

Australian Capital Territory

Kerryn Butler & Courtney Breen

ACT TRENDS IN ECSTASY AND RELATED DRUG MARKETS 2015

Findings from the Ecstasy and Related Drugs

Reporting System

Australian Drug Trends Series No. 156

Suggested citation: Butler, K., & Breen, C. (2016) *Australian Capital Territory Trends in Ecstasy and Related Drug Markets 2015. Findings from the Ecstasy and Related Drug Reporting System (EDRS)*. Australian Drug Trend Series No.156. Sydney, National Drug and Alcohol Research Centre, University of New South Wales

Please note that as with all statistical reports there is the potential for minor revisions to data in this report over its life.

Please refer to the online version at www.drugtrends.org.au.

AUSTRALIAN CAPITAL TERRITORY
TRENDS IN ECSTASY AND RELATED DRUG MARKETS
2015



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

Kerryn Butler & Courtney Breen

National Drug and Alcohol Research Centre
University of New South Wales

Australian Drug Trends Series No. 156

ISBN 978-0-7334-3631-4

©NDARC 2016

This work is copyright. You may download, display, print and reproduce this material in unaltered form only (retaining this notice) for your personal, non-commercial use or use within your organisation. All other rights are reserved. Requests and enquiries concerning reproduction and rights should be addressed to the information manager, National Drug and Alcohol Research Centre, University of New South Wales, Sydney, NSW 2052, Australia

TABLE OF CONTENTS

1	INTRODUCTION	1
1.2.	Study aims	1
2	METHOD.....	2
2.1.	Survey of regular psychostimulant users (RPU)	2
2.2.	Recruitment	2
2.3.	Procedure	3
2.4.	Measures	3
2.5.	Data analysis	4
2.6.	Survey of key experts (KE)	4
2.7.	Other indicators	4
3	DEMOGRAPHICS	6
1.1.	Overview of the RPU participant sample	6
4	CONSUMPTION PATTERNS	8
1.1.	Drug use history and current drug use	8
4.2.	Ecstasy use	11
4.3.	Methamphetamine use	15
4.4.	Cocaine use	21
4.5.	LSD use	23
4.6.	Cannabis use.....	25
4.7.	New psychoactive substances (NPS).....	27
4.8.	OTHER DRUG USE	30
5	PRICE, PURITY, AVAILABILITY AND PURCHASING PATTERNS.....	32
5.1.	Ecstasy	32
5.2.	Methamphetamine	37
5.3.	Cocaine.....	44
5.4.	LSD.....	47
5.5.	Cannabis.....	50
6	HEALTH-RELATED TRENDS ASSOCIATED WITH DRUG USE.....	56
1.1.	Overdose and drug-related fatalities	56
6.2.	Help-seeking behaviour	57
6.3.	Drug treatment.....	57
6.4.	Hospital admissions.....	57
6.5.	Mental and physical health problems and psychological distress.....	59
7	RISK BEHAVIOUR.....	61
7.1.	Injecting risk behaviour	61
7.2.	Sexual risk behaviour	61
7.3.	The Alcohol Use Disorders Identification Test (AUDIT)	64
7.4.	Driving risk behaviour	64
8	LAW ENFORCEMENT TRENDS ASSOCIATED WITH DRUG USE	66
1.1.	Reports of criminal activity among RPU	66
8.2.	Arrests	66
9	SPECIAL TOPICS OF INTEREST.....	70
9.1.	Online purchasing and NPS use	70
9.2.	NPS Policy.....	71
9.3.	Cognitive enhancers	72
10	REFERENCES	75

LIST OF TABLES

Table 1: Demographic characteristics of sample, ACT RPU, 2011-2015	6
Table 2: Lifetime and recent use of substances, ACT RPU, 2011-2015.....	9
Table 3: Lifetime and recent use of ecstasy, ACT RPU, 2011-2015.....	11
Table 4: Median days of use of ecstasy, ACT RPU, 2011-2015.....	12
Table 5: Median recent use of ecstasy, ACT RPU, 2015.....	12
Table 6: Patterns of ecstasy use, ACT RPU, 2011-2015.....	13
Table 7: Patterns of methamphetamine powder use, ACT RPU, 2011-2015	16
Table 8: Patterns of methamphetamine base use, ACT RPU, 2011-2015	18
Table 9: Patterns of crystal methamphetamine use, ACT RPU, 2011-2015.....	19
Table 10: Patterns of cocaine use, ACT RPU, 2011-2015.....	21
Table 11: Patterns of cocaine use, ACT RPU, 2011-2015.....	22
Table 12: Patterns of LSD use, ACT RPU, 2011-2015	23
Table 13: Patterns of cannabis use, ACT RPU, 2011-2015.....	25
Table 14: New psychoactive substances (NPS)	27
Table 15: Use of new psychoactive substances (NPS), ACT RPU, 2014-2015	29
Table 16: Price for ecstasy, ACT RPU, 2011-2015.....	32
Table 17: Purity and purity change of ecstasy, ACT RPU, 2011-2015	33
Table 18: Availability and source of ecstasy, ACT RPU, 2011-2015	35
Table 19: Patterns of purchasing ecstasy, ACT RPU, 2011-2015.....	36
Table 20: Price for methamphetamine powder, ACT RPU, 2011-2015	37
Table 21: Purity and purity change of methamphetamine powder, ACT RPU, 2011-2015.....	38
Table 22: Availability of methamphetamine powder, ACT RPU, 2011-2015.....	39
Table 23: Price for methamphetamine base, ACT RPU, 2011-2015	39
Table 24: Purity and purity change of methamphetamine base, ACT RPU, 2011-2015.....	40
Table 25: Availability of methamphetamine base, ACT RPU, 2011-2015.....	41
Table 26: Price for crystal methamphetamine, ACT RPU, 2011-2015.....	41
Table 27: Purity and purity change of crystal methamphetamine, ACT RPU, 2011-2015.....	42
Table 28: Availability of crystal methamphetamine, RPU ACT, 2011-2015	42
Table 29: Price for cocaine, ACT RPU, 2011-2015.....	44
Table 30: Purity and purity change of cocaine, ACT RPU, 2011-2015	45

Table 31: Availability of cocaine, ACT RPU, 2011-2015	45
Table 32: Price of LSD, ACT RPU, 2011-2015	47
Table 33: Purity and purity change of LSD, ACT RPU, 2011-2015	48
Table 34: Availability and availability change of LSD, ACT RPU, 2011-2015	48
Table 35: Price of hydroponic cannabis, ACT RPU, 2011-2015	50
Table 36: Potency of hydroponic cannabis, ACT RPU, 2011-2015	51
Table 37: Availability of hydroponic cannabis, ACT RPU, 2011-2015	52
Table 38: Price for bush cannabis, ACT RPU, 2011-2015	52
Table 39: Potency of bush cannabis, ACT RPU, 2011-2015	53
Table 40: Availability for bush cannabis, ACT RPU, 2011-2015	54
Table 41: Sexual activity and number of casual sexual partners, ACT RPU, 2015	62
Table 42: Drug use during casual sex in the preceding six months, ACT RPU, 2015	63
Table 43: Sexual health check-up, ACT RPU, 2015	63
Table 44: AUDIT levels, by gender, ACT RPU, 2015	64
Table 45: Recent alcohol driving risk behaviour, ACT RPU, 2015	65
Table 46: Criminal activity reported by ACT RPU, 2011-2015	66
Table 47: Number of amphetamine-type stimulants consumer and provider arrests, ACT, 2004-2015	67
Table 48: Number of cocaine consumer and provider arrests, ACT, 2004-2015	67
Table 49: Number of cannabis consumer and provider arrests, ACT, 2004-2015	68
Table 50: Unexpected adverse NPS effects experienced on last occasion of use, ACT RPU, 2015	70
Table 51: Perceptions of the legal status of particular NPS, ACT RPU, 2015	71
Table 52: Cognitive enhancer use in the last six months, ACT RPU, 2015	73
Table 53: Main motivations for CE use in the last six months, ACT RPU, 2015	74

LIST OF FIGURES

Figure 1: Drug of choice, ACT RPU, 2011-2015	8
Figure 2: Location of last use, 2015	14
Figure 3: Prevalence of ecstasy use among the general population, 1993-2013	14
Figure 4: Trends in recent methamphetamine use, ACT RPU, 2011-2015	15
Figure 5: Methamphetamine powder trends, ACT, 2011-2015	17
Figure 6: last location of use for speed, ACT RPU, 2015.....	17
Figure 7: Crystal methamphetamine trends, ACT, 2011-2015.....	20
Figure 8: Cocaine trends in recent use and median days used, ACT RPU, 2011-2015.....	22
Figure 9: LSD trends in recent use and median days used, ACT RPU, 2011-2015	24
Figure 10: Last location of LSD use, ACT RPU, 2015	24
Figure 11: Cannabis trends in recent use and median days used, ACT RPU, 2011-2015.....	26
Figure 12: Ecstasy price change in last six months, ACT RPU, 2011-2015	33
Figure 13: Median purity of phenethylamine seizures, ACT, 2003-04 to 2013-14	34
Figure 14: Methamphetamine powder, price change in last 6 months, ACT RPU, 2011-2015	38
Figure 15: Methamphetamine base, price change, ACT RPU, 2011-2015.....	40
Figure 17: Amphetamine-type stimulant seizures by ACT local police, 2003-04 to 2013-14.....	43
Figure 18: Cocaine price change, ACT RPU, 2011-2015	44
Figure 19: Last location purchased cocaine, ACT RPU, 2015	46
Figure 20: Cocaine seizures, 2002/03 to 2013/14.....	46
Figure 21: LSD price changes, ACT RPU, 2011-2015.....	47
Figure 22: Last locations LSD purchase, ACT RPU, 2015.....	49
Figure 23: Hydroponic cannabis price changes, ACT RPU, 2011-2015	51
Figure 24: Price changes for bush cannabis, 2011-2015.....	53
Figure 25: Cannabis seizures by ACT police, 2003/04 to 2013/14	55
Figure 26: Stimulant overdose in the past 12 months, by drug type, ACT RPU, 2015	56
Figure 27: Hospital admissions, amphetamine, ACT, 2003-04 to 2013-14.....	58
Figure 28: Hospital admissions, cannabis, ACT, 2003-04 to 2013-14	59
Figure 29: Psychological distress as measured by K10 among ACT RPU and the general population.	60
Figure 30: Number of SCONs, ACT, 2004-2014.....	68
Figure 31: Number of SCONs for males and females, ACT, 2004-2014	69

ACKNOWLEDGEMENTS

In 2015, the Ecstasy and related Drugs Reporting System (EDRS) project was run for the thirteenth consecutive year in the Australian Capital Territory (ACT). In 2015, the EDRS was funded by the Australian Government Department of Health, and was coordinated by the National Drug and Alcohol Research Centre (NDARC).

In acknowledgement of their valuable assistance with the ACT EDRS in 2015, there are a number of organisations and individuals the authors would like to thank.

We would like to thank the 100 regular psychostimulant users interviewed in the ACT for the 2015 EDRS for their openness and willingness to discuss the sensitive issues addressed in the EDRS survey.

We would also like to extend our gratitude to the following organisations that committed time and expertise to collecting and providing the indicator data: the Australian Crime Commission, the Australian Federal Police, and the Australian Institute of Health and Welfare.

Just as important to the EDRS as the regular psychostimulant user survey and the routinely collected indicator data is the information derived from key expert interviews. These interviews are conducted with people who have specific expertise in the domain of ecstasy and related drugs. These people are all busy professionals who gave up their time, and so we also want to express our gratitude to each of the key experts.

Thanks are also extended to our interviewers – Isabelle Stephens, Georgia Kirton, Georgia Driels, Linnea Houghton, and Michelle Christopher who were involved with the regular psychostimulant user survey.

We would like to thank all those who have been involved in the EDRS in previous years, including the previous national co-ordinators, and the many other research personnel around the country who contributed greatly to the EDRS.

And last but certainly not least, the authors gratefully acknowledge the support, assistance and advice from Lucinda Burns, the chief investigator and colleagues of the National Drug and Alcohol Research Centre (NDARC), specifically the current national co-ordinators Natasha Sindicich and Jennifer Stafford. Many thanks also to Amanda Roxburgh for her help with access to and analysis of indicator data.

ABBREVIATIONS

5-MEO-DMT	5-methoxy-dimethyltryptamine
1,4B	1,4 butanediol
2C-B	4-bromo-2,5-dimethoxyphenethylamine
2C-E	2, 5-dimethoxy-4-ethylphenethylamine
2C-I	2,5-dimethoxy-4-iodophenethylamine
ABS	Australian Bureau of Statistics
ACC	Australian Crime Commission
ACS	Australian Customs Service
ACT	Australian Capital Territory
ADIS	Alcohol and Drug Information Service
AFP	Australian Federal Police
AIHW	Australian Institute of Health and Welfare
AOD	Alcohol and Other Drug
AODTS-NMDS	Alcohol and Other Drug Treatment Services National Minimum Data Set
ATS	Amphetamine type stimulants
ATSI	Aboriginal and/ or Torres Strait Island
AUDIT	Alcohol Use Disorders Identification Test
BBVI	Blood-borne viral infection(s)
BZP	1-Benzylpiperazine(s)
DOB	2,5-dimethoxy-4-bromoamphetamine
DOI	Death on Impact; 2, 5-dimethoxy-4-iodamphetamine
DOM	2,5-dimethoxy-4-methylamphetamine
DMT	Dimethyl tryptamine
DPMP	Drug Policy Modelling Program
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition
DXM	Dextromethorphan hydrobromide
D&A	Drug and Alcohol

EDRS	Ecstasy and related Drugs Reporting System
ERD	Ecstasy and related drug(s)
GBL	Gamma-butyrolactone
GHB	Gamma-hydroxybutyrate
GP	General Practitioner
IDRS	Illicit Drug Reporting System
IPS	Illicit psychostimulants
KE	Key Expert
K10	Kessler Psychological Distress Scale
LSD	<i>d</i> -lysergic acid
MDA	3,4-methylenedioxyamphetamine
MDAI	5,6-Methylenedioxy-2-aminoindane
MDEA	3,4-methylenedioxyethylamphetamine
MDMA	3,4-methylenedioxymethamphetamine
MDPV	Methylenedioxypyrovalerone (Ivory wave)
MPTP	1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine
MXE	Methoxetamine
N	(or n) Number of participants
NCIS	National Coronial Information System
NIDIP	National Illicit Drug Indicators Project
NDARC	National Drug and Alcohol Research Centre
NDSHS	National Drug Strategy Household Survey
NDLERF	National Drug Law Enforcement Research Fund
NHMD	National Hospital Morbidity Database
NNDSS	National Notifiable Diseases Surveillance System
NPS	New Psychoactive Substance(s)
NSP	Needle and Syringe Program(s)
OD	Overdose

OCD	Obsessive Compulsive Disorder
OTC	Over the counter
PCP	Phencyclidine
PDI	Party Drugs Initiative
PMA	Para-methoxyamphetamine
RBT	Random Breath Test
ROA	Route of administration
RPU	Regular psychostimulant user(s)
SCON	Simple Cannabis Offence Notice
SDS	Severity of Dependence Scale
SPSS	Statistical Package for the Social Sciences
STI	Sexually transmitted infection
THC	Tetrahydrocannabinol
TMA	3,4,5, trimethoxyamphetamine
WHO	World Health Organization

GLOSSARY OF TERMS

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

EXECUTIVE SUMMARY

Common terms throughout the report:

- Regular psychostimulant user (RPU): Used ecstasy or related drugs on six or more separate occasions in the previous six months
- Recent use: Used at least once in the previous six months
- Sentinel group: A surveillance group that points towards trends and harms
- Median: The middle value of an ordered set of values
- Mean: The average
- Frequency: The number of occurrences within a given time period

The Ecstasy and related Drugs Reporting System (EDRS, formerly the Party Drugs Initiative) arose out of the Illicit Drug Reporting System (IDRS). The EDRS is a study that monitors trends and issues emerging from illicit drug markets in Australia. The data collected examines the price, purity and availability of four primary illicit drug classes – ecstasy, methamphetamine, cocaine and cannabis as well as niche market drugs such as GHB and LSD. Interviews with regular psychostimulant users (RPU) are used to supplement other data, such as key expert (KE) reports and indicator data, thus providing a multifaceted approach to the task of monitoring the Australian ecstasy and related drug (ERD) market. RPU have been identified as a sentinel group of ERD users and are able to provide the required information on patterns of use, market characteristics, related harms and other issues associated with ERD use. KE include nightclub owners, treatment providers and law enforcement personnel. Indicator data include routinely collected health and law enforcement data such as drug related arrests and hospital admissions.

Demographic characteristics of RPU

In 2015 two-thirds of the RPU interviewed for the ACT EDRS were male (67%) and, similar to 2014, most participants were aged between their late teens to early twenties. The mean age in 2015 was 20 years old ($M=20.31$, $SD=3.184$, range=16-34). Consistent with previous years, the majority of RPU interviewed were from an English-speaking background (ESB), and predominantly heterosexual. The majority of the sample had completed 12 years of schooling, and at the time of interview the majority of RPU was either studying (part of full time) or employed. A minority of the sample reported currently accessing a drug treatment facility. KE reports are generally consistent with RPU demographics.

Patterns of drug use among RPU

The proportion of participants reporting that they had ever injected a drug remained stable in 2015 at 5%. In 2015, the proportion of RPU reporting ecstasy as their drug of choice significantly decreased to 30% from 50% in 2014 ($p=0.01$). Polydrug use was commonly reported by RPU, consistent with KE interviews.

Significantly less participants (30% in 2015, 48% in 2014, $p=0.02$) reported having 'binged' (used continuously for 48 hours or more) on any stimulants or related drugs in the six months prior to interview. Drugs commonly used in these binge episodes were ecstasy, cannabis, methamphetamine powder (speed), and cocaine.

Ecstasy

There has been a sharp and statistically significant reduction in the proportion of RPU reporting the recent use of pills (92% in 2014, down to 56% in 2015). Ecstasy capsules were the most commonly used form of ecstasy by RPU followed by MDMA crystals and ecstasy pills. In the six months prior to interview, the median number of days of any form of ecstasy use was 10. The majority (61%) of the sample reported using ecstasy on a monthly to fortnightly basis in the past six months. The median number of ecstasy tablets consumed in a typical session of use was two, whereas a median of three tablets were taken by RPU in the heaviest session of use.

Methamphetamine

Methamphetamine is available in three forms: methamphetamine powder (speed), methamphetamine base (base) and methamphetamine crystal (ice). Less than one-third (31%) of RPU reported having used at least one form of methamphetamine in the past six months continuing the downward trend from 51% in 2014 and 65% in 2013.

The majority (61%) of participants reported ever having used *speed* and 31% reported having recently used speed (a significant reduction from 48% reporting recent use in 2014). Recent speed users reported a median of two days of use in the six months prior to interview (decreasing from 5.5 days in 2014). Swallowing and snorting (nasal route) were the main routes of administration (ROA) reported by recent speed users. The amount of speed used by RPU in a typical session was 0.25 grams.

Base methamphetamine had been used by 4% of RPU at least once in their lifetime. Just 2% of RPU reported using base in the past six months. A median of five and half days of use in the six months prior to interview was reported (range=1-10), but caution should be used when interpreting this data as numbers were low (n=2). All participants reported swallowing, snorting or smoking base.

Crystal methamphetamine use decreased again for the third year in a row among RPU with 13% reporting lifetimes use and only 7% reporting recent use (in the past six months). Recent crystal users reported a median of four days use (range=1-30), but caution should be used when interpreting this data as numbers were low (<10).

Cocaine

Sixty-two per cent of the 2015 ACT EDRS sample had ever used cocaine. This is a significantly smaller proportion than 2014 ($p=0.009$) and may be due to the 2014 sample having an older mean age with more drug experience. Two-fifths (41%) reported recent use. Those RPU who had recently used cocaine had used the substance on a median of three days in the preceding six months. Snorting remained the most common ROA, followed by swallowing. The median amount of cocaine used in a typical episode of use was half a gram and one gram reported when referring to the heaviest episode of use.

LSD

A significant increase in lifetime and recent use was observed in 2015. Fifty-four per cent reported lifetime use, compared to 38% in 2014. More than a third (37%) reported recent use compared with just 19% of the sample in 2014. These proportions decreased sharply in 2014 and now appear to be returning to previous levels. RPU had used a median of one tab of LSD in a typical session and one tab during the heaviest session of recent use.

Cannabis

Almost all participants (98%) had used cannabis in their lifetime and 82% had used cannabis in the six months preceding interview. Median days of use decreased for the third consecutive year to approximately twice weekly. There was a significant decline in the proportion who reported daily use of cannabis from 32% in 2014 to just 16% in 2015 ($p=0.03$). The vast majority (98%) of RPU who had recently used cannabis reported smoking it, and 11% reported that they had swallowed cannabis in the preceding six months.

New psychoactive substances (NPS)

Participant numbers reporting use of new psychoactive substances remains low in the ACT and caution is advised in interpreting this data. Drugs in the 2C-x family remained most commonly reported.

PRICE, PURITY AND AVAILABILITY AND PURCHASING PATTERNS

Ecstasy

The median reported price for a tablet of ecstasy remained stable at \$25. The majority (69%) of respondents reported ecstasy purity to be medium (36%) and high (33%). With respect to availability, the majority of the sample reported that ecstasy was very easy (57%) or easy (38%) to obtain in the ACT.

In the six months prior to interview, RPU had purchased ecstasy from a median of two people. Participants indicated that when purchasing ecstasy they typically bought it for themselves and others, and they typically purchased a median of four pills on each purchase occasion.

Methamphetamine

In 2015, the median price for speed was reported to be \$222 per gram, and \$25 for a point (0.1 gram). Reports of the purity of speed varied with most reporting purity to be medium (56%) or high (38%). The availability of speed was reported to be very easy to easy to obtain. Small numbers of RPU were able to comment ($n<10$) on the price, purity and availability of crystal and no RPU commented on base. Due to small numbers reporting on the prices of these forms, caution is advised when interpreting the results.

Cocaine

The median price for a gram of cocaine remained stable in 2015 at \$300. Reports of purity were varied as were reports of cocaine availability.

LSD

The median price for a tab of LSD remained stable at \$25. Reports of purity of LSD were mostly high (65%) or medium (19%). Reports of the current availability of LSD were varied.

Cannabis

The median price for a gram and an ounce of hydroponic cannabis was \$20 and \$280 respectively, and the median price for a gram and an ounce of bush cannabis was \$17.50 and \$160 respectively. The majority reported that the prices for both forms had remained stable in the six months preceding interview. The current potency of hydroponic cannabis was reported to

be medium to high, as was the potency for bush. Both hydroponic and bush cannabis were reported to be very easy to easy to obtain, similar to 2014.

Patterns of other drug use

Lifetime use of alcohol was universal and almost all (99%) of the sample reported use in the six months prior to interview. Alcohol was consumed on a median of one day per week. The use of tobacco was also common in the EDRS population, with 79% reporting recent use of tobacco. Recent use of the following substances was low and infrequent: mushrooms, ketamine, GHB, and nitrous oxide.

Health-related issues

Overdose

More than a quarter (26%) of all RPU indicated that they had overdosed on a stimulant drug in their lifetime and, of those, 82% had done so in the past 12 months. Recent stimulant overdoses (last 12 months) were most commonly attributed to ecstasy. The majority reported that they received no treatment for their overdose. Forty-three per cent of the sample reported that they had ever suffered a depressant overdose, of which 90% had done so in the past 12 months. Recent depressant overdoses were almost universally attributed to alcohol with one participant reporting overdosing on heroin. The majority reported that they received no treatment for their overdose.

Mental health

A third of RPU reported that they had experienced a mental health problem in the preceding six months. Depression and anxiety were the most commonly reported.

Risk behaviour

Injecting

Five per cent of RPU reported ever having injected a drug and the median age of first injection was 20. Two participants reported injecting in the past six months.

Sexual risk behaviour

Two-thirds of RPU reported having had casual penetrative sex in the six months prior to interview. When having sex with a casual sex partner whilst not under the influence of alcohol or drugs, 37% reported not using protection on their last occasion of casual sex.

Of those who reported having casual penetrative sex in the past six months whilst under the influence of ERD, only 61% reported using protection on their last occasion of casual sex.

Risky alcohol use

Using the AUDIT, 82% of respondents scored eight or above, indicating alcohol intake that is possibly hazardous. Five per cent of respondents scored in Zone 4 of the AUDIT, indicating the need for evaluation for possible alcohol dependence. There was no difference between males and females.

Criminal activity, policing and market changes

One third of the sample reported engaging in some form of criminal activity in the month prior to interview.

KEY FINDINGS AND IMPLICATIONS

In 2015, for the thirteenth consecutive year, the Australian Capital Territory (ACT) Ecstasy and related Drugs Reporting System (EDRS) provides an opportunity to examine trends within the ACT through interviews with a sentinel group of people who regularly use ecstasy or other psychostimulant drugs ('regular psychostimulant users' RPU), interviews with key experts (KE), and the collation of indicator data. This is done with the aim of informing further research and contributing to the evidence base from which policy decisions can be made. The continued monitoring of ecstasy and related drug markets within the ACT for changes in the price, purity, availability, use patterns and issues associated with drug use adds to our understanding of drug markets and our ability to inform policies to minimise harms. The findings of the 2015 ACT EDRS indicate that further attention is required in the following areas:

Polydrug use

As in previous years, the majority of ACT EDRS participants in 2015 were polydrug users. Three-quarters of RPU who reported that the last time they used ecstasy or other psychostimulants, they had used other drugs at the same time (stable from 70% in 2014). The drugs most commonly used in combination with psychostimulants by RPU were ecstasy, tobacco, alcohol, and cannabis. Polydrug use can increase or alter adverse effects in ways that are often unpredictable and problems relating to intoxication may be enhanced due to the drug interactions arising from polydrug use. Treatment approaches and harm reduction interventions need to take this into account, especially in relation to the effects of drugs, safer use, withdrawal, and overdose risk.

Ecstasy

In 2013 the EDRS began collecting data on MDMA crystals in response to reports indicating the arrival of this form in the market. The introduction of MDMA crystals did not result in an increase in overall use of ecstasy, suggesting that RPU use diverse forms and current data indicate some RPU may be changing their preferred form.

Alcohol

The use of alcohol remains problematic amongst RPU, with use occurring once to twice a week. Furthermore, high proportions of RPU reported using alcohol during binge sessions. In the 2015 EDRS, RPU were administered the Alcohol Use Disorders Identification Test (AUDIT). Using this measure, 5% of respondents scored in Zone 4 of the AUDIT, indicating the need for evaluation for possible alcohol dependence. KE also reported that alcohol use was common amongst RPU and that binge drinking was frequent and problematic. While it is important to focus on the risks associated with illicit drug use, the excessive use of alcohol (alone and in conjunction with other drug use) is associated with a high level of risk for harm. Cannabis

The use of cannabis also remains problematic. The median frequency of use has decreased in 2015 for the third consecutive year to approximately twice a week. This decrease is not statistically significant from 2014, however, when considered within the context of a downward trend it may be noteworthy. Efforts to target users with information concerning harms associated with its use, including dependence and comorbid mental health problems, remain important.

Other drugs

In 2015 smaller proportions of RPU reported using antidepressants, heroin, methadone, buprenorphine, other opioids, GHB, MDA, ketamine and pharmaceutical stimulants. While only small numbers of this group report using the abovementioned drugs, an increased risk exists as these drugs are being used in conjunction with other drugs. This simultaneous polydrug use is associated with increased risks through the additive and synergetic effects of combining these drugs together. Efforts to target users with information concerning the harms and risks associated with polydrug use remain vital.

