Western Australia

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WA TRENDS IN ECSTASY AND RELATED DRUG MARKETS 2015

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

Australian Drug Trends Series No. 160

WEST AUSTRALIAN TRENDS IN ECSTASY AND RELATED DRUG MARKETS 2015

FINDINGS FROM THE ECSTASY AND RELATED DRUGS REPORTING SYSTEM (EDRS)

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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.ndarc.med.unsw.edu.au.

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ABBREVIATIONS

2C-B	2,5-dimethoxy-4-bromophenethylamine
2C-E	2,5-dimethoxy-4-ethylphenethylamine
2C-I	2,5-dimethoxy-4-iodophenethylamine
5MEO-DMT	5-methoxy-dimethyltryptamine
6-APB	6-(2-aminopropyl)benzofuran
ABCI	Australian Bureau of Criminal Intelligence
ACC	Australian Crime Commission
ADIS	Alcohol and Drug Information Service
AGDH	Australian Government Department of Health and Ageing
AIHW	Australian Institute of Health and Welfare
ATS	amphetamine-type stimulants
AUDIT	Alcohol Use Disorders Identification Test
BZP	benzylpiperazine
CI	confidence interval
CNS	central nervous system
DMT	dimethyltriptamine
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders IV
DSM 5	Diagnostic and Statistical Manual of Mental Disorders 5
DOI	'death on impact'; 2,5-dimethoxy-4-iodoamphetamine
DXM	dextromethorphan
EDRS	Ecstasy and Related Drugs Reporting System
EPS	Emerging psychoactive substances
GHB	gamma-hydroxy-butyrate
GP	general practitioner
IDDR	Illicit Drug Data Report
IDRS	Illicit Drug Reporting System
K10	Kessler Psychological Distress Scale
KE	key expert/s
LSD	*d*-lysergic acid
MDA	3,4-methylenedioxyamphetamine
MDAI	5,6-Methylenedioxy-2-aminoindane
MDEA	3,4-methylenedioxyethylamphetamine
MDMA	3,4-methylenedioxymethamphetamine
MDPV	3,4-methylenedioxypyrovalerone; ivory wave; 'bath salts'
MXE	methoxetamine or 3-MeO-2-Oxo-PCE
NBOMe	4-idio-2,5-dimethoxy-N-(2-methoxybenzyl) phenethylamine
NDARC	National Drug and Alcohol Research Centre
NDLERF	National Drug Law Enforcement Research Fund
NDSHS	National Drug Strategy Household Survey
NPS	new psychoactive substance
NSP	needle and syringe program
OTC	over-the-counter
PDI	Party Drugs Initiative
PMA	paramethoxyamphetamine
REU	regular ecstasy user/s
ROA	route of administration
RPU	regular psychostimulant user/s
SDS	Severity of Dependence Scale
STI	sexually transmitted infection
WA	Western Australia
WHO	World Health Organization

GLOSSARY

1,4-B	Acronym for 1,4-butanediol. It is a GHB precursor and substitute, which metabolises into GHB in the stomach
2-CB	Street term for 4-bromo-2,5-dimethoxyphenethylamine. It is a synthetic psychedelic of moderate duration
2-CI	Street term for 2,5-dimethoxy-4-iodophenethylamine. It is a short-acting synthetic psychedelic
Bump	A bump refers to a small amount of powder, typically measured and snorted from the end of a key, the corner of a plastic card or a 'bumper'
Bumper	A bumper is a small glass nasal inhaler, purchased from tobacconists, used to store and administer powdered substances such as ketamine
Cap	Capsule
Cocaine	A central nervous system stimulant, obtained from the cocoa plant. Cocaine hydrochloride, the salt, is the more common form used in Australia. The freebase form is called 'crack'; little or no crack is available or used in Australia
Crystal	Street term for crystal methamphetamine, a potent form of methamphetamine. Also known as 'ice'
Daily use	Use occurring on each day in the past six months, based on a maximum of 180 days
Ecstasy	Street term for MDMA (3,4-methylenedioxymethamphetamine), which may contain a range of other substances. It is an hallucinogenic amphetamine
GBL	Acronym for gamma butyrolactone. It is a GHB precursor and substitute, which metabolises into GHB in the stomach
GHB	Acronym for gamma-hydroxy butyrate. It is a central nervous system depressant. Other known terms include 'GBH' and 'liquid ecstasy'; however, the latter is misleading as GHB is a depressant, not a stimulant
Ketamine	It is a dissociative psychedelic used as a veterinary and human anaesthetic
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 ROAs: inject; smoke; snort; swallow; and/or shaft/shelve
LSD	Acronym for *d*-lysergic acid diethylamide. It is a powerful hallucinogen

