RPU interviews 2011–2016

^n<10 interpret with caution

3.5.2 Purity

Twenty-six participants commented on current ketamine purity. Nearly 60% of this sample (58%, n=15) reported the purity to be 'high'. Smaller numbers of these participants reported the purity to be 'low' (4%, n=1) 'medium' (23%, n=6) or 'fluctuating' (15%, n=4).

Twenty-five participants commented on the change in purity over the past 6 months. The majority (60%, n=15) reported that purity to have remained 'stable' over this time. Twenty percent (n=5) reported an increase, 8% (n=2) reported a decrease and 3 participants had experienced fluctuating purity.

3.5.3 Availability

Of the twenty-seven participants who commented on the availability of ketamine there was considerable variation. Fifty-nine percent (n=16) reported it to be 'very easy' (n=6) or 'easy' (n=10), by contrast 41% (n=11) reported it to be 'difficult' (n=10) or 'very difficult' (n=1).

Sixty-percent (n=15) of the participants who reported on changes in availability (n=25) reported the availability to be 'stable'. Thirty-percent (n=7) believed it was 'easier' to access ketamine. A small percentage of participants reported it to be 'more difficult' (8%, n=2) or 'fluctuating' (4%, n=1).

3.5.4 Supply

Twenty-six participants felt confident commenting on who they obtained ketamine from at the time of their last purchase. The vast majority obtained the ketamine from a 'friend' (77%, n=20). A small percentage of the participants obtained it from a 'known dealer' (19%, n=5), or a 'workmate' (4%, n=1).

There was greater variation with regard to the venue where they obtained the last ketamine. Of the twenty-six participants who commented 31% (n=8) obtained it from a 'friend's place', 19% (n=5) obtained it from an 'agreed public location', and 15% (n=4) had it 'delivered to their home'. Participants also reported obtaining it from a 'dealer's home' (12%, n=3), or 'private party' (12%, n=3). Single participants reported obtaining it from 'raves/doofs/dance parties', 'pubs/bars', or 'live music event/concert/ festival'.

Key expert comments

One law enforcement KE was able to comment on ketamine.

The KE was unable to provide data regarding the number of seizures in the last 12 months, and purity of ketamine was also not assessed.

Nevertheless, prices have increased in 2015/16 to \$200–260 per gram (from \$100–180 per gram in 2014/15).

3.6 GHB

Key points

- *Price*: \$10 per ml.
- *Purity*: Medium–high.
- *Availability*: Easy to access.

3.6.1 Price

Thirteen participants reported on the price of GHB with a median of \$10 per ml (range 2–15ml;) over the last 6 months (Table 31).

There was variation in the 13 participant's reports of price stability over the past 6 months. Nearly one-third (31%, n=4) reported the price as 'stable', with the same percentage reporting a 'decrease' in price. Smaller percentages reported an 'increase' (23%, n=3) or 'fluctuation' (15%, n=2) in price over the last 6 months.

Table 31: Price of GHB purchased by RPU, NSW, 2011–2016

	2011 (n=7) ^	2012 (n=4) ^	2013 (n=6) ^	2014 (n=3) ^	2015 (n=6) ^	2016 (n=13)
Med price per ml (\$) (range)	10 (4.8–10)	9 (7–20)	11.5 (4–25)	10 (8–35)	17.5 (10–100)	10 (2–15)

Source: NSW EDRS RPU interviews 2011–2016

^n<10 interpret with caution

3.6.2 Purity

Fifteen participants commented on the purity of GHB. Eight participants (53%) reported it was high, 3 participants (20%) reported it was 'medium'. Four participants (27%) reported the purity to be 'fluctuating'. None of the participants reported it to be 'low'.

Fourteen participants commented on the change in GHB purity over the last six months. There was considerable variation in their experience. Twenty-nine percent (n=4) reported the purity to be 'stable', 21% reported it was 'decreasing' (n=3), and 14% (n=2) reported it to be 'increasing'. Over one-third (36%, n=5) reported it to be 'fluctuating'.

3.6.3 Availability

The general perception of the fifteen participants is that GHB is easy to access, with 73% (n=11) reporting it was 'easy' and 27% (n=4) reporting it was 'very easy'.

Fifteen people commented in the change in availability of GHB over the last 6 months. Sixty-percent (n=9) commented the availability had been 'stable'. Twenty-seven percent (n=4) reported it to be 'easier'. Single participants reported it to be 'more difficult' or 'fluctuating'.

3.6.4 Supply

Fifteen participants reported who they obtained GHB from at the time of their last purchase. Consistent with 2015, 'friends' (53%, n=8) and 'known dealers' (33%, n=5) were important sources. Additionally single participants reported their source to be an 'acquaintance' and 'relative'.

The same number of participants (n=15) reported on the location they had last obtained the GHB. These locations were varied and included, 'dealers home' (20%, n=3), 'friend's home' (20%, n=3), 'home delivered' (13%, n=2), 'private parties' (13%, n=2) and 'an agreed public location' (13%, n=2). Single participants reported 'night club', 'live music event/concert/festival' and 'hotel'.

Key expert comments

One law enforcement KE was able to comment on GHB.

3.7 Cannabis

Key points

Hydro

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

Bush

- *Price*: \$20 per gram; \$280 per ounce, stable.
- *Potency*: Currently medium, stable.
- *Availability*: Variable reports.

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 2016, only participants who were able to distinguish between hydro and bush provided information about the price, potency and availability of cannabis.

3.7.1 Price

Table 32 presents the reported price for one ounce and one gram of hydro and bush cannabis. It is evident prices for hydro and bush remained relatively stable from 2015 to 2016.

Table 32: Price of hydroponic and bush grown cannabis purchased by RPU, NSW, 2011–2016

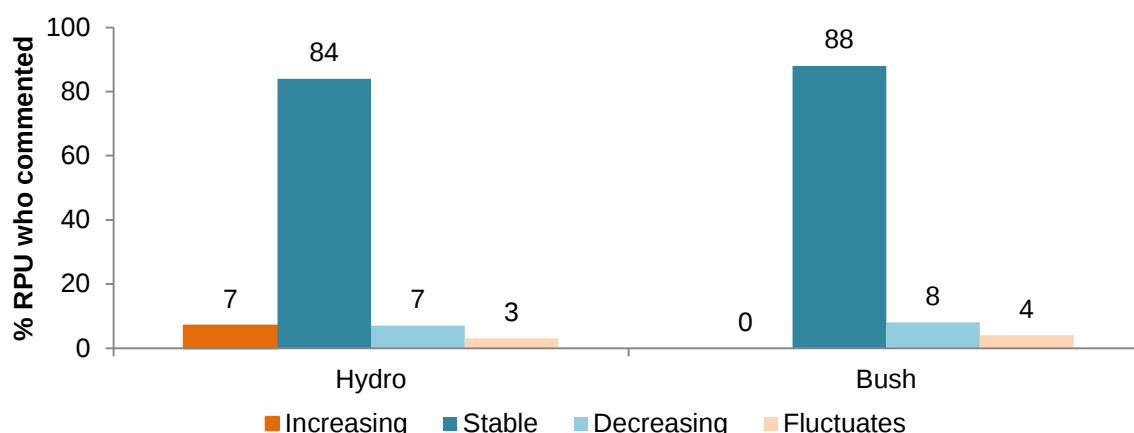
	2011	2012	2013	2014	2015	2016
Hydro	n=46	n=39	n=37	n=31	n=24	n=20
<i>Md</i> price per ounce (\$) (range)	300 (230–400)	290 (160–350)	300 (250–450)	300 (250–320)	300 (250–350)	300 (100–360)
<i>Md</i> price per gram (\$) (range)	20 (10–20)	20 (10–25)	20 (10–100)	20 (10–20)	20 (5–20)	20 (15–25)
Bush	n=19	n=27	n=16	n=29	n=16	n=9
<i>Md</i> price per ounce (\$) (range)	290^ (200–300)	265^ (150–300)	300 (200–400)	280 (200–360)	280 (200–350)	280 (220–350)
<i>Md</i> price per gram (\$) (range)	20 (10–20)	20 (10–20)	20 (10–25)	20 (10–25)	20 (10–20)	20 (10–20)

Source: NSW EDRS RPU interviews 2011–2016

^ Small numbers, interpret with caution

Participants were asked about changes to the price of hydro and bush over the preceding six months (see Figure 54). The majority reported that it had been 'stable' both for hydro (84%) and bush (88%).

Figure 54: RPU reports of the price change of hydro and bush cannabis, NSW, 2016



Source: NSW EDRS RPU interviews 2016

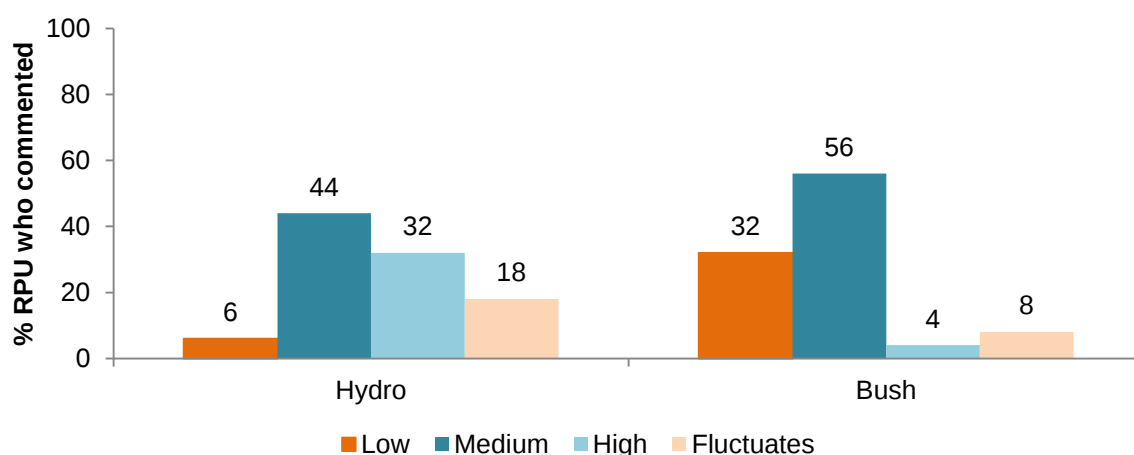
Note: Of those who commented: n=31 for hydro, n=25 for bush.

3.7.2 Potency

Figure 55 presents participants' perceptions of the current potency of hydro and bush cannabis. Thirty-two percent (n=11) of those participants who commented (n=34), reported hydro was currently of 'high' potency. This figure is a decline on 2015 (55%), but similar to 2014 (30%). Forty-four percent (n=15) reported the potency to be 'medium', with few participants (6%, n=2) reporting the potency to be 'low'. Nearly one-fifth of participants (18%, n=6) reported fluctuating potency.

Similarly to 2015, over half (56%, n=14) of those who commented on the potency of bush (n=25) reported it was 'medium'. One-third (32%, n=8) reported it was 'low'. Only one participant reported it to be 'high'. Few participants reported 'fluctuating' potency (8%, n=2).

Figure 55: RPU reports of current potency of hydro and bush cannabis, NSW, 2016



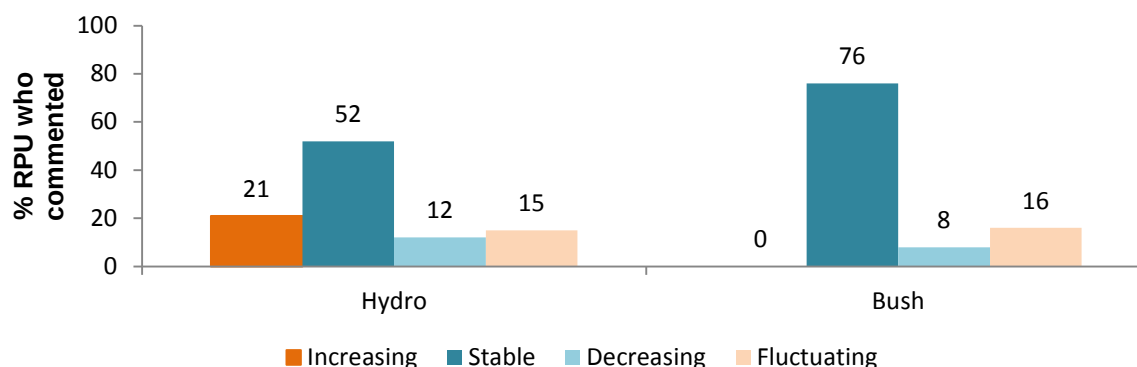
Source: NSW EDRS RPU interviews 2016

Note: Of those who commented: n=34 for hydro, n=25 for bush.

Figure 56 presents participants' perceptions of the change in potency of hydro and bush cannabis over the last six months. Fifty-two percent of those who commented reported that hydro potency was 'stable' (46% in 2015). Similar to 2015, 21% of those who reported on changes in hydro potency reported it was 'increasing' (n= 7). Fewer participants reported the potency as 'decreasing' (12%, n=4) or 'fluctuating' (15%, n=5).

The vast majority (76%, n=19) of participants who felt confident commenting on changes in the potency of bush (n=25), reported the potency to be 'stable'. Small number reported it was 'decreasing' (8%, n=2) or 'fluctuating' (16%, n=4).

Figure 56: RPU reports of change in potency of hydro and bush cannabis over the last six months, NSW, 2016



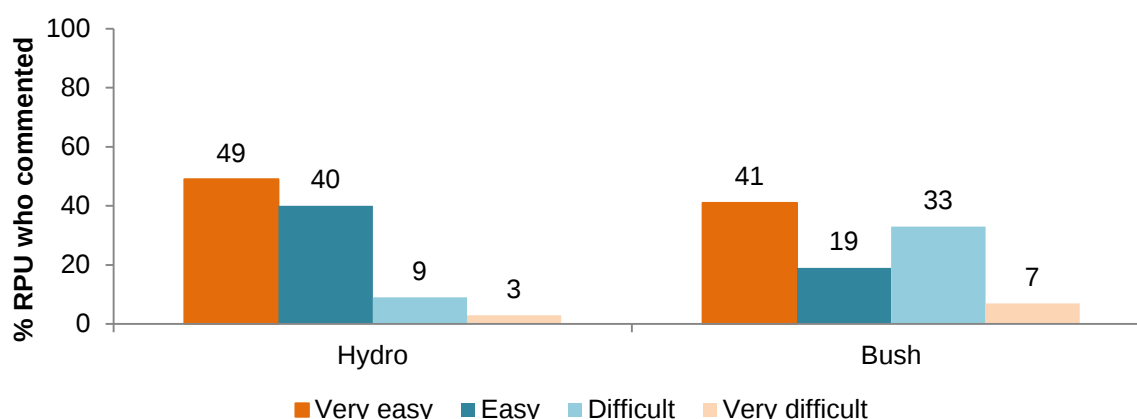
Source: NSW EDRS RPU interviews 2016

Note: Of those who commented: n=33 for hydro, n=25 for bush.

3.7.3 Availability

Figure 57 reports RPU perceptions of current hydro and bush availability; these perceptions are similar to 2015. Nearly 90% (n=29) reported hydro as 'very easy' (49%) or 'easy' (40%) to obtain. A small number reported it to be 'difficult' (9%, n=3) or 'very difficult' (3%, n=1). Similarly to 2015, there was a lower level of consensus on availability of bush, with 41% (n=11) reporting it to be 'very easy', 19% (n=5) 'easy', 33% (n=9) 'difficult' and 7% (n=2) 'very difficult'.

Figure 57: RPU reports of current availability of hydro and bush cannabis, NSW, 2016

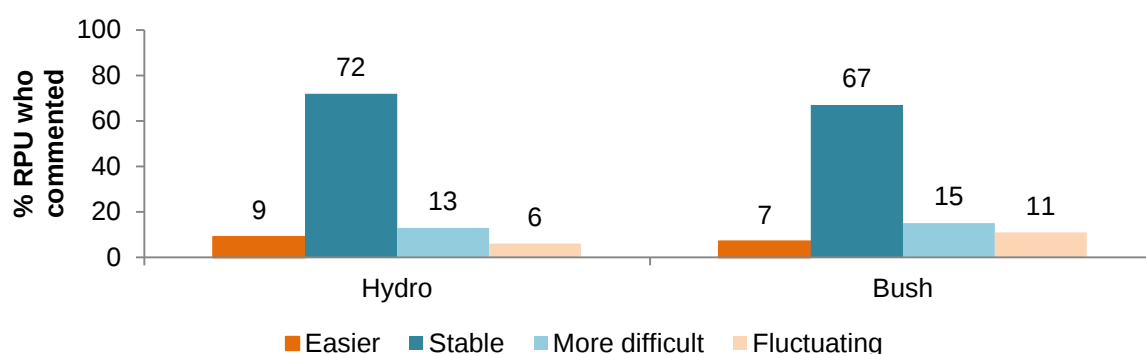


Source: NSW EDRS RPU interviews 2016

Note: Of those who commented: n=33 for hydro, n=27 for bush.