1 INTRODUCTION

The findings in this report provide a summary of trends in ecstasy and related drug (ERD) use detected in the Australian Capital Territory (ACT) in 2015.

The term 'ecstasy and related drugs' or 'psychostimulants' includes drugs that are routinely used in the context of entertainment venues and other recreational locations including nightclubs, dance parties, pubs and music festivals. ERD include ecstasy (MDMA, 3,4-methylenedioxymethamphetamine), methamphetamine, cocaine, LSD (*d*-lysergic acid), ketamine, MDA (3,4-methylenedioxyamphetamine), NPS (e.g. 2C-B, DMT, synthetic cannabis) and GHB (gamma-hydroxybutyrate).

RPU interview data examine the price, purity and availability of these drugs, and are used to supplement existing data from key expert (KE) reports and indicator data, thus providing a multifaceted approach to the task of monitoring the Australian ERD market.

In 2015, the Ecstasy and related Drugs Reporting System (EDRS) project was supported by funding from the Australian Government under the Substance Misuse Prevention and Service Improvement Grants Fund. The project uses a methodology that was based on the methodology used for the Illicit Drug Reporting System (IDRS) (Topp et al., 2004). The IDRS monitors Australia's heroin, cocaine, methamphetamine and cannabis markets, but does not adequately capture ERD use and, therefore, there was a need to access a different population to obtain information on ERD markets. Consistency between the methodology of the main IDRS and this study was maintained where possible, as the IDRS has demonstrated success as a national monitoring system.

Please note that as with all statistical reports there is the potential for minor revisions of data in this report over its life. Please refer to the online version at www.drugtrends.org.au.

1.2. STUDY AIMS

In 2015, the specific aims of the EDRS were to:

1. Describe the characteristics of a sample of current RPU interviewed in each capital city of Australia;
2. Examine the patterns of ERD use of these samples;
3. Document the current price, purity and availability of ERD across Australia;
4. Examine participants' reports of ecstasy-related harm, including physical, psychological, occupational, social and legal harms; and
5. Identify emerging trends in the ERD market that may require further investigation.

2 METHOD

The 2015 ACT EDRS involved the collection and analysis of data from three sources:

- Interviews with current regular psychostimulant users (RPU) recruited in the ACT;
- Interviews with key experts (KE) who have contact with and knowledge of the ERD scene in the ACT;
- Indicator or routinely collected data.

2.1. 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 the drug sold as 'ecstasy'. Although a range of drugs fall into the ERD category, ecstasy is considered one of the main illicit drugs used in Australia. It is the second most widely used illicit drug after cannabis with 3% of the population aged 14 years or older reporting recent use of ecstasy in the Australian Institute of Health and Welfare's *National Drug Strategy Household Survey* (AIHW, 2011).

A growing market for ecstasy, i.e. tablets sold purporting to contain MDMA, 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. LSD), fluctuated widely in availability (e.g. MDA), or are relatively new in the market and are not as widely used as ecstasy (e.g. ketamine and GHB). It was suggested (Topp and Darke 2001) 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. Ecstasy may be the first drug categorised under ERD with which many young Australians who choose to use illicit drugs will experiment, and a minority of these users will go on to experiment with the less common related drugs such as ketamine and GHB.

The entrenchment of ecstasy in Australia's illicit drug markets, relative to other related drugs, underpinned the decision that regular use of ecstasy could be considered the defining characteristic of the target population – RPU (Topp and Darke 2001). A sample of this population was successfully recruited and interviewed in the two-year feasibility trial, (Breen, Topp and Longo, 2002) and was able to provide the data that was sought. Therefore, RPU have been used again in 2012 to provide information on ERD markets; 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. Ethics approval to conduct the study from the appropriate Ethics Committees has been obtained.

2.2. RECRUITMENT

Participants were recruited through a purposive sampling strategy (Kerlinger 1986), which included advertisements in entertainment street press, radio and via internet websites (including drug information sites and forums as well as social mediums). Interviewer contacts and 'snowball' procedures (Biernacki and Waldorf 1981) were also utilised. '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 (Solowij, Hall et al. 1992; Dalgarno and Shewan 1996; Forsyth 1996; Peters, Davies et al. 1997) studies.

Initial contact was established through advertisements on local radio, Facebook, advertisements posted at various tertiary education campuses around Canberra, and websites. On completion of the interviews, participants were asked if they would be willing to discuss the study with friends who would be interested in participating. Those who agreed were given business cards that listed the contact details for the study.

2.3. PROCEDURE

Participants contacted the research coordinator by telephone or email and were screened for eligibility. To meet the eligibility criteria, participants were required to be at least 16 years of age (due to ethical constraints); to have lived in the ACT for the preceding 12 months; and to have used ecstasy or related drugs (psychostimulants) a minimum of six times (i.e. on a monthly basis) in the past six months. The interview time and location was then negotiated between the researcher and participant.

Participants were informed that the study would involve a face-to-face interview that would take approximately 40-60 minutes to complete. Before conducting the interview, the nature and purpose of the study were explained to participants prior to obtaining informed consent. The researchers also informed participants that the information they provided was anonymous and confidential. On completion of the interview, participants were provided with \$40 as reimbursement for their time.

2.4. 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 routes of administration;
- Drug market characteristics: the price, purity and availability of different ERD;
- Risk behaviours (such as injecting, sexual behaviour, driving under the influence of alcohol and other drugs);
- Help-seeking behaviour;
- Mental health, personal health and wellbeing;
- Self-reported criminal activity;
- Areas of special interest including: online purchasing, NPS health impacts and cognitive enhancers

2.5. DATA ANALYSIS

Analyses were conducted using PASW Statistics, Version 22.0 (SPSS inc, 2009). The data collected in 2015 was compared with data collected from comparable samples of ecstasy users from 2003 onward, recruited as part of the PDI (2003-2005), and then the EDRS (2006-2015). As each of these samples was recruited using the same methods, meaningful comparisons can be made. Further analysis was conducted on the main drugs of focus in the EDRS to test for significant differences between 2014 and 2015 for recent use, purity and availability. Confidence intervals (CI) were calculated using an Excel spreadsheet available at <http://www.cebm.net/index.aspx?o=1023> (Tandberg). This calculation tool was an implementation of the optimal methods identified by Newcombe (Newcombe, 1998). Significance testing using the Mann-Whitney U calculation was used to compare 2014 and 2015 median days of use for the major drug types discussed.

2.6. SURVEY OF KEY EXPERTS (KE)

To maintain consistency with the main IDRS, it was decided that the eligibility criterion for KE participation in the EDRS would be regular contact, in the course of employment, with a range of ERD users throughout the preceding six months.

The interview schedule was a semi-structured instrument that included sections on drug use patterns, drug availability, criminal behaviour, and health issues and police activity. The majority of interviews took approximately 30-40 minutes to complete. Data were analysed and sorted for recurring themes. Interviews were conducted online between July and October 2015. KE were remunerated with a small incentive (e.g. box of chocolates, coffee) for their time.

KE professionals were interviewed across the ACT. Interviews were held with a variety of professionals including law enforcement, health services, drug treatment workers, outreach workers, and youth workers and an entertainment promoter.

2.7. OTHER INDICATORS

A number of secondary data sources ('indicator' or routinely collected data) concerning ERD issues were collected in order to validate the data obtained from the RPU surveys and KE interviews. The entry criteria for indicator data are listed below:

- The data should be available at least annually.
- The data should include 50 or more cases.
- The data should provide details of illicit drug use.
- The data should be collected in the main study site (i.e. the ACT).

The indicator data sources meeting the above criteria included in the 2015 EDRS study are described below:

- **Purity of drug seizures.** In 2015, the Australian Crime Commission (ACC) provided data on the median purity of illicit drug seizures made by local police in the ACT. This report presents the purity of drug seizures from the 2003/2004 financial year to 2013/2014.

- **Number and weight of drug seizures.** Data on the number and weight of drug seizures made by ACT local police were provided by the ACC. Data include number of seizures and amount seized in grams from 2003/04 to 2013/14, by each drug type.
- **Drug-specific arrests.** The ACC provided data on the number of consumer (user-type offences) and provider (supply-type offences) arrests made by the Australian Federal Police (AFP) and ACT local police. This report provides the number of arrests for each drug type from 2003/04 to 2013/14.
- **Simple Cannabis Offence Notices (SCON).** Data for this report on the number of SCON issued in the ACT from 2003/2004 to 2013/2014 were provided by the ACC.
- **Hospital admissions.** The 2015 EDRS study includes data on the number of hospital admissions due to methamphetamine and cannabis among those aged 15 to 54 years from 2003-04 to 2013/2014. At the time of print more recent data were not available. These data are provided by the AIHW and ACT Health.

3 DEMOGRAPHICS

Key Points

- A total of 99 participants were interviewed for the EDRS survey in the ACT.
- Mean age was 20 years (range=16-34 years).
- Two-thirds of the participants were male (67%).
- Most of the participants were well educated, completing a mean of 12 school years.
- Majority of the participants were employed (full-time or part-time) or were students.

1.1. OVERVIEW OF THE RPU PARTICIPANT SAMPLE

Table 1 presents the demographic characteristics of the 2015 ACT EDRS sample. Two-thirds of the participants were male (67%). The mean age of the sample was 20 years (S.D=3.2, range=16-34). The majority of the sample nominated their sexual identity as heterosexual (94%).

Table 1: Demographic characteristics of sample, ACT RPU, 2011-2015

	2011	2012	2013	2014	2015
Mean age (years)	22	25	20	22	20
Male (%)	66	71	71	69	67
English speaking background (%)	99	98	96	99	98
Aboriginal and/or Torres Strait Islander (%)	1	0	1	5	3
Heterosexual (%)	89	84	96	94	94
Mean level of school achieved	12	11	11	11	12
Tertiary qualifications (%)	24	49	48	78	32↓
Employed full-time (%)	23	37	14	45	24↓
Full-time students (%)	10	6	7	1	15↑
Unemployed (%)	19	16	29	9	7
Current drug treatment (%)	3	10	3	2	1
Mean weekly income (\$)	432	656	406	650	468

Source: EDRS RPU interviews, 2011-2015

↑ ↓ Significant increase/decrease at 95% CI $p < 0.05$

Fifty-eight per cent of the sample reported that they were single, 37% reported that they had a regular partner and 5% reported that they were married or in a de facto relationship.

Two participants did not speak English as the main language spoken at home. Almost half (49%) of the sample lived in their parents' or family home and 43% indicated they lived in their own (rented or purchased) premises.

The mean level of education completed by the sample was Grade 12. Almost a third (32%) of the sample had completed a course since finishing their school education, 19% had completed a trade or technical qualification and 13% had completed a university degree or college course.

When examining employment status, 78% indicated that they were in either full-time or part-time employment. More than one-third (35%) of the sample indicated that they were employed on a part-time or casual basis. Twenty-four per cent indicated that they were employed on a full-time basis, 19% were both studying and employed, 15% indicated they were full-time students and 7% indicated that they were unemployed.

4 CONSUMPTION PATTERNS

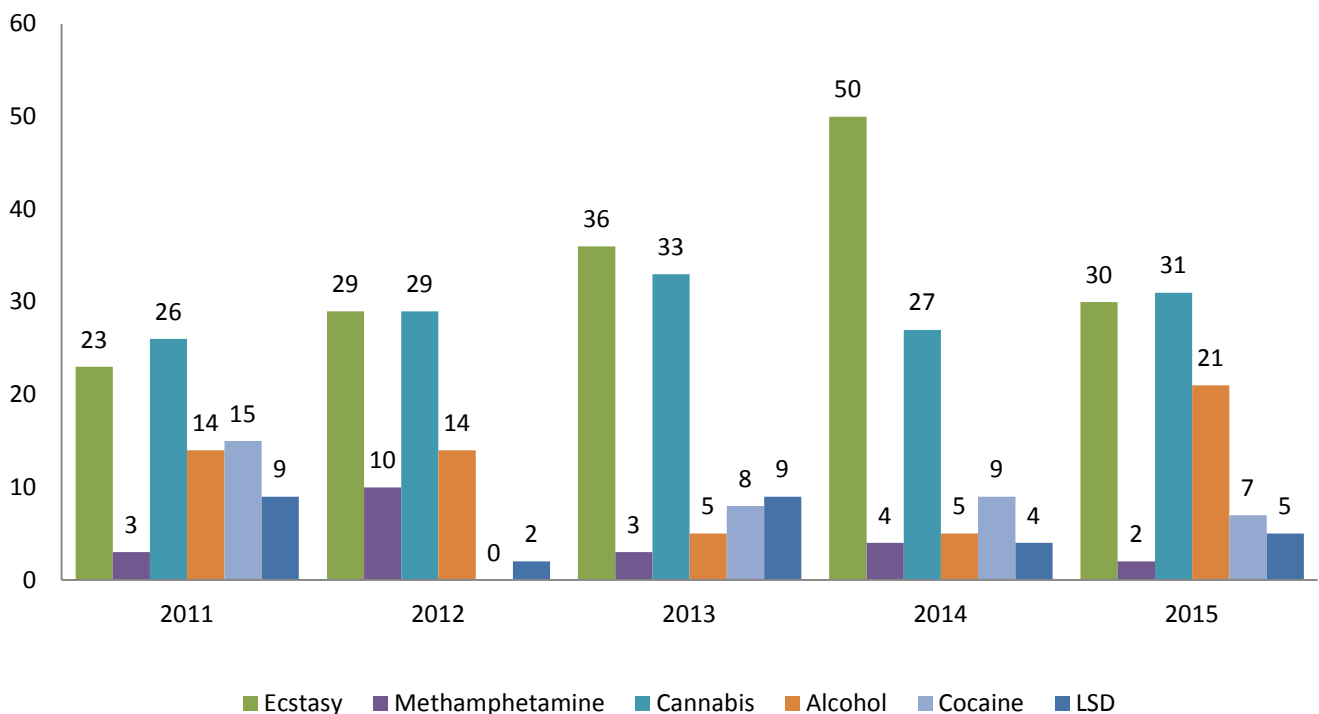
Key points

- The proportion of respondents reporting ecstasy to be their drug of choice decreased from 50% to 30%.
- Methamphetamine use among this sample remains low and infrequent and continues to decline.

1.1. DRUG USE HISTORY AND CURRENT DRUG USE

As shown in Figure 1, the proportion of the RPU sample reporting ecstasy as their drug of choice decreased from 50% in 2014 to 30% in 2015 ($p=0.007$). The proportion reporting methamphetamine as their drug of choice remains low and stable from last year (4% in 2014 to 2% in 2015). Seven per cent of the sample reported cocaine as their drug of choice. Alcohol was nominated by 21% of the sample to be the drug of choice.

Figure 1: Drug of choice, ACT RPU, 2011-2015



Source: EDRS RPU interviews, 2011-2015

For the purpose of this study, 'bingeing' was defined as the use of a drug on a continuous basis for more than 48 hours without sleep. Thirty per cent of the 2015 sample reported having binged on any stimulant in the six months prior to interview (48% in 2014). The median length of the longest binge session reported by RPU was almost three days (71 hours, range=48-168 hours). The most common substance used during binge episodes was ecstasy, with 75% of RPU who reported bingeing in the previous six months reporting ecstasy as involved in the episode. Other commonly used substances used during binge episodes included alcohol (54%), cannabis (46%), methamphetamine powder (43%), and cocaine (40%). Almost half (46%) of RPU who reported

bingeing in the previous six months reported consuming more than five standard alcoholic drinks during the episode.

The proportion of participants reporting that they had ever injected a drug remained stable at 5%. Heroin was reported as the most common drug first injected.

In 2015, RPU were asked how often they had used ERD in the last month. Thirty-seven per cent of RPU reported using ecstasy approximately monthly, almost a third (30%) reported using ecstasy approximately fortnightly and 22% of the ACT RPU reported using ecstasy weekly.

Table 2: Lifetime and recent use of substances, ACT RPU, 2011-2015

	2011 (N=80)	2012 (N=51)	2013 (N=77)	2014 (N=100)	2015 (N=99)
Ever inject any drug (%)	9	28	4	4	5
Alcohol					
Ever used (%)	100	98	100	97	99
Used last 6 months (%)	99	94	96	95	98
Cannabis					
Ever used (%)	98	100	94	86	97
Used last 6 months (%)	89	92	93	74	82
Tobacco					
Ever used (%)	94	100	85	89	90
Used last 6 months (%)	86	92	74	76	79
Methamphetamine powder (speed)					
Ever used (%)	78	82	70	70	61
Used last 6 months (%)	50	63	57	48	31
Crystal methamphetamine (crystal)					
Ever used (%)	23	39	23	16	13
Used last 6 months (%)	9	26	14	8	7
Cocaine					
Ever used (%)	76	78	62	80	62↓
Used last 6 months (%)	43	37	38	51	41
LSD					
Ever used (%)	60	86	75	38	54↑
Used last 6 months (%)	39	38	53	19	37↑

Source: EDRS RPU interviews, 2011-2015

↓↑ Significant increase/decrease at 95% CI $p < 0.05$

Table 2: Lifetime and recent use of substances, ACT RPU, 2011-2015 (continued)

	2011 (N=80)	2012 (N=51)	2013 (N=77)	2014 (N=100)	2015 (N=99)
MDA					
Ever used (%)	21	28	17	22	16
Used last 6 months (%)	9	14	10	10	10
Ketamine					
Ever used (%)	29	45	43	18	22
Used last 6 months (%)	14	14	33	6	9
GHB					
Ever used (%)	17	35	5	10	5
Used last 6 months (%)	9	6	0	3	4
Amyl nitrate					
Ever used (%)	50	51	30	24	25
Used last 6 months (%)	28	20	9	17	9↓
Nitrous oxide					
Ever used (%)	44	45	43	32	41
Used last 6 months (%)	24	24	26	15	26
Mushrooms					
Ever used (%)	73	84	65	55	48
Used last 6 months (%)	46	45	47	17	24
Illicit benzodiazepines					
Ever used (%)	44	51	23	21	8↓
Used last 6 months (%)	25	16	12	9	5
Heroin					
Ever used (%)	8	26	5	9	5
Used last 6 months (%)	5	12	1	3	2
Illicit Pharmaceutical Stimulants					
Ever used (%)	59	71	33	15	36↑
Used last 6 months (%)	43	33	16	6	18↑
Other opiates					
Ever used (%)	36	31	21	19	11
Used last 6 months (%)	16	6	17	9	4

Source: EDRS RPU interviews, 2011-2015

↓↑ Significant increase/decrease at 95% CI $p < 0.05$

4.2. ECSTASY USE

Key Points

- The mean age at which ecstasy was first used was 17.
- Ecstasy (any form) was used once a fortnight on average.
- Participants reported using a median of two tablets in a typical session of use and three tablets in heavy session of use.
- The majority of participants reported using other drugs in combination with ecstasy. The drugs most commonly used were alcohol, cannabis and cocaine.

In 2015, the mean age at which RPU first used ecstasy was 17 years (SD=1.7, range=13-21). Almost the whole sample had used ecstasy at least on a monthly basis in the past six months, and reported first having used at this frequency at a mean age of 18 years (SD=1.6, range=13-23).

Ecstasy use among RPU

Table 3 shows the lifetime and recent use of ecstasy pills, powder, capsules and crystals. There has been a sharp and statistically significant reduction in the proportion of RPU reporting the recent use of pills (91% in 2014 down to 56% in 2015; $p<0.001$). The recent use of powder, capsules and crystal have all remained stable.

Table 3: Lifetime and recent use of ecstasy, ACT RPU, 2011-2015

	2011	2012	2013	2014	2015
Lifetime use%					
Pills	100	100	99	99	75
Powder	44	53	29	18	31
Capsules	71	75	52	73	71
Crystals	-	-	81	74	63
Recent use%					
Pills	100	94	97	91	56↓
Powder	23	35	20	13	22
Capsules	39	61	43	56	69
Crystals	-	-	70	54	57

Source: RPU interviews, 2011-2015

↓↑ Significant increase/decrease at 95% CI $p<0.05$

Median use

When examining the total number of days that RPU had used any form of ecstasy in the past six months (use of pill, powder, capsule and crystal forms combined), the median number of days of ecstasy use was 10 (range=1-180). The majority of RPU (61%) reported using any form of ecstasy on a monthly to fortnightly basis.

Table 4: Median days of use of ecstasy, ACT RPU, 2011-2015

Median days	2011	2012	2013	2014	2015
Pills	12	12	10	12	6
Powder	1	0	5	2	6
Capsules	1	2	6	6	6
Crystal	-	-	8.5	8.5	6

Source: RPU interviews, 2011-2015

One in three (34%) participants reported that they typically used more than one tablet in a typical episode of use, which significantly decreased from 75% in 2014. During the 'heaviest' episodes of recent ecstasy use, RPU reported the median use of three tablets (range=0.5-10).

Table 5: Median recent use of ecstasy, ACT RPU, 2015

Ecstasy Use	Typical use	Heavy use
Pills/tablets	2	3
(range)	(0.5-5)	(0.5-10)
Powder (points)^	2	3
(range)	(1-3)	(2-4)
Capsules	2	2
(range)	(0.5-6)	(1-10)
Crystal (points)^	2.5	3
(range)	(1-3)	(1-4)

Source: RPU interviews, 2015

Route of administration

Tablets/Pills – Of those who had recently used tablets/pills (n=55) 87% reported swallowing as a means of administration, with 20% reporting recently snorting ecstasy tablets/pills. One participant reported recently shelving/shafting ecstasy tablets/pills while no participants reported either smoking or injecting in the preceding six months.

Powder – Of those that had recently used ecstasy powder (n=22), 64% reported that they had snorted ecstasy powder and 46% reported that they had swallowed ecstasy powder in the past six months.

Capsules – Of those that had recently used ecstasy capsules (n=31), 88% reported that they had swallowed ecstasy capsules, 15% reported snorting ecstasy capsules and one participant reported shelving/shafting ecstasy capsules in the preceding six months.

Crystals – Of those that had recently used MDMA crystals (n=56), 66% reported that they had swallowed MDMA crystals and 64% reported that they had snorted MDMA crystals. One participant reported smoking MDMA crystals and no participants reported shelving/shafting MDMA crystals.

Polydrug use

Three-quarters of RPU reported that the last time they used ecstasy they had used other drugs in combination with ecstasy. The drugs most commonly used in combination with ecstasy by RPU were alcohol (more than five standard drinks) (60%), cannabis (45%), and cocaine (11%).

Forty-two per cent of participants reported using other drugs to facilitate comedown from ecstasy. The main drugs used in 2015 to facilitate comedown were reported as cannabis (90%) and alcohol (8%). Twenty-eight per cent of participants reported bingeing in the six months prior to interview. The proportion of RPU who reported typically using less than 1 tablet significantly reduced from 75% in 2014 to 34% in 2015 $p < 0.01$.

The patterns of ecstasy use reported by RPU in the ACT from 2011 to 2015 are presented in Table 6.

Table 6: Patterns of ecstasy use, ACT RPU, 2011-2015

	2011 (N=80)	2012 (N=51)	2013 (N=77)	2014 (N=77)	2015 N=99
Mean age first used ecstasy (years)	17	18	16	18	17
Median days used ecstasy (any form) #	14	19	15	14	10
Ecstasy 'favourite drug'	23	29	36	50	30
Use ecstasy $\geq$ weekly basis	33	24	33	24	12
Median ecstasy tablets in a 'typical' session	2	2	2	2	2
Typically use >1 tablet (%)	68	80	79	75	34↓
Recently binged on ecstasy (%) *	39	37	43	39	28
Forms used past six months (%)					
Pills	100	94	96	91	56↓
Powder	23	35	20	13	22
Capsules	39	61	43	56	69
Crystals	-	-	43	54	57
Use of other drugs (%)					
In conjunction with ecstasy	95	94	88	70	75
To come down from ecstasy	53	71	69	43	42

Source: EDRS RPU interviews, 2011-2015

* Bingeing defined as the use of stimulants 48 hours or more continuously without sleep.

* Question only asked of RPU who had recently binged on psychostimulants.

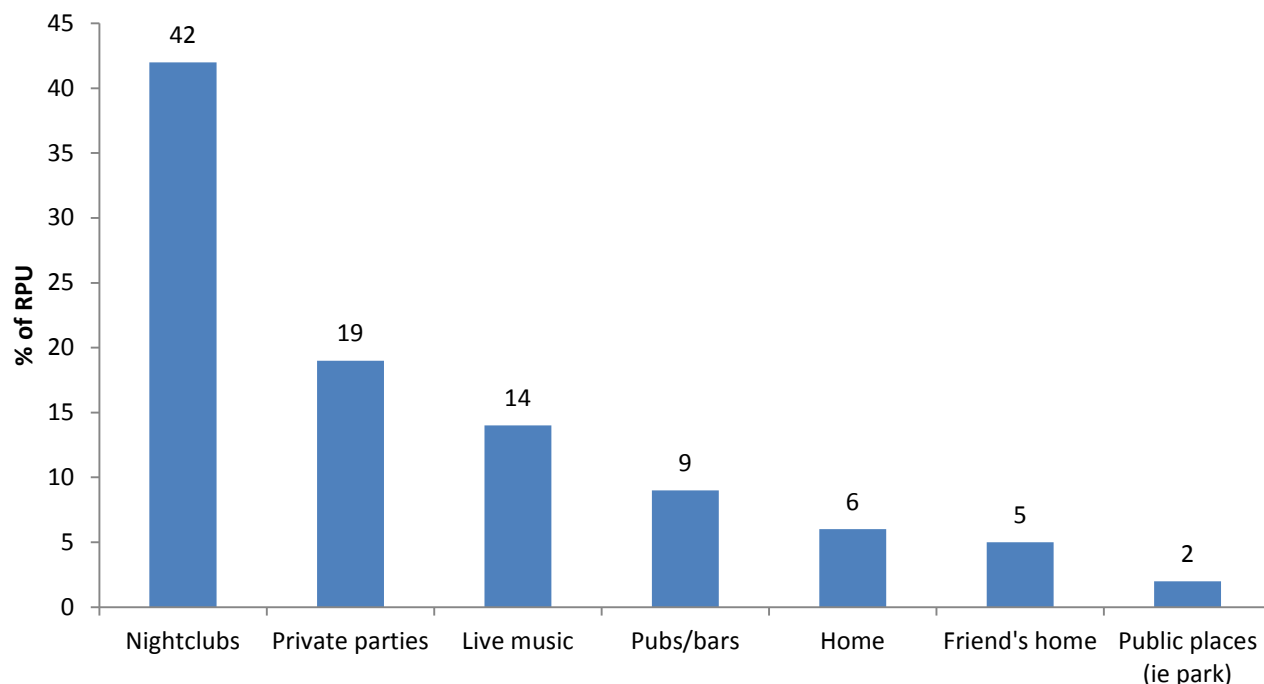
In the previous six months

↓↑ Significant increase/decrease at 95% CI $p < 0.05$

Locations of ecstasy use

RPU reported a wide variety of locations the last time they used ecstasy (see Figure 2 below). The venues that RPU most frequently reported were: nightclubs (42%), private parties (19%), live music events (14%), pubs/bars (9%), home (6%), friend's home (5%), and public places (2%).