MDA	Acronym for 3,4-methylenedioxyamphetamine. It is classed as a stimulant hallucinogen. It is closely related to MDMA (and is sometimes found in ecstasy tablets); however, its effects are said to be slightly more psychedelic
Mephedrone	Mephedrone (2-methylamino-1-p-tolylpropane-1-one), also known as 4-methylmethcathinone (4-MMC) or 4-methylephedrone, is a stimulant and entactogen drug of the phenethylamine, amphetamine, and cathinone chemical classes
Methamphetamine	An analogue of amphetamine, it is a central nervous system stimulant. The three main forms of methamphetamine in Australia are methamphetamine powder ('speed'), methamphetamine base ('base') and crystalline methamphetamine ('crystal', 'ice')
PMA	Acronym for para-methoxyamphetamine. It is an amphetamine-type drug with both stimulant and hallucinogenic properties
Point	0.1 gram
Recent injection	Injection (typically intravenous) in the last six months
Recent use	Use in the last six months via one or more of the following ROAs: inject; smoke; snort; swallow; and/or shaft/shelve
Shaft/shelve	Vaginal/anal administration
Tab/s	The most common form of LSD is paper blotter divided into about 1/4" squares called 'tabs'. A single tab usually contains between 30-100 micrograms (ug) of LSD. Paper blotters are created by taking a sheet of absorbent paper (usually decorated and perforated) and soaking it in a dilution of lysergic acid diethylamide. The dilution can vary greatly from one batch to another, or one chemist to another

EXECUTIVE SUMMARY

This report presents the results of the WA EDRS (formerly the PDI), an ongoing study monitoring ecstasy and related drug markets within WA. It is part of a nationwide study, which commenced in New South Wales, Queensland and Victoria in 2000, with the addition of other states and territories in 2003. The survey design was informed by and modelled upon the pre-existing IDRS, designed to monitor use of the main illicit drugs in Australia, developing a new survey for monitoring trends in the ecstasy and related drugs (ERD) markets.

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

It needs to be noted that the EDRS is not a representative sample of ecstasy/psychostimulant drug users, but rather comprises annual samples of sentinel groups of users with similar characteristics, which allow trends in drug markets to be tracked over time. The EDRS cannot provide information on rates of drug use among REU/RPU in the general population.

The current report provides findings for the 13th year of data collection in WA, obtained from three sources:

1. Quantitative interviews with 100 current RPU residing in the Perth metropolitan area;

2. Qualitative interviews with 12 KE who have regular contact with ecstasy/psychostimulant users and are employed in areas of, health, outreach, and law enforcement; and chemical analysis; and

3. Analysis of various indicator data from health and law enforcement sources.

I. Demographic characteristics

For the purpose of this study, REU is a population defined by the use of ecstasy on at least six occasions over the preceding six-month period. This population was recruited until 2011. In 2012, the WA EDRS expanded its selection criteria for recruitment of participants. This change was made in WA, and some other jurisdictions, in response to difficulties experienced in the 2011 EDRS recruitment process. The selection criteria expanded to include both REU and RPU. For the purpose of this study, RPU is a population defined by the use of ecstasy or any psychostimulant drug/s (e.g. MDA, cocaine, ketamine, GHB, LSD, or NPS such as 2C-B and 2C-I) on at least six occasions over the preceding six-month period.

In 2015 in WA, while the expanded criteria were employed, there were no difficulties recruiting participants who had used ecstasy on at least six occasions in the preceding six months. Consequently, the 2015 sample comprised only REU. However, given that the expanded criteria was used, and to allow for standardisation across jurisdictions, 2015 WA EDRS participants are referred to as RPU in this report.

In the 2015 WA EDRS:

- The sample comprised 100 RPU;
- There were a greater proportion of males (64%) than females (36%);
- The mean age of the sample was 21.7 years;
- The vast majority (99%) of RPU were of English speaking background;
- The mean number of high school years completed was 11.8, significantly less than 11.9 years in 2014;
- More than one-third (38%) of the sample had completed a tertiary qualification;
- The median weekly income was $503;
- The proportion of participants who reported being employed full-time was 22%
- The proportion of participants who reported being employed part-time was 47%, a significant increase from 16% in 2014;
- Just 2% of respondents reported that they were 'working and studying' a significant decrease from 39% in 2014;
- One participant (1%) reported currently being in drug treatment; and
- These demographics have remained relatively stable across WA EDRS data collection periods, aside from mild variations in age, employment status, years of tertiary education completed and income.

II. Patterns of drug use

- Participants had used a median of 12 different drug types during their lifetimes and eight different drug types recently (during the preceding six-month period).
- Consistent with previous data collection years, the majority of the sample reported recent use of alcohol (97%), cannabis (86%) and tobacco (82%).
- In 2015, 79% of the sample reported lifetime use of ecstasy capsules, a significant increase from 61% in 2014.
- Lifetime and recent use of ecstasy crystal was reported by 64% and 51% of the sample respectively, consistent with the 2014 findings.
- Some 63% of the current sample reported lifetime use of e-cigarettes, a significantly larger proportion than 47% in 2014. However, recent use was unchanged from 2014, reported by approximately one-third (34%) of the sample.
- In 2015, just 6% of the sample reported recent speed use, a significant decrease from 19% in 2014.
- Approximately one-quarter (24%) of the 2015 sample reported recent LSD use, a significant decrease from 45% in 2014.
- One-third (33%) of the current sample reported lifetime use of other (pharmaceutical) opiates, a significant increase from 18% in 2014. Recent use of other opiates was reported by 16% of the sample, not significantly different from 8% in 2014.

III. Drug