Reports on the change in cannabis availability in 2016 were similar to both 2015 and 2014 data. Most participants who commented reported both hydro (72%) and bush (67%) availability as stable over the last six months (see Figure 58).

Figure 58: RPU reports of change in availability of hydro and bush cannabis over the last six months, NSW, 2016



Source: NSW EDRS RPU interviews 2016

Note: Of those who commented: n=32 for hydro, n=27 for bush.

3.7.4 Supply

Hydro

Most individuals who reported purchasing hydro in the last six months obtained it from either a 'known dealer' (41%, n=14) or 'friends' (29%, n=10). Smaller percentages reported sourcing it from 'unknown dealers' (15%, n=5) and 'mobile dealers' (6%, n=2). Single participants reported sourcing from 'relatives', 'street dealers' or 'neighbour'.

Thirty-four participants reported on the location where they last bought hydro. The majority either bought at a 'friend's house' (32%, n=11), 'dealer's home' (29%, n=10) or 'agreed public location' (24%, n=8). Smaller numbers had it 'home delivered' (6%, n=2) or bought at a 'street market' (6%, n=2). One participant reported obtaining it at the 'neighbour's house'.

Bush

Most individuals who reported purchasing bush in the last six months obtained it from either 'friends' (44%, n=12) or a 'known dealer' (30%, n=8) on their last purchase. Two participants reported purchasing from a 'relative' (7%). Otherwise, single participants reported obtaining the bush from 'acquaintances', 'unknown dealers', 'street dealer', 'mobile dealer' or 'growing it himself'.

Twenty-seven participants reported on the location where they last bought bush. The majority either bought at a 'friend's house' (30%, n=8), 'dealer's home' (22%, n=6) or had it 'home delivered' (22%, n=6). Smaller numbers obtained it at a 'street market' (11%, n=3) or 'agreed public location' (7%, n=2). Single participants reported that 'they grew it' or it 'arrived by mail'.

Key expert comments

The prevalence of cannabis use remained high for this group.

Law enforcement KE reported that availability had increased and the prices for both hydro and bush cannabis are now comparable, whereas hydro has historically been more expensive. As a result, prices have been collapsed; an ounce of cannabis ranges from \$200–400, and a pound ranges from \$2,800–3,500.

Hydro is still mainly cultivated in residential dwellings in the Sydney Metropolitan area, and bush is grown in the north/north western region of NSW.

One KE reported that Asian cultivators generally have bigger operations (between 500–600 plants), and non-Asian cultivators generally have just a few plants (for personal use).

4 HEALTH-RELATED TRENDS ASSOCIATED WITH ERD USE

Key points

Stimulant dependence

- Over one-quarter (28%) of RPU scored 3 or above on the ecstasy severity of dependence scale (SDS), indicative of problematic dependent ecstasy use.
- Five participants obtained a score of 4 or above indicative of methamphetamine dependence.

Overdose, deaths and hospital admissions

- About half (49%) of participants reported having overdosed on a stimulant drug throughout their lifetime.
- About half (45%) reported having ever overdosed on a depressant drug.
- There has been an upward trend in deaths where ecstasy, methamphetamine were detected post mortem in 2014/15.
- Hospital admissions in which methamphetamine, cocaine and cannabis were the principal diagnosis appear to be increasing over time in NSW

Service usage

- Over one-quarter of respondents reported that they had at least one visit to a health service related to drug use in the past six months. GPs and emergency departments (ED) visits were the two main services accessed.
- There has been an upward trend in calls to helplines relating to crystal methamphetamine.

Mental health

- Forty-four percent of RPU had recently experienced a mental health problem, higher than general population estimates. Mood and anxiety disorders were most commonly reported.
- Thirty-four percent of the group reported high to very high psychological distress as measured by the Kessler Psychological Distress Scale (K10), higher than population norms (15%).

4.1 Stimulant 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). There is 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).

Up until 2014, 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.

Since 2015, participants were asked two separate SDS scales, to provide information on ecstasy and methamphetamine dependence separately. This provided data on methamphetamine dependence among RPU to complement dependence data from PWID

obtained in the Illicit Drug Reporting System (IDRS: <http://ndarc.med.unsw.edu.au/project/illicit-drug-reporting-system-idrs>).

4.1.1 Ecstasy dependence

Two cut-off scores are presented. 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-nine percent of RPU (n=29) 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). Twenty-two percent (n=23) of EDRS participants scored 4 or above.

Of those who answered the ecstasy SDS (100%, n=103), the median SDS score was 1 (range 0–10). Forty-eight percent (n=49) of these participants obtained a score of zero on the SDS and 13% (n=13) obtained a score of 1 on the scale; that is, over half (61%, n=62) of the respondents reported no or few symptoms of dependence in relation to ecstasy use. These findings are supported by responses of the majority of these participants (68%, n=70) reporting 'never or almost never' thinking that their use of ecstasy was out of control and 77% (n=80) reporting that they would find it 'not difficult to stop or miss a prospective dose of ecstasy'.

4.1.2 Methamphetamine dependence

Twenty-seven percent (n=28) of the sample reported using any form of methamphetamine in the last six months and all but two of these participants answered the methamphetamine SDS.

A cut-off score of 4 or more has been shown to be a good indicator of amphetamine dependence as defined by the DSM-IV (Topp & Mattick, 1997). Of the twenty-six participants who answered the questions in relation to methamphetamine, five participants reported a cut-off score of 4 or more.

The median methamphetamine SDS score was 0 (range 0–11). Seventeen (65%) of the twenty-six participants obtained a score of zero on the SDS and three (12%) obtained a score of 1 or 2 on the scale. Consistent with the low level of dependence scores, when asked if they thought their use of methamphetamine was out of control, 81% (n=21) reported 'never or almost never' and 77% (n=20) answered that they would not find it difficult to 'stop or miss a prospective methamphetamine dose'.

4.2 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.

4.2.1 Stimulant overdose

Nearly half (49%, n=50) of participants reported having overdosed on a stimulant drug throughout their lifetime. Participants reported having experienced a median of 2 overdoses (range 1–30), and that their last overdose had occurred a median of 2.5 months ago (range 0–16). Two-fifths (40%, n=41) of participants reported having overdosed on a stimulant drug within the preceding 12 months.

Forty-one participants reported on the location for where their last overdose on a stimulant drug occurred. The location for where this last overdose occurred varied considerably and included being at 'home' (22%, n=9), 'live music event/concert/festival' (20%, n=8), 'friends home' (15%, n=6), 'nightclubs' (12%, n=5), or 'private parties' (10%, n=4). Smaller numbers of participants reported being in a 'hotel' (7%, n=3), 'public place (street/park)' (5%, n=2), 'outdoors' (5%, n=2), 'city' (2%, n=1), or in a 'pub' (2%, n=1). Overall, stimulant overdoses occurred roughly equally in 'public' (49%) and 'private' (51%) settings. Approximately half the participants (51%, n=21) reported having a sober person present to assist them the last time they overdosed on a stimulant drug.

Those who had recently (i.e. within the last year) overdosed 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 reported by half the sample to have caused the overdose (51%, n=21), with smaller proportions reporting crystal meth (15%, n=6), pharmaceutical stimulants (10%, n=4), cocaine (5%, n=2), ketamine (5%, n=2), speed (n=1), LSD (n=1), cannabis (n=1), GHB (n=1), or NBOME (n=1). Most participants (83%, n=34) who had recently experienced a stimulant overdose had been using multiple drugs on that occasion. The most common additional drug used was alcohol (n=21), followed by cannabis (n=11), ecstasy (n=8) and GHB (n=3).

Among those who overdosed within the preceding year, the most common symptoms reported included increased body temperature (44%, n=18), increased heart rate (39%, n=16), nausea (37%, n=15), panic (32%, n=13), dizziness (29%, n=12) and paranoia (24%, n=9). Sixteen of the 41 participants (39%) who had recently overdosed on a stimulant drug did not receive any treatment. Of the other 25 participants who reported overdose, 76% (n=19) were watched by friends, and three (12%) attended hospital emergency. Single participants reported 'attendance to by ambulance', 'monitored at emergency tent', 'psychiatric emergency department', 'splashed water on face' and 'swallowed Valium's'.

4.2.2 Depressant overdose

Forty-five percent (n=46) of the current sample of RPU reported having ever overdosed on a depressant drug. Those who had overdosed reported having done so on a median of 2 occasions (range 1–730) with the most recent overdose having occurred a median of 1 month prior to the interview (range 0–8). Twenty-eight participants (27%) reported having overdosed on a depressant drug within the year preceding the interview.

Of those who overdosed on a depressant drug within the 12 months prior to being interviewed, twenty participants (71%) attributed their most recent overdose to alcohol, 6 participants (6%) attributed it to GHB, and the remaining 2 participants (2%) to benzodiazepines. Nearly three-quarters (71%, n=20) who reported a recent overdose reported having used other drugs on that occasion; six participants (n=30%) reported alcohol use, with the same number reporting cannabis use. Five participants (25%) reported using ecstasy. Two participants reported the concurrent use of cocaine (10%) or crystal methamphetamine (10%) respectively. Single participants reported the use of ketamine, LSD, mushrooms, nitrous oxide and 'other opiate'.

Participants were asked where they were when they last overdosed within the past 12 months. Participants had overdosed at a 'friend's home' (25%, n=7), 'home' (18%, n=5), 'private party' (18%, n=5), 'pub' (14%, n=4), or 'public place' (11%, n=3). Single participants also reported locations such as 'raves/doofs/dance party', 'nightclub', 'outdoor' and 'other'. Sixty-one percent (n=17) had overdosed in a private location. Fifteen of the twenty-eight

participants (54%) who reported overdosing on a depressant drug reported that on the last occasion they overdosed they had a person to assist them.

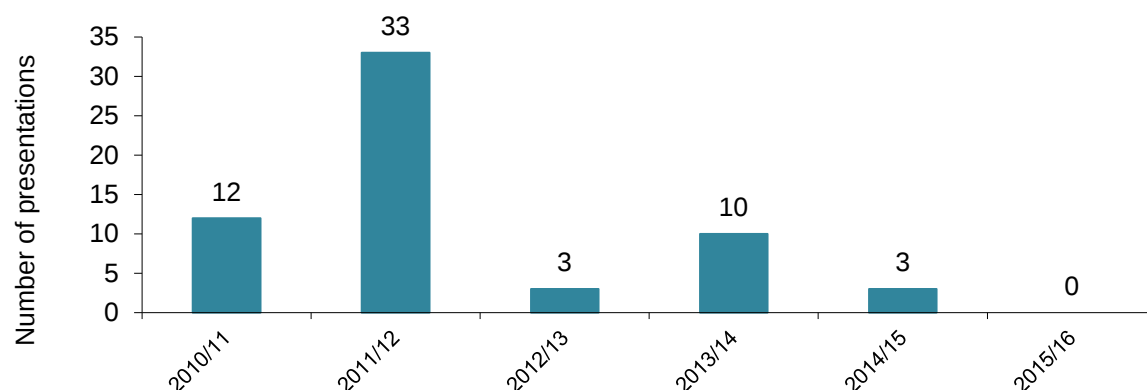
The most commonly reported symptoms of a depressant overdose among this group were vomiting (43%, n=12), losing consciousness (29%, n=8), collapsing (14%, n=4). Single participants also reported 'fainting', 'heart stopping', 'nausea' and becoming 'violent and angry'. Over half (57%, n=16) the participants 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 (75%, n=9), treated at a hospital emergency department (25%, n=3) and/or were attended to by ambulance (17%, n=2).

4.2.3 Ecstasy

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 2014/15, there were 3 emergency department presentations for ecstasy poisonings.

The total number of ecstasy overdose presentations to NSW emergency departments has fluctuated over time, with 2011/12 recording the highest number of presentations (33) in the past 5 years (Figure 59). There were no ecstasy overdose presentations recorded in 2015/16.

Figure 59: Ecstasy overdose presentations to NSW emergency departments, July 2010 to June 2016

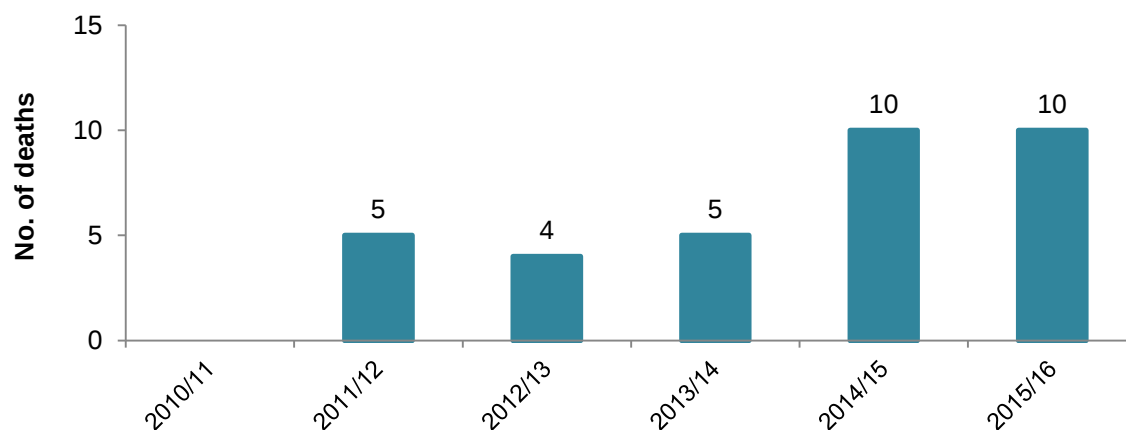


Source: Emergency Department Information System, NSW Ministry of Health

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

The number of suspected drug-related deaths where ecstasy was detected post-mortem was low and appeared to have remained relatively stable over time until 2014/15 and 2015/16, when there were 10 detections of MDMA post-mortem each year respectively. 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 60: Number of deaths of individuals suspected of drug use, in which MDMA was detected post-mortem, July 2010 to June 2016



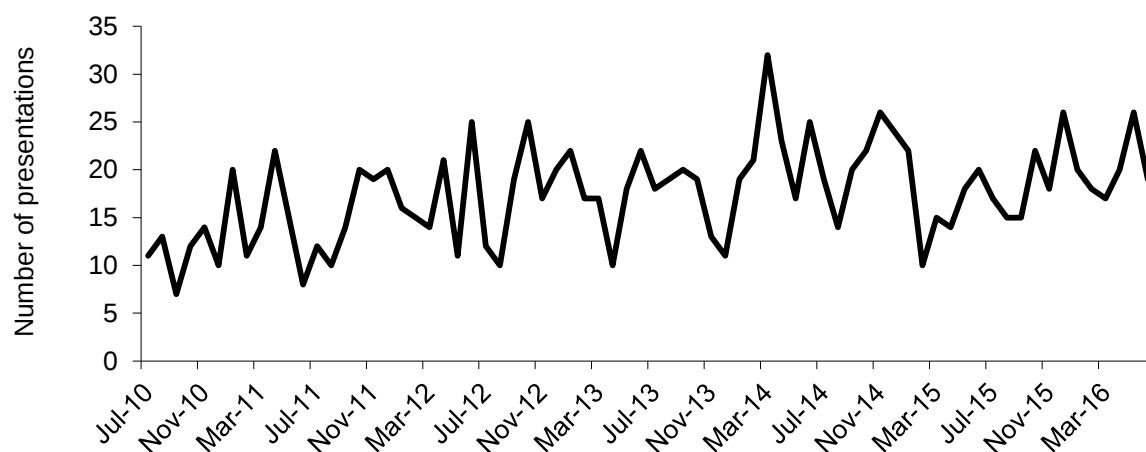
Source: Forensic Toxicology Laboratory, NSW Forensic and Analytical Science Service, NSW Ministry of Health

Note: These numbers relate to deaths in which ecstasy was detected; however, there may have also been other drugs present. 2010/11 data not published in order to protect confidentiality

4.2.4 Methamphetamine

The total number of amphetamine overdose presentations to NSW emergency departments has fluctuated over time (Figure 61).