Figure 2: Location of last use, 2015

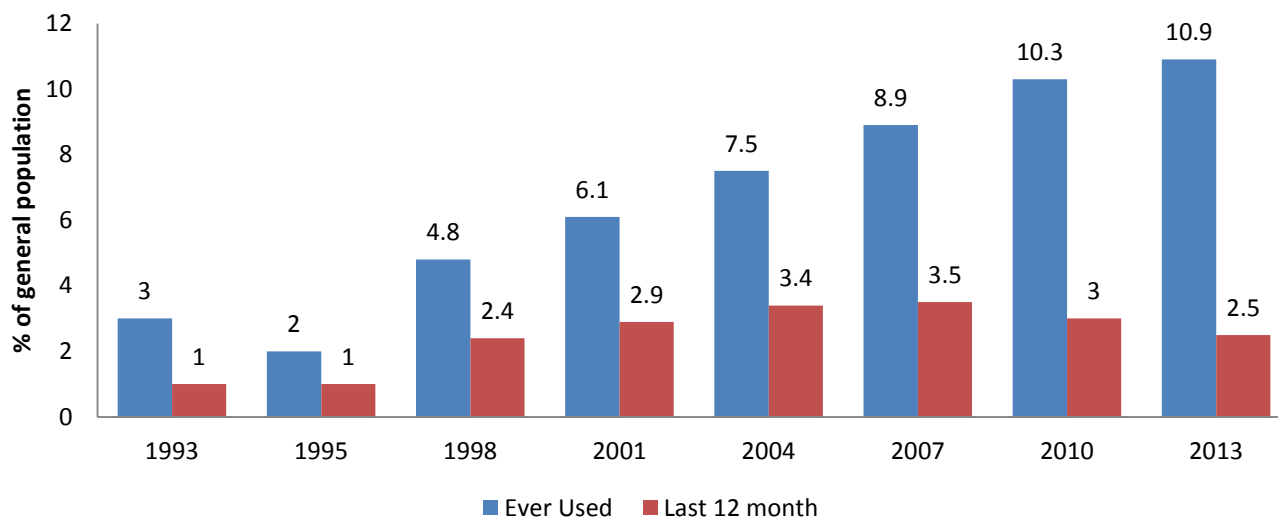


Source: EDRS RPU interviews, 2015

Use of ecstasy in the general population

Ecstasy use in Australia occurs most frequently among those aged 20-29 years, with the number of people reporting lifetime use continuing to increase. Between 2010 and 2013 recent use of ecstasy declined for the second consecutive time since 1995, decreasing from 3% to 2.5%. The 2013 NDSHS showed ecstasy remains the second most widely used illicit drug after cannabis in Australia (Australian Institute of Health and Welfare 2005, 2011, 2014). Figure 3 presents the prevalence of ecstasy use among the general population (aged over 14 years) in Australia between the years 1993 and 2013.

Figure 3: Prevalence of ecstasy use among the general population, 1993-2013



Source: NDSHS 1993-2014, AIHW

4.3. METHAMPHETAMINE USE

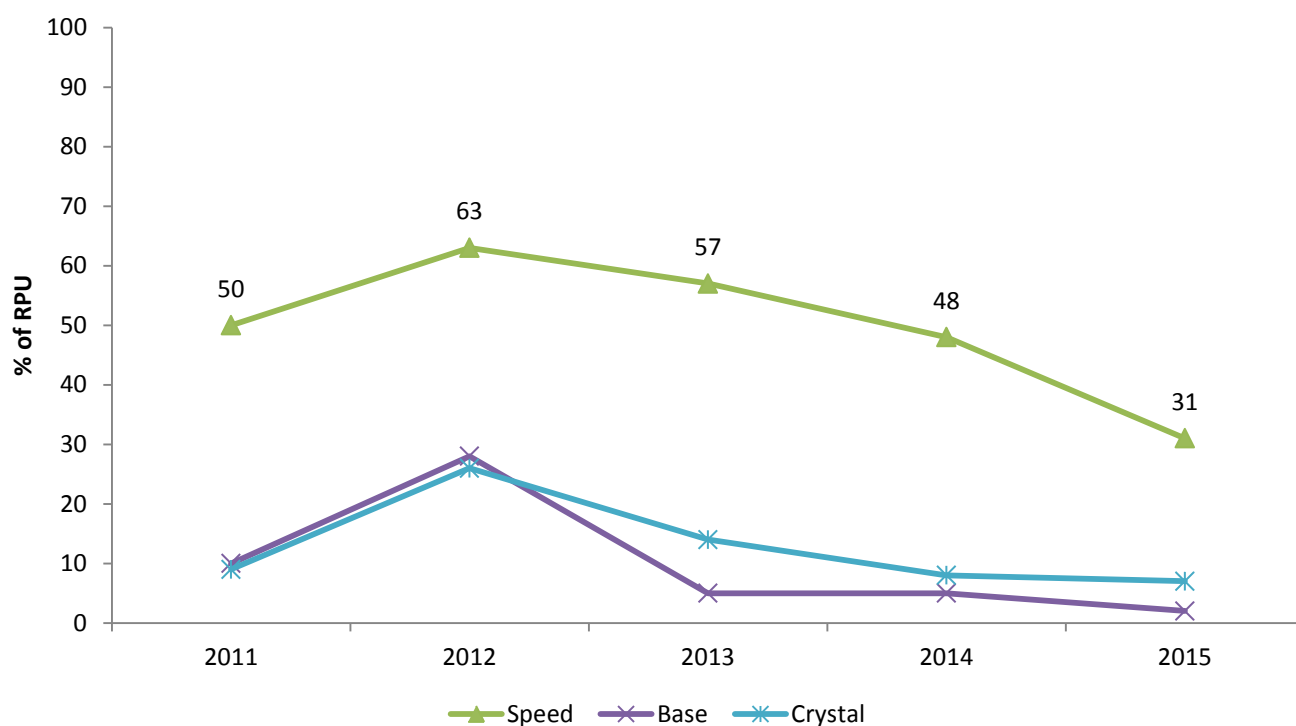
Key Points

- The proportion of participants who reported recent use of one or more forms of methamphetamine (speed, base and/or crystal) significantly decreased (51% in 2014 down to 35% in 2015).
- Methamphetamine powder (speed) was the most commonly used methamphetamine by RPU, followed by crystal and then base. Crystal use in this group continues a downward trend.
- Median days of any methamphetamine have decreased to two days in the past six months.

Sixty-two per cent of participants in the 2015 EDRS reported lifetime use of at least one form of methamphetamine (73% in 2014), with speed being the most commonly used form. The proportion of the sample who reported recent use of at least one form of methamphetamine in the previous six months significantly decreased from 51% in 2014 to 35% in 2015 ($p=0.037$). The median number of days used decreased from 6 days in the past six months in 2014 to 2 days in 2015.

Recent use of any form (combined) of methamphetamine has continued its downward trend for the third consecutive year in this sample. Thirty-one per cent of RPU reported recent powder use, 2% reported recent base use and 7% reported recent crystal use as shown in Figure 4.

Figure 4: Trends in recent methamphetamine use, ACT RPU, 2011-2015



Source: EDRS RPU interviews, 2009-2015

Methamphetamine powder (speed)

Table 7 presents a summary of the patterns of speed use among RPU in the ACT from 2011 to 2015. One participant nominated speed as their current drug of choice (3% in 2014). The majority (60%) of participants reported ever having used speed, and 31% reported having recently used speed. A significant reduction from 48% ($p=0.007$).

Recent speed users reported a median of 2 days (range=1-90) of speed use in the past six months. Most (74%) of those RPU who had recently used speed had used less than once a month in the preceding six months (52% in 2014). One in five recent speed users had used on a monthly to fortnightly basis (27% in 2014), and 6% had used speed more regularly than fortnightly during the past six months.

The majority of recent speed users quantified their use in terms of 'grams'. The median amount of speed used in a 'typical' episode of use in the past six months among those RPU was a quarter of a gram (range=0.05-2). The median amount of speed used in the 'heaviest' session was a third of a gram (range=0.05-2).

Among RPU who reported having binged on psychostimulants recently ($n=28$), 43% reported they had used speed during these binge sessions. Eight per cent of RPU who indicated that they last used other drugs in combination with ecstasy ($n=74$) reported using speed in this context.

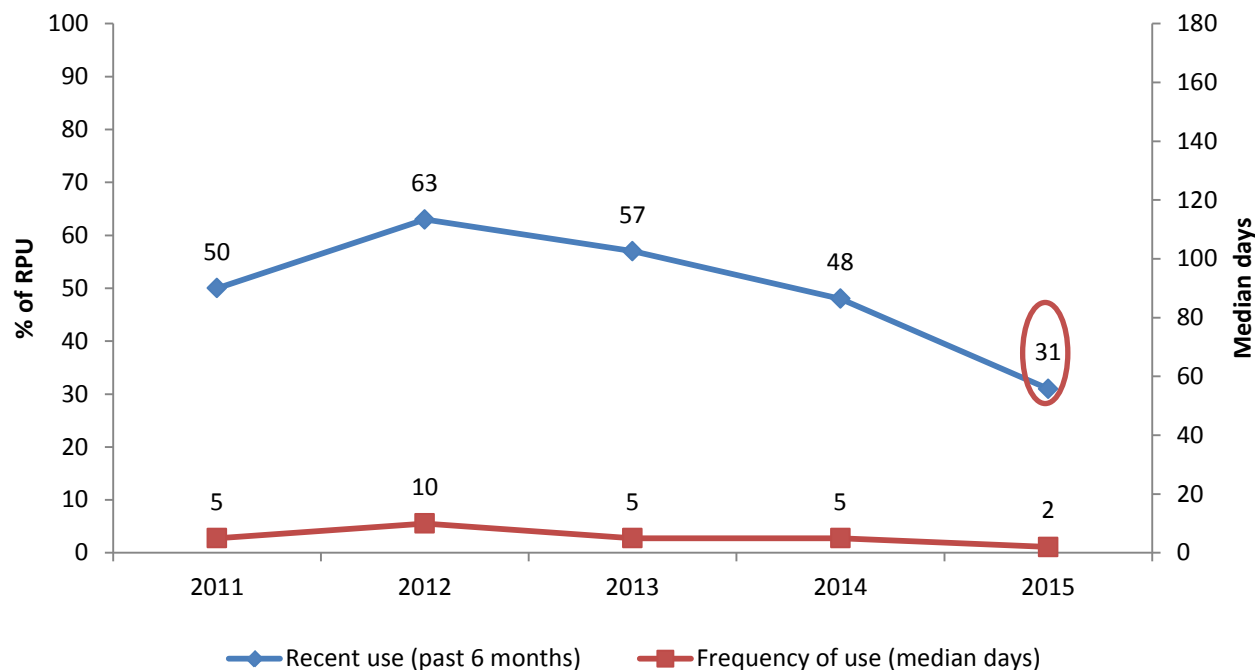
Of those participants who had used speed in the previous six months, 77% snorted, 39% reported swallowing and 7% smoked (50%, 60% and 4% respectively in 2014) and none had recently injected speed.

Table 7: Patterns of methamphetamine powder use, ACT RPU, 2011-2015

Methamphetamine powder (speed)	2011 (N=80)	2012 (N=51)	2013 (N=77)	2014 (N=100)	2015 (N=99)
Ever used (%)	78	82	70	70	61
Used preceding six months (%)	50	63	57	48	31↓
Median days used last 6 mths	5	5	5	5	2
(range)	(1-90)	(1-180)	(1-180)	(1-60)	(1-90)
Median quantities used (grams)					
Typical	0.6	0.5	0.5	0.5	0.25
(range)	(0.1-3.5)	(0.05-3.0)	(0.5-2.2)	(0.1-2)	(0.05-2.0)
Heavy	1	1	1	0.5	0.3
(range)	(0.25-10)	(0.05-6.0)	(0.05-5.0)	(0.1-14.0)	(0.05-2.0)

Source: EDRS RPU interviews, 2011-2015

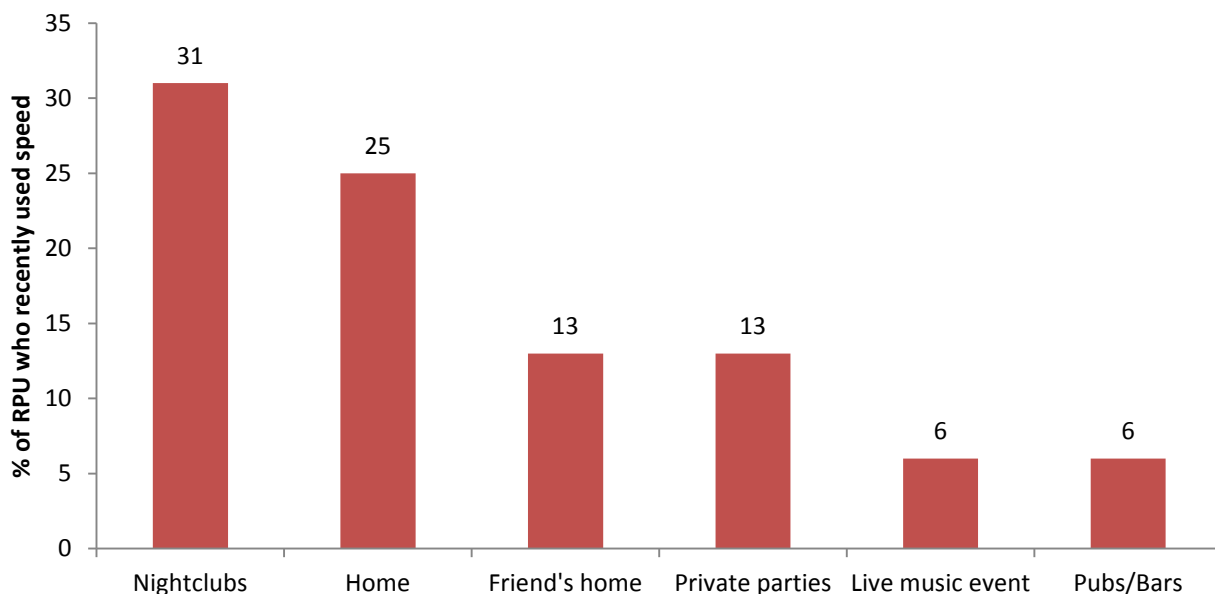
Figure 5: Methamphetamine powder trends, ACT, 2011-2015



Source: EDRS RPU interviews, 2011-2015

Figure 6 presents the last locations of speed use in the six months prior to interview. Speed had been used by RPU at a variety of locations. The most common location reported for speed use was nightclubs (31%).

Figure 6: last location of use for speed, ACT RPU, 2015



Source: EDRS RPU interviews, 2015

Methamphetamine base

Table 8 presents a summary of the patterns of base use from 2011 to 2015. No participants nominated base as their drug of choice. Four per cent of RPU in 2015 reported ever having used base. Two per cent reported having recently used base (during the past six months).

Only two participants reported the recent use of base so caution is advised when interpreting data. Recent base users (n=2) reported a median of 5.5 days (range=1-10) of base use in the past six months. Both recent base users quantified their use in terms of points. The median amount used in a typical session was 2 points and 3 points for a heavy session.

Of those RPU who reported having binged on psychostimulants in the past six months (n=28), none reported that they had used base during these binge sessions. Similarly, none of those RPU who indicated that they last used other drugs in combination with ecstasy reported using base in this context.

Of those participants who had used base in the previous six months, one participant reported smoking base and one participant reported snorting and swallowing base in the previous six months. There were no reports of injecting base.

Table 8: Patterns of methamphetamine base use, ACT RPU, 2011-2015

Methamphetamine base	2011 (N=80)	2012 (N=51)	2013 (N=77)	2014 (N=100)	2015 (N=99)
Ever used (%)	24	37	9	9	4
Used preceding six months (%)	10	28	5	5	2
Median days used last 6 mths	5	3.5	2.5	1	5.5 [^]
(range)	(1-36)	(1-20)	(1-12)	(1-12)	(1-10)
Median quantities used (points)					
Typical	0.65	2	2	1.5	2 [^]
(range)	(0.1-5.0)	(0.2-10.0)	(no range)	(1.0-2.0)	(1.0-3.0)
Heavy	2.3	2.5	5.0	1.5	3 [^]
(range)	(0.2-7.0)	(0.2-14.0)	(no range)	(1.0-2.0)	(no range)

Source: EDRS RPU interviews, 2011-2015

↑ ↓ Significant increase/decrease at 95% CI p<0.05

[^] small numbers (<10), interpret with caution

Crystal methamphetamine

Table 9 presents a summary of the patterns of crystal use among RPU in the ACT from 2011 to 2015. One participant nominated crystal as their drug of choice. A downward trend in the proportion of participants reporting use of crystal methamphetamine continues with 16% reporting lifetime use (16% in 2014) and 7% reporting recent use (8% in 2014).

Recent crystal users (n=7) reported a median of four days (range=1-30) of crystal use in the past six months. Four of the recent users reported using crystal less than monthly, and two reported using the drug between monthly and fortnightly.

Most recent crystal users quantified their use in terms of points. Two points was the median amount of crystal reported to be used in a 'typical' episode (range=0.25-4.0) and 2.6 points for the 'heaviest' (range=0.25-5.0) episode of use in the past six months.

Of those RPU who reported having binged on psychostimulants recently (n=28), 18% reported they had used crystal during these binge sessions. No respondents reported using crystal to facilitate ecstasy comedown.

Of those participants who had used crystal in the previous six months, most (57%) reported that they had smoked it.

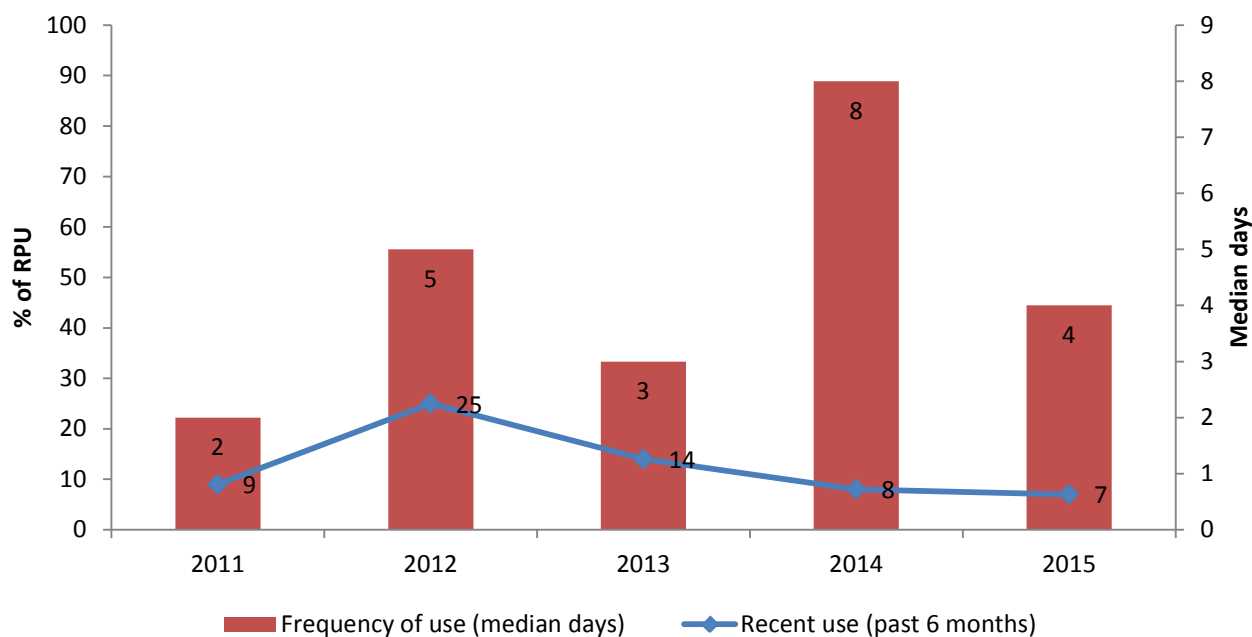
Table 9: Patterns of crystal methamphetamine use, ACT RPU, 2011-2015

Crystal methamphetamine	2011 (N=80)	2012 (N=51)	2013 (N=77)	2014 (N=100)	2015 (N=99)
Ever used (%)	23	39	23	16	13
Used preceding six months (%)	9	25	14	8	7
Median days used last 6 mths	2	5	3	8	4^
(range)	(1-5)	(1-48)	(1-180)	(1-72)	(1-30)
Median quantities used (points)					
Typical	0.2	1	1	2	2^
(range)	(0.2-5.0)	(0.2-5.0)	(1.0-3.0)	(0.5-3.0)	(0.25-4.0)
Heavy	2	3	2	2	2.6^
(range)	(0.2-7.0)	(0.2-25)	(1.0-9.0)	(0.5-10.0)	(0.25-5.0)

Source: EDRS RPU interviews, 2011-2015

^ small numbers (<10), interpret with caution

Figure 7: Crystal methamphetamine trends, ACT, 2011-2015



Source: EDRS RPU interviews, 2011-2015

KEY EXPERT COMMENTS: METHAMPHETAMINE

- Treatment and outreach services noted that the lack of effective treatment options for methamphetamine (including pharmacotherapies) exposes a service gap for people with problematic use.

4.4. COCAINE USE

Key points

- Lifetime and recent use have both decreased in 2015.
- Frequency of cocaine use decreased to a median of three days in the previous six months.

Table 10 presents a summary of the patterns of cocaine use from 2011-2015. In 2015, 62% of participants reported having ever used cocaine, a significant decrease from 80% in 2014 ($p<0.01$). This decrease sees the proportion return to levels similar to previous years (2011-2013). A decrease in the proportion of participants reporting recent use was also observed but was not statistically significant with 41% reporting recent use compared to 51% in 2014, representing a return to pre-2014 levels. Seven per cent of participants reported cocaine to be their main drug of choice.

In 2015, recent cocaine users ($n=41$) reported a median of three days of use (range=1-16). About three-quarters (76%) of recent cocaine users had used infrequently (i.e. less than monthly) in the past six months, 15% of RPU had used cocaine between monthly and fortnightly and 9% had used cocaine on a fortnightly or greater basis.

Most recent cocaine users quantified their use of cocaine in terms of grams. A median of half a gram ($n=20$, range=0.25-2.0) was used during a 'typical' session of cocaine use, and a median of one gram (range=0.25-4.0) when referring to the median amount used in the 'heaviest' session of cocaine use (see Table 10).

Forty-seven per cent of RPU who had recently binged on psychostimulants reported using cocaine during these binge episodes. Among those RPU who reported that they had consumed other drugs when taking ecstasy, 10% reported using cocaine in this context.

The majority (93%) of participants who had recently used cocaine reported snorting it while the remaining 7% reported swallowing it.

Table 10: Patterns of cocaine use, ACT RPU, 2011-2015

Cocaine	2011 (N=80)	2012 (N=51)	2013 (N=77)	2014 (N=100)	2015 (N=99)
Ever used %	76	78	62	80	62↓
Used last six months %	43	37	38	51	41
Median days used last 6 months	4	4	2	6	3
(range)	(1-24)	(1-60)	(1-100)	(1-170)	(1-16)

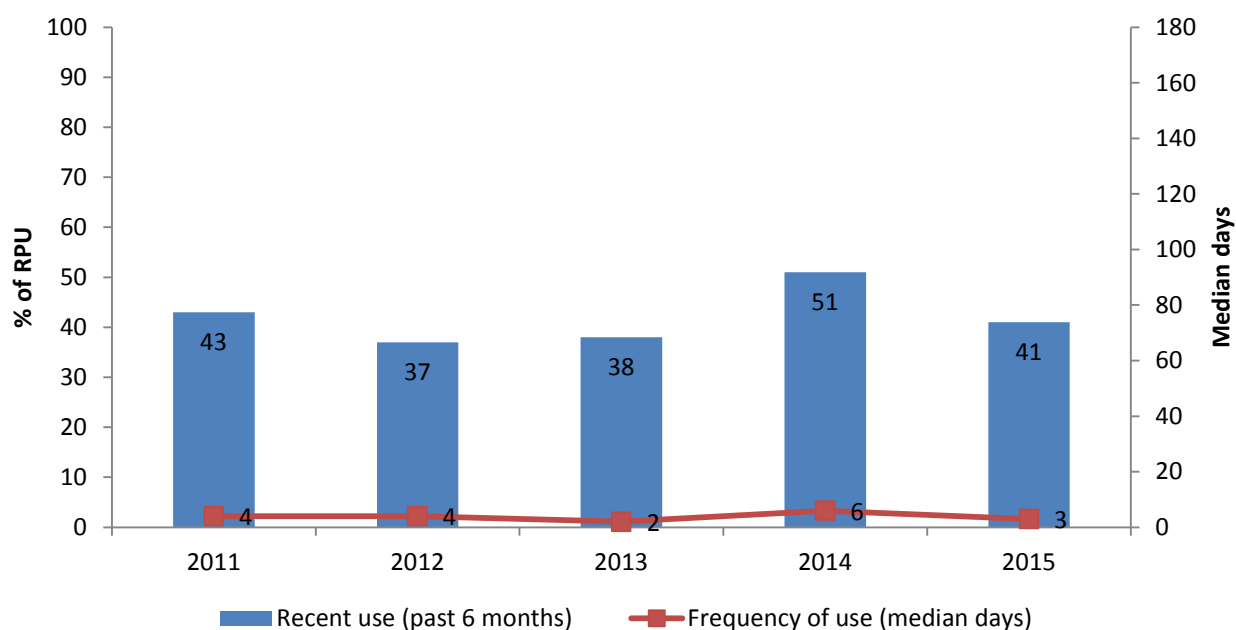
Table 111: Patterns of cocaine use, ACT RPU, 2011-2015

Cocaine	2011 (N=80)	2012 (N=51)	2013 (N=77)	2014 (N=100)	2015 (N=99)
Median quantities used (grams)					
Typical	0.5	1	1	0.5	0.5
(range)	(0.3-3.0)	(0.3-1.2)	(0.5-3.5)	(0.2-3.5)	(0.25-2.0)
Heavy	1	1	1.1	1	1
(range)	(0.5-4.0)	(0.3-8.0)	(0.5-5.0)	(0.3-7.0)	(0.25-4.0)

Source: EDRS RPU interviews, 2011-2015

Participants typically report using cocaine at a friend's home (35%), nightclubs (23%), private parties (8%) and at home (8%).

Figure 8: Cocaine trends in recent use and median days used, ACT RPU, 2011-2015



Source: EDRS RPU interviews, 2015

KEY EXPERT COMMENTS: COCAINE

- All KE commented that cocaine was used sporadically among this demographic and is not commonly seen by youth or outreach services.

4.5. LSD USE

Key Points

- Reported lifetime and recent use increased this year but have not reached levels seen prior to 2014.
- Frequency of LSD use was low at a median of two days in the previous six months.
- The median amount of LSD used in a typical session of use was one tab.

Table 12 summarises the patterns of LSD use amongst ACT RPU from 2011-2015. Five per cent of participants nominated LSD as their drug of choice (4% in 2014). A significant increase in the proportion of people reporting lifetime use was observed: 54% in 2015 compared to 38% in 2014 ($p=0.02$). Likewise, significantly more people reported recent use: 37% compared to 19% in 2014 ($p=0.006$). These increases bring proportions back to levels similar to those seen prior to 2014.

Recent LSD users ($n=37$) reported a median of two days of use in the past six months (range=1-48). Most recent LSD users who commented quantified their use of the substance in terms of 'tabs'. A median of one tab was taken during a 'typical' ($n=30$, range=1-3) episode and one tab also for the 'heaviest' ($n=29$, range=1-15) episodes of LSD use (Table 12). Most (94%) recent LSD users reported that they had swallowed LSD in the past six months ($n=37$).

Of those RPU who reported bingeing on psychostimulants in the preceding six months, 39% had used LSD during extended drug use sessions. Of those RPU who indicated that they last used other drugs in combination with ecstasy ($n=74$), only eight per cent reported that they used LSD in combination with their last ecstasy use.