Figure 61: Amphetamine overdose presentations to NSW emergency departments, July 2010 to June 2016

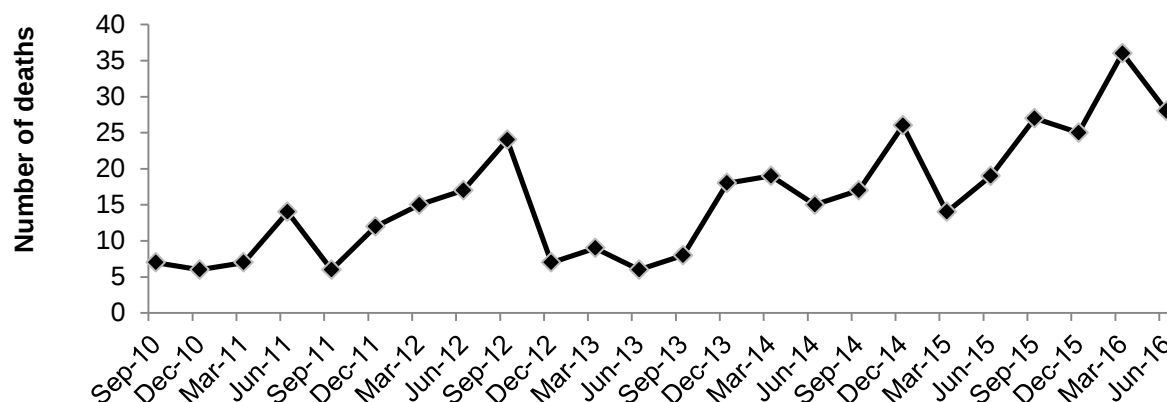


Source: Emergency Department Information System, NSW Ministry of Health

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

The number of suspected drug related deaths where amphetamines were detected post-mortem in NSW has fluctuated; data remains under 20 per quarter with the exception of mid-to-late 2012 and late-2014. These figures do not include methylenedioxymethamphetamine (MDMA), methylenedioxyamphetamine (MDA), or p-methoxyamphetamine (PMA). Also excluded are pseudoephedrine and ephedrine, as only deaths related to illicit amphetamines are presented.

Figure 62: Number of deaths of individuals suspected of drug use, in which illicit amphetamines were detected post-mortem, September 2010 to June 2016



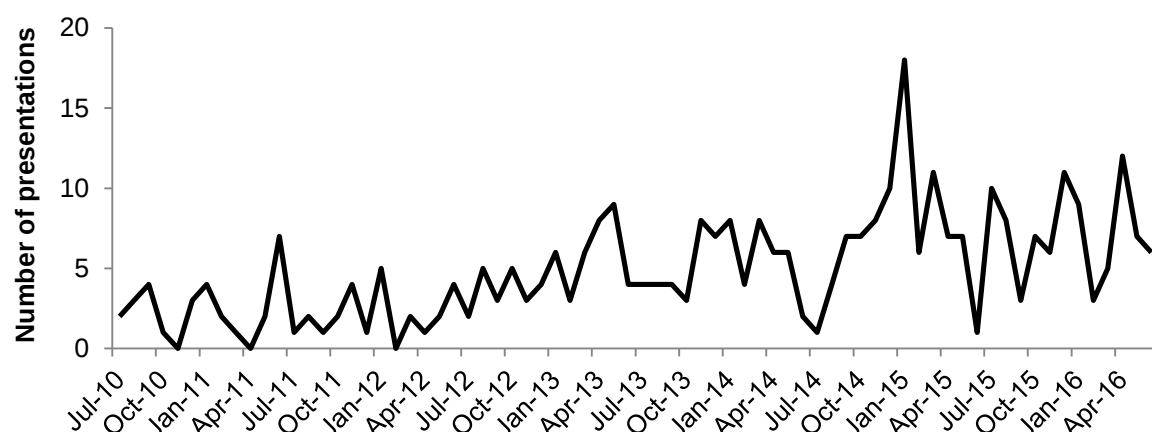
Source: Forensic Toxicology Laboratory, NSW Forensic and Analytical Science Service, NSW Ministry of Health

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

4.2.5 Cocaine

The number of cocaine overdose presentations to NSW emergency departments has become more variable since early-2013. During 2015/16, there were a total of 87 overdose presentations to NSW emergency departments (Figure 63).

Figure 63: Cocaine overdose presentations to NSW emergency departments, July 2010 to June 2016

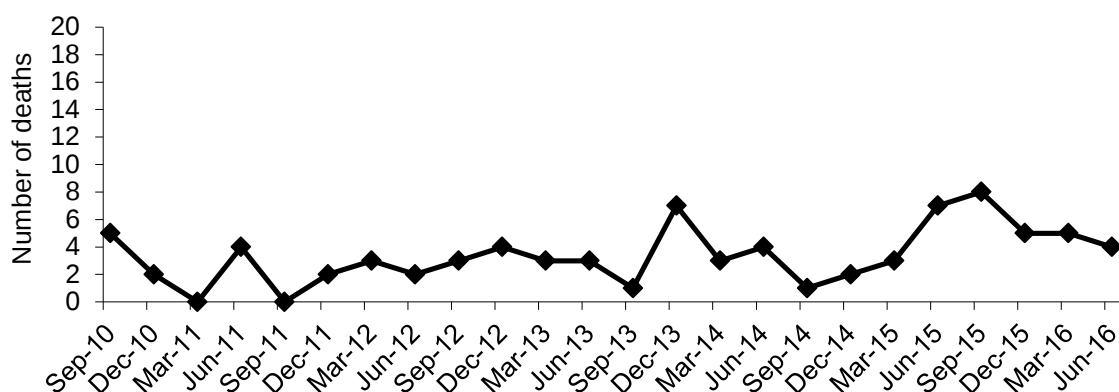


Source: Emergency Department Information System, NSW Ministry of Health

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

The number of suspected drug related deaths where cocaine was detected post-mortem has remained low over time (Figure 64).

Figure 64: Number of deaths of individuals suspected of drug use, in which cocaine was detected post-mortem, September 2010 to June 2016



Source: Forensic Toxicology Laboratory, NSW Forensic and Analytical Science Service, NSW Ministry of Health

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

4.2.6 Ketamine

Deaths of suspected drug users where ketamine was detected post-mortem remain very low. Data from the Forensic Toxicology Laboratory, NSW Forensic and Analytical Science Service (NSW Ministry of Health) recorded 8 deaths between July 2010 and June 2015.

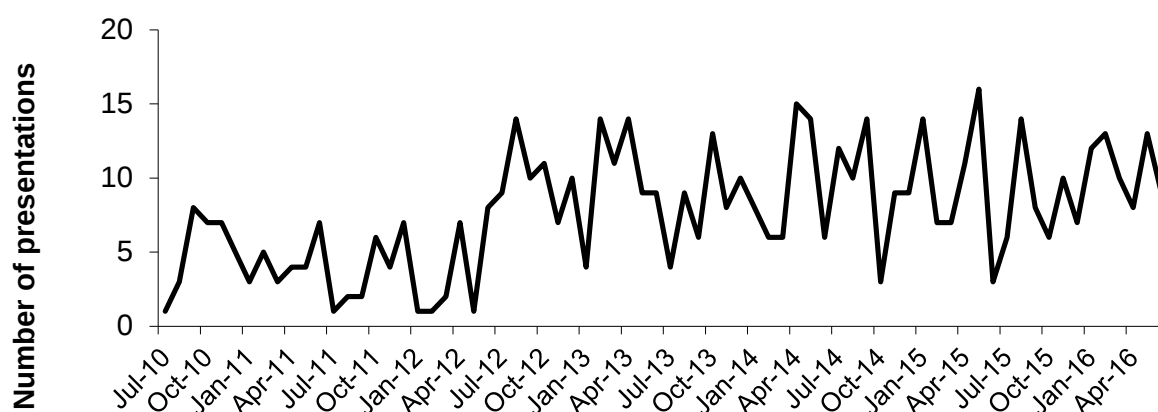
4.2.7 GHB

Data from the Forensic Toxicology Laboratory, NSW Forensic and Analytical Science Service (NSW Ministry of Health) showed that there were no deaths where GHB was detected post-mortem between July 2010 and June 2015.

4.2.8 Cannabis

The number of cannabis toxicity presentations to emergency departments has remained relatively low; however, since mid-2012, presentations fluctuated at higher levels (Figure 65).

Figure 65: Cannabis toxicity presentations to NSW emergency departments, July 2010 to June 2016



Source: Emergency Department Information System, NSW Ministry of Health

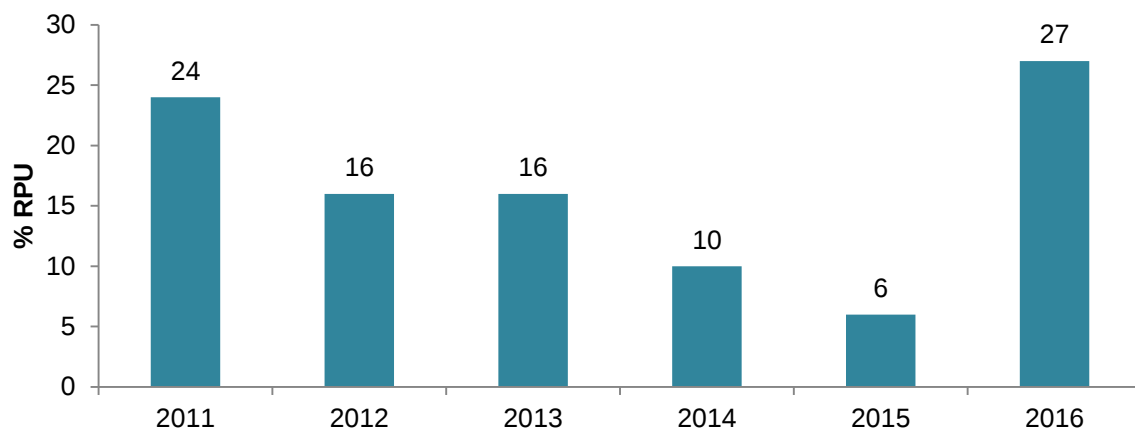
Note: Figures refer to overdose only and do not include presentations for use disorders

4.3 Help-seeking behaviour

Ninety of the participants (n=87%) had accessed a health service in the last 6 months. Of the 103 RPU, only 14 (14%) had thought about seeking help for 'issues related to drug and/or alcohol use'. In terms of service provision, twenty-eight participants (27%) reported at least one visit to a health service related to drug use in the last 6 months.

From Figure 66 there appears to be a dramatic increase in the percentage of RPU who had recently accessed a medical/health service in relation to drug use, but this difference is in the measure of 'medical/health service use'. In 2015, RPU were asked 'Have you sought help from a service or health professional in the last 6 months for any issues related to drug and/or alcohol use?' Six percent of respondents reported they had 'sought help'. In 2016 this question was not asked. Rather, access to a medical/health services was measured by counting the number of participants who had at least one consult which related to drug use with any of 13 different health services. The distinction being that these participants may not have deliberately 'sought' the help, but they had received or been offered the help. In 2015, it is apparent that 6 people may have 'sought help', but 24 people (24%) reported at least one visit which related to drug use at one of the thirteen different services listed. The difference in the metric used can explain the lower level of figures for the 2014 and 2015 survey, prior surveys had asked a question in a similar format to 2016.

Figure 66: Proportion of RPU who recently accessed a medical/health service in relation to drug use, NSW 2011–2016***

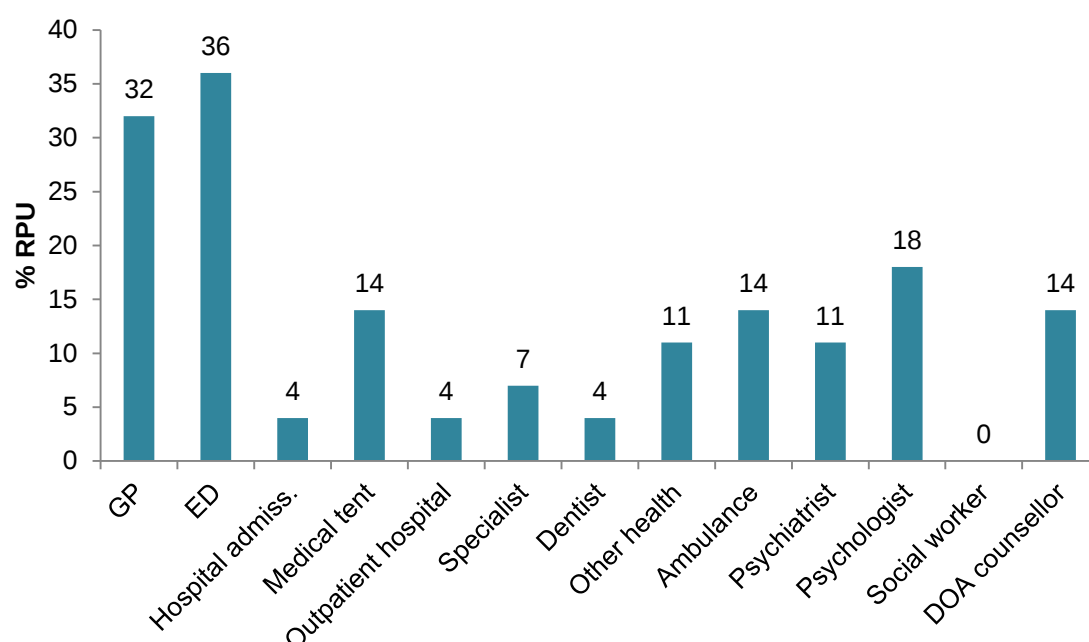


Source: EDRS RPU interviews 2011–2016

*** The difference in the number of people accessing services in relation to drug use can be attributed to the different measure, rather than real difference in access. Explanation is included in the text.

For the twenty-eight participants who visited health providers and received a drug related service, 32% (n=9) received the service from a GP and 36% (n=10) received this service from the hospital ED. Five participants (18%) received the service from a psychologist. Figure 67 shows the percentage of RPU who had received a drug related service who received this service from 13 different health service providers.

Figure 67: The percentage of RPU who have received a drug related service from health service providers.



Source: EDRS RPU interviews 2016

The two main services RPU reported receiving drug related help, were GPs and EDs. Seventy-nine of the RPU had attended a GP in the last 6 months, of these only 9 participants received drug-related assistance, the median number of consults was 2 (range 1–10). Twenty-one participants reported a visit to an ED in the last 6 months. On at least one occasion, 10 participants received drug-related assistance. For these 10 participants there was a median of 1 drug-related visit (range 1–4).

For those who did visit the GP for drug-related assistance there was considerable variance in the main drug of concern on their last visit. Crystal methamphetamine and cannabis were reported by 2 of the 9 participants. Single participants reported the main drug to be ecstasy, speed, alcohol, benzodiazepines, and a combination of 'alcohol, MDMA and cocaine'. For those who attended ED for drug-related assistance there was considerable variance in the main drug of concern on their last visit for the 10 participants. Alcohol was reported by 4 participants and GHB by 2 participants. Single participants reported the main drug involved in the visit to be speed, crystal methamphetamine, cocaine and the combination of 'Datura and Salvia'. Table 33 lists the number of participants who reported the different drugs as the main drug of concern on the last visit for the thirteen different health services.

Across all services alcohol was most frequently reported 'main drug' (n=15), followed by ecstasy (n=8) and crystal methamphetamine (n=8) (see Table 33).

Table 33: The number of participants who reported the different drugs as the main drug of concern on the last visit for the thirteen different health services

	Ecstasy	Speed	Crystal methamphet amine	Cannabis	Cocaine	GHB	Alcohol	Benzodiaze pine	Other
GP	1	1	2	2	–	–	1	1	1
ED	–	1	1	–	1	2	4	–	1
Hospital admission (inpatient)	–	–	–	–	–	1	–	–	–
Medical tent	3	–	–	–	–	1	–	–	–
Drug and alcohol counsellor	1	–	2	–	–	–	–	1	–
Hospital as outpatient	–	–	–	–	–	–	1	–	–
Specialised doctor*	–	–	1	–	–	–	–	–	–
Dentist	1	–	–	–	–	–	–	–	–
Other health professional	1	–	–	–	–	–	2	–	–
Ambulance attendance	–	–	–	–	–	1	3	–	–
Psychiatrist	–	–	2	–	–	–	–	1	–
Psychologist	1	–	–	–	–	–	4	–	–
Social / welfare worker	–	–	–	–	–	–	–	–	–
Total	8	2	8	2	1	5	15	3	2

Source: EDRS RPU interviews 2016

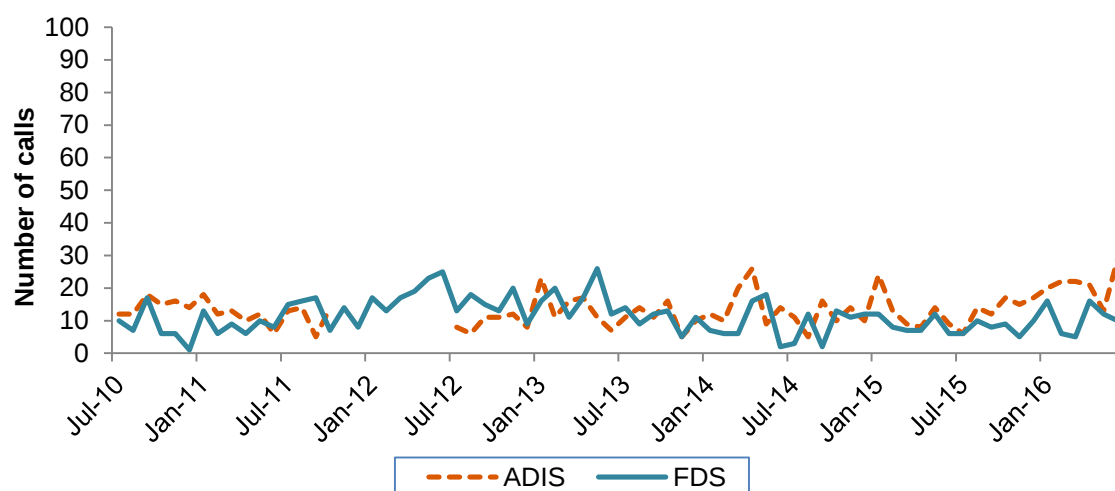
*Not including psychiatrists

4.4 Drug treatment

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 68 shows the number of calls received by ADIS and FDS regarding ecstasy from July 2010. These calls have remained low and stable.

Figure 68: Number of inquiries regarding ecstasy received by ADIS and FDS, July 2010 to June 2016

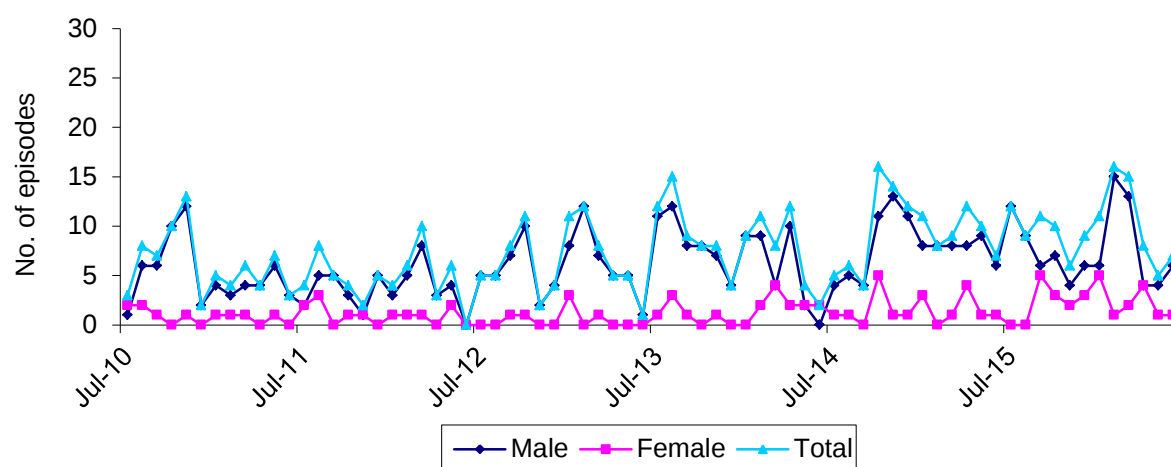


Source: NSW Alcohol and Drug Information Service and NSW Family Drug Support

Note: FDS data refer to calls where any mention of ecstasy was made. ADIS data refer to the number of calls where ecstasy were mentioned as any drug of concern. Breaks in the data series represent time periods where data was unavailable. FDS data in 2012/13 has been estimated as only national totals were available.

The number of closed treatment episodes based on the date of commencement where the principal drug of concern was ecstasy has remained stable since mid-2010 (Figure 69). Men accounted for most of the treatment episodes.

Figure 69: Number of ecstasy treatment episodes by gender, NSW July 2010 to June 2016



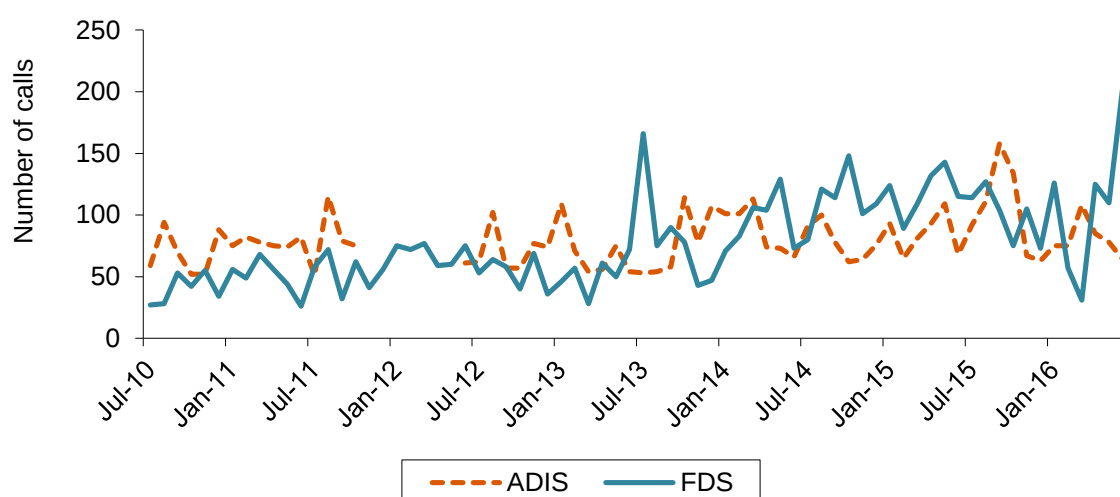
Source: NSW MDS AODTS, NSW Department of Health

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.

4.4.1 Methamphetamine

Figure 70 shows the number of calls to the ADIS and FDS lines regarding methamphetamines. The number of enquiries to ADIS has fluctuated over the past 12 months to June 2016. Calls to FDS have steadily increased over the past 2 years, likely reflecting the fact that these calls include crystal methamphetamine, which in the past 12 months comprised the majority of calls for meth/amphetamine.

Figure 70: Number of enquiries to ADIS and FDS regarding amphetamines, July 2010 to June 2015

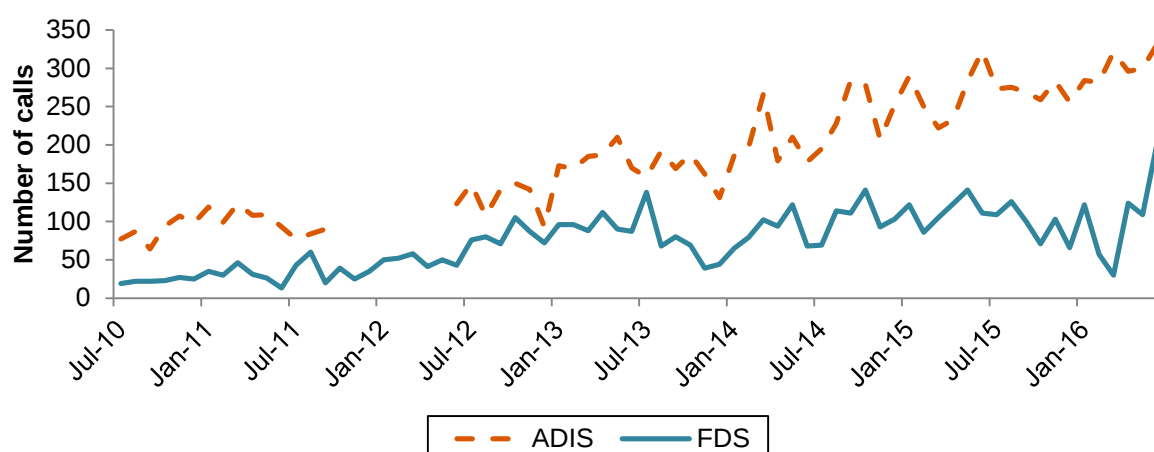


Source: NSW Alcohol and Drug Information Service and NSW Family Drug Support

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. Breaks in the data series represent time periods where data was unavailable.

Figure 71 presents calls to ADIS and FDS regarding crystal methamphetamine. These calls have been steadily increasing across both services since 2010.

Figure 71: Number of enquiries to ADIS and FDS regarding crystal methamphetamine, July 2010 to June 2016

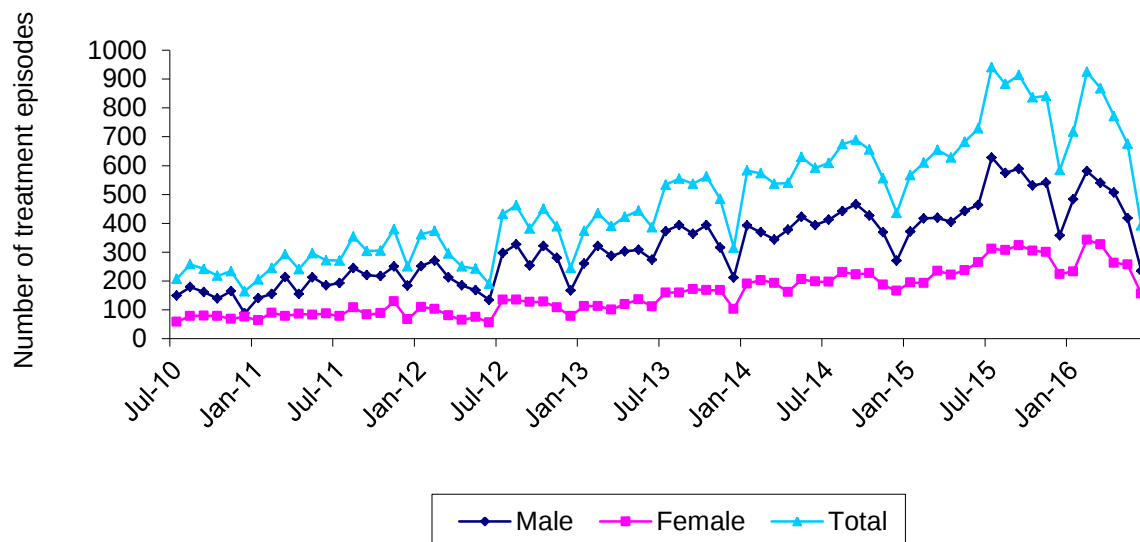


Source: NSW Alcohol and Drug Information Service and NSW Family Drug Support

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. Breaks in the data series represent time periods where data was unavailable. FDS data in 2012/13 has been estimated as only national totals were available.

The number of closed treatment episodes based on date of commencement where amphetamine was the principal drug of concern has increased from mid-2010 onward (Figure 72). Men continued to account for a greater proportion of these treatment episodes compared to women.

Figure 72: Number of ATS treatment episodes by gender, NSW July 2010 to June 2016



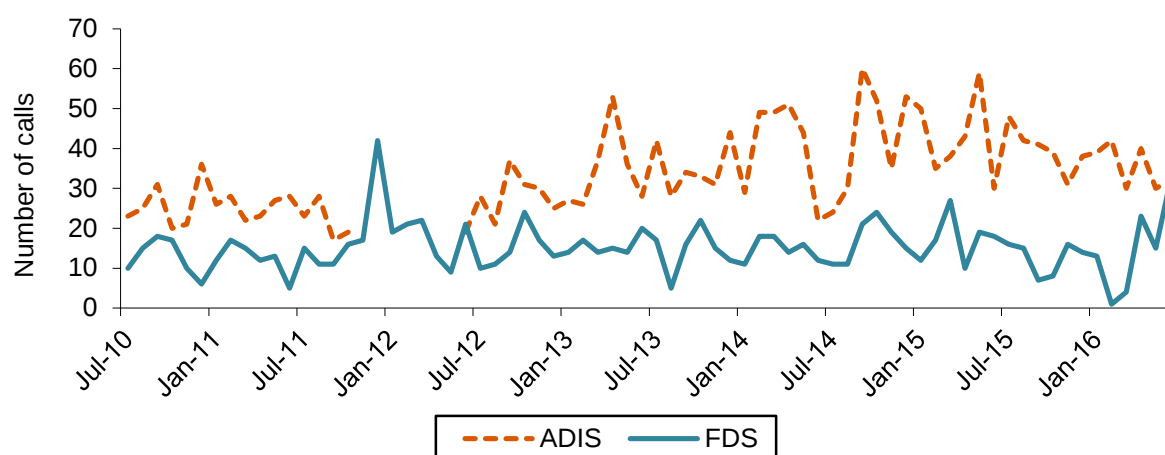
Source: NSW MDS AODTS, NSW Department of Health

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.

4.4.2 Cocaine

Figure 73 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 mid-2010.

Figure 73: Number of enquiries to ADIS and FDS regarding cocaine, July 2010 to June 2016

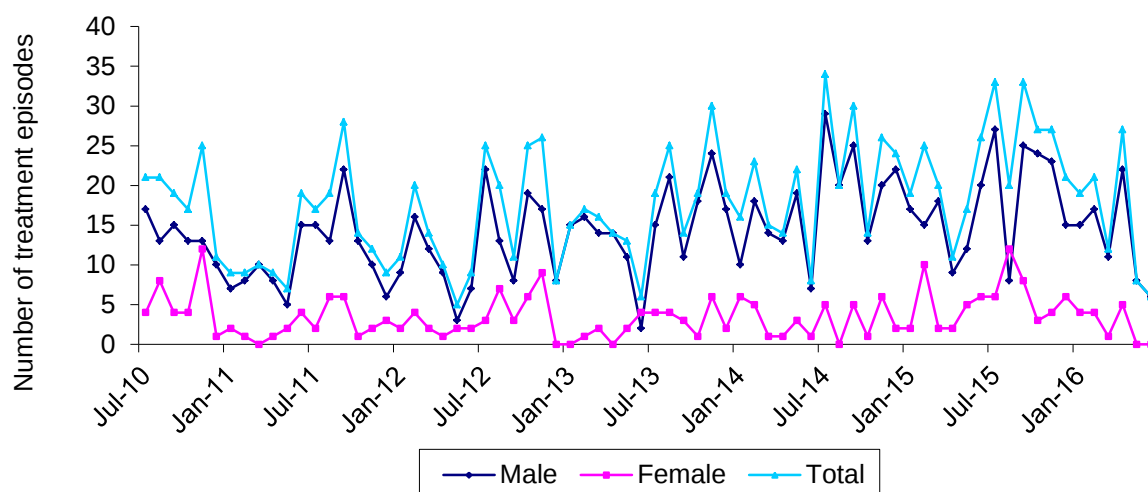


Source: NSW Alcohol and Drug Information Service and NSW Family Drug Support

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. Breaks in the data series represent time periods where data was unavailable. FDS data in 2012/13 has been estimated as only national totals were available.

The number of closed treatment episodes based on date of commencement where cocaine was the principal drug of concern has fluctuated since mid-2010 (Figure 74). Males continued to account for the vast majority of all treatment episodes.

Figure 74: Number of cocaine treatment episodes by gender, NSW July 2010 to June 2016



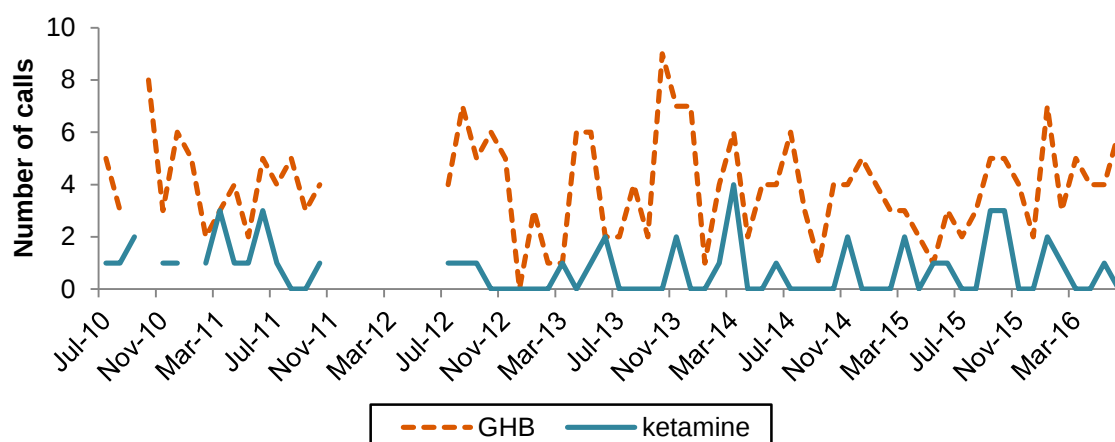
Source: NSW MDS AODTS, NSW Department of Health

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.

4.4.3 Ketamine

Treatment-seeking for problems with ketamine use is low compared to other drugs. Data from the NSW Minimum Dataset show during the period 2002–2016 there were twenty-four closed treatment episodes based on the date of commencement where the principal drug of concern was ketamine (NSW MDS AODTS, NSW Department of Health). The NSW MDS is based on closed treatment episodes and so some episodes may be excluded if they did not finish in the given period. 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 75).