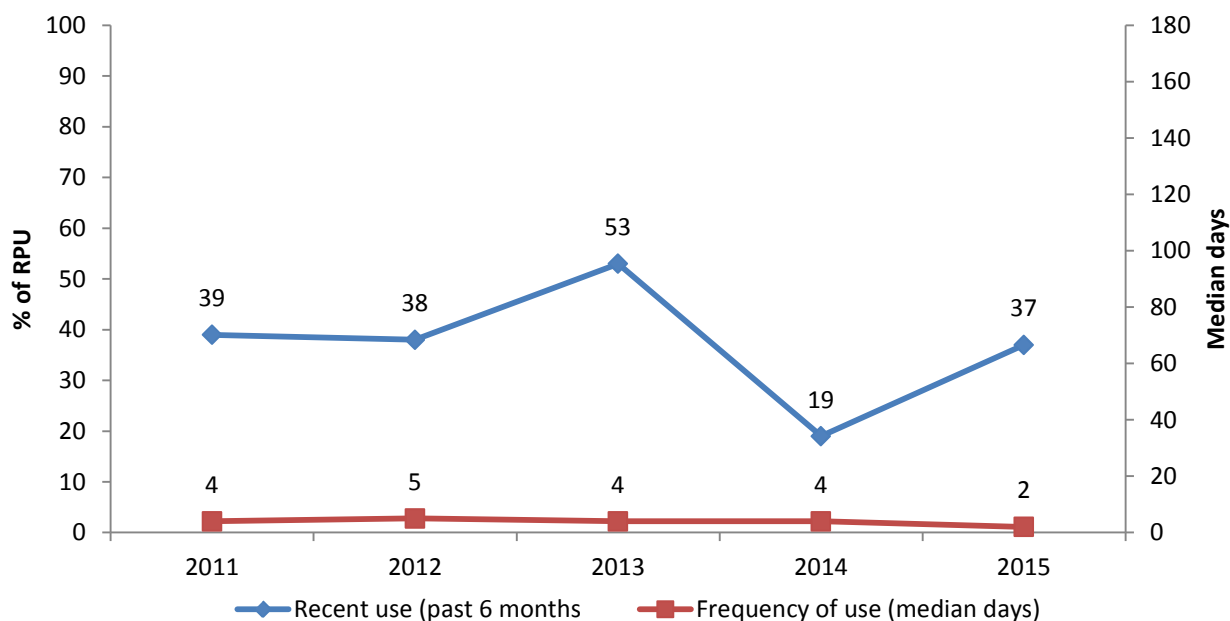
Table 12: Patterns of LSD use, ACT RPU, 2011-2015

LSD	2011 (N=80)	2012 (N=51)	2013 (N=77)	2014 (N=100)	2015 (N=99)
Ever used %	60	86	75	38	54↑
Used last six months %	39	38	53	19	37↑
Median days used last 6 months	4	5	4	4	2
(range)	(1-24)	(1-30)	(1-72)	(1-20)	(1-48)
Median quantities used (tabs)					
Typical	1	1	1	1	1
(range)	(0.5-2.0)	(0.75-4.0)	(1-5)	(1-3)	(1-3)
Heavy	2	2	2	1	1
(range)	(1-40)	(1-20)	(1-11)	(1-3)	(1-15)

Source: EDRS RPU interviews, 2011-2015

↑ significant increase at 95% CI $p<0.05$

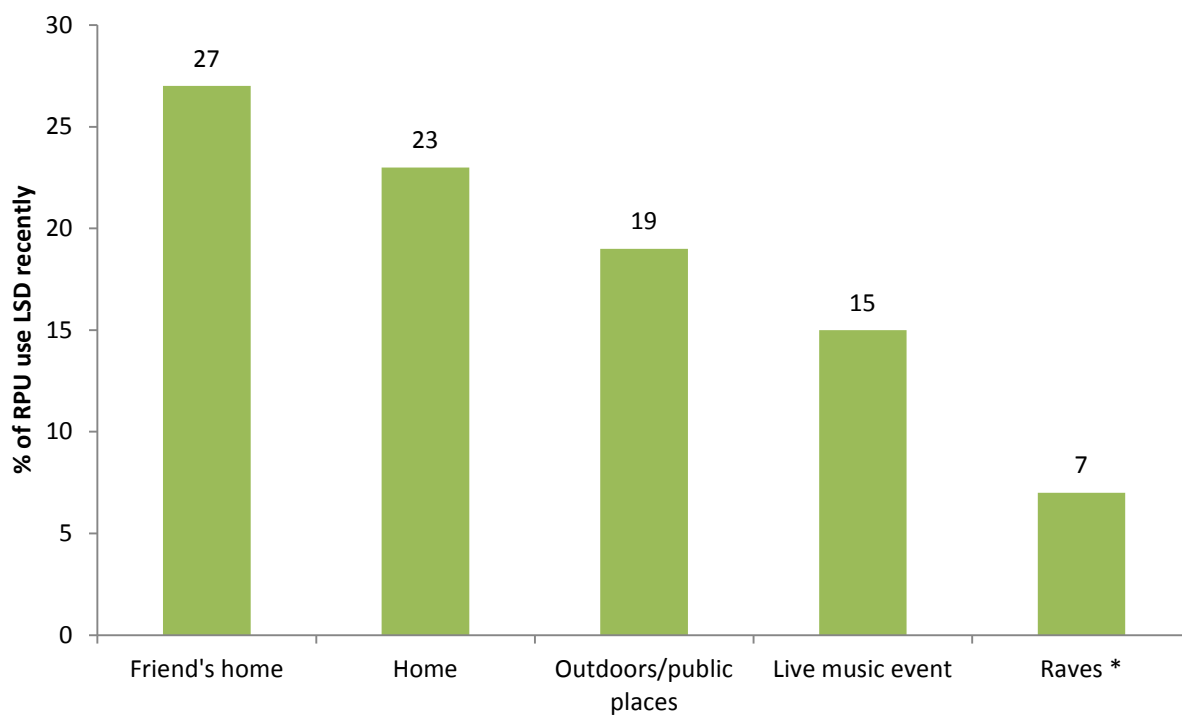
Figure 9: LSD trends in recent use and median days used, ACT RPU, 2011-2015



Source: EDRS RPU interviews, 2011-2015

The locations at which respondents indicated they had last used LSD were at a friend's home (27%), their own home (23%), outdoors or in public places (i.e. parks; 19%), live music events (15%) and at raves (7%).

Figure 10: Last location of LSD use, ACT RPU, 2015



Source: EDRS RPU interviews, 2015

* Includes outdoor raves (doofs) and dance parties

4.6. CANNABIS USE

Key Points

- Four in five RPU reported recent use of cannabis.
- Those that had used cannabis recently used on a median of 40 days (twice a week).
- Significantly fewer (16%) recent cannabis users reported using cannabis on a daily basis.

Table 13 presents a summary of cannabis use of ACT RPU from 2011 to 2015. In 2015, 98% of RPU reported lifetime use of cannabis, and 82% of RPU reported using cannabis in the six months preceding interview. Cannabis was nominated by almost one in three (31%) as their drug of choice.

In 2015, RPU who had used cannabis in the preceding six months used it on a median of 40 days (range=1-180). This decrease continues the downward trend seen from 2012. More than half (59%) reported using cannabis on a greater than weekly basis, with 16% of RPU reporting that they were daily users of cannabis (32% in 2014).

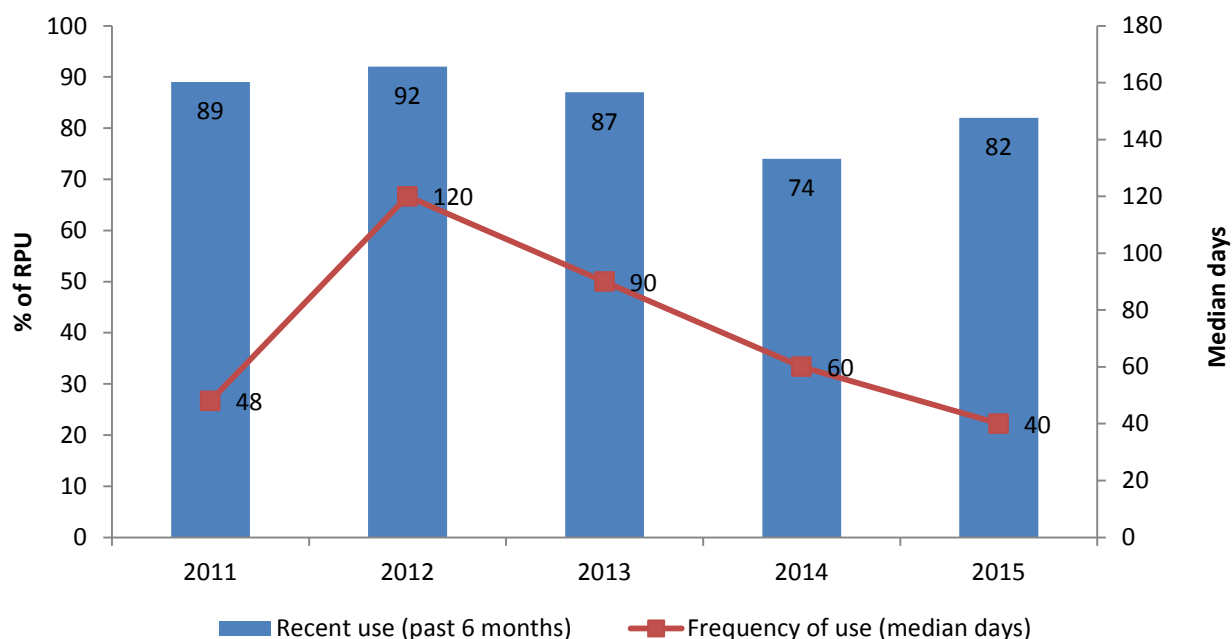
Table 13: Patterns of cannabis use, ACT RPU, 2011-2015

Cannabis	2011 (N=80)	2012 (N=51)	2013 (N=77)	2014 (N=100)	2015 (N=99)
Ever used %	98	100	94	86	98
Used last six months %	89	92	87	74	82
Median days used last 6 months	48	120	90	60	40
(range)	(1-180)	(1-180)	(1-180)	(1-180)	(1-180)
Route of administration (%)					
Smoked	99	98	100	96	98
Swallowed	35	34	21	14	11
Vaped (vapourised)†	-	-	-	-	19

Source: EDRS RPU interviews, 2011-2015

† Vapourised added in 2015

Figure 11: Cannabis trends in recent use and median days used, ACT RPU, 2011-2015



Source: EDRS RPU interviews, 2011-2015

Almost half (48%) of those that had recently used cannabis quantified their use in terms of cones. The median number of cones used on the last occasion of use was three (n=37, range=1-20). Twenty per cent of those that had recently used cannabis quantified their use in terms of joints. The median number of joints used on the last occasion of use was one (n=20, range=0.5-5).

The vast majority of RPU (98%) who had used cannabis in the preceding six months reported that they had recently smoked it and 11% reported that they had recently swallowed it. In 2015, the EDRS included the option to nominate vapourising (i.e. the use of a vapouriser, commonly known as 'vaping') as an additional route of administration. Almost one in five (19%) indicated they had used cannabis this way in the past six months.

One in ten RPU who reported that they had binged on psychostimulants in the preceding six months reported that they had used cannabis during these binges. Forty-five per cent of RPU who reported that they used other drugs the last time they were under the influence of ecstasy reported that they had used cannabis. Ninety per cent of RPU who reported that they used drugs while coming down from ecstasy (n=40) used cannabis.

KEY EXPERT COMMENTS: CANNABIS

- KE commonly reported that cannabis was cheap to buy and easy to obtain. Much harm seen by services is compounded by the illegality of the drug and the social stigma that is attached to its use.

4.7. NEW PSYCHOACTIVE SUBSTANCES (NPS)

Key Points

- Use of NPS remains very low in the ACT.
- 2CB and 2CI remain the most commonly reported NPS used.
- Use of synthetic cannabinoids remains stable.

From 2010 onward, the EDRS has attempted to systematically investigate a group of new or emerging drugs known as 'new psychoactive substances' (NPS; also known as research chemicals, analogues, legal highs, herbal highs, party pills).

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

Table 14: New psychoactive substances (NPS)

Street name	Chemical name	Information on drug	Information on use and effects
Phenethylamines			
2CI	2,5-dimethoxy-4-iodophenethylamine	A psychedelic drug with stimulant effects	Recent reports suggest that 2CI is slightly more potent than the closely related 2CB.
2CB	4-bromo-2,5-dimethoxyphenethylamine	A psychedelic drug with stimulant effects	2CB is sold as a white powder sometimes pressed in tablets or gel caps. Commonly taken orally but can also be snorted.
2CE	2,5-dimethoxy-4-ethylphenethylamine	A psychedelic drug with stimulant effects	Commonly taken orally and highly dose-sensitive.
NBOMe	N-methoxybenzyl	Psychedelic drugs with stimulant effects	NBOMe includes a series of drugs that contain an N-methoxybenzyl group. The most common NBOMes that are used recreationally are extensions of the 2C family of phenethylamine psychedelics , and include 25B-NBOMe, 25I-NBOMe and 25C-NBOMe. Available in powder, tablet and liquid formulations.
DOI (death on impact)	2,5-dimethoxy-4-iodoamphetamine	A psychedelic phenethylamine	Requires only very small doses to produce full effects. Has been found

			on blotting paper and may be sold as LSD. ¹
PMA	Paramethoxyamphetamine; 4-methoxy-amphetamine	A synthetic hallucinogen that has stimulant effects	Ingesting a dose of <50mg (usually one pill or capsule) without other drugs or alcohol induces symptoms reminiscent of MDMA, although PMA is more toxic than MDMA. Doses >50mg are considered potentially lethal (due to the risk of overheating).
Tryptamines			
DMT	Dimethyltryptamine	A hallucinogenic drug in the tryptamine family	Similar to LSD though its effects are said to be more powerful. Pure DMT is usually found in crystal form but has been reportedly sold in powder form. ²
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. 5-MeO-DMT is mostly seen in crystalline form ³ 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.
Methylone	3,4-methylenedioxy-N-methylcathinone	An entactogen and stimulant of the phenethylamine , amphetamine , and cathinone classes	Effects are primarily psychostimulant in nature.

2CB: The proportion of participants reporting recent use of 2CB in 2015 (18%) increased significantly from figures reported in 2014.

All other NPS recorded very low numbers (<10). For further information please see the 2015 National Ecstasy and Related Drugs Reporting System Report (Sindicich, Stafford, & Breen, 2016)

¹ Erowid: <http://www.erowid.org/chemicals/doi/doi.shtml>

² Drugscope: <http://www.drugscope.org.uk/resources/drugsearch/drugsearchpages/dmt>

³ Erowid: http://www.erowid.org/chemicals/5meo_dmt/5meo_dmt.shtml

Table 15: Use of new psychoactive substances (NPS), ACT RPU, 2014-2015

New psychoactive substances	2014 Recent use (%)	2015 Recent use (%)
Phenethylamines (2C-x class)		
2CB	6	18↑
2CI	3	3
2CE	-	1
Phenethylamines (beta-ketones)		
Mephedrone	-	2
methyldone / black MDMA	2	-
Cathinone – other	-	-
Ivory Wave / MDPV	-	1
Phenethylamines (amphetamine-based)		
Mescaline	-	3
MDAI	-	-
Ergolines		
LSA (Hawaiian Baby Woodrose)	1	-
Tryptamines		
5MEO-DMT	-	-
DMT	7	6
(Dissociative)		
DXM (cough syrup)	1	7
Methoxetamine (MXE)	-	2
Salvia divinorum	-	1
Piperazines		
BZP	-	-
Synthetic cannabinoids	1	1

Source: EDRS RPU interviews, 2014-2015

↓ significant decrease at 95% CI $p < 0.05$

4.8. OTHER DRUG USE

Key Points

- Half of recent alcohol users reported more than weekly drinking.
- A third (37%) of RPU who had used tobacco recently reported using tobacco daily.
- Smaller proportions of RPU reported using heroin, methadone, buprenorphine, other opioids, GHB, MDA, ketamine and pharmaceutical stimulants.

4.8.1 Alcohol

The entire 2015 ACT EDRS sample reported lifetime use of alcohol and 99% reported recent alcohol use. One in five participants nominated alcohol as their drug of choice compared to just one in twenty in 2014.

Alcohol was consumed on a median of 30 days (approximately weekly, range=1-180) in the six months prior to interview. This remains stable from 2014. Half (55%) of recent alcohol users reported using alcohol more than weekly in the past six months.

4.8.2 Tobacco

The majority (90%) of the 2015 sample reported lifetime use of tobacco, and 79% of the 2015 sample reported use of tobacco in the six months preceding interview. Of those who reported using tobacco in the previous six months, 37% (n=29) reported daily tobacco use.

4.8.3 Illicit Benzodiazepines

The illicit use of benzodiazepines remains low among RPU with one in four (25%) reporting ever having used an illicit benzodiazepine. Fifteen per cent of participants reported using an illicit benzodiazepine in the six months preceding interview on a median of two days (range 1-56).

4.8.4 Inhalants

Amyl nitrite: Lifetime use of amyl nitrate remains stable at 26%. In 2015, 9% of RPU reported using amyl nitrate in the six months preceding interview. The use of amyl nitrite occurred on a median of one day (range=1-10).

Nitrous oxide: Lifetime use of nitrous oxide remained stable at 41% (32% in 2014). One in four RPU reported the recent use of nitrous oxide (15% in 2014). The median days of use was nine (range=1-48). The median amount of 'bulbs' used in a typical session was reported to be six (range=2-30) and a median of 12 bulbs (range=2-70) was reported to be used in a heavy session.

4.8.5 Mushrooms

In 2015, almost half (49%) reported lifetime use of mushrooms. The proportion of RPU reporting use of mushrooms in the preceding six months remained relatively stable at 24% (17% in 2014). The median days of use was one (range=1-48).

4.8.6 Heroin and other opiates

Heroin: Five per cent of the sample reported lifetime use of heroin and two participants reported recent use of heroin. No participants reported heroin as their drug of choice.

Methadone: None of the 2015 ACT participants reported having used methadone.

Buprenorphine: One participant reported lifetime use of buprenorphine but none reported recent use.

4.8.7 Gamma-hydroxy butyrate (GHB)

In 2015, one in twenty RPU (5%) reported ever having tried GHB, and four participants reported that they had used GHB in the six months preceding interview.

4.8.8 MDA

MDA (3,4-methylenedioxyamphetamine) is a stimulant hallucinogen and, like ecstasy, is part of the phenethylamine family. It generally comes in powder or tablet form and occasionally as pills sold as ecstasy.

In 2015, 16% of RPU reported that they had ever used MDA and 10% of participants reported having recently used MDA. Median days of use was two and a half days (range=1-20).

4.8.9 Ketamine

One in five (22%) RPU reported the lifetime use of ketamine in 2015, while one in ten reported recent use (9%). Median days of use was one day (range=1-6).

4.8.10 Pharmaceutical stimulants

In 2015, thirty-six per cent of the sample reported ever having used illicit pharmaceutical stimulants, while approximately one in five (18%) reported the recent use of illicit pharmaceutical stimulants. The median number of days of use in the past six months among those RPU who had used illicit pharmaceutical stimulants was two and half days (range=1-30).

5 PRICE, PURITY, AVAILABILITY AND PURCHASING PATTERNS

5.1. ECSTASY

Key points

- Price remained stable across all forms.
- The majority of respondents reported ecstasy to be easy or very easy to obtain.
- The majority of respondents bought ecstasy from a friend for themselves and about half reported also purchasing for others.
- The median number of tablets bought at one time was four.

Price

In the 2015 ACT EDRS, 81% RPU commented on the price, purity and availability of ecstasy. RPU reported the current median price for an ecstasy tablet to be \$25 (\$18-\$35) (Table 16). Sixty per cent of the RPU sample commented on the price of an ecstasy capsule. The median price reported in 2015 was \$26 (\$20-\$30). Small numbers reported the median price of a gram of ecstasy powder was \$150 (\$25-\$275) and the median price per point of ecstasy crystal was \$30 (\$10-\$60). Caution is advised when interpreting these results.

Table 16: Price for ecstasy, ACT RPU, 2011-2015

Ecstasy	2011	2012	2013	2014	2015
Median price per tablet	\$30	\$25	\$25	\$25	\$25
Median price per capsule	\$30	\$30	\$30	\$30	\$26
Median price per gram of powder	\$200	\$300	\$300	\$300^	\$150^
Median price per point of crystal	-	-	\$25	\$30	\$30^

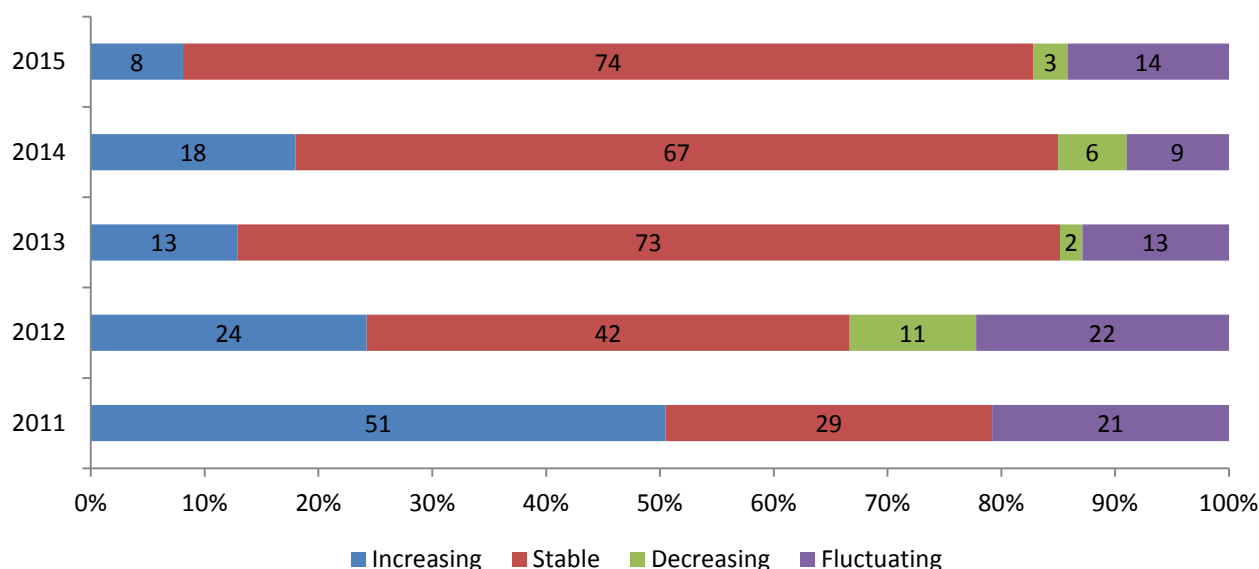
Source: EDRS RPU interviews, 2011-2015

↑ significant increase at 95% CI $p > 0.05$

^ small numbers, interpret with caution

Almost three-quarters (74%) of respondents in 2015 reported that the price of ecstasy was stable in the past six months (Figure 12).

Figure 12: Ecstasy price change in last six months, ACT RPU, 2011-2015



Source: EDRS RPU interviews, 2011-2015

RPU Purity reports

Table 17 presents the purity reports of ACT RPU from 2011 to 2015, regarding both the perceived current purity and the change in the perceived purity of ecstasy available to them. The majority of those who commented reported purity to be medium (36%) or high (33%).

Table 17: Purity and purity change of ecstasy, ACT RPU, 2011-2015

Purity - ecstasy	2011	2012	2013	2014	2015
<i>Current purity</i>	n=79	n=50	n=70	n=98	n=76
% Low	11	32	27	13	11
% Medium	8	26	34	46	36
% High	53	26	19	32	33
% Fluctuates	28	16	20	9	21
<i>Purity change</i>	n=79	n=47	n=64	n=98	n=72
% Increasing	51	13	14	16	10
% Stable	9	32	33	39	74
% Decreasing	10	30	31	25	3
% Fluctuating	30	26	22	20	14

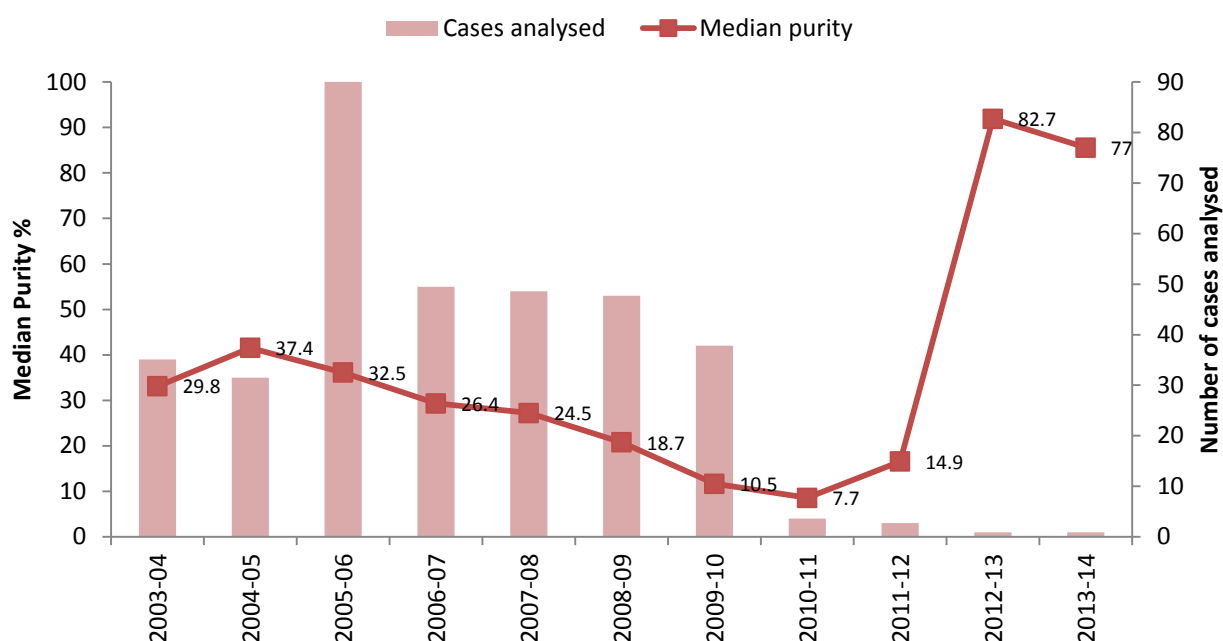
Source: EDRS RPU interviews, 2011-2015

↑↓ significant increase/decrease at 95% CI $p > 0.05$

Estimates of purity by users are necessarily subjective and depend, among other factors, on users' tolerance to the drug. Laboratory analyses of the purity of seizures provide more objective evidence regarding purity changes, and should be considered in addition to the subjective reports of users. It is also important to note the limitation of the average purity figures; namely, that not all illicit drugs seized by Australia's law enforcement agencies are routinely analysed for purity. In some instances, seized drugs will be analysed only in a contested court matter. The purity figures are, therefore, related to an unrepresentative sample of the illicit drugs available in Australia. Notwithstanding this limitation, the purity figures remain the most objective measure of changes in purity levels available in Australia.

The ACC routinely collects data on the purity of phenethylamines seized by the ACT Police. The analysis of the purity of phenethylamine seizures includes purity analysis of drugs such as 3,4-methylenedioxymethamphetamine (MDMA), MDA, PMA and mescaline. The median purity of phenethylamines seizures analysed in the ACT between the 2003-04 financial year and the 2013-14 financial year are presented in Figure 13. In the ACT, only one seizure has been analysed with a median purity of 77%. As only one seizure was analysed it is difficult to comment on trends in purity. As can be seen in Figure 13, cases analysed since 2010 have been low in number so caution is advised when interpreting any apparent increase in purity.

Figure 13: Median purity of phenethylamine seizures, ACT, 2003-04 to 2013-14



Source: Australian Bureau of Criminal Intelligence, 2000-2015. Note: Data not available for the 2014-/15 financial year.

Availability

Table 18 summarises the reports of RPU on the availability of ecstasy in the ACT for the years 2011 to 2015. Three quarters of RPU commented on the availability of ecstasy. Most respondents reported that ecstasy was either very easy (57%) or easy (38%) to obtain. One in twenty (5%) RPU reported that ecstasy was difficult to obtain. Seventy-two per cent of RPU indicated that the ease with which ecstasy could be obtained had remained stable and 20% reported that ecstasy was easier to obtain.

Table 18: Availability and source of ecstasy, ACT RPU, 2011-2015

Ecstasy availability	2011	2012	2013	2014	2015
Current availability	n=79	n=51	n=74	n=100	n=79
% <i>Very easy</i>	33	37	45	41	57
% <i>Easy</i>	47	51	39	47	38
% <i>Difficult</i>	20	10	16	11	5
% <i>Very difficult</i>	-	2	-	1	-
Availability change	n=76	n=49	n=71	n=99	n=75
% <i>More difficult</i>	15	12	17	16	4
% <i>Stable</i>	49	71	42	54	72
% <i>Easier</i>	24	10	30	23	20
% <i>Fluctuates</i>	13	6	11	6	4
Persons scored from: #	n=79	n=50	n=76	n=100	n=78
<i>Friends (%)</i>	70	64	62	65	60
<i>Known dealers (%)</i>	23	28	25	23	24
<i>Acquaintances (%)</i>	3	6	5	6	6
<i>Unknown dealers (%)</i>	4	0	1	3	5
<i>Online (%)</i>	-	-	3	-	1
Locations scored from: #	n=79	n=50	n=70	n=100	n=76
<i>Friend's home (%)</i>	39	32	27	43	34
<i>Dealer's home (%)</i>	5	18	17	9	8
<i>Nightclub (%)</i>	16	20	11	12	9
<i>Agreed public location (%)</i>	10	4	4	9	15
<i>At own home (%)</i>	15	18	14	11	16
<i>Other (%)</i>	14	8	23	16	18
<i>Online (%)</i>	-	-	3	-	-

Source: EDRS RPU interviews, 2011-2015

of those who purchased ecstasy in the past six months.

^ Online category added in 2013

Ecstasy markets and patterns of purchasing ecstasy

In 2015, participants were asked to nominate from whom they had last purchased ecstasy. The most common people RPU had obtained ecstasy from remained friends (60%) and known dealers (24%). In 2013, a response category for 'online' was added. In 2015, one RPU reported purchasing ecstasy online. The most common locations at which ecstasy had last been purchased were at a friend's home (34%), at their own home (16%), an agreed public location (15%) at nightclubs (9%) or private parties (9%).

Table 19 summarises ecstasy purchasing practices of RPU in the ACT in 2011 to 2015. In 2015, the median number of people that RPU reported they had purchased ecstasy from in the previous six months was two (range=1-8). Half (54%) of RPU indicated that, when purchasing ecstasy, they had typically bought for themselves and others, with a similar proportion (42%) reporting that they had only purchased ecstasy for their own personal use in the prior six months.

RPU were also asked to indicate how often they had purchased ecstasy in the past six months. RPU reported that they most commonly purchased ecstasy on a monthly or less basis (72%) or on a fortnightly or less basis (17%). Nine per cent purchased it on a weekly or less basis and two participants had purchased ecstasy more than once a week in the preceding six months.

The median number of ecstasy tablets that RPU reported usually buying when purchasing ecstasy in the past six months was four (range=1-30).

Table 19: Patterns of purchasing ecstasy, ACT RPU, 2011-2015

	2011	2012	2013	2014	2015
Median number of people purchased from#	3	3	3	3	2
Purchased for (%)					
Self only	35	24	34	27	42
Self and others	63	72	61	71	54
Others only	1	2	-	2	-
Did not purchase	1	2	5	0	4
No. of times purchased in the last six months (%)					
0	0	2	-	1	1
1-6	57	31	40	49	72
7-12	28	43	36	37	17
13-24	14	16	12	11	9
25+	1	8	3	2	-
Median no. of ecstasy tablets purchased#	5	5	4	4	4

Source: EDRS RPU interviews, 2011-2015

of those who purchased ecstasy in the last six months

5.2. METHAMPHETAMINE

Key points

- Small proportions of the 2015 ACT EDRS sample were able to comment on methamphetamine powder (speed). Reports were that price, purity and availability had largely remained stable. Caution is advised when interpreting results for price as numbers are small (n=8).
- Very small numbers (n=8) were able to report on the price, purity and availability of crystal methamphetamine and no data was collected on methamphetamine base. Caution is advised when interpreting results.

5.2.1 Methamphetamine powder (speed)

Price

In the 2015 ACT EDRS, 8% of RPU were able to comment on the price of methamphetamine powder (speed). The median reported current price for a gram of speed was \$222.50 (\$125-380). In terms of purchasing points of speed, the median price paid for a point was \$25 (\$20-35). Due to the very low numbers reporting; caution is advised when interpreting these results (Table 20).

Table 20: Price for methamphetamine powder, ACT RPU, 2011-2015

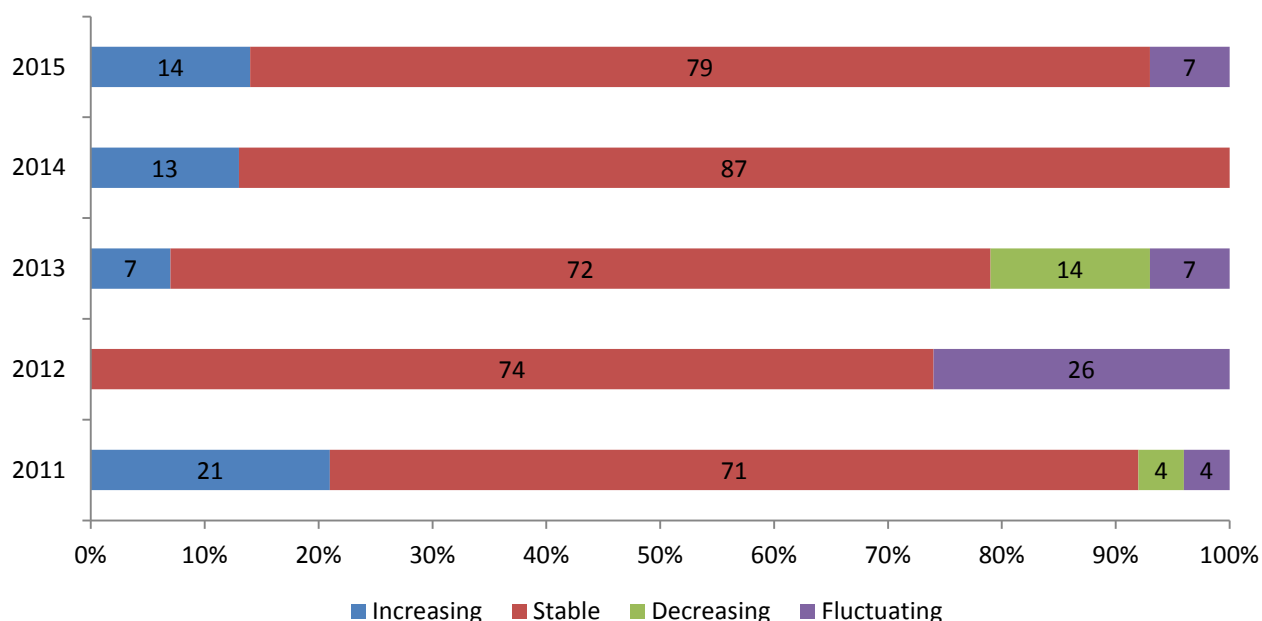
Median price	2011	2012	2013	2014	2015
Point	\$23^	\$40	\$25	\$35	\$25^
(range)	(20-30)	(20-60)	(10-40)	(20-80)	(20-35)
Gram	\$200	\$200	\$200	\$200	\$222.50^
(range)	(90-350)	(100-250)	(100-270)	(100-800)	(125-380)

Source: EDRS RPU interviews, 2011-2015

^ small numbers (<10), interpret with caution

The majority (79%) of the RPU who were able to comment on the change in the price of speed (n=14) reported that the price had remained stable in the preceding six months. One in seven reported that the price had increased in the past six months, as can be seen in Figure 14.

Figure 14: Methamphetamine powder, price change in last 6 months, ACT RPU, 2011-2015



Source: EDRS RPU interviews, 2011-2015

Results based on following response numbers: 2011 (n=24), 2012 (n=26), 2013 (n=38), 2014 (n=22), 2015 (n=14)

RPU reports of Purity

Reports on the purity of methamphetamine powder were mixed. Over half of those who commented reported speed to be of medium purity (56%). A further third (38%) reported purity to be high and 6% reported speed to be of low purity. Half of the respondents who commented on the change in purity of speed believed purity had remained stable in the last six months. A further quarter reported purity to have increased and 19% reported that purity had decreased (Table 21).

Table 21: Purity and purity change of methamphetamine powder, ACT RPU, 2011-2015

	2011	2012	2013	2014	2015
Current purity	n=25	n=26	n=37	n=22	n=16
% Low	20	12	38	33	6
% Medium	32	27	32	43	56
% High	36	46	16	14	38
% Fluctuates	12	15	47	10	-
Purity change	n=21	n=25	n=30	n=15	n=16
% Increasing	14	12	23	-	25
% Stable	52	52	40	48	50
% Decreasing	19	12	17	40	19
% Fluctuating	14	24	20	13	6

Source: EDRS RPU interviews, 2011-2015

Availability

Of the 16 RPU who commented on the availability of speed in the preceding six months, the majority (57%) reported that speed was currently easy (38%) or very easy (19%) to obtain. Forty-four per cent reported that speed was difficult to obtain (Table 22). The majority (75%) of respondents believed that the availability of speed had remained stable. One in five indicated that it had been more difficult to obtain in the previous six months.

Table 22: Availability of methamphetamine powder, ACT RPU, 2011-2015

	2011	2012	2013	2014	2015
Current availability	n=26	n=26	n=38	n=22	n=16
% Very easy	39	58	34	14	19
% Easy	54	39	50	73	38
% Difficult	4	4	16	14	44
% Very difficult	4	-	-	-	-
Availability change	n=26	n=25	n=35	n=20	n=16
% More difficult	8	8	6	20	19
% Stable	69	80	60	75	75
% Easier	23	12	29	5	6
% Fluctuates	-	-	6	-	-

Source: EDRS RPU interviews, 2011-2015

5.2.2 Methamphetamine base

Price

No participants were able to comment on the price of methamphetamine base in 2015. Data for previous years is presented below.

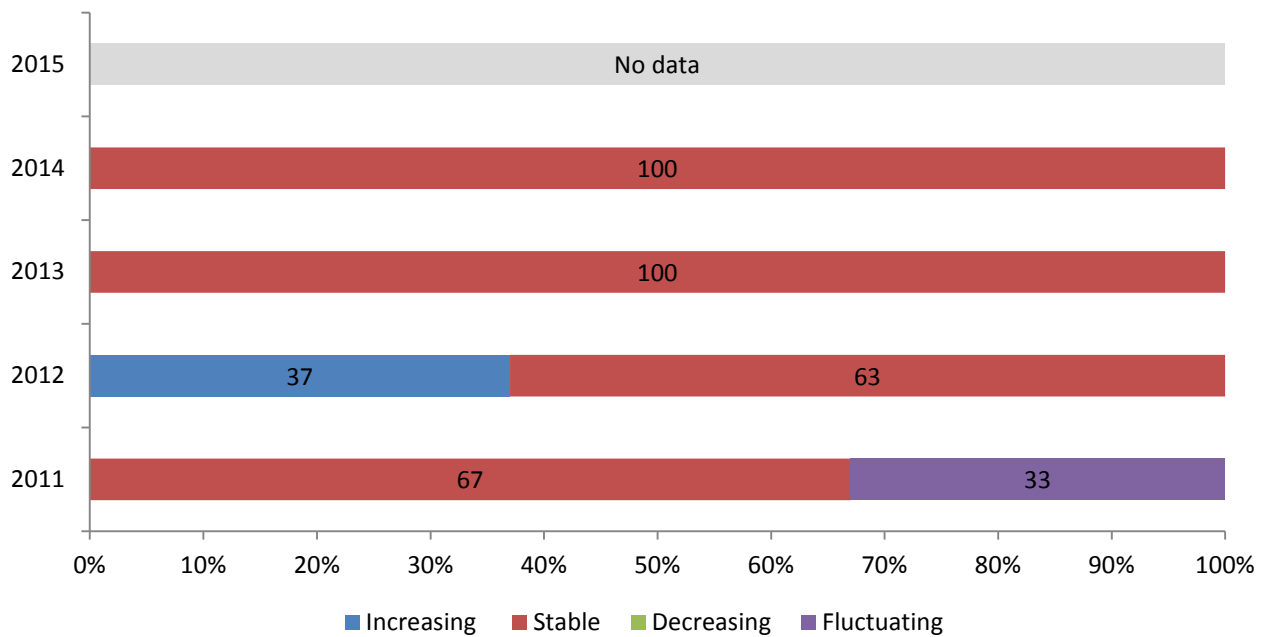
Table 23: Price for methamphetamine base, ACT RPU, 2011-2015

Median price	2011	2012	2013	2014	2015
Point	\$23^	\$50^	-	\$30^	-
(range)	(20-25)	(20-80)	-	(no range)	-
Gram	\$225^	\$250^	\$225^	\$120^	-
(range)	(100-350)	(150-300)	(150-300)	(no range)	-

Source: EDRS RPU interviews, 2011-2015

^ small numbers (<10), interpret with caution

Figure 15: Methamphetamine base, price change, ACT RPU, 2011-2015



Source: EDRS RPU interviews, 2011-2015

Results based on following response numbers: 2011 (n=6), 2012 (n=8), 2013 (n=1), 2014 (n=2), 2015 (n=0)

RPU reports of Purity

No participants were able to comment on the purity of methamphetamine base in 2015. Data from previous years is presented below.

Table 24: Purity and purity change of methamphetamine base, ACT RPU, 2011-2015

	2011	2012	2012	2014	2015
Current purity	n=8	n=9	n=1	n=2	n=0
% Low	-	-	-	50	-
% Medium	-	22	-	-	-
% High	88	68	100^	-	-
% Fluctuates	13	11	-	50	-
Purity change	n=6	n=9	n=1	n=1	n=0
% Increasing	-	11	-	-	-
% Stable	67	56	100	-	-
% Decreasing	-	-	-	-	-
% Fluctuating	33	22	-	100	-

Source: EDRS RPU interviews, 2011-2015

Availability

No participants were able to comment about the availability of methamphetamine base. Data from previous years is presented below.

Table 25: Availability of methamphetamine base, ACT RPU, 2011-2015

	2011	2012	2013	2014	2015
Current availability	n=8	n=9	n=1	n=1	n=0
% Very easy	13	56	100	-	-
% Easy	50	11	-	100	-
% Difficult	38	33	-	-	-
% Very difficult	-	-	-	-	-
Availability change	n=6	n=9	n=1	n=2	n=0
% More difficult	17	11	-	-	-
% Stable	83	67	100	100	-
% Easier	-	11	-	-	-
% Fluctuates	-	11	-	-	-

Source: EDRS RPU interviews, 2011-2015

5.2.3 Crystal methamphetamine

Price

Four RPU (4%) commented on the price of crystal methamphetamine (Table 26). The median price paid for the last point (n=3) of crystal purchased was \$80 (range=\$50-90). One participant reported that the price for a gram of crystal was \$500 (no range). Reports on the change in price were varied. Caution is advised when interpreting results as numbers who were able to report on crystal were extremely low.

Table 26: Price for crystal methamphetamine, ACT RPU, 2011-2015

Median price	2011	2012	2013	2014	2015
Point	\$80^	\$100	\$80^	\$100^	\$80^
(range)	(50-100)	(40-100)	(60-100)	(60-120)	(50-90)
Gram	-	\$350^	\$725^	\$375^	\$500^
(range)	-	(250-400)	(650-800)	(250-500)	(no range)

Source: EDRS RPU interviews, 2011-2015

^ Small numbers (<10), interpret with caution

RPU reports of Purity

In 2015, small numbers commented on the current purity of crystal (n=3). Responses should therefore be interpreted with caution. Purity was reported as high and stable.

Table 27: Purity and purity change of crystal methamphetamine, ACT RPU, 2011-2015

	2011	2012	2013	2014	2015
Current purity	n=3	n=12	n=4	n=4	n=3
% Low	33	17	25^	25	-
% Medium	-	25	75^	50	-
% High	67	59	-	25	100
% Fluctuates	-	-	-	-	-
Purity change	n=3	n=12	n=3	n=3	n=3
% Increasing	-	17	-	-	-
% Stable	67	50	67	-	100
% Decreasing	-	8	33	67	-
% Fluctuates	33	17	-	33	-

Source: EDRS RPU interviews, 2011-2015

^ Small numbers (<10), interpret with caution

Availability

In 2015 four RPU commented on the availability of crystal methamphetamine and therefore responses should be interpreted with caution. Results for the reported availability of crystal over the preceding six months were mixed (Table 28).

Table 28: Availability of crystal methamphetamine, RPU ACT, 2011-2015

	2011	2012	2013	2014	2015
Current availability	n=3	n=12	n=4	n=5	n=4
% Very easy	-	50	50	-	-
% Easy	67	42	-	40	75
% Difficult	33	8	50	60	25
% Very difficult	-	-	-	-	-
Change in availability	n=3	n=12	n=5	n=4	n=4
% More difficult	33	-	40	50	25
% Stable	67	92	40	25	50
% Easier	-	-	20	-	25
% Fluctuates	-	8	-	25	-

Source: EDRS RPU interviews, 2011-2015

Methamphetamine markets and patterns of purchasing

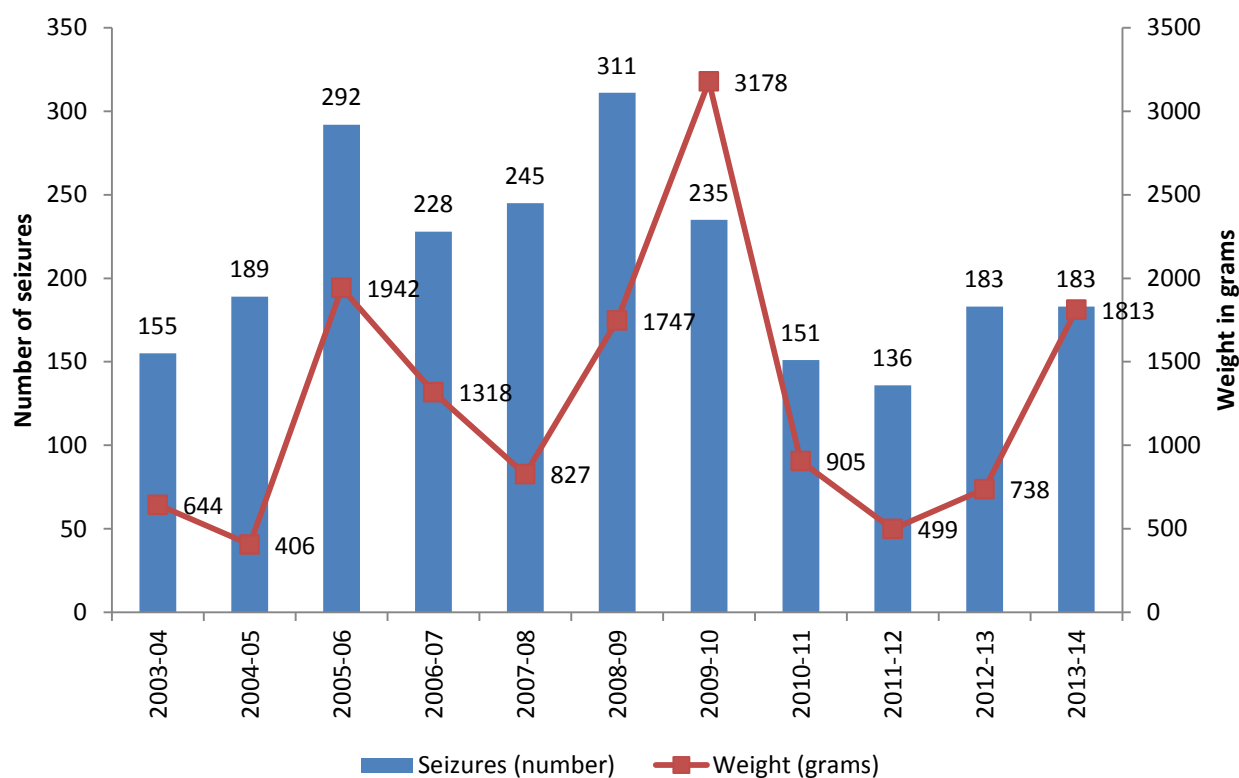
Participants were asked to nominate from whom they had last purchased methamphetamine in the six months prior to interview. Friends (69%) were the most common source RPU obtained speed from followed by known dealers (25%). Crystal was obtained from known dealers (75%).

The locations at which RPU last purchased crystal methamphetamine was primarily agreed public locations (67%) and methamphetamine powder was commonly purchased from a friend's home (44%) or a dealer's home (20%).

Law enforcement seizure data

The number and weight of amphetamine-type seizures in the ACT from 2003-04 to 2013-14 are presented in Figure 17. It must be noted that amphetamine-type stimulants include amphetamine, methamphetamine and phenethylamines. The weight of seizures made in the ACT remained stable in the 2013-2014 period, with 183 seizures weighing 1,813g.

Figure 16: Amphetamine-type stimulant seizures by ACT local police, 2003-04 to 2013-14



Source: Australian Bureau of Criminal Intelligence, 2000-2015. Note: Data not available for the 2014-15 financial year.

5.3. COCAINE

Key Points

- The median price of a gram of cocaine in 2015 was \$300.
- A third of RPU report the price of cocaine is increasing.
- Reports of purity were mixed.

Price

Twenty-seven per cent of participants (n=27) commented on the current price of cocaine. The median reported price paid for the last gram of cocaine purchased by RPU remained stable at \$300 per gram (range=\$200-500) (Table 29).

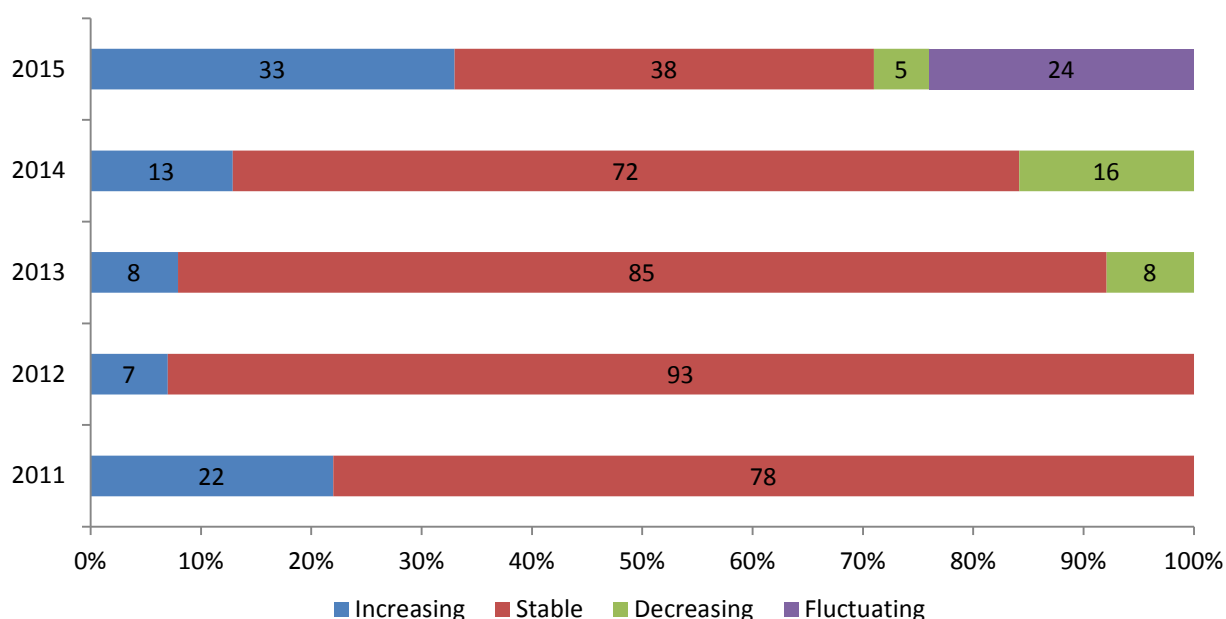
Table 29: Price for cocaine, ACT RPU, 2011-2015

Median price	2011	2012	2013	2014	2015
Gram	\$300	\$300	\$300	\$300	\$300
(range)	(150-350)	(300-500)	(300-900)	(100-550)	(200-500)

Source: EDRS RPU interviews, 2011-2015

Reports on the change in price were mixed with 38% of RPU reporting the price had remained stable and a third (33%) reporting the price had increased (Figure 18).

Figure 17: Cocaine price change, ACT RPU, 2011-2015



Source: EDRS RPU interviews, 2011-2015

Results based on following response numbers: 2011 (n=23), 2012 (n=14), 2013 (n=18), 2014 (n=32), 2015 (n=21)

RPU reports of purity

In the 2015 EDRS, reports on the current purity of cocaine were mixed (see Table 30). Forty-six per cent of respondents reported the current purity of cocaine to be medium and a third (33%) reported purity to be low.

Reports of change in purity in the six months prior to interview varied, with 60% reporting purity had remained stable, 20% reporting purity had decreased and 20% reporting that purity had fluctuated in the six months prior to interview.

Table 30: Purity and purity change of cocaine, ACT RPU, 2011-2015

	2011	2012	2013	2014	2015
Current purity	n=26	n=15	n=15	n=37	n=24
% Low	39	40	38	19	33
% Medium	31	27	38	43	46
% High	12	27	25	19	21
% Fluctuates	19	7	-	19	-
Purity change	n=22	n=12	n=12	n=32	n=20
% Increasing	14	8	33	3	-
% Stable	32	50	42	66	60
% Decreasing	18	25	17	9	20
% Fluctuating	36	17	8	22	20

Source: EDRS RPU interviews, 2011-2015

Availability

In 2015, reports on the availability of cocaine were varied. Almost three quarters (72%) of respondents indicated that cocaine was easy (52%), or very easy (20%), and 24% reported it difficult or very difficult (4%) to obtain.

Reports on the change in availability in the six months prior to interview were varied. Over half (56%) of respondents believed that the availability of cocaine had remained stable over the previous six months and a quarter (24%) believed it had become easier.