Figure 75: Number of enquiries to ADIS regarding ketamine and GHB, July 2010 to June 2016



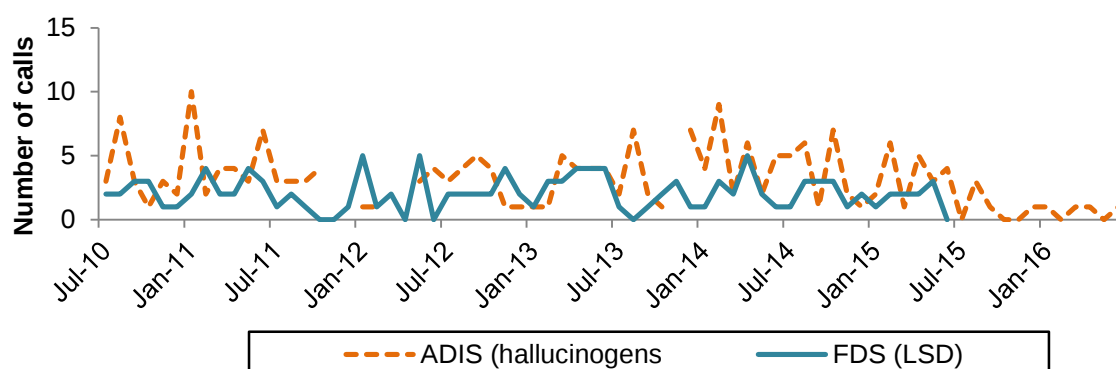
Source: NSW Alcohol and Drug Information Service

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.

4.4.4 LSD

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 76).

Figure 76: Number of enquiries to ADIS and FDS regarding hallucinogens, July 2010 to June 2016



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

Note: FDS data refer to calls where any mention of hallucinogens was made. 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. Hallucinogen synthetic were not included here. FDS data in 2012/13 has been estimated as only national totals were available. FDS (LSD) data for 15/16 was not available at the time of publication.

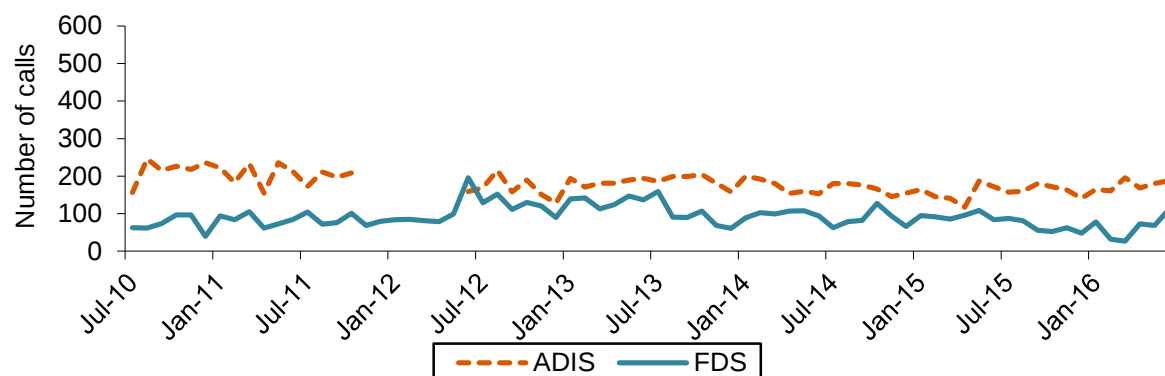
4.4.5 GHB

Data from the NSW Minimum Dataset show that during the period 2002–2016 there have been 83 treatment episodes where GHB was the principal drug of concern (NSW MDS DATS, NSW Department of Health). There were seventeen GHB episodes recorded in the 2015/16 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. The number of calls to ADIS where GHB was mentioned as a drug of concern continued to be low but variable (50 mentions; Jul-15 to Jun-16) with no more than 9 calls in any given months since mid-2010 (Figure 75).

4.4.6 Cannabis

Figure 77 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 2010.

Figure 77: Number of enquiries to ADIS and FDS regarding cannabis, July 2010 to June 2016

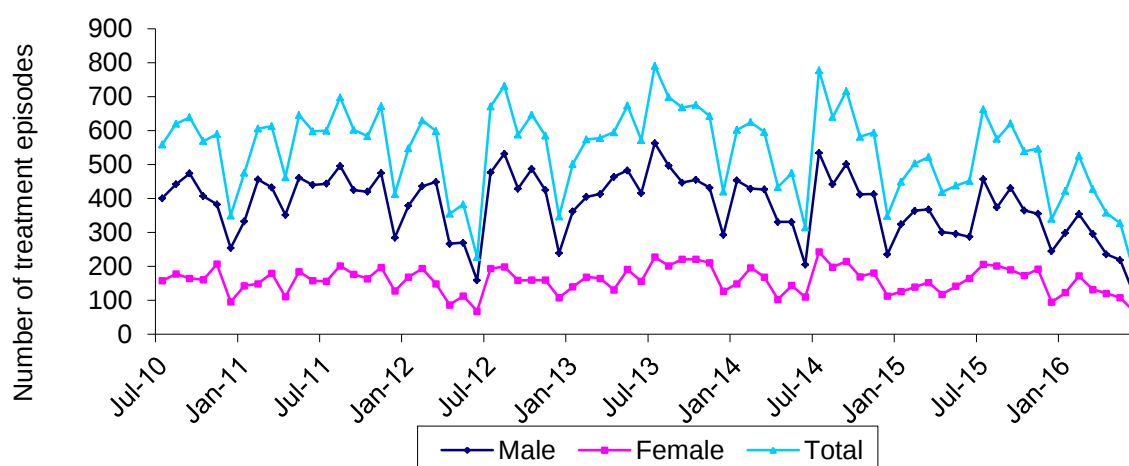


Source: NSW Alcohol and Drug Information Service and NSW Family Drug Support

Note: FDS data refer to calls where any mention of cannabis 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 cannabis was mentioned as any drug of concern. Breaks in data represent time periods where data was unavailable. FDS data in 2012/13 has been estimated as only national totals were available.

Figure 78 shows the number of closed treatment episodes based on the date of commencement where the principal drug of concern was cannabis, by gender. Treatment episodes were relatively high in 2013/14, declining again in 2015/16.

Figure 78: Number of cannabis treatment episodes by treatment type, NSW July 2010 to June 2016



Source: NSW MDS AODTS, NSW Department of Health

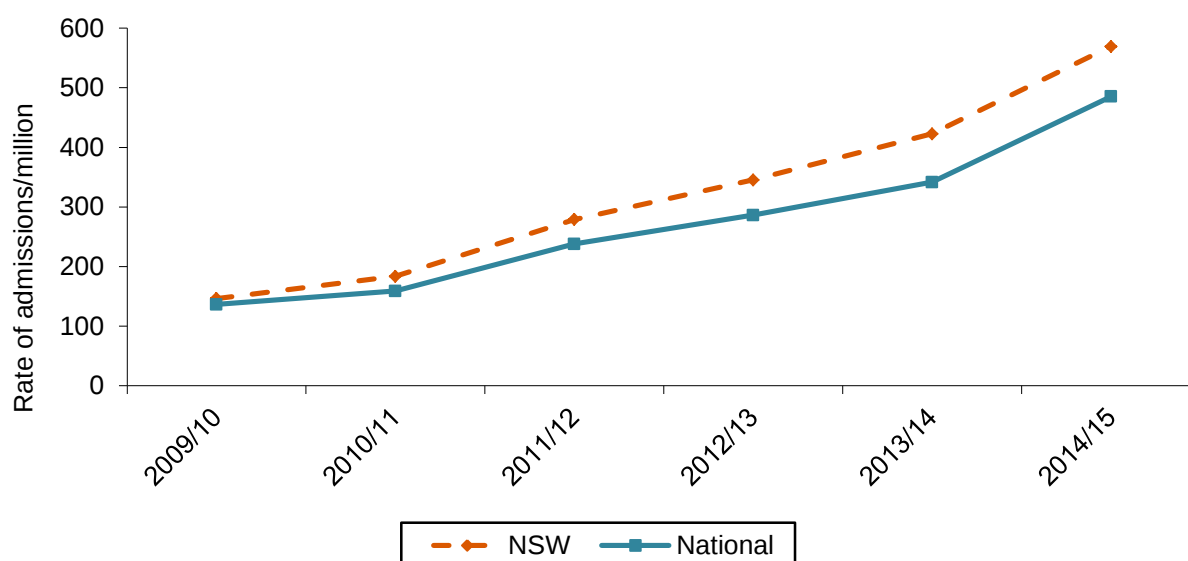
Note: The NSW MDS AODTS is based on closed treatment episodes and so some episodes may be excluded if they did not finish in the given period. Figures are presented by the commencement date for treatment.

4.5 Hospital admissions

4.5.1 Methamphetamine

The rate per million of inpatient hospital admissions among persons aged 15–54 years in which amphetamines were the principal diagnosis is shown below (Figure 79). 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 have increased from 2009/10 to 2014/15.

Figure 79: Number per million persons of principal amphetamine-related hospital admissions among persons aged 15–54, NSW and nationally, 2009/10–2014/15

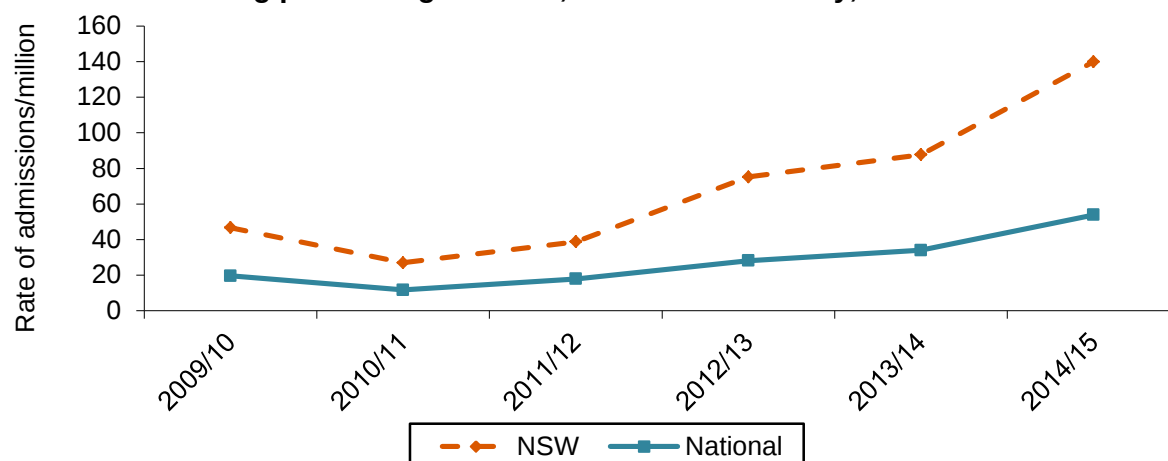


Source: National Hospital Morbidity Database, AIHW; Roxburgh & Breen (in press)

4.5.2 Cocaine

The rates of inpatient hospital admissions where cocaine was the principal diagnosis per million people aged 15–54 years are shown in Figure 80. National rates appear to have increased since 2010/11; however, NSW rates appear to have remained stable across the same time period.

Figure 80: Number per million persons of principal cocaine-related hospital admissions among persons aged 15–54, NSW and nationally, 2009/10–2014/15

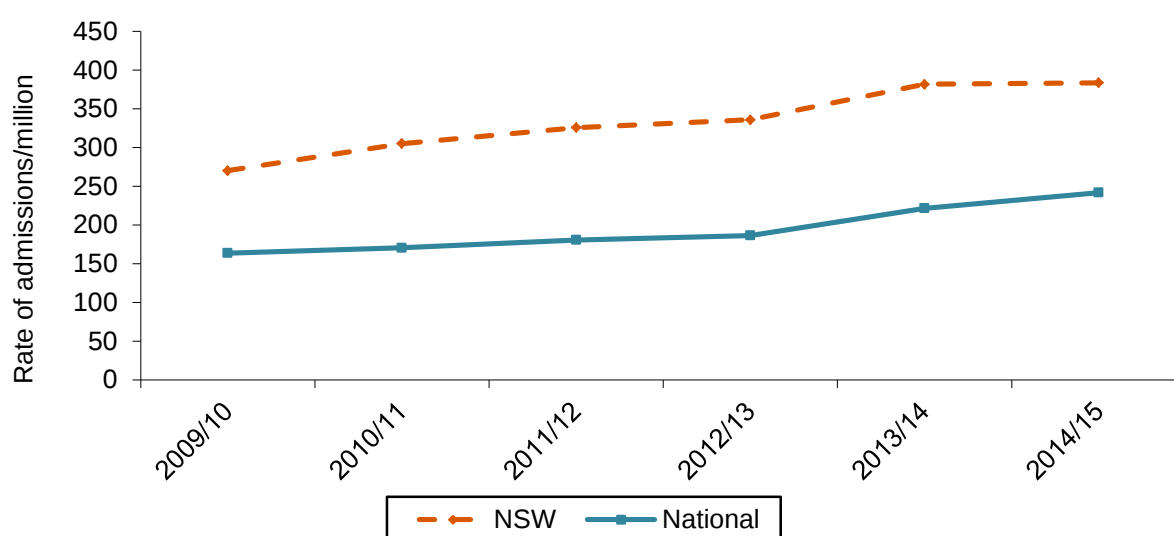


Source: National Hospital Morbidity Database, AIHW; Roxburgh & Breen (in press)

4.5.3 Cannabis

Figure 81 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. These rates appear to be rising over time.

Figure 81: Number per million persons of inpatient hospital admissions where cannabis was the principal diagnosis aged 15–54 years, NSW and nationally, 2009/10–2014/15



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

4.6 Mental health and psychological distress

4.6.1 Self-reported mental health

Participants were asked whether they had experienced any mental health problems over the previous six months (Table 34). Forty-four percent (n=45) of the group had recently experienced a mental health problem, a figure which is higher than that recorded among the general population of a similar age range (26.4% for individuals aged 16–24) (Slade, Johnston et al. 2009). Mood and anxiety disorders were those most commonly reported. Sixty percent (n=27) of those who experienced a mental health problem sought assistance from a health professional, and over one-third (37%, n=10) were then prescribed medication (most commonly antidepressants). Six participants were prescribed pharmaceutical stimulants and 2 were prescribed benzodiazepines.

Trends over time in self-reported mental health problems and help-seeking behaviours around these are presented in Table 34. Overall, these figures appear relatively stable from 2015 to 2016. However, both 2015 and 2016 show a gradual increase in the proportion of respondents reporting having a mental health problem in the last 6 months.

Table 34: Mental health problems among RPU, NSW, 2011–2016

	2011 (N=100)	2012 (N=100)	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (N=103)
Any mental health problem recently (%)	26	30	30	29	35	44
Of these (%):[^]						
Depression	73	53	67	69	66	67
Anxiety	46	47	70	79	49	56
Panic	4	7	10	–	6	2
Bipolar	8	7	–	–	6	4
Mania	–	7	–	–	3	2
Paranoia	8	3	23	7	–	2
Personality disorder	–	3	–	–	–	–
Schizophrenia	4	–	–	–	–	–
Drug-induced psychosis	4	–	3	–	3	2
OCD	–	–	–	3	3	2
ADHD	–	–	–	–	–	20
PTSD	–	–	–	–	–	4
Sought help from health professional [^] (%)	62	67	63	55	77	60
Prescribed medication [∞] (%)	35	73	32	38	34	37

Source: EDRS regular psychostimulant user interviews 2011–2016

[^]Percentage of all those who had recently experienced a mental health problem

[∞]Percentage of those who sought help from a mental health professional

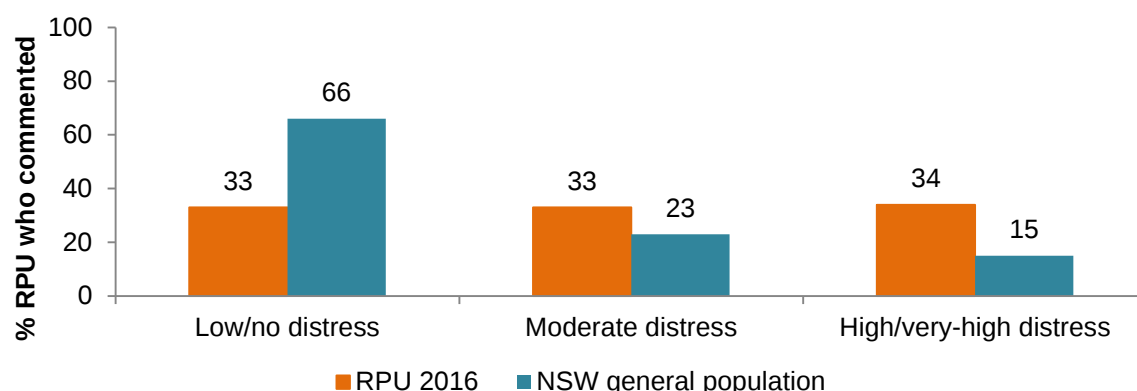
4.6.2 Kessler Psychological Distress Scale (K10)

From 2006, the EDRS has included the 10-item Kessler Psychological Distress Scale (K10; Kessler et al., 2002), which is a questionnaire designed for the general population to measure the level of distress and severity associated with psychological symptoms. 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', 22–29 'high distress' and 30–50 'very high distress' (Australian Bureau of Statistics, 2012).