Table 31: Availability of cocaine, ACT RPU, 2011-2015

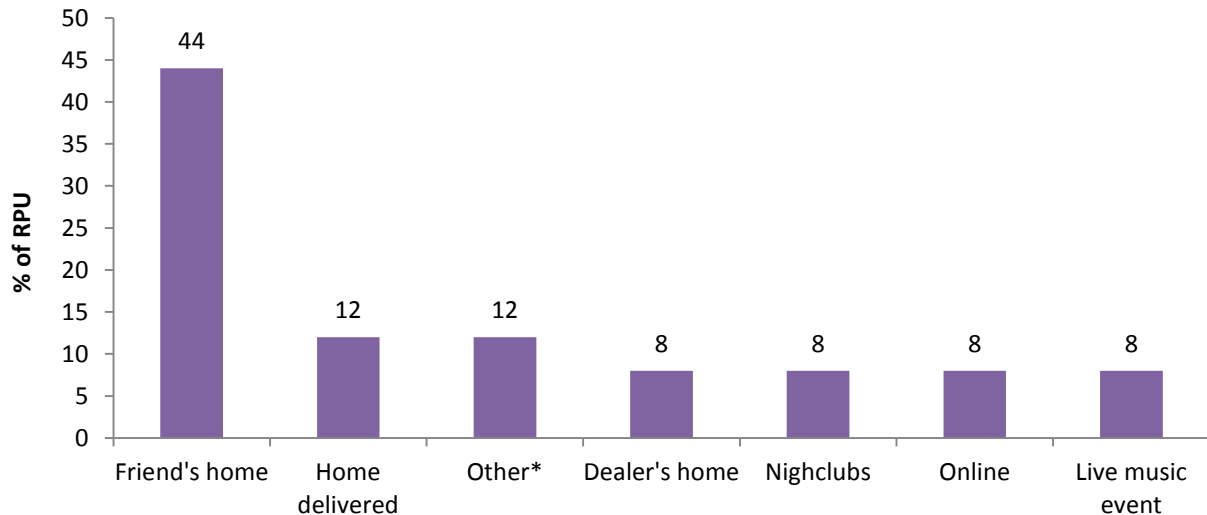
	2011	2012	2013	2014	2015
Current availability	n=29	n=15	n=18	n=33	n=25
% Very easy	7	27	17	32	20
% Easy	38	40	39	32	52
% Difficult	48	27	39	32	24
% Very difficult	7	7	6	8	4
Change in availability	n=26	n=15	n=14	n=33	n=25
% More difficult	23	-	-	3	8
% Stable	58	93	64	88	56
% Easier	15	7	29	6	24
% Fluctuates	4	-	7	-	12

Source: EDRS RPU interviews, 2011-2015

Cocaine markets and patterns of purchasing

The sources RPU most commonly reported last obtaining cocaine from in the preceding six months were friends (73%) and known dealers (8%). The most common locations at which RPU (n=25) reported last obtaining cocaine in the six months prior to interview were a friend's home (44%), home delivered (12%), a dealer's home (8%), nightclubs (8%), online (8%) and at a live music event (8%).

Figure 18: Last location purchased cocaine, ACT RPU, 2015



Source: EDRS RPU interviews, 2015

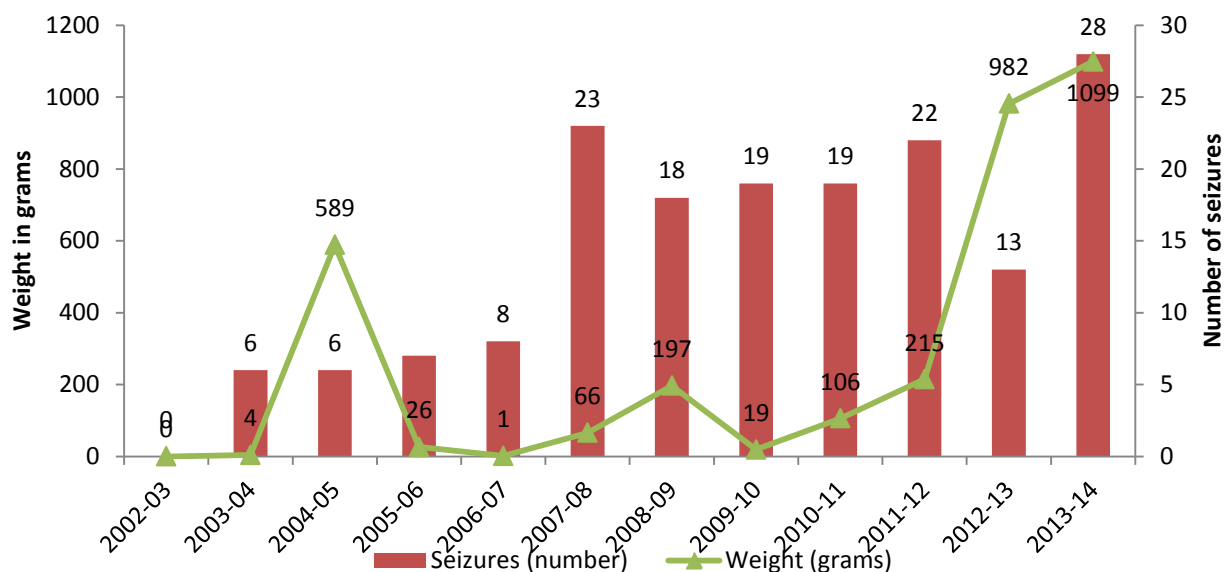
Note: Results based on response numbers n=25.

* includes private parties, agreed public location, work

Law enforcement seizure data

Figure 20 shows the number and weight of cocaine seizures in the ACT from 2002-03 to 2013-14. Recent data reports 28 seizures between July 2013 and June 2014 weighing 1,099 grams.

Figure 19: Cocaine seizures, 2002/03 to 2013/14



Source: Australian Bureau of Criminal Intelligence, 2003-2015. Note: Data not available for the 2014-15 financial year.

5.4. LSD

Key Points

- The median price reported for a tab of LSD has increased to \$25.
- The majority (65%) of respondents reported that purity was high.
- The majority (79%) of respondents reported that the availability of LSD remained stable.

Price

In 2015, 24% (n=24) of the EDRS sample commented on the current price, purity and availability of LSD in the ACT. In 2015, the median reported last price for a tab of LSD increased from \$20 across the last four years to \$25 (range=10-75) (Table 32).

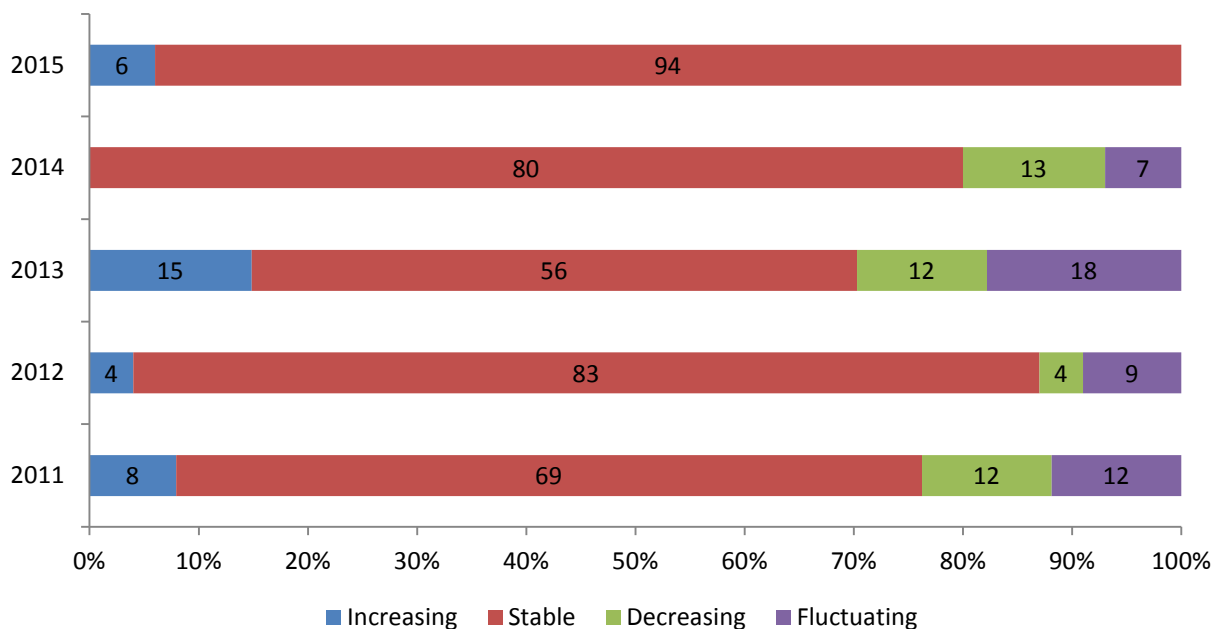
Table 32: Price of LSD, ACT RPU, 2011-2015

	2011	2012	2013	2014	2015
Tab	\$20	\$20	\$20	\$20	\$25
(range)	(10-30)	(10-40)	(10-30)	(12-25)	(10-75)

Source: EDRS RPU interviews, 2011-2015

Of the 16 respondents who commented on the change in price, most (94%) reported that the price remained stable in the past six months, and only 6% reported the price had increased (Figure 16).

Figure 20: LSD price changes, ACT RPU, 2011-2015



Source: EDRS RPU interviews, 2011-2015

Results based on following response numbers: 2011 (n=26), 2012 (n=16), 2013 (n=37), 2014 (n=15), 2015 (n=16)

RPU reports of purity

In 2015, 65% of those that were able to comment on LSD purity reported that the current purity was high (see Table 33). Of the RPU who were able to comment on the change in purity of LSD, 79% reported that it had remained stable.

Table 33: Purity and purity change of LSD, ACT RPU, 2011-2015

	2011	2012	2013	2014	2015
Current purity	n=26	n=21	n=35	n=16	n=26
% Low	12	10	40↑	0	8
% Medium	50	33	31	31	19
% High	19	48	14	50	65
% Fluctuates	19	10	14	19	8
Purity change	n=25	n=21	n=29	n=16	n=19
% Increasing	8	5	24	19	11
% Stable	44	71	41	44	79
% Decreasing	20	5	21	19	-
% Fluctuating	28	19	14	19	11

Source: EDRS RPU interviews, 2011-2015

Availability

About half (51%) of the RPU sample who were able to comment on LSD reported that the substance was difficult (44%) or very difficult (7%) to obtain, while 26% reported it was easy to obtain or very easy (22%) (see Table 34).

Table 34: Availability and availability change of LSD, ACT RPU, 2011-2015

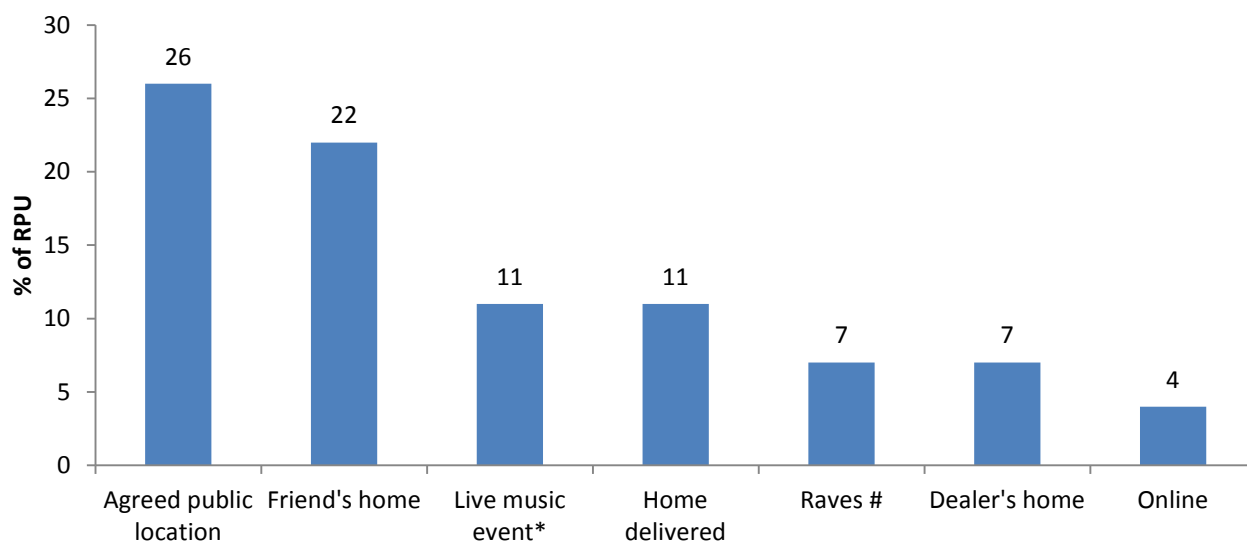
	2011	2012	2013	2014	2015
Current availability	n=28	n=25	n=37	n=16	n=27
% Very easy	25	24	32	25	22
% Easy	50	32	32	44	26
% Difficult	25	40	27	25	44
% Very difficult	0	4	8	0	7
Availability change	n=29	n=23	n=35	n=16	n=22
% More difficult	7	13	14	8	9
% Stable	76	78	46	70	77
% Easier	10	4	26	23	9
% Fluctuates	7	4	14	0	5

Source: EDRS RPU interviews, 2011-2015

LSD markets and patterns of purchasing

RPU reported primarily obtaining LSD from friends (44%) and known dealers (26%) in the preceding six months. The locations at which RPU reported most frequently obtaining LSD from in the six months prior to interview (see Figure 22) were at an agreed public location (26%), a friend's home (22%), live music event/concert/festival (11%), home delivered (11%), raves, doofs, and dance parties (7%), dealer's home (7%) and online (4%).

Figure 21: Last locations LSD purchase, ACT RPU, 2015



Source: EDRS RPU interviews, 2015

#includes doofs/dance parties

*includes concerts/festivals

5.5. CANNABIS

Key Points

- The median price paid in 2015 for a gram of hydroponic cannabis was \$20 and for an ounce was \$280.
- The median price paid for a gram of bush cannabis was \$17.50.
- The majority of participants reported that the price of both hydro and bush had remained stable in the previous six months.
- The majority (92%) that commented reported that the potency of hydro was medium or high.
- The majority of participants reported that the purity of both hydro and bush had remained stable in the previous six months.

Questions regarding the price, purity and availability of cannabis related to the two main forms of cannabis; i.e. hydroponic (indoor-grown) cannabis (hydro), and bush (outdoor-cultivated) cannabis (bush).

5.5.1 Hydroponic

Price

Nineteen per cent of RPU were able to report on the last price paid for a gram of hydroponic cannabis, with the median price reported to be \$20 (range=\$10-20; see Table 35). Nine per cent of RPU were able to comment on the last price paid for an ounce of hydroponic cannabis, with the median price being \$280 (range=\$250-340).

Table 35: Price of hydroponic cannabis, ACT RPU, 2011-2015

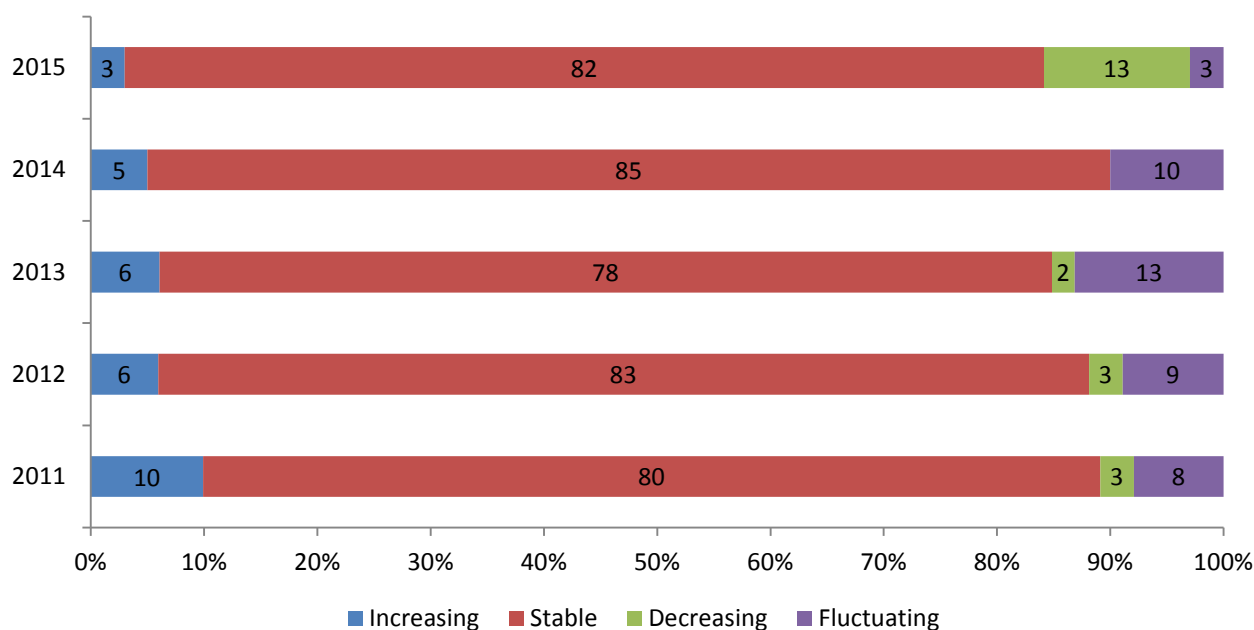
Hydroponic cannabis	2011	2012	2013	2014	2015
Median price (range)					
Gram	\$20	\$20	\$20^	\$20	\$20
(range)	(10-20)	(10-25)	(10-20)	(10-45)	(10-20)
Ounce	\$290	\$280	\$280	\$280	\$280^
(range)	(250-350)	(50-350)	(240-360)	(240-320)	(250-340)

Source: EDRS RPU interviews, 2011-2015

^ small numbers reporting <10, caution advised when interpreting

The majority (82%) of the RPU who were able to comment reported that the price of hydro had remained stable in the preceding six months (Figure 23).

Figure 22: Hydroponic cannabis price changes, ACT RPU, 2011-2015



Source: EDRS RPU interviews, 2011-2015

Results based on following response numbers: 2011 (n=40), 2012 (n=35), 2013 (n=47), 2014 (n=44), 2015 (n=39)

RPU reports of potency

Reports of potency and potency change in hydroponic cannabis are presented in Table 36. Of those that were able to report on the potency of hydro (n=36), the majority reported purity to be high (53%) or medium (39%). The majority of RPU reported that the potency of hydro in the six months preceding interview had been stable (54%).

Table 36: Potency of hydroponic cannabis, ACT RPU, 2011-2015

	2011	2012	2013	2014	2015
Current potency	n=42	n=36	n=50	n=44	n=36
% High	43	47	52	52	53
% Medium	43	39	32	25	39
% Low	0	6	4	11	0
% Fluctuates	14	8	12	0	8
Potency change	n=39	n=34	n=49	n=43	n=35
% Increasing	10	9	20	14	20
% Stable	69	68	41	51	54
% Decreasing	0	6	6	14	9
% Fluctuating	21	18	33	21	17

Source: EDRS RPU interviews, 2011-2015

Availability of hydroponic cannabis

The availability and availability change data for hydro in the ACT are presented in Table 37. Of those who were able to report on the availability of hydro (n=39) the majority reported that hydro was very easy (51%) and easy (44%) to obtain in the ACT. The majority (87%) also reported that availability had remained stable in the ACT in the preceding six months.

Table 37: Availability of hydroponic cannabis, ACT RPU, 2011-2015

	2011	2012	2013	2014	2015
Current availability	n=42	n=36	n=50	n=42	n=39
% Very easy	62	64	62	55	51
% Easy	33	36	28	38	44
% Difficult	5	-	10	7	5
% Very difficult	-	-	-	-	-
Availability change	n=43	n=35	n=50	n=41	n=39
% More difficult	5	11	14	12	3
% Stable	86	77	60	71	87
% Easier	2	6	14	12	11
% Fluctuating	7	6	12	5	-

Source: EDRS RPU interviews, 2011-2015

Hydroponic cannabis markets and patterns of purchasing

The most common sources of hydro were known friends (65%) and known dealers (28%). The most common places of purchase for hydroponic cannabis were at a friend's home (49%), home delivered (24%) or a dealer's home (14%).

5.5.2 Bush

Six per cent of RPU were able to report on the last price paid for a gram in the last six months in the ACT, with the median price being \$17.50 (range=\$10-20). Only one RPU reported on the last price paid for an ounce of bush, with the price being \$160 (see Table 38).

Table 38: Price for bush cannabis, ACT RPU, 2011-2015

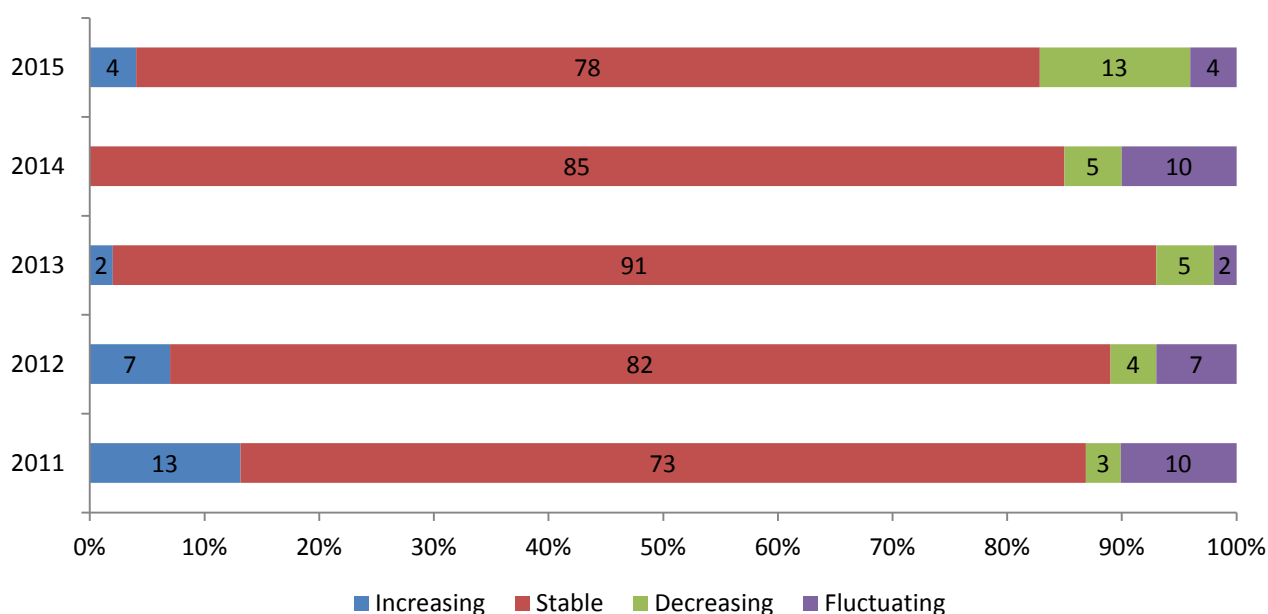
	2011	2012	2013	2014	2015
Median price (range)					
Gram	\$20^	\$20	\$15	\$17.50	\$17.50^
(range)	(10-20)	(10-25)	(10-20)	(10-30)	(10-20)
Ounce	\$280^	\$240^	\$280	\$280	\$160^
(range)	(250-300)	(180-300)	(100-360)	(70-350)	(no range)

Source: EDRS RPU interviews, 2011-2015

^ small number reporting (<10), caution advised when interpreting

Most (78%) respondents reported that the price of bush had remained stable in the previous six months. A Smaller proportion reported that the price was decreasing (13%).

Figure 23: Price changes for bush cannabis, 2011-2015



Source: EDRS RPU interviews, 2011-2015

Results based on following response numbers: 2011 (n=30), 2012 (n=27), 2013 (n=43), 2014 (n=39), 2015 (n=23)

RPU reports of potency

A quarter of RPU were able to comment on the potency of bush in the six months preceding interview. Most (56%) reported medium potency and a third (32%) reported high potency. The majority reported that potency of bush had remained stable (81%). Ten per cent reported that potency had increased in the six months prior to interview and 10% reported that potency had decreased in the six months prior to interview (see Table 39).

Table 39: Potency of bush cannabis, ACT RPU, 2011-2015

	2011	2012	2013	2014	2015
Current potency	n=34	n=29	n=49	n=40	n=25
% High	18	14	12	33	32
% Medium	53	48	63	33	56
% Low	21	24	20	25	8
% Fluctuates	9	14	4	10	4
Potency change	n=34	n=28	n=43	n=40	n=21
% Increasing	15	11	16	10	10
% Stable	59	61	58	58	81
% Decreasing	3	7	12	12	10
% Fluctuating	24	21	14	20	-

Source: EDRS RPU interviews, 2011-2015

Availability of bush cannabis

The majority (79%) of RPU who were able to comment reported that bush was currently very easy (50%) and easy (29%) to obtain in the ACT. One in five RPU who commented reported that bush was currently difficult to obtain. Almost two-thirds (63%) reported that the availability of bush had remained stable. Smaller proportions reported that availability had become easier (13%), more difficult (13%) or was fluctuating (8%).

Table 40: Availability for bush cannabis, ACT RPU, 2011-2015

	2011	2012	2013	2014	2015
Current availability	n=35	n=29	n=48	n=39	n=24
% Very easy	46	38	33	46	50
% Easy	51	55	46	36	29
% Difficult	3	7	17	15	21
% Very difficult	-	-	4	3	-
Availability change	n=35	n=29	n=45	n=38	n=24
% More difficult	3	14	20	13	13
% Stable	74	69	67	68	63
% Easier	14	14	7	13	13
% Fluctuating	9	3	7	5	8

Source: EDRS RPU interviews, 2011-2015

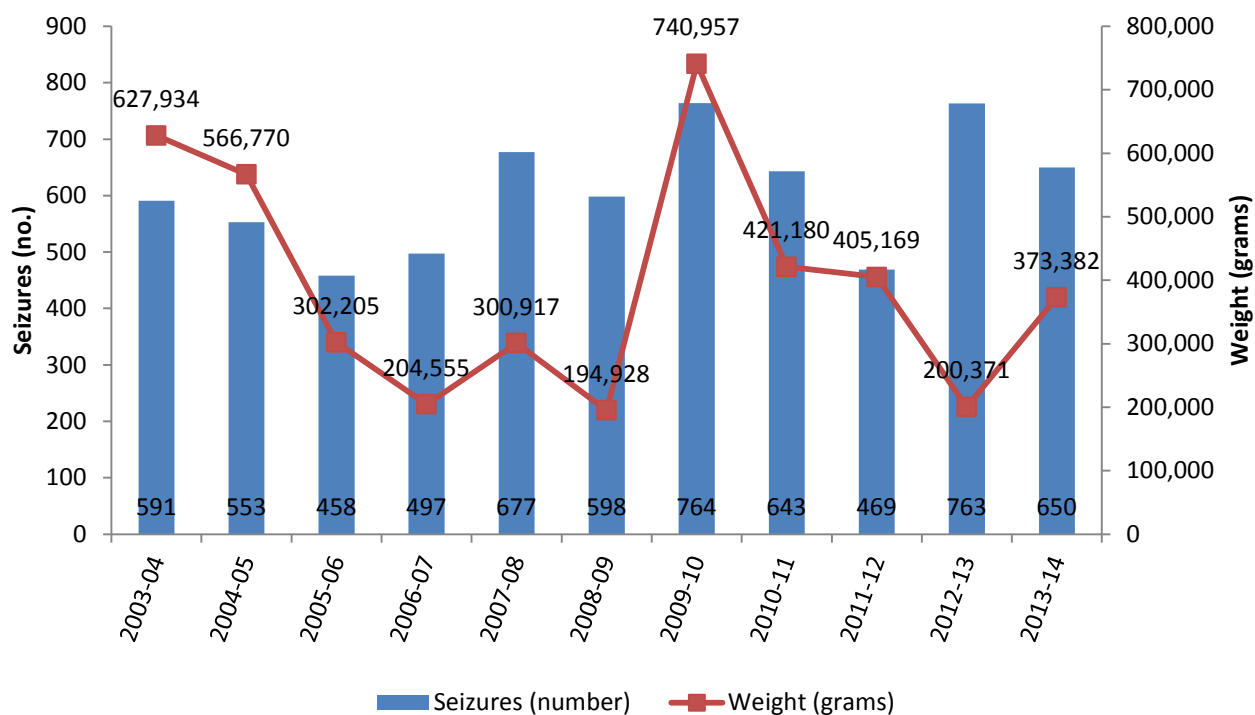
Bush cannabis markets and patterns of purchasing

The most common sources of bush were friends (50%) and known dealers (29%). The most common places of purchase of bush were at a friend's home (38%), a dealer's home (21%) or home delivered (13%).