The median score for participants was 18 (range 10–39). Approximately equal percentages of participants reported scores indicative of 'low or no distress' (33%, n=34), 'moderate distress' (33%, n=34) and 'high distress' (27%, n=28). Few participant's scores were

indicative of 'very high distress' (7%, n=7). The percentage of RPU experiencing 'high' to 'very high' distress (34%, n=35) is substantially higher than the percentage of 18–24 year olds in NSW. Results from the National Health Survey for 2014–2015 indicated that 15.4% of 18–24 year olds in NSW scored high or very high on the Kessler Psychological Distress Scale (Australian Bureau of Statistics 2016) and 19.4% in Australia (Australian Bureau of Statistics 2015). This difference between RPU and a representative sample of 18–24 year olds from the general population in NSW can be seen in Figure 82. Overall, RPU also appear to experience a higher level of psychological distress than the wider Australian public (reference).

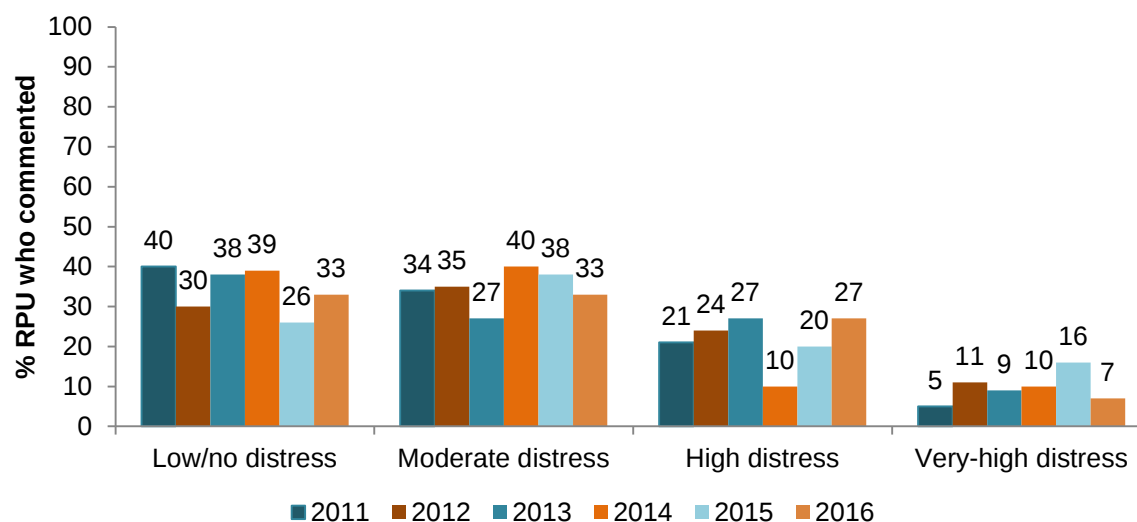
Figure 82: K10 scores for RPU compared with the general population (aged 18 and older), NSW, 2016



Source: EDRS RPU interviews 2016; Australian Bureau of Statistics (2016)

Figure 83 presents data across time on the proportions of each sample from 2011 to 2016 that fell into each distress category.

Figure 83: K10 scores across time for RPU, NSW 2011–2016



Source: EDRS RPU interviews 2011–2016

5 RISK BEHAVIOUR

Key points

- Seventy-four percent of RPU reported that they had driven a vehicle in the preceding six months, and of these, 27% had driven while over the BAC limit.
- Among those who had driven recently, 51% had done so while under the influence of drugs.
- Three participants had ever injected a drug and none had done so recently.
- Over half (59%) of the sample had recently had penetrative sex with a casual partner. Forty three percent of participants did not use a sexual barrier on the last occasion, when intoxicated, and 20% did not when sober. The main reasons were: they did not want to use a barrier, they were using a contraceptive pill or a barrier was not available.
- The majority (70%) of participants reported harmful alcohol consumption as measured by the Alcohol Use Disorders Identification Test (AUDIT).

5.1 Driving risk behaviour

Every second year, participants are asked a series of questions regarding their driving behaviour. Whilst this data would not normally be collected in 2016, a subset of questions was asked.

Seventy-four percent (n=76) of the NSW sample reported having driven a vehicle in the six months preceding interview. Of these, 27% (n=20) had driven while over the legal limit of alcohol. The frequency with which they drove whilst under the influence of alcohol was not asked in the 2016 survey. These statistics have remained stable compared to 2015 (Table 35). Questions regarding random breath testing were also not asked in the 2016 survey.

Table 35: RPU reports of alcohol and other drug driving risk behaviour in the last six months, NSW, 2016

	2013 (N=100)	2015 (N=100)	2016 (N=103)
Driven a vehicle in the last six months	62	78	74
Driven over limit of alcohol (%)	n=62 24	n=76 32	n=75 27
Median number of times driven over limit of alcohol (<i>Med</i> ; range)	2 (1–10)	2 (1–10)	NC
Driven soon after taking an illicit drug (%)	n=62 45	n=76 57	n=75 51

Source: EDRS RPU interviews 2013, 2015, 2016

NC: this data was not collected in the 2016 survey

Just over half (51%, n=39) of those who had driven in the last 6 months had driven on at least one occasion within three hours of taking an illicit drug, which is relatively similar to 2015 figures. No further questions were asked in the 2016 survey on illicit drug use and driving behaviour.

5.2 Injecting risk behaviour

Three participants had ever injected a drug. Although this is not significantly different to 2015 there has been a gradual reduction in numbers since 2012 (see Table 36). Previous surveys had also looked at injecting behaviour in the 'last 6 months', the 2016 survey used a different time frame and asked about the 'past month'. None of the 2016 RPU reported injecting in the past month.

Table 36: Injecting risk behaviour among RPU, NSW, 2011–2016

	2011 (N=100)	2012 (N=100)	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (N=103)
Ever injected (%)	13	20	8	11	8	3
Injected last 6 months (%)	8	13	6	5	5	NC
Injected in the last month (%)	NC	NC	NC	NC	NC	0

Source: EDRS RPU interviews 2010–2015

NC: this data was not collected in the survey

5.2.1 Lifetime injectors

The median age of initiation for respondents who had ever injected was 24 (range 24–28); this is based on 3 participants and caution should be used in making any interpretation based on this small sample. The three participants who reported 'ever' injecting all injected a different drug on the first occasion. These drugs were crystal methamphetamine, heroin and steroids.

5.2.2 Recent injectors

None of the 2016 RPU reported injecting in the past month.

5.2.3 Injecting drug use in other populations

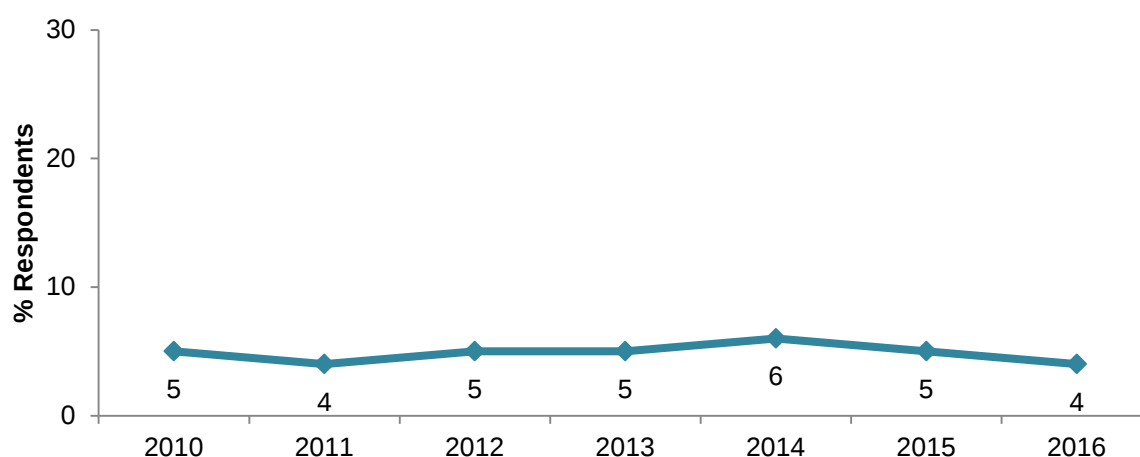
General population

The 2013 *National Drug Strategy Household Survey* report indicates that the proportion of the general population aged 14 years or over who had injected a drug in the past 12 months had significantly dropped to 0.3% in 2013 (versus 0.4% in 2010; Australian Institute of Health and Welfare, 2014).

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 84). In 2015, 4% of the sample had recently injected any drug. According to the authors, there is currently no recent linear trend (Hull et al., 2016).

Figure 84: Proportion of gay men in Sydney reporting recent injecting drug use, 2010–2016

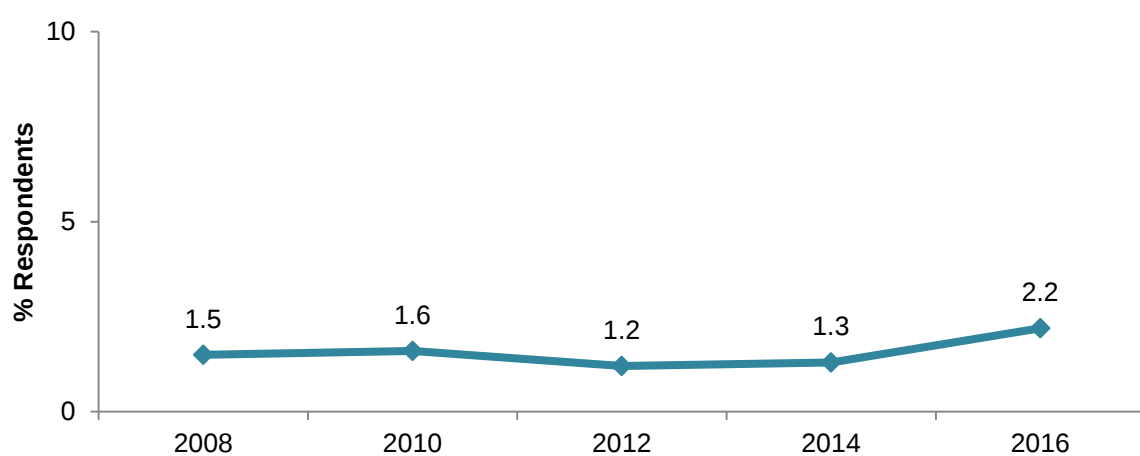


Source: Sydney Gay Community Periodic Survey 2010–2016

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 2.2% of the sample injecting any drug in the six months prior to interview in 2016 (Figure 85; Mooney-Somers, Deacon, Richters & Parkhill, 2015).

Figure 85: Proportion of LBQ women in Sydney reporting recent injecting drug use, 2008–2016



Source: Sydney Women and Sexual Health Survey 2008–2016

5.3 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 / hand / toy 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.

Over half (59%, n=61) 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 61 participants who reported penetrative sex with a casual partner, 56 participants (92%) reported having done so, on at least one occasion, while under the influence of alcohol or drugs (Table 37). Of those who had penetrative sex in the last 6 months while under the influence of drugs, 11% (n=11) reported this occurring once, 11% (n=11) reported it occurring twice, 18% (n=19) reported '3–5 times', 8% (n=8) reported '6–10 times' and 7% (n=7) reported 'more than 10 times' in the last 6 months. The drugs most commonly used were alcohol (86%, n=48), ecstasy (34%, n=10), cannabis (21%, n=12) and cocaine (20%, n=11).

Table 37: Trends in sexual activity with casual partners in the past six months among RPU, NSW 2011–2016

	2011 (N=100)	2012 (N=100)	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (N=103)
Casual penetrative sex (%)	73	71	57	52	61	59
<i>No. of sexual partners* (%)</i>						
1 person	18	19	30	27	23	30
2 people	19	17	18	35	21	18
3–5 people	41	24	33	21	34	18
6–10 people	12	7	16	13	18	10
10+ people	8	4	4	4	3	3
Penetrative sex with casual partner while on drugs	n=64	n=65	n=46	n=45	n=55	n=56
<i>Drugs used (%)**</i>						
Ecstasy	48	63	63	44	40	34
Alcohol	81	48	57	78	71	86
Cannabis	48	43	35	24	40	21
Cocaine	23	17	9	18	7	20
Crystal meth	14	9	–	7	4	11
LSD	9	3	11	–	–	9
Amyl nitrite	5	6	13	4	2	2
Ketamine	5	6	4	2	2	11
Speed	5	6	2	9	–	–
GHB	3	5	2	–	4	13
Base	2	–	–	2	–	–
Benzodiazepines	2	5	–	2	4	2
Pharmaceutical stimulants	–	5	–	2	2	–
Heroin	2	2	–	–	–	–

Source: NSW EDRS RPU interviews 2011–2016

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

** Of those who had penetrative sex with casual partners while on drugs in the last 6 months

The participants who had penetrative sex with a casual partner on at least one occasion while using ecstasy or other drugs (n=56) in the last 6 months, were asked on the last occasion they were 'sober' or 'under the influence' whether they had used a protective sexual barrier. Forty-eight percent (n=27) reported having used a protective barrier on the last occasion they were sober. Twenty percent (n=11) reported they had not used a

protective barrier on the last 'sober' occasion. Importantly, 31% (n=17) reported that had not had sex with a casual partner in the past 6 months when they were 'sober'. For those who had not used a protective barrier on the last occasion when 'sober', the reason they didn't was varied and included: 'using contraceptive pill' (27%, n=3), 'it wasn't mentioned' (18%, n=2) and 'we agreed not to' (18%, n=2). Single participants reported 'I didn't wish to' and 'lack of availability'. Two participants gave the reason as 'other'.

Of the group who had penetrative sex with a casual partner under the influence of drugs on at least one occasion in the last 6 months (n=56), on the last occasion when they were 'intoxicated', over half (57%, n=32) reported using a protective barrier. Forty-three percent (n=24) reported they did not use a protective barrier on the last occasion. The reasons for not using a protective barrier on the last occasion they were intoxicated were varied and included: 'lack of availability' (21%, n=5), 'we agreed not to use' (21%, n=5), 'it wasn't mentioned' (17%, n=4), 'using contraceptive pill' (17%, n=4), 'I didn't wish to use' (13%, n=3), 'we were too intoxicated' (8%, n=2) and 'other' (4%, n=1).

5.3.1 Sexual health check-up and sexually transmitted disease (STI)

All RPU (n=103) were asked if they had ever had a sexual health check-up. Forty-four percent (n=45) reported they had one in the last year, 14% (n=14) reported having one more than a year ago and 42% reported never having a sexual health check-up. One participant did not know if they had ever had a sexual health check-up.

The majority of RPU (90%, n=93) reported not ever having been diagnosed with a sexually transmitted infection (STI; e.g., chlamydia, gonorrhoea). Ten participants had a positive diagnosis, with half being diagnosed in the last year and the other half, more than one year ago.

5.4 Problematic alcohol use among RPU

5.4.1 Alcohol Use Disorders Identification Test (AUDIT)

The Alcohol Use Disorders Identification Test (AUDIT; Saunders et al., 1993) was designed by the World Health Organization (WHO) 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.

The mean score on the AUDIT for the NSW 2016 sample was 12.5 (SD 7.3). The majority (70%) of RPU scored in the harmful range (i.e. total score of 8 or more). There was no significant difference between male and female mean scores (12.7 versus 11.9). The AUDIT guidelines (Babor et al., 2001) indicate four 'zones' into which total scores on the test can be divided. In the current sample (see Table 38), 30% (n=31) scored in zone 1 (low risk drinking or abstinence), 36% (n=37) scored in zone 2 (alcohol in excess of low-risk guidelines), 18% (n=18) scored in zone 3 (harmful or hazardous drinking) and the remaining 17% (n=17) scored in zone 4 (possible alcohol dependence and may require referral for evaluation and possible treatment). In comparison to 2015, in 2016 there was nearly double the number of RPU where treatment may be warranted for alcohol dependence.

Table 38: AUDIT total scores and proportion of RPU scoring above recommended levels indicative of hazardous alcohol intake, NSW 2011–2016

	2011 (N=100)	2012 (N=100)	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (n=103)
Mean AUDIT total score (SD)	14.33 (7.2)	13.3 (7.2)	10.6 (6.1)	11.6 (6.4)	11.3 (6.0)	12.5 (7.3)
Score 8 or above (%)	80	78	66	69	70	70
Zone 1	20	21	34	31	30	30
Zone 2	39	42	48	42	42	36
Zone 3	17	19	10	14	19	18
Zone 4	24	17	8	13	9	17

Source: NSW EDRS RPU interviews 2011–2016

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

6 LAW ENFORCEMENT-RELATED TRENDS ASSOCIATED WITH ERD USE

Key points

- Thirty-nine percent of RPU had committed a crime within the past month; most commonly drug dealing and property crimes.
- Seventeen participants had reportedly been arrested over the past year.
- Data from the Bureau of Crime Statistics and Research indicate an upward trend in arrests for methamphetamines and cocaine over the last few years.

6.1 Reports of criminal activity among RPU

Seventeen participants (17%) interviewed in 2016 had reportedly been arrested over the preceding 12 months. The reason for arrest varied and included 'use/possession of drugs' (n=8), 'property crime' (n=1), 'violent crime' (n=2), 'alcohol and driving' (n=1), 'other drugs and driving' (n=1), 'public order (drunk and disorderly)' (n=1), 'malicious damage' (n=1), 'suspected car theft' (n=1), 'trespassing' (n=1) and 'trying to re-enter after being asked to leave' (n=1).

Thirty-nine percent of the sample reported involvement in criminal activity over the last month. Just over one-quarter (26%, n=27) of the participants reported drug dealing in the month leading up to the interview. Of these, the majority of respondents (n=18) had done so less than once a week. Twenty percent of RPU (n=21) had committed a property crime over the last month; again, mostly less than once per week (n=14). Five participants reported committing a crime involving violence in the last month. Four of these participants had done so less than weekly and one participant reported the frequency as 'once per week'. In terms of fraud, two participants reported committing fraud in the past month, both had done so 'less than weekly'.

Table 39 presents data across time on both self-reported criminal activity and arrests among samples of RPU. Consistent with previous years (with the exception of 2013), drug dealing has been the most commonly reported crime followed by property crime.

Table 39: Criminal activity reported by RPU, NSW 2011–2016

	2011 (N=100)	2012 (N=100)	2013 (N=100)	2014 (N=100)	2015 (N=100)	2016 (N=103)
<i>Any criminal activity in the last month</i>	44	33	27	37	36	39
Drug dealing	26	20	18	29	33	26
Property crime	26	18	22	12	14	20
Fraud	1	4	–	4	1	2
Violent crime	5	4	3	2	4	5
<i>Arrested last 12 months</i>	14	14	8	11	8	17

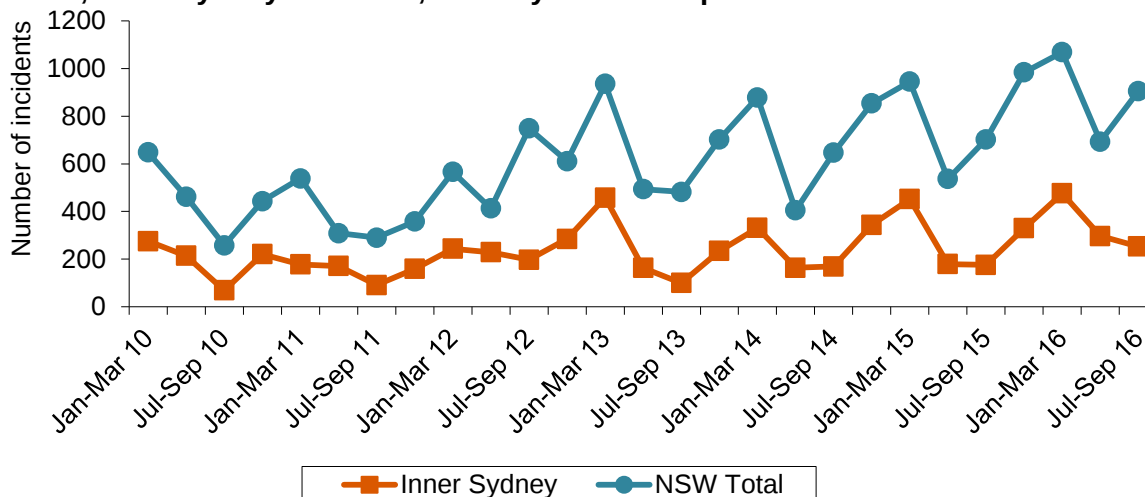
Source: NSW EDRS RPU interviews 2011–2016

6.2 Arrests

6.2.1 Ecstasy

Figure 86 presents the number of police-recorded criminal incidents for ecstasy possession and use in inner Sydney and NSW. The number of incidents per month was highly variable over the previous 4 years.

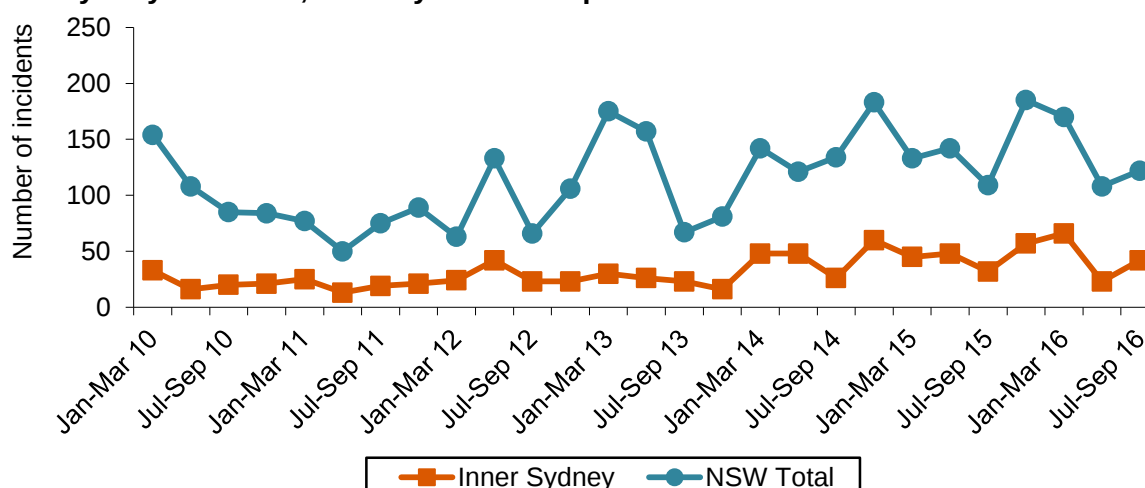
Figure 86: Number of police incidents recorded for ecstasy possession/use per quarter, inner Sydney and NSW, January 2010 to September 2016



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

Figure 87 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 with no noticeable trends seen in the past six years.

Figure 87: Number of police incidents recorded for ecstasy deal/traffic per quarter, inner Sydney and NSW, January 2010 to September 2016

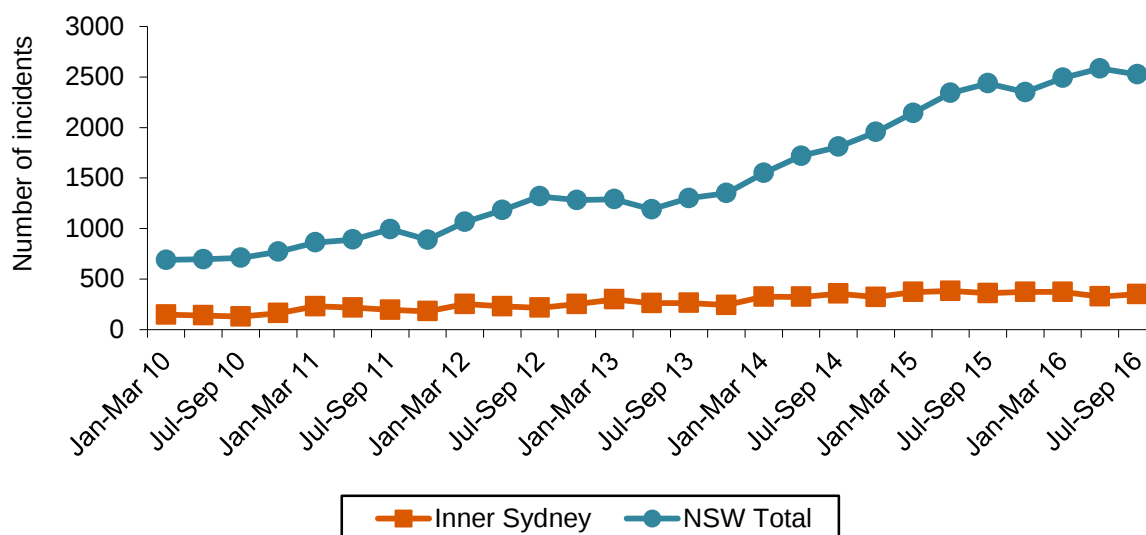


Source: NSW Bureau of Crime Statistics and Research (BOCSAR)

6.2.2 Methamphetamine

Figure 88 shows the recorded incidents of amphetamine possession or use for inner Sydney and NSW. It is clear that there has been an increase in the number of arrests in NSW from late 2012 onward.

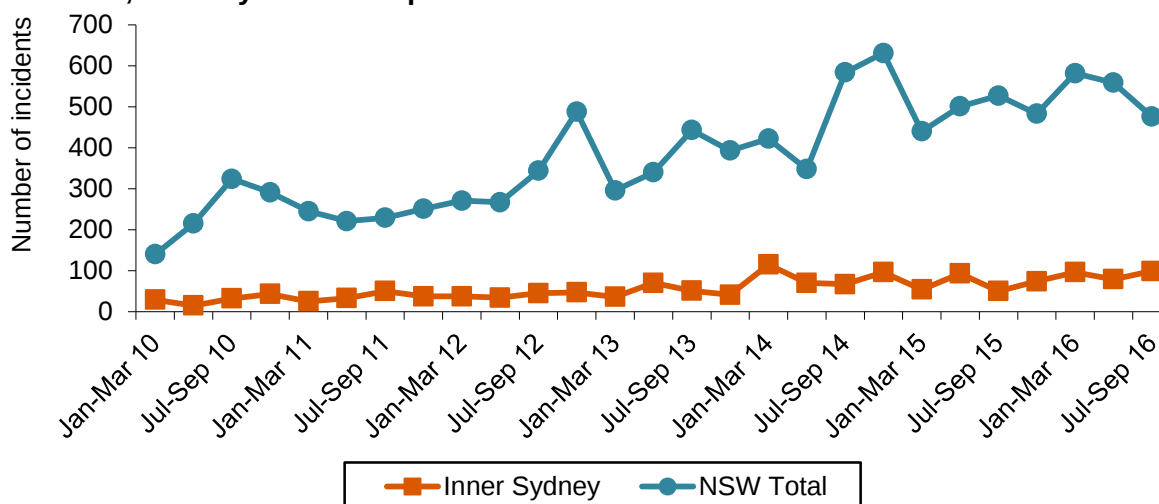
Figure 88: Recorded incidents of amphetamine possession/use per quarter, inner Sydney and NSW, January 2010 to September 2016



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

Figure 89 shows the number of police-recorded criminal incidents for amphetamine dealing or trafficking in inner Sydney and NSW. Since Jul-Sep 12, the number of reported incidents has been highly variable, but overall there seems to be an increasing trend in NSW and possibly a small increase in the inner city.

Figure 89: Recorded incidents of amphetamine deal/traffic per quarter, inner Sydney and NSW, January 2010 to September 2016

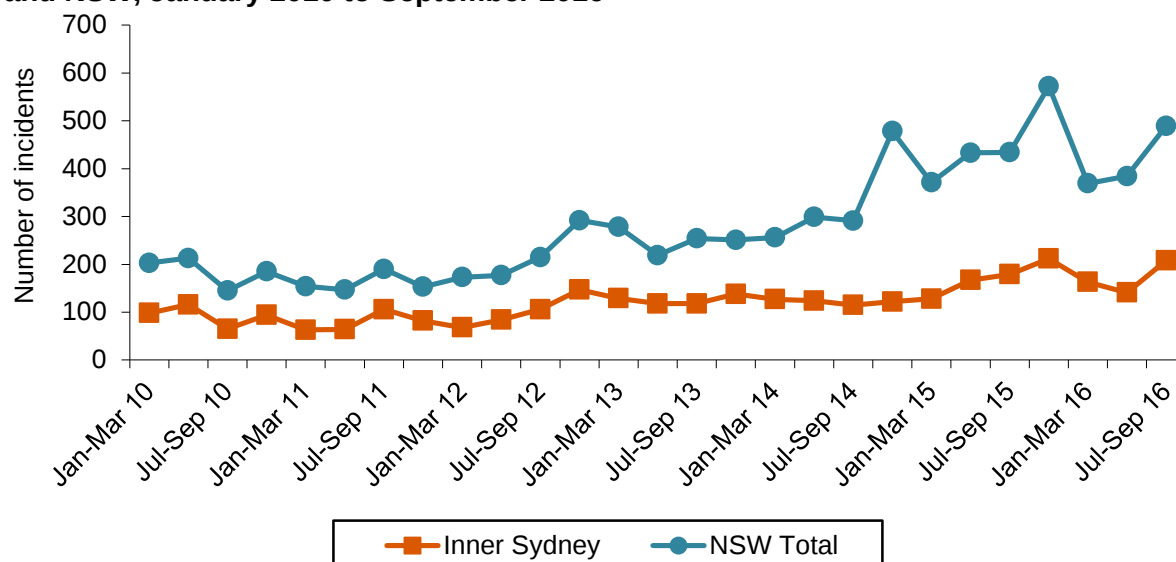


Source: NSW Bureau of Crime Statistics and Research (BOCSAR)

6.2.3 Cocaine

The number of police-recorded incidents for cocaine possession/use has been increasing since Jul-Sep 2012 Figure 90. Incidents reported in inner Sydney represent approximately half of all incidents recorded in NSW, and have continued to do so until late 2016.

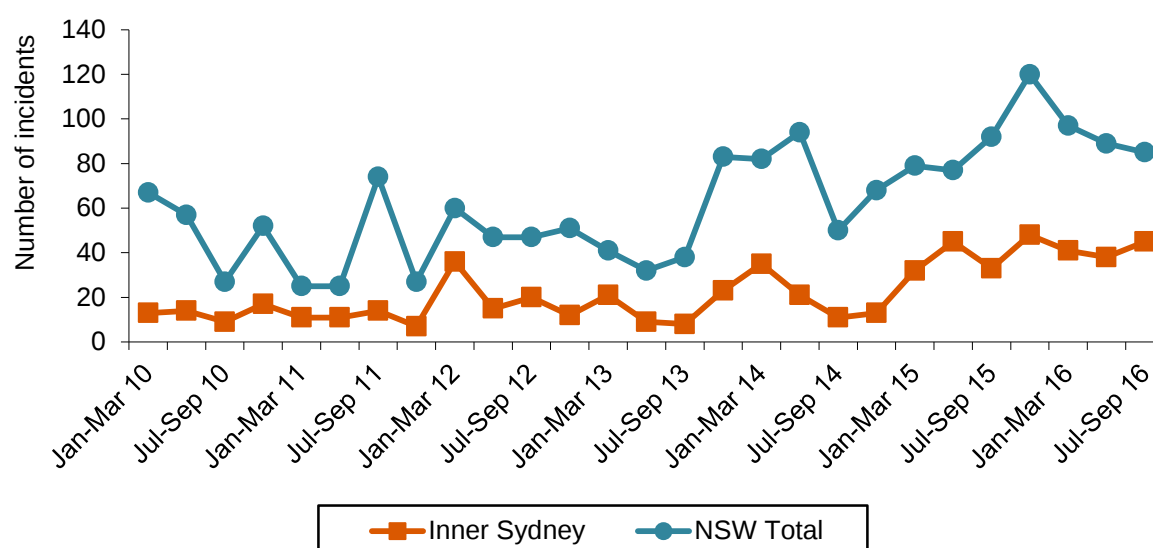
Figure 90: Recorded incidents of cocaine possession/use per quarter, inner Sydney and NSW, January 2010 to September 2016



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

Figure 91 shows the number of police-recorded criminal incidents for cocaine dealing or trafficking in the inner Sydney region and NSW. Overall there seems to be an increasing trend in incidents over time since 2013.

Figure 91: Recorded incidents of cocaine deal/traffic per quarter, inner Sydney and NSW, January 2010 to September 2016



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

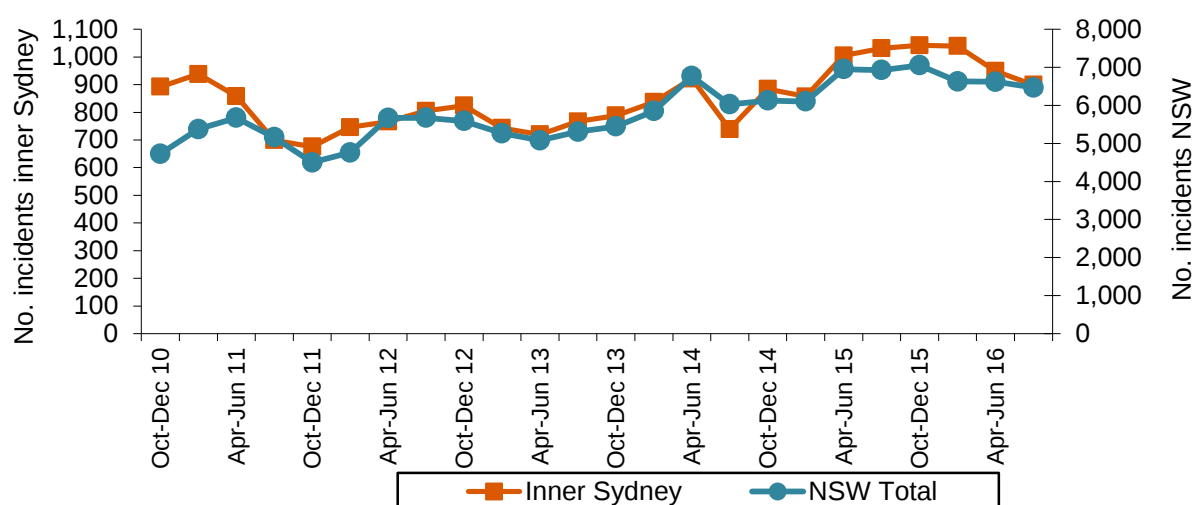
6.2.4 Ketamine

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.