Law enforcement seizure data

Figure 25 shows the number and weight of cannabis seizures in the ACT from 2003-04 to 2013-14. In the 2013-14 period there was a decrease in the number of cannabis seizures as compared to the previous period. In the 2013-14 period, there were 650 seizures weighing a total of 373,382 grams.

Figure 24: Cannabis seizures by ACT police, 2003/04 to 2013/14



Source: Australian Bureau of Criminal Intelligence, 2003-2015. Note: Data not available for the 2014-15 financial year.

6 HEALTH-RELATED TRENDS ASSOCIATED WITH DRUG USE

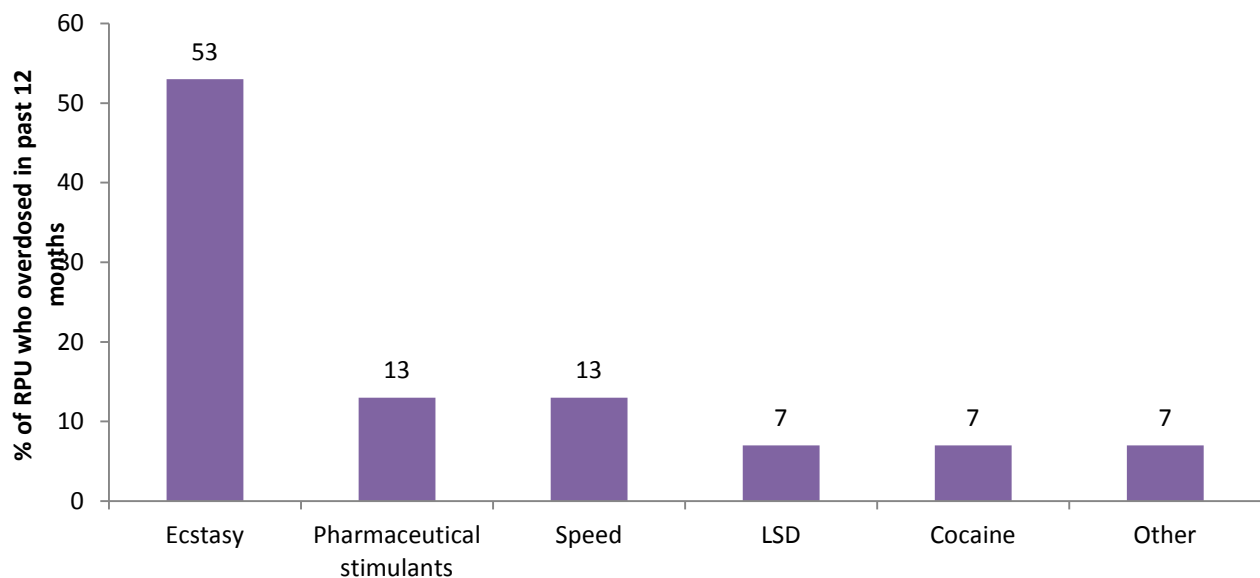
1.1. OVERDOSE AND DRUG-RELATED FATALITIES

In 2015, participants were asked about their experiences with stimulant and depressant overdoses. 'Overdose' was defined as experiencing symptoms consistent with stimulant toxicity which may indicate an overdose, including nausea and vomiting, chest pain, tremors, increased body temperature, increased heart rate, seizure, extreme paranoia, extreme anxiety, panic, extreme agitation, hallucinations and excited delirium, or symptoms consistent with a depressant overdose which may include reduced level of consciousness, respiratory depression, turning blue, collapsing and being unable to be roused. It should be noted that the following data refer to participants' understandings of these definitions and do not represent medical diagnosis.

6.1.1 Non-fatal stimulant overdose

Lifetime stimulant overdose was reported by 22% (n=21) of the sample. The median number of stimulant overdoses was one (range=1-7). Of those who had ever overdosed on a stimulant drug, 82% (n=18) reported overdosing in the 12 months preceding interview. Of those participants that reported overdosing in the 12 months preceding interview, 53% attributed their last overdose to ecstasy. Smaller proportions indicated LSD, pharmaceutical stimulants or speed was the main drug attributable to the overdose event (see Figure 26).

Figure 25: Stimulant overdose in the past 12 months, by drug type, ACT RPU, 2015



Source: EDRS RPU interviews, 2015

Of those who had overdosed in the past 12 months, their own home (20%), a private parties (13%), nightclubs (13%), raves/doofs/dance parties (13%) and live music events (13%) were the locations participants reported the stimulant overdose had occurred.

The most severe symptoms which participants reported on their last stimulant overdose (if it occurred within the last 12 months) included extreme anxiety (27%) and increased heart rate (13%). Nausea and or vomiting, extreme agitation, hallucinations, muscle twitches and loss of consciousness were all reported at reduced rates.

Of those that had a stimulant overdose in the past 12 months, 73% did *not* receive treatment. Four participants reported receiving treatment; either being attended to by ambulance, receiving treatment from a general practitioner or receiving treatment from a drug health service.

6.1.2 Non-fatal depressant overdose

Forty-three per cent of the sample reported that they had ever suffered a depressant overdose in their lifetime, of which 90% had suffered a depressant overdose in the 12 months preceding interview. Participants reported a median of 5 (range=1-400) depressant overdoses in their lifetime.

Of those who had experienced a depressant overdose in the preceding 12 months (n=38), the main drugs attributed to were alcohol (87%) and heroin (n=1, 3%). Of those who had overdosed in the preceding 12 months, the last location of overdose was reported to have occurred mainly in locations such as their own home (27%), friend's homes (23%), private parties (17%) or nightclubs (10%). The most common overdose symptom was vomiting (70%), followed by losing consciousness or collapsing (17%). Three of the 30 participants reported that they received treatment during their last depressant overdose.

6.2. HELP-SEEKING BEHAVIOUR

In the preceding six months, 5% (n=5) of the sample had accessed some form of medical or health service as a consequence of their drug use. The main services accessed included seeing a GP, a dentist, and attending an emergency department.

6.3. DRUG TREATMENT

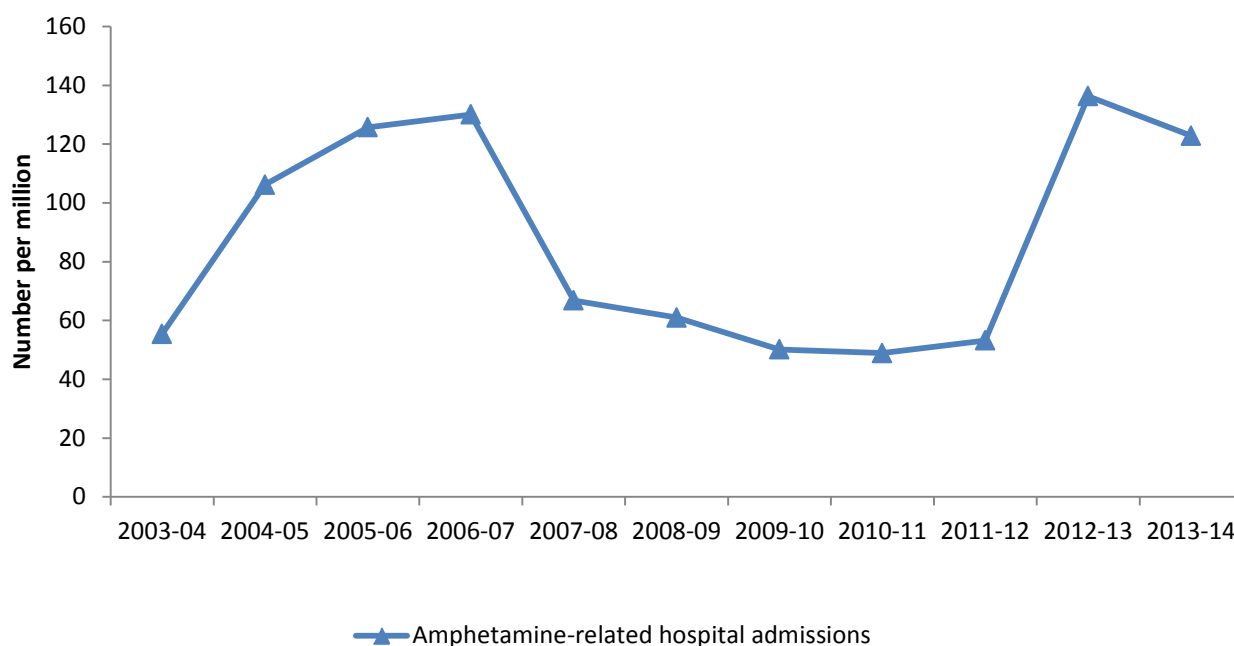
In 2015, one participant reported currently receiving drug treatment in the form of drug and alcohol counselling. This is consistent with findings from previous years that have reflected only a minority of EDRS participants are actively involved in drug treatment options.

6.4. HOSPITAL ADMISSIONS

6.4.1 Methamphetamine

The AIHW defines primary diagnosis as the diagnosis established to be chiefly responsible for occasioning the patient's episode of care in hospital. As can be seen from Figure 27, the number of hospital admissions in the ACT, of persons aged 15–54 years, where amphetamine was implicated in the primary diagnosis is 122.84 per million persons. At the time of print the 2014–15 data for hospital admissions were not available.

Figure 26: Hospital admissions, amphetamine, ACT, 2003-04 to 2013-14.



Source: AIHW; ACT Department of Health; Roxburgh and Breen (2016)

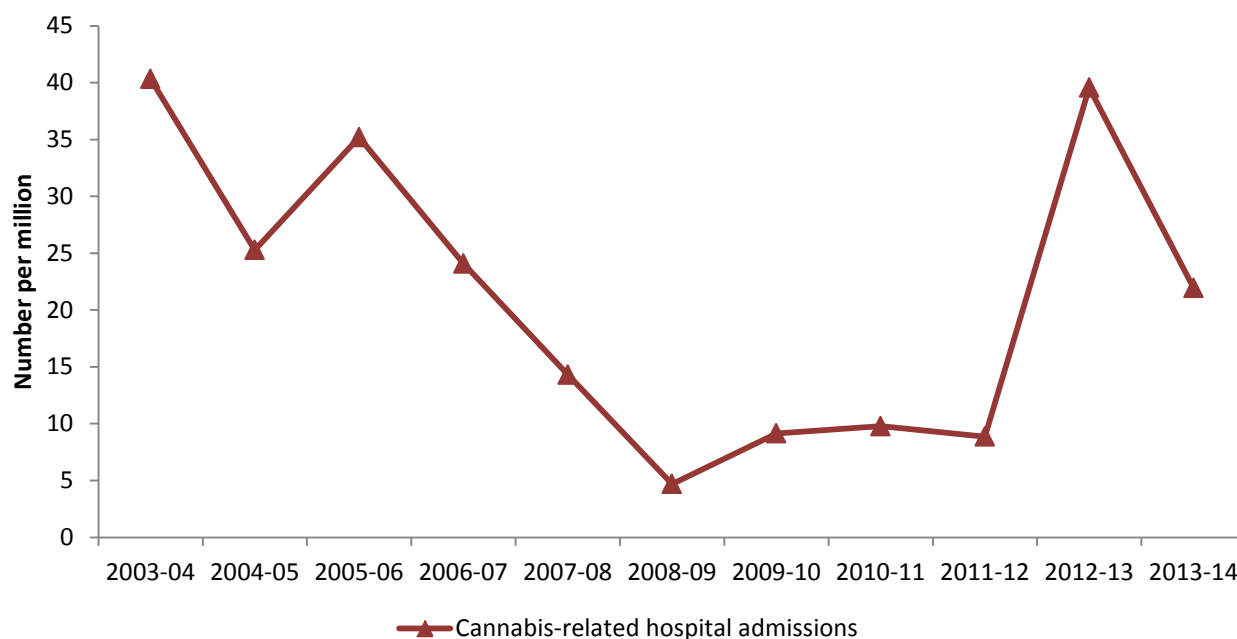
6.4.2 Cocaine

Numbers of hospital admissions in the ACT where cocaine was implicated in the primary diagnosis have remained lower than 10 per million persons aged 15–54 years in the last 20 years. In 2013–14, there were 8.77 cocaine-related hospital admissions per million persons recorded in the ACT. At the time of print the 2014-15 data for hospital admissions were not available.

6.4.3 Cannabis

As can be seen from Figure 28 the number of cannabis-related hospital admissions per million persons has fluctuated over the last 10 years. In 2013-14, there were 21.94 cannabis-related hospital admissions per million persons recorded in the ACT continuing the recent 5 years trend of less than 10 admissions per million. At the time of print the 2014–15 data for hospital admissions were not available.

Figure 27: Hospital admissions, cannabis, ACT, 2003-04 to 2013-14



Source: AIHW; ACT Department of Health; Roxburgh and Breen (2016)

6.5. MENTAL AND PHYSICAL HEALTH PROBLEMS AND PSYCHOLOGICAL DISTRESS

A third (34%) of participants reported that they had experienced a mental health problem in the preceding six months. Among this group (n=33), depression (61%) and anxiety (58%) were most commonly reported. Other problems reported included bi-polar disorder (9%), obsessive compulsive disorder (6%) and panic disorder (6%).

Among those who had experienced a problem, half (n=19) reported attending a mental health professional during this period. Of those who sought help, one-third (n=7) were prescribed medication. Antidepressants were prescribed to four of these participants and antipsychotics were prescribed to two participants.

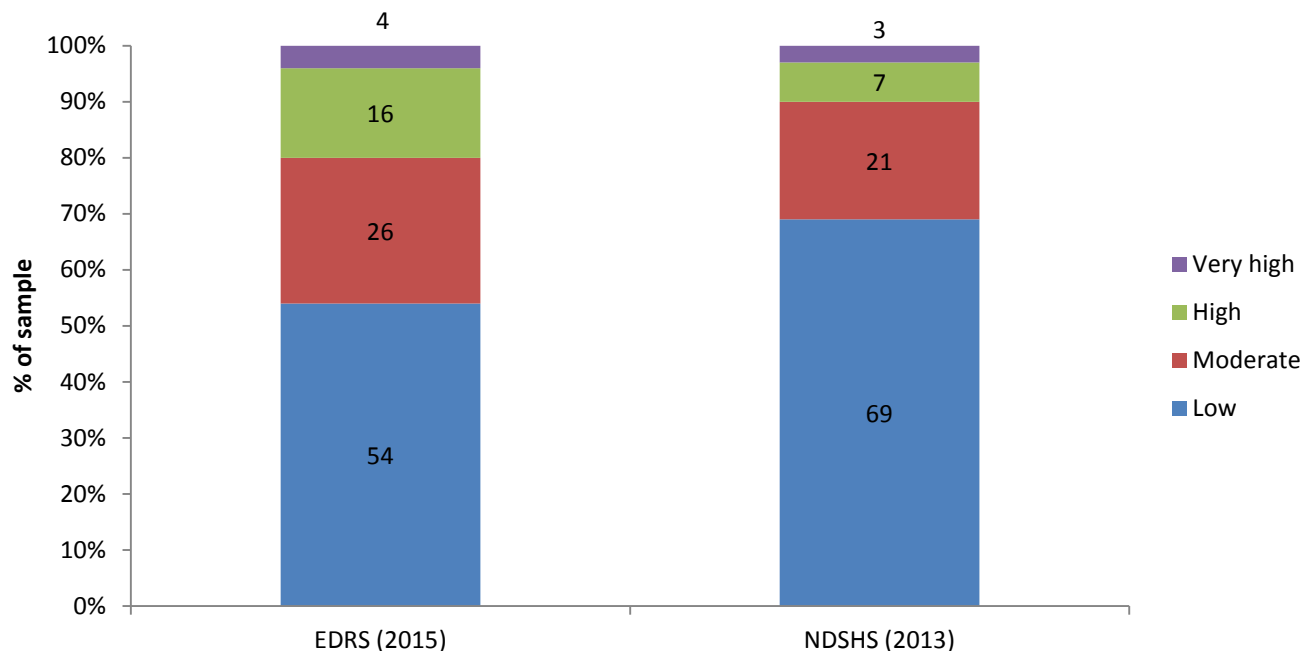
The 2015 EDRS included the Kessler Psychological Distress Scale (K10), a questionnaire designed to yield a global measure of 'psychological distress' based on questions about the level of anxiety and depressive symptoms experienced in the most recent four-week period (Kessler, Andrews, Colpe et al, 2002).

The minimum score was 10 (indicating no distress) and the maximum was 50 (indicating very high psychological distress). Among the general population, scores of 30 or more indicate a high likelihood of having a mental health problem (Andrews and Slade, 2001; Furukawa et al., 2003) and those scoring 30 or more have 10 times the population risk of meeting criteria for an anxiety or depressive disorder (see www.crufad.unsw.edu.au/k10/k10info.htm).

The 2013 National Drug Strategy Household Survey (NDSHS) (Australian Institute of Health and Welfare, 2014) provides the most recent Australian population norms available for the K10 and uses four categories to describe levels of distress: 10 to 15 were considered low levels of

psychological distress; 16 to 21 moderate; 22 to 29 as high; and 30 to 50 as very high levels of psychological distress. Using these categories, the proportion of EDRS participants reporting 'high' (16%) or 'very high' (4%) distress was only slightly higher compared to those in the 2013 NDSHS (high = 7%, very high = 3%) (see Figure 29).

Figure 28: Psychological distress as measured by K10 among ACT RPU and the general population.



Source: EDRS interviews, Australian Institute of Health & Welfare, 2014

Note: The extent to which cut-offs derived from the population samples can be applied to the RPU population is yet to be established and, therefore, should be taken as a guide only.

7 RISK BEHAVIOUR

Key points

Injecting risk behaviour

- Five per cent of RPU reported ever having injected a drug and the median age of first injection was 20 years. Two participants reported injecting in the past six months.

Sexual risk behaviour

- Two-thirds of RPU reported having had casual penetrative sex in the six months prior to interview. When having sex with a casual sex partner while **not** under the influence of alcohol or drugs, 63% reported using protection on their last occasion of casual sex.
- Of those who reported having casual penetrative sex in the past six months while under the influence of ERD, 61% reported using protection on their last occasion of casual sex.

Risky alcohol use

- Using the AUDIT, 82% of respondents scored within the hazardous alcohol intake range. Five per cent of respondents scored in Zone 4 of the AUDIT, indicating the need for evaluation for possible alcohol dependence. There was no difference between males and females.

7.1. INJECTING RISK BEHAVIOUR

7.1.1 Lifetime injectors

In 2015, five of the EDRS sample reported ever having injected a drug. The median age at which participants reported first having injected a drug was 20 (range=19-22). Those RPU who indicated that they had injected drugs during their lifetime were asked to nominate the first drug they had injected. Heroin (n=4) and steroids (n=1) were reported as the first drug injected by those that had ever injected a drug.

7.1.2 Recent injectors

Two participants indicated that they had injected drugs in the preceding six months. Heroin was reported by both participants as the last drug they had injected. The median number of times they reported injecting in the past six months was 37 (range=3-72).

7.2. SEXUAL RISK BEHAVIOUR

7.2.1 Recent sexual activity

Over half (60%) of RPU reported having had casual penetrative sex in the six months prior to interview (see Table 41). Twenty-six per cent of those who reported having casual sex reported

that they had sex with one person in the preceding six months. A further 14% reported having had casual sex with two persons, and 17% reported three to five casual partners. Six per cent of casually sexually active RPU reported having sex with six to 10 partners in the past six months. One participant who was casually sexually active reported having sex with more than 10 partners in the past six months. When having sex with a casual sex partner in the preceding six months whilst **not** under the influence of alcohol or drugs, 63% of RPU who reported having casual sex indicated that the last time they had casual sex they used a protective barrier.

Table 41: Sexual activity and number of casual sexual partners, ACT RPU, 2015

	2015 (n=60)
No. of casual sexual partners (%)*	
One person	26
Two people	14
3–5 people	17
6–10 people	6
More than 10 people	1
Sex with a casual partner (%)**	
Use protection	63

Source: EDRS RPU interviews, 2015

* Of those who had casual penetrative sex in the last six months

Whilst not under the influence of alcohol or drugs

7.2.2 Drug use during sex

Of those who reported having casual penetrative sex in the last six months, the majority (73%, n=44) reported having sex while under the influence of drugs in the past six months (see Table 42). Two-fifths (44%) of RPU who reported having casual sex under the influence of ERD had done so three to five times, 37% reported doing so once or twice (once 21%, twice 16%), 14% reported doing so on six to 10 occasions and 5% reported having casual sex more than 10 times while under the influence in the past six months. RPU were asked to nominate which drugs they were under the influence of last time they had casual sex. Of those who reported having sex while under the influence of ERD in the past six months, the majority nominated using alcohol (73%), ecstasy (50%), cannabis (48%) or cocaine (18%).

Among those who had sex with a casual sex partner while using ERD (n=44) in the past six months, more than half (61%) reported using protection the last time they had sex under the influence of alcohol or drugs. Participants who chose *not* to use a barrier when having sex with a casual partner while using drugs reported that they reason they had not used a barrier included: I didn't wish to use (24%); we agreed not to use (24%); or already using the contraceptive pill (24%).

The 2015 findings indicate that, within the context of sexual intercourse with casual partners, sexual encounters that place the individual at increased risk for sexually transmitted infections (STIs, i.e. unprotected sex), are no more likely to occur when ERD are involved. However, significant proportions of RPU are still having unprotected sex regardless of ERD involvement.

Table 42: Drug use during casual sex in the preceding six months, ACT RPU, 2015

	2015 (N=44)
Casual penetrative sex while on drugs[#] (%)	73
Number of times*	
Once	21
Twice	16
3-5 times	44
6-10 times	14
10+	5
Drugs use (%) *	
Alcohol	73
Ecstasy	50
Cannabis	43
Cocaine	18
Sex with a casual partner using drugs (%)*	
Use protection last time	61

Source: EDRS RPU interviews, 2015

Of those who had casual penetrative sex in the last six months

* Of those who had casual penetrative sex while on drugs in the last six months

Forty-three per cent of RPU who commented had never had a sexual health check-up, 9% reported having one more than a year ago and 47% reported having one in the last year. Of those who commented, 4% (n=4) had ever been diagnosed with a STI.

Table 43: Sexual health check-up, ACT RPU, 2015

	2015 (N=100)
Sexual health check-ups (%)	n=97
No	43
Yes, in the last year	47
Yes, more than 1 year ago	9
STI positive (%)	n=95
No	96
Yes, in the last year	1
Yes, more than 1 year ago	3

Source: EDRS RPU interviews, 2015

7.3. THE ALCOHOL USE DISORDERS IDENTIFICATION TEST (AUDIT)

Participants in the 2015 EDRS were administered the AUDIT (Saunders, Aasland, Babor et al., 1993). The AUDIT was designed by the World Health Organization (WHO) as a brief screening scale to identify individuals with alcohol problems, including those in the early stages. It is a 10-item scale, designed to assess three conceptual domains: alcohol intake; dependence; and adverse consequences (Reinert and Allen, 2002). Total scores of 8 or more are recommended as indicators of hazardous and harmful alcohol use and may also indicate alcohol dependence (Babor, de la Fuente, Saunders et al., 1992). Higher scores indicate greater likelihood of hazardous and harmful drinking; such scores may also reflect greater severity of alcohol problems and dependence, as well as a greater need for more intensive treatment (Babor and Higgins-Biddle, 2000).

The sample mean score of the AUDIT was 12 (median=11, range=1-23). Eighty-two per cent of the ACT sample scored 8 or more, which is the level at which alcohol intake may be considered hazardous (Table 44).

The total AUDIT score places respondents into one of four 'zones' or risk levels. Almost one in five (18%) of respondents scored in Zone 1 (low-risk drinking or abstinence), over half (59%) scored in Zone 2 (alcohol use in excess of low-risk guidelines) and 17% scored in Zone 3 (harmful or hazardous drinking). Five per cent of RPU scored in Zone 4

Table 44: AUDIT levels, by gender, ACT RPU, 2015

	Male	Female	Total
Mean AUDIT total score	12.18	10.28	11.56
Score 8 or above (%)	86	70	82
Zone 1	14	28	18
Zone 2	62	53	59
Zone 3	20	13	17
Zone 4	5	6	5

Source: EDRS RPU interviews, 2015

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.

7.4. DRIVING RISK BEHAVIOUR

Every second year, participants are asked a series of questions regarding their driving behaviour. Ninety per cent of the ACT sample reported having driven a vehicle in the six months preceding interview. Of these, 31% self-reported that they had driven while over the limit of alcohol and they had done so on a median of two occasions (range=1-90) (See Table 45).

Table 45: Recent alcohol driving risk behaviour, ACT RPU, 2015

(%)	2015 n=98
Driven a vehicle in the last six months	90
Driven over limit of alcohol [#]	31
Median number of times driven over limit of alcohol ^{###}	2
(range)	(1-90)

Source: EDRS RPU interviews, 2015

[#] Among those who had driven a vehicle in the last six months

^{###} Among those who had driven over the limit of alcohol in the last six months

Experiences of random breath testing in the preceding six months were also recorded. More than half (56%) of those who had driven a car in the last six months reported having been required to perform a RBT during that time.

Nearly half (44%) of those who had driven in the previous six months reported having driven after taking an illicit drug and had done so on a median of five occasions in the preceding six months (range=1-180). The median time between drug consumption and driving a vehicle was 30 minutes (range=0-480 minutes). Cannabis (67%) and ecstasy (44%) were the drugs most frequently nominated as having been consumed prior to driving a vehicle in the preceding six months; such findings are likely, at least in part, a reflection of the relative prevalence of the use of these drugs amongst this group. Cannabis was the drug most reported to have been used prior to their last occasion of drug driving.

Nearly one in five (18%) of those who had driven a car in the last six months reported having been tested for drug driving in the six months prior to interview.

8 LAW ENFORCEMENT TRENDS ASSOCIATED WITH DRUG USE

Key points

- One third of the sample reported engaging in some form of criminal activity in the month prior to interview.

8.1. REPORTS OF CRIMINAL ACTIVITY AMONG RPU

One third (34%) reported having engaged in some form of criminal activity in the month prior to interview (24% in 2014, 46% in 2013; Table 45). The proportion of RPU who reported that they had engaged in drug dealing in the preceding six months increased to 21% of the sample and those engaging in property crime also increased to 15%, however these increases were not statistically significant and are below 2013 figures. One in ten RPU reported that they had been arrested in the past 12 months.

Table 46: Criminal activity reported by ACT RPU, 2011-2015

	2011 (n=80)	2012 (n=51)	2013 (n=77)	2014 (n=100)	2015 (n=99)
Criminal activity in the last month (%)					
<i>Any crime</i>	43	47	46	24↓	34
<i>Drug dealing</i>	25	37	17↓	15	21
<i>Property crime</i>	22	12	35	7↓	15
<i>Fraud</i>	10	0	9	2	2
<i>Violent crime</i>	13	6	4	5	1
Arrested in the past 12 months (%)	14	6	14	10	11

Source: EDRS RPU interviews, 2011-2015

8.2. ARRESTS

8.2.1 Amphetamine-type stimulants

Table 46 presents the number of consumer and provider arrests for amphetamine-type stimulants made in the ACT between 2003 and 2014. Amphetamine-type stimulants include amphetamine, methamphetamine and phenethylamines. The ACC classifies consumers as offenders who are charged with user-type offences (e.g. possession and use of illicit drugs), whereas providers are offenders who are charged with supply-type offences (e.g. trafficking, selling, manufacture or cultivation). The number of consumer and provider arrests increased slightly from the previous reporting year, with a total of 157 arrests recorded in 2013-14, compared to 105 arrests in 2012-13.