6.2.5 Cannabis

Figure 92 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 late-2012 and has remained stable from late 2014–2016.

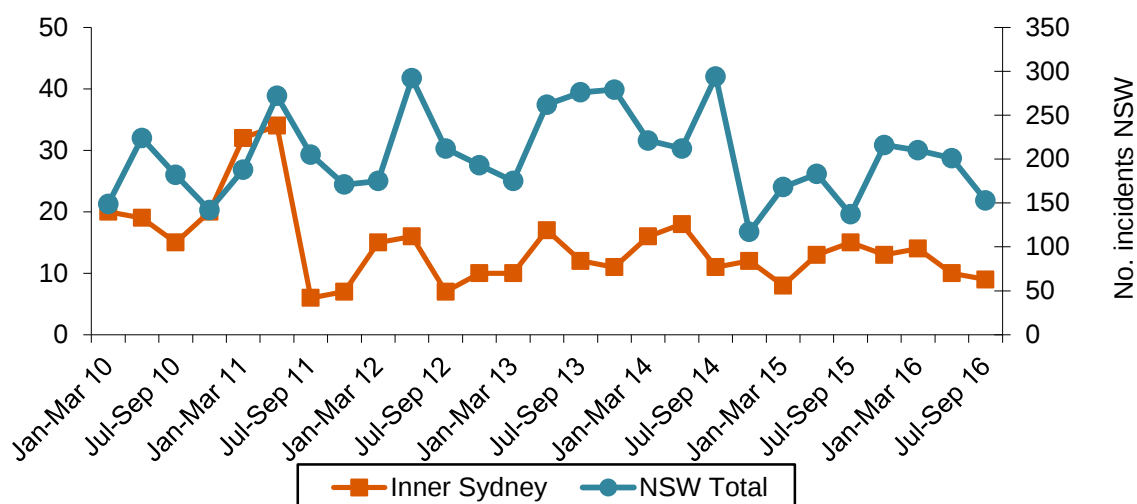
Figure 92: Recorded incidents of cannabis possession/use per quarter, inner Sydney and NSW, January 2010 to September 2016



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

Figure 93 shows the number of police-recorded criminal incidents for cannabis dealing or trafficking in the inner Sydney region and NSW. The number of incidents of trafficking in the inner Sydney region has remained low and stable. Incidents in NSW have remained stable, with seasonal variation.

Figure 93: Recorded incidents of cannabis deal/traffic per quarter, inner Sydney and NSW, January 2010 to September 2016



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

7 SPECIAL TOPICS OF INTEREST

Key points

NPS supply and purchasing patterns

- Fifty percent of the NSW sample reported using a NPS in the preceding 12 months, most commonly DMT and 2C-x.
- Sixty percent of those who had used a NPS in the last 12 months nominated a 'friend' as their main source. An 'acquaintance' and 'shop' were also nominated by 10% of participants as the main source of purchase, respectively.
- Nineteen percent had supplied NPS to others in the preceding 12 months, with all participants admitting supplying to 'friends'.
- Seventy-five percent of those who provided NPS to others reported 'sharing' with friends and 45% reported 'giving it away for free'.

Online purchasing

- Twenty-three percent of the NSW sample reported that in their lifetime, they had purchased an illicit drug online, with 18% having done so in the previous 12 months.
- Forty-four percent of those who commented reported that less than 25% of their drugs were purchased online. No participants reported purchasing all of their drugs online.
- Five participants purchased drugs online for the purpose of supplying to friends, two participants intended to sell the drugs for a profit and four participants intended to supply the drugs to friends and to make a profit.
- Purchases of illicit drugs were primarily made from the 'dark web' marketplaces.
- Fourteen participants reported buying traditional illicit substances online; of these, ten participants reported buying ecstasy and/or LSD (respectively).
- When asked about their level of knowledge regarding 'dark net' and online marketplaces, the majority of participants (n=27) reported that they had obtained drugs through a friend, who purchased them from the dark net.

Video gaming and gambling

- Seventy-five percent of the NSW sample reported playing video games in the six months preceding interview, on a median of 20 days.
- The median amount of time spent playing video games was two hours per day.
- Of those who had played video games in the last six months, 17% believed that they had an issue with video gaming.
- Fifty-three percent of the NSW sample had gambled on a median of five days in the preceding six months.
- Of those who had gambled in the last six months, 18% believed that they had an issue with gambling.

7.1 NPS supply and purchasing patterns

Over the past decade, the number and range of substances collectively referred to as 'new psychoactive substances' (NPS) has increased dramatically. In 2015, the European Union were monitoring over 560 NPS, of which 70% were detected in the past five years (European Monitoring Centre for Drugs and Drug Addiction 2016). The rapid growth of the NPS market has been facilitated by a number of factors, one of which is the expansion of online marketplaces (European Monitoring Centre for Drugs and Drug Addiction 2016, European Monitoring Centre for Drugs and Drug Addiction 2016). The expansion of these online drug markets has provided new opportunities for the supply and purchase of drugs, with internet sales of NPS now an international phenomenon and with many shops advertising worldwide delivery (European Monitoring Centre for Drugs and Drug Addiction 2011).

However, despite being readily available online, and despite the widely held perception that most NPS are purchased online, it appears that most consumers do not source NPS in this manner. That is, despite findings that NPS users are *more likely* to purchase drugs online than other drug users (Burns, Roxburgh et al. 2014, Van Buskirk, Roxburgh et al. 2016), for the most part they appear to obtain these substances from 'in-person' sources such as friends and dealers (e.g. Burns et al., 2014; European Commission, 2014; Stephenson & Richardson, 2014). However, despite potential heterogeneity in the forms of NPS used, many of these studies combine NPS consumers together into a single category and it is unclear whether differences exist across NPS consumers.

In addition to the direct purchasing of NPS for personal use, it is likely that the internet plays a role in practices of 'social supply' (i.e. the non-commercial or non-profit-making distribution of drugs to non-strangers; Hough, Warburton et al. 2003 pg. 36) and dealing for cash profit. There are some anecdotal reports of this taking place, however, the overall extent to which this is happening remains unknown.

In order to address these issues, additional questions were included in the 2016 EDRS survey which examined the supply and purchasing patterns of past year NPS consumers. As outlined in (Sutherland, Barratt et al., Under Review).

Table 40, 50% (n=51) of the NSW sample reported using a NPS in the last 12 months, most commonly DMT and 2C-x. The majority of those who had used a NPS in the last 12 months nominated a friend as their main source (60%, n=30). Ten percent (n=5) reported the main source as an 'acquaintance' and a further 10% (n=5) from a 'shop'. Smaller numbers nominated a dealer or 'online' as their main NPS source.

Participants were asked in the last 12 months if they provided any NPS to others. Of the 2016 RPU (N=103), 20 participants (19%) had supplied NPS to others in the past 12 months. All 20 participants reported they had supplied to 'friends' (100%, n=20), with much smaller numbers supplying to 'relatives' (10%, n=2), 'acquaintances' (5%, n=1) and 'strangers' (5%, n=1). The most common type of 'supply' to others was 'sharing' with friends (75%, n=15) or 'giving it away for free' (45%, n=9) (Table 40). For more detailed results (including differences in purchasing and supply patterns across NPS consumers), please refer to (Sutherland, Barratt et al. 2017 in press).

Table 40: Purchasing and supply patterns among past year NPS consumers in NSW, 2016

	NSW (n=103)
% used NPS last 12 months	50
% Main NPS used last 12 months [^]	(n=51)
DMT	26
2C-x	20
NBOMe	6
Synthetic cannabinoids	6
Methoxetamine	2
DXM	10
Mephedrone	2
Salvia Divinorum	4
5-MeO-DMT	2
LSA (Hawaiian Baby Woodrose)	2
Other	20
% How obtained substance [#]	(n=51)
Bought it	57
Given for free	53
Exchanged for something other than cash	4
% Main source	(n=50)
Friend	60
Acquaintance	10
Known dealer	6
Unknown dealer	2
Online dark net	6
Online surface web	2
Relatives	2
Shop	10
Other	2
% Supplied NPS to others	39
% Who supplied NPS to ^{*#}	(n=20)
Friends	100
Relatives	10
Acquaintances	5
Strangers	5
% Method of supply ^{*#}	(n=20)
Gave away for free	45
Shared	75
Provided at cost price	35
Provided for cash profit	25
Exchanged	10

Source: EDRS participant interviews 2016

* Multiple responses allowed, hence sum of percentages may exceed 100%

Among those who had supplied NPS to others in the past year

[^] Other drugs included: methylone (no reports), PMA (no reports) and Mescaline (no reports)

--- Data not published due to small numbers commenting (n<10)

7.2 Online purchasing

In 2016, the EDRS continued to investigate and monitor the practice of purchasing drugs online among recreational drug users in Australia. Of particular interest was the use of 'dark web' market places that are only accessible using a specially routed, anonymous connection, making it possible for people around the world to get illicit drugs like MDMA and cocaine delivered to their door (Burns and Van Buskirk 2013). There is particular focus, given the changes in legislation and negative effects of particular NPS (such as NBOMe and synthetic cannabis), on the attainment of NPS online. The EDRS collected data to obtain: (1) prevalence of online drug purchasing; (2) motivations for using the internet to purchase substances; (3) patterns of online drug purchasing; and (4) familiarity with the internet as an avenue for purchasing of illicit substances.

In 2016, 23% (n=24) of NSW EDRS participants reported that they had ever purchased an illicit drug online, with 18% (n=18) having done so in the previous year. The frequency of these recent purchases occurred between once and more than five times (Table 41).

Table 41: Number of times recently purchased illicit drugs online reported by RPU in NSW, 2016

% How many online purchases of illicit drugs in the past 12 months:	NSW (N=18)
% Once	22 (n=4)
% Twice	22 (n=4)
% 3–5 times	28 (n=5)
% More than 5 times	28 (n=5)

Source: NSW EDRS RPU interviews

Participants were asked what proportion of their drugs were purchased online. Just over two-fifths (44%, n=8) reported that less than 25% of their drugs were purchased online. Almost one-third purchased between 75–99% of drugs online. None of the participants reported purchasing all of their drugs online. Results are summarised in Table 42.

Table 42: What proportion of drugs were purchased online by RPU in NSW, 2016

% What proportion of all purchased drugs was purchased online?	NSW (N=18)
Less than 25%	44 (n=8)
Between 25% and 49%	6 (n=1)
Between 50% and 74%	22 (n=4)
Between 75% and 99%	28 (n=5)
All (100%)	0

Source: NSW EDRS RPU interviews

The EDRS participants, who had purchased online (n=18), were asked if in the past 12 months they had purchased any substance from the internet for the purpose of supplying or selling to others. Twenty-eight percent (n=5) reported that they had purchased some for the purpose of supplying to friends, 11% (n=2) for the purposes of selling for a profit, 22 % (n=4) for both supply to friends and for profit.

Purchases of illicit drugs were primarily made from the 'dark web' marketplaces (94%, n=17). Other online purchasing facilities were less commonly used; Australian webstore 'surface web' (6%, n=1), International webstore 'surface web' (17%, n=3), online market place (eBay, Gumtree) (6%, n=1) and social networking sites / apps (6%, n=1). The specific 'dark web' marketplaces EDRS participants reported using included Abraxis, Agora, Alpha

Bay, Nucleus, Dream, Middle Earth, Silk Road 2.0 and TCi. If participants had purchased from a dark net marketplace, they were asked to specify whether the retailer they purchased from was Australian (33%, n=6), International (39%, n=7) or both (28%, n=5).

Illicit substances recently purchased online were specified, see Table 43. Fourteen participants reported buying traditional illicit substance/s online. Of these participants, most reported this was ecstasy (71%) and/or LSD (71%), followed by benzodiazepines (29%), cannabis (21%) and cocaine (21%). Eight participants reported purchasing an NPS online including from the 2C-x family (25%), 5-MeO-DMT (25%), NBOMe (25%) and Etizolam (25%). Single participants also reported buying other NPS online, which can be seen in Table 43.

Table 43: Illicit substances reportedly purchased online recently by NSW RPU, 2016

Online substance purchased	NSW
% Traditional illicit substances	(N=14)
Ecstasy (any form)	71 (n=10)
LSD	71 (n=10)
Cannabis	21 (n=3)
Benzodiazepines	29 (n=4)
Ketamine	7 (n=1^)
Methamphetamine (any form)	7 (n=1^)
Mushrooms	7 (n=1^)
Cocaine	21 (n=3^)
Pharmaceutical stimulants	7 (n=1^)
Pharmaceutical Opioid	7 (n=1^)
% NPS illicit substances	(N=8)
2C-x family	25 (n=2^)
DMT	–
NBOMe	25 (n=2^)
Mephedrone	13 (n=1^)
MXE	13 (n=1^)
Methylone	13 (n=1^)
5-MeO-DMT	25 (n=2^)
Synthetic Cannabinoids	13 (n=1^)
Etizolam	25 (n=2^)
Other	25 (n=2^)

Source: NSW EDRS RPU interviews

Note: ^ = small numbers interpret with caution

All EDRS participants were asked about their level of knowledge of, and familiarity with, the 'dark net' and marketplaces, such as the now-closed Silk Road. Results are outlined in Table 44

Table 44: Familiarity with the 'dark net' for NSW RPU, 2016

% Level of knowledge of the dark net	NSW (N=101)
Never heard of the 'dark net'	7 (n=7)
Only heard of the 'dark net' online but never accessed it	26 (n=26)
Researched the dark net but never accessed it	7 (n=7)
Obtained drugs through a friend who purchased them from dark	27 (n=27)
Accessed dark net marketplaces but never purchased from them	12 (n=12)
Purchased drugs from 'dark net' market places	22 (n=22)

Source: NSW EDRS RPU interviews

7.3 Video gaming and gambling

Gambling disorder and internet gaming disorder are two of the most widely researched behavioural addictions (Grant, Potenza et al. 2010) with the former recognised as a mental health disorder in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) (American Psychiatric Association 2013). Previous research has indicated a co-occurrence of each of these two behavioural addictions with substance use disorders (Sim, Gentile et al. 2012); (Petry, Stinson et al. 2005).

In the 2016 EDRS survey additional questions were added to examine the proportions of co-occurring behavioural addictions and substance use disorders among a cohort of regular psychostimulant users. The questions assessed the amount of video gaming/gambling in the last six months and single-item measures of problematic video gaming/gambling use derived from (Thomas, Piterman et al. 2008) for gambling were included. (Widyanto, Griffiths et al. 2010) demonstrate a high correlation between a single-item measure for internet addiction and a multiple item questionnaire.

Among the NSW sample, 75% (n=77) reported playing video games in the last six months on a median of 20 days (around once a week; range 1–180 days). The median amount of time spent playing video games on a typical day was 2 hours (ranged from 2 minutes to 10 hours). Around half (46%) of those who had used video games in the last months had done so for one hour or less on a typical day of use. Over one-third (37%, n=28) had played for more than 1 hour, but less than 3 hours. Seventeen percent of those who had played video games in the last six months believed they had an issue with video gaming (Table 45).

Participants were also asked questions around gambling. Of the NSW sample, over half (53%, n=55) had gambled on a median of five days in the last six months (range 1–96 days). Eighteen percent (n=10) believed they had an issue with gambling (Table 45).

Table 45: Video gaming and gambling in the last six months among RPU in NSW, 2016

	2016 N=103
Video games:	(n=103)
% Played video games in the last six months	75
Last six months:	(n=77)
Median days played video games (range)	20 (1–180)
Median number of minutes spent playing video games on a typical day (range)	120 (2–600)
Amount of time spent video games on a typical day:	
% 1 hour or less	46
% More than 1 hour but less than 3 hours	37
% 3 hours or more	17
% Ever had an issue with video gaming	17
Gambling:	(n=103)
% Gambled last six months	53
Last six months:	(n=55)
Median days gambled (range)	5 (1–96)
% Ever had an issue with gambling	18 (n=10)

Source: NSW EDRS RPU interviews

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