Table 47: Number of amphetamine-type stimulants consumer and provider arrests, ACT, 2004-2015

	Consumer/user		Provider/supplier		Total arrests
	Male	Female	Male	Female	
2003-2004	60	16	19	4	99
2004-2005	51	7	27	9	94
2005-2006	50	9	46	1	106
2006-2007	77	22	30	3	132
2007-2008	77	23	28	5	133
2008-2009	68	19	20	3	110
2009-2010	64	12	21	3	100
2010-2011	42	9	7	2	60
2011-2012	88	14	16	6	124
2012-2013	72	9	23	1	105
2013-2014	82	16	53	6	157

Source: ACC, 2004-2015

Note: Data not available for the 2014/2015 financial year

8.2.2 Cocaine

In 2013-14 there were 16 consumer arrests for cocaine and eight provider arrests recorded.

Table 48: Number of cocaine consumer and provider arrests, ACT, 2004-2015

	Consumer/user		Provider/provider		Total arrests
	Male	Female	Male	Female	
2003-2004	1	0	1	0	2
2004-2005	2	1	4	0	7
2005-2006	2	0	3	0	5
2006-2007	7	0	0	0	7
2007-2008	3	0	1	0	4
2008-2009	10	1	3	0	14
2009-2010	8	0	0	0	8
2010-2011	5	1	7	5	18
2011-2012	9	0	1	0	10
2012-2013	6	0	7	4	17
2013-2014	15	1	7	1	24

Source: ACC, 2004-2015

Note: Data not available for the 2014/2015 financial year

8.2.3 Cannabis

Table 49 summarises the number of cannabis consumer and provider arrests in the ACT from 2003 to 2014. In the ACT, the greatest numbers of drug-specific arrests are due to user-type and supply-type cannabis offences.

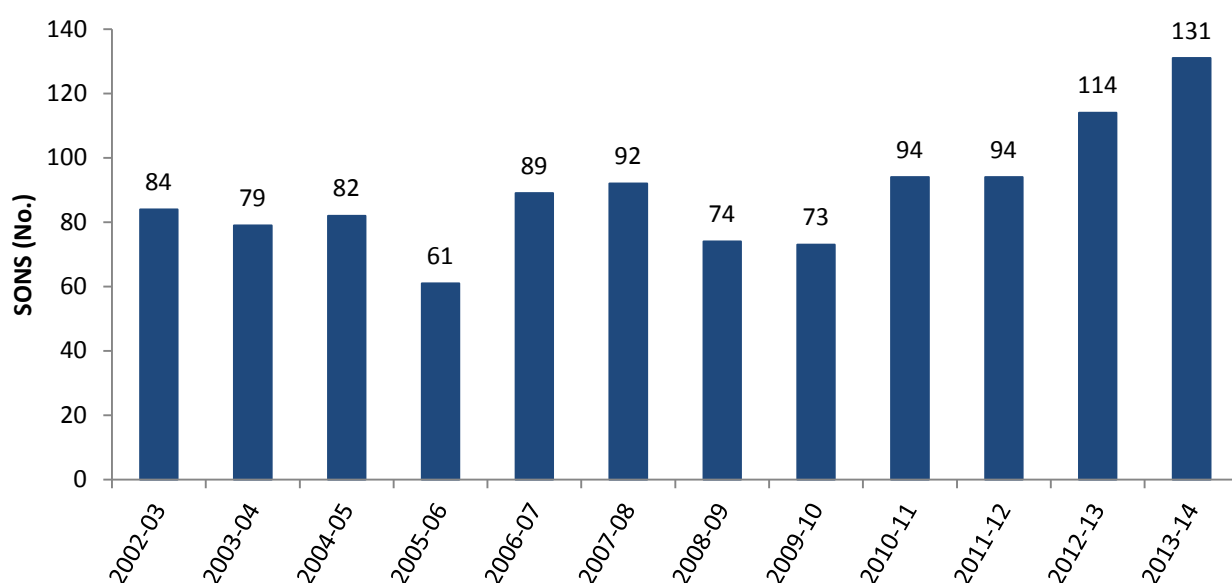
Table 49: Number of cannabis consumer and provider arrests, ACT, 2004-2015

	Consumer/user		Provider/provider		Total arrests
	Male	Female	Male	Female	
2003-2004	17	4	4	8	2
2004-2005	15	2	4	10	2
2005-2006	17	4	2	3	2
2006-2007	16	3	1	2	2
2007-2008	16	4	1	2	2
2008-2009	16	5	1	3	2
2009-2010	18	3	1	2	2
2010-2011	19	3	8	1	2
2011-2012	19	3	3	3	2
2012-2013	20	4	2	3	2
2013-2014	19	4	2	8	2

Source: ACC, 2004-2015

Note: Data not available for the 2014/2015 financial year

In the ACT, a Simple Cannabis Offence Notice (SCON) and a small fine are used to deal with minor cannabis offences, whereby the offence is expiated on payment of the fine. Figure 30 presents the total number of SCONs given out in the ACT from 2003 to 2014.

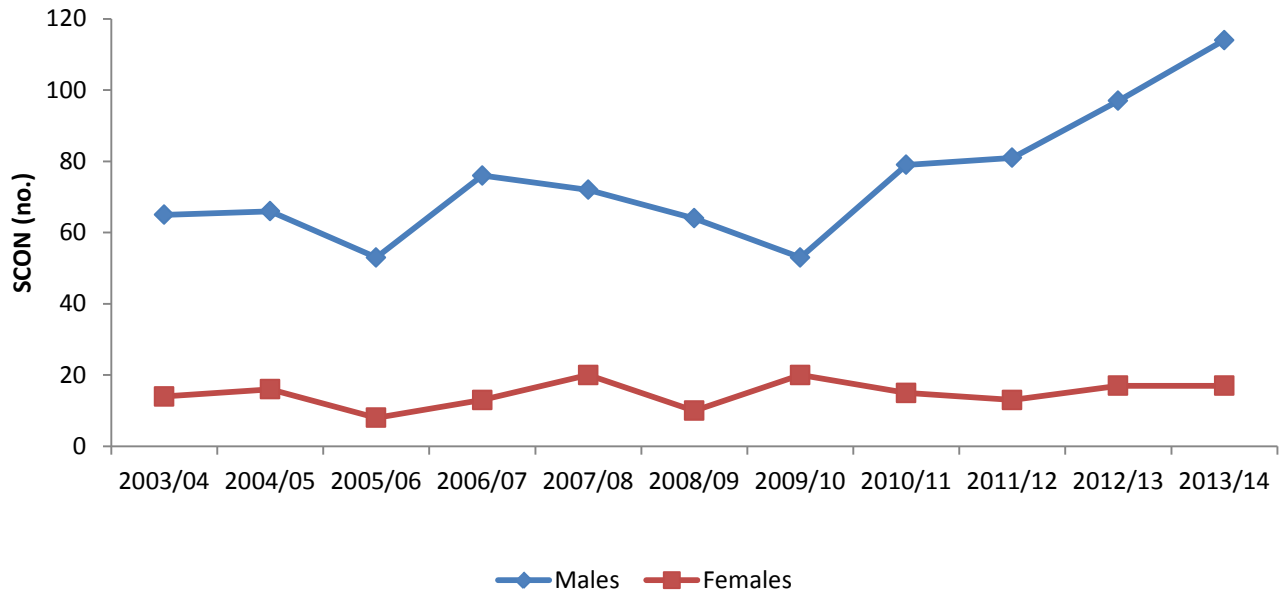
Figure 29: Number of SCONs, ACT, 2004-2014

Source: ACC, 2004-2015

Note: Data not available for the 2014/2015 financial year

As can be seen in Figure 31, the proportion of SCONs received by females has remained consistently low; 17 SCONs given to females in 2013/2014 and has remained relatively stable over the previous ten years. In 2013/2014, 114 SCONs were given to males in the ACT.

Figure 30: Number of SCONs for males and females, ACT, 2004-2014



Source: ACC, 2004-2015

Note: Data not available for the 2014/2015 financial year

9 SPECIAL TOPICS OF INTEREST

9.1. ONLINE PURCHASING AND NPS USE

In 2015, the EDRS continues to investigate and monitor the practice of purchasing drugs online among recreational drug users in Australia. Of particular interest is 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 & 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. This aim of this module is to investigate: (1) prevalence of online drug purchasing among the 2015 EDRS sample; and (2) patterns of online drug purchasing, with a focus on NPS.

In 2015, 62% of ACT participants reported that their friends had purchased an illicit drug online (56% reported 'a few' friends and 6% reported 'about half'). Participants were then asked about their personal lifetime purchase of an illicit drug online, to which 8% of the ACT EDRS reported that they had. Five participants in the ACT reported that they had purchased an illicit drug online in the past 12 months. Due to the small numbers reporting online purchasing in the ACT, further information on this special topic can be found in the National Ecstasy and Related Drugs Reporting System Report (Sindicich, Stafford, & Breen, 2016).

Participants were asked how long ago they had used an NPS and which NPS this was. The median number of days ago people reported using an NPS was 162 days (range 36-4320) and the NPS most reportedly used were the 2C-X family, DMT, methylone, and NBOMe. Participants were asked if the NPS they had last taken was personally purchased online (n=42), to which 5% (n=2) reported that it had been. The remainder of participants (n=8) were asked if the person from whom they last purchased an NPS had purchased it online, to which one participant reported that it had been. All participants that reported NPS use (n=41) were asked about their last occasion of use and whether any adverse unexpected effects were experienced (see Table 50). The most common adverse effect experienced by ACT participants was overheating (10%).

Table 50: Unexpected adverse NPS effects experienced on last occasion of use, ACT RPU, 2015

Unexpected adverse effect	(N=41) (n) %
Overheating	(4) 10
Shaky hands/fingers	(3) 7
Nausea / vomiting	(1) 2
Seeing things that were not there	(3) 7
Restless	(3) 7
Paranoid	(2) 5
Heart racing or erratic	(2) 5
Panicky	(1) 2
Fingers/toes cold or numb	(1) 2

Source: EDRS RPU interviews, 2015

9.2. NPS POLICY

The laws about selling and possessing NPS are complex and the 2015 EDRS assessed understanding of the NPS laws among RPU. The drugs included were the most commonly reported in the 2014 EDRS.

All participants were asked about their understanding of the legal status of the following NPS: 2CB, 2CI, DMT, mephedrone and NBOMe. The majority of participants were able to correctly identify that these five substances were in fact illegal (See Table 51). Minor proportions reported that the substances were legal: 6% Mephedrone, 3% NBOMe, 2% DMT, 2% 2CB, and 1% 2CI. Substantial proportions reported that they were 'unsure' of the legal status of these illicit substances. This is a clear area where harm reduction messages could be further targeted and clarified.

Table 51: Perceptions of the legal status of particular NPS, ACT RPU, 2015

Substance and perceived legal status		(N=99) %
2CB		
	Legal	2
	Illegal	53
	Unsure	45
2CI		
	Legal	1
	Illegal	44
	Unsure	55
DMT		
	Legal	2
	Illegal	59
	Unsure	39
Mephedrone		
	Legal	6
	Illegal	41
	Unsure	53
NBOMe		
	Legal	3
	Illegal	33
	Unsure	64

Source: EDRS RPU interviews, 2015

9.3. COGNITIVE ENHANCERS

Cognitive enhancing substances (CEs) are drugs that have the potential to improve intellectual ability across various cognitive domains (Smith et al., 2014). Whether CEs actually improve cognitive performance remains unclear. There is some evidence that at least some CEs likely improve cognitive performance in limited cognitive domains (Farah, Smith, Ilieva, & Hamilton, 2014), however, whether these results are applicable to real-world settings remains unknown. Despite mixed evidence of their efficacy, users may perceive them as effective (Ragan, Bard, & Singh, 2013).

Only two studies have examined the prevalence of CE use in Australia. Both studies used university samples, with estimates varying from 4% to 8.5% (Joshi, 2011; Mazanov, Dunn, Connor, & Fielding, 2013). Despite these varying estimates, it is clear that CE use, at least amongst Australian university students, is not insignificant.

All CEs are associated with a risk of harm, to varying degrees of severity. Case studies have documented adverse physical and/or psychiatric harms associated with CEs, some of which may be severe and/or permanent (Berman, Kuczenski, McCracken, & London, 2008; Oskooilar, 2005). Harms may also occur when CEs are illicitly obtained online or via others' prescriptions (Ragan et al., 2013).

Very little is known about the prevalence of CE use in Australia or how they are being used. EDRS participants are a recreational drug using sample, many of whom have performance demands from study or fulltime work placed upon them. There is some evidence that use of CEs may be more prevalent among illicit drug users (Mazanov et al., 2013). The EDRS project therefore aims to investigate the prevalence of CE use in this group, along with their motivations for use and associated potential harms in order to better inform future harm reduction initiatives.

Fifty-three per cent of the ACT EDRS sample reported using CEs in the last six months. These participants were asked to indicate which CEs they had used in the preceding six months (see Table 52). The majority reported using coffee (60%, n=31) and energy drinks (60%, n=31), followed by non-prescribed methylphenidate (21%, n=11), other caffeine products (21%, n=11), and non-prescribed modafinil (19%, n=10).

Table 52: Cognitive enhancer use in the last six months, ACT RPU, 2015

Substance	(n=52) %
Methylphenidate	
Prescribed	2
Non-prescribed	21
Any methylphenidate (prescribed or non-prescribed)	23
Modafinil	
Prescribed	-
Non-prescribed	19
Any modafinil (prescribed or non-prescribed)	19
Dexamphetamine	
Prescribed	-
Non-prescribed	10
Any dexamphetamine (prescribed or non-prescribed)	10
Racetams	
Prescribed	-
Non-prescribed	4
Any racetams (prescribed or non-prescribed)	4
Anti-dementia drugs	
Prescribed	-
Non-prescribed	-
Any anti-dementia drugs (prescribed or non-prescribed)	-
Energy drinks	60
Coffee	60
Other caffeine products (caffeine tablets, caffeine sublingual strips)	21
Ginkgo Biloba	4
Ginseng	2
Omega 3 fish oil	10
Other[#]	6

Source: EDRS RPU interviews, 2015

[#]Other reported CEs were 'stimulant supplement', 'vitamin B'.

Participants who had used CEs in the previous six months (n=52) were asked to report the last CE that they had used. The most commonly last reported CE used was coffee (n=20, 39%), followed by

energy drinks (n=11, 21%), methylphenidate (n=5, 10%), other caffeine products (n=5, 10%), and modafinil (n=4, 8%).

Main motivations for using these substances on the last occasion for use were also explored (See Table 52). Participants most commonly reported using CEs to offset sleep deprivation (52%, n=27), to improve concentration (48%, n=25), to complete an assignment or task on time (40%, n=21), to decrease fatigue (39%, n=20), to improve academic performance (37%, n=19), or to enhance their mood (23%, n=12).

Table 53: Main motivations for CE use in the last six months, ACT RPU, 2015

Motivations	n=52 %
To decrease fatigue	39
To complete an assignment or task on time	40
To improve concentration	48
To offset sleep deprivation	52
To improve motivation for study	29
To improve academic performance	37
To enhance mood	23
To improve memory	12
Curiosity	4
Other reasons [#]	4

Source: EDRS RPU interviews, 2015

[#]Other reasons were: 'increase energy', and 'routine'.

Of those participants who had used CEs in the preceding six months (n=52), one third (n=21, 33%) reported experiencing negative side effects on the last occasion of use. The most commonly reported negative side effects were a jolt and crash episode (41%, n=7), sleeping difficulties (41%, n=7), loss of appetite (35%, n=6), headache (24%, n=4), increased speed of speech (24%, n=4), nausea (24%, n=4), and stomach problems (24%, n=4). Smaller proportions reported tremors and twitching (both 18%, n=3). Aggression, anxiety, depression, dizziness, and high blood pressure were all reported once (6%, n=1).

Of the participants who had used CEs recently (n=52), 14% (n=7) reported using other licit or illicit drugs in conjunction with the CE they took on the last occasion. Due to small numbers, please see the National Ecstasy and Related Drugs Reporting System Report for further information (Sindicich, Stafford, & Breen, 2016).

10 REFERENCES

- ANDREWS, G. & SLADE, T. 2001. Interpreting scores on the Kessler Psychological Distress Scale (K10). *Australian and New Zealand Journal of Public Health*, 25, 494-497.
- AUSTRALIAN BUREAU OF CRIMINAL INTELLIGENCE 2000. Australian Illicit Drug Report 1998-99. Canberra: Australian Bureau of Criminal Intelligence.
- AUSTRALIAN BUREAU OF CRIMINAL INTELLIGENCE 2001. Australian Illicit Drug Report 1999-2000. Canberra: Australian Bureau of Criminal Intelligence.
- AUSTRALIAN BUREAU OF CRIMINAL INTELLIGENCE 2002. Australian Illicit Drug Report 2000-2001. Canberra: Australian Bureau of Criminal Intelligence.
- AUSTRALIAN CRIME COMMISSION 2003. Australian Illicit Drug Report 2001-02. Canberra: Australian Crime Commission.
- AUSTRALIAN CRIME COMMISSION 2004. Australian Illicit Drug Data Report 2002-03. Canberra: Australian Crime Commission.
- AUSTRALIAN CRIME COMMISSION 2005. Australian Illicit Drug Data Report 2003-04. Canberra: Australian Crime Commission.
- AUSTRALIAN CRIME COMMISSION 2006. Australian Illicit Drug Data Report 2004-05. Canberra: Australian Crime Commission.
- AUSTRALIAN CRIME COMMISSION 2007. Australian Illicit Drug Data Report 2005/06. Canberra: Australian Crime Commission.
- AUSTRALIAN CRIME COMMISSION 2008. Australian Illicit Drug Data Report 2006-07. Canberra: Australian Crime Commission.
- AUSTRALIAN CRIME COMMISSION 2009. Australian Illicit Drug Data Report 2007-08. Canberra: Australian Crime Commission.
- AUSTRALIAN CRIME COMMISSION 2010. Illicit Drug Data Report 2008-09. Canberra: Australian Crime Commission.
- AUSTRALIAN CRIME COMMISSION 2015. Illicit Drug Data Report 2013-14. Canberra: Australian Crime Commission.
- AUSTRALIAN CUSTOMS AND BORDER PROTECTION SERVICE 2010. Australian Customs and Protection Service Annual Report 2009-10. Canberra: Commonwealth of Australia.
- AUSTRALIAN CUSTOMS SERVICE 2007. Australian Customs Service Annual Report 2006-07. Canberra: Commonwealth of Australia.
- AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE 2002. 2001 National Drug Strategy Household Survey: Detailed findings. Canberra: Australian Institute of Health and Welfare.
- AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE 2005. National Drug Strategy Household Survey 2004 - detailed findings. Canberra: Australian Institute of Health and Welfare.

- AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE 2008. 2007 National Drug Strategy Household Survey: detailed findings. *Drug statistics series no. 22. Cat. no. PHE 107*. Canberra: Australian Institute of Health and Welfare.
- AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE 2011a. 2010 National Drug Strategy Household Survey report. *Drug statistics series no. 25. Cat. no. PHE 145*. Canberra: Australian Institute of Health and Welfare.
- AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE 2011b. 2010 National Drug Strategy Household Survey report. *Drug statistics series no. 25*. Department of Health and Ageing.. In: NO., C. (ed.) *PHE 145*. Canberra: AIHW.
- AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE 2015. Alcohol and other drug treatment services in Australia 2013-14. Drug supplementary tables. *Drug treatment series no. 25. Cat. no. HSE 158*. Canberra: AIHW.
- BABOR, T., DE LA FLUENTE, J., SAUNDERS, J. & GRANT, M. 1992. The Alcohol Use Disorders Identification Test: Guidelines for use in Primary Health Care.
- BABOR, T. & HIGGINS-BIDDLE, J. 2000. Alcohol screening and brief intervention: Dissemination strategies for medical practice and public health. *Addiction*, 95, 677-86.
- BERMAN, S. M., KUCZENSKI, R., MCCracken, J. T. & LONDON, E. D. 2008. Potential adverse effects of amphetamine treatment on brain and behavior: a review. *Mol Psychiatry*, 14, 123-142.
- BIERNACKI, P. & WALDORF, D. 1981. Snowball sampling: Problems, techniques and chain referral sampling. *Sociological Methods for Research*, 10, 141-163.
- BOYS, A., LENTON, S. & NORCOSS, K. 1997. Polydrug use at raves by a Western Australian sample. *Drug and Alcohol Review*, 16, 227-234.
- BREEN, C., TOPP, L. & LONGO, M. 2002. Adapting the IDRS methodology to monitor trends in party drug markets: Findings of a two- year Feasibility trial. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- BURNS, L. & VAN BUSKIRK, J. 2013. Shedding light on online stores for illicit and synthetic drugs Available: <http://theconversation.com/shedding-light-on-online-stores-for-illicit-and-synthetic-drugs-16580> [Accessed 20/02/2014].
- CALDICOTT, D., CHOW, F., BURNS, B., FELGATE, P. & BYARD, R. W. 2004. Fatalities associated with the use of gamma-hydroxybutyrate and its analogues in Australasia. *Medical Journal of Australia*, 181, 310-313.
- COMMONWEALTH DEPARTMENT OF COMMUNITY SERVICES AND HEALTH 1988. Statistics on Drug Abuse in Australia 1988: An information document for use in association with the National Campaign Against Drug Abuse. Canberra: Australian Government Publishing Service.
- COMMONWEALTH DEPARTMENT OF HEALTH AND FAMILY SERVICES 1996. 1995 National Drug Strategy Household Survey: Survey Results. Canberra: Commonwealth Department of Health and Family Services.

- COMMONWEALTH DEPARTMENT OF HEALTH, H., LOCAL GOVERNMENT AND COMMUNITY SERVICES, 1993. 1993 National Drug Household Survey. Canberra: Commonwealth Department of Health, Housing, Local Government and Community Services.
- DALGARNO, P. J. & SHEWAN, D. 1996. Illicit use of ketamine in Scotland. *Journal of Psychoactive Drugs*, 28, 191-199.
- DARKE, S., COHEN, J., ROSS, J., HANDO, J. & HALL, W. 1994. Transitions between routes of administration of regular amphetamine users. *Addiction*, 89, 1077-1083.
- DILLON, P., COPELAND, J. & JANSEN, K. L. R. 2003. Patterns of use and harms associated with non-medical ketamine use. *Drug and Alcohol Dependence*, 69, 23-28.
- FARAH, M. J., SMITH, M. E., ILIEVA, I. & HAMILTON, R. H. 2014. Cognitive enhancement. *Wiley Interdisciplinary Reviews-Cognitive Science*, 5, 95-103.
- FORSYTH, A. J. M. 1996. Places and patterns of drug use in the Scottish dance scene. *Addiction*, 91, 511-521.
- FURUKAWA, T. A., KESSLER, R. C., SLADE, T. & ANDREWS, G. 2003. The performance of the K6 and K10 screening scales for psychological distress in the Australian National Survey of Mental Health and Well-being. *Psychological Medicine*, 33, 357-362.
- HANDO, J. & HALL, W. 1993. Amphetamine use among young adults in Sydney, Australia. Sydney: NSW Health Department.
- HANDO, J., TOPP, L. & HALL, W. 1997. Amphetamine-related harms and treatment preferences of regular amphetamine users in Sydney, Australia. *Drug and Alcohol Dependence*, 46, 105-113.
- JANSEN, K. L. R. 2000. *Ketamine, Dreams and Realities*, Florida, Multidisciplinary Association for Psychedelic Studies.
- JOSHI, P. 2011. Use of cognitive enhancing substances by University students: a cross-sectional study.
- KERLINGER, F. N. 1986. *Foundations of Behavioral Research*, Japan, CBS Publishing Limited.
- KESSLER, R. C., ANDREWS, G., COLPE, L. J., HIRIPI, E., MROCZEK, D. K., NORMAND, S.-L. T., WALTERS, E. E. & ZASLAVSKY, A. M. 2002. Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine*, 32, 959-976.
- MAZANOV, J., DUNN, M., CONNOR, J. & FIELDING, M.-L. 2013. Substance use to enhance academic performance among Australian university students. *Performance Enhancement & Health*.
- NICHOLSON, K. & BALSTER, R. 2001. GHB: A new and novel drug of abuse. *Drug and Alcohol Dependence*, 63, 1-22.
- OSKOOILAR, N. 2005. A case of premature ventricular contractions with modafinil. *Am J Psychiatry*, 162, 1983-4.
- OVENDON, C. & LOXLEY, W. 1996. Bingeing on psychostimulants in Australia: Do we know what it means (and does it matter)? *Addiction Research*, 4, 33-43.

- PETERS, A., DAVIES, T. & RICHARDSON, A. 1997. Increasing popularity of injection as the route of administration of amphetamine in Edinburgh. *Drug and Alcohol Dependence*, 48, 227-237.
- RAGAN, C. I., BARD, I. & SINGH, I. 2013. What should we do about student use of cognitive enhancers? An analysis of current evidence. *Neuropharmacology*, 64, 588-595.
- REINERT, D. F. & ALLEN, J. P. 2002. The Alcohol Use Disorders Identification Test (AUDIT): A review of the recent research. *Alcoholism: Clinical & Experimental Research*, 26, 272-279.
- ROXBURGH, A. & BURNS, L. in press-a. Drug-induced deaths in Australia, 2008. National Drug and Alcohol Research Centre, University of New South Wales.
- ROXBURGH, A. & BURNS, L. in press-b. Drug-related hospital stays in Australia, 1993-2008. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- SAUNDERS, J. B., AASLAND, O. G., BABOR, T. F., DE LA FUENTE, J. R. & GRANT, M. 1993. Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO collaborative project on early detection of persons with harmful alcohol consumption. *Addiction*, 88, 791-804.
- SIEGEL, S. & CASTELLAN, N. J. 1988. *Nonparametric Statistics for the Behavioural Sciences*, Singapore, McGraw-Hill.
- SOLOWIJ, N., HALL, W. & LEE, N. 1992. Recreational MDMA use in Sydney: A profile of 'Ecstasy' users and their experiences with the drug. *British Journal of Addiction*, 87, 1161-1172.
- STATISTICS, A. B. O. 2006. National Health Survey: Summary of Results 2004-2005. Canberra: Australian Bureau of Statistics.
- TOPP, L., BREEN, C., KAYE, S. & DARKE, S. 2004. Adapting the Illicit Drug Reporting System (IDRS) methodology to examine the feasibility of monitoring trends in party drug markets. *Drug and Alcohol Dependence*, 73, 189-197.
- TOPP, L., HANDO, J., DEGENHARDT, L., DILLON, P., ROCHE, A. & SOLOWIJ, N. 1998. Ecstasy Use in Australia. Sydney: National Drug and Alcohol Research Centre, University of New South Wales.
- TOPP, L., HANDO, J., DILLON, P., ROCHE, A. & SOLOWIJ, N. 2000. Ecstasy use in Australia: Patterns of use and associated harms. *Drug and Alcohol Dependence*, 55, 105-115.
- WHITE, B., DAY, C., DEGENHARDT, L., KINNER, S., FRY, C., BRUNO, R. & JOHNSTON, J. 2006. Prevalence of injecting drug use and associated risk behaviour among regular ecstasy users in Australia. *Drug and Alcohol Dependence*, 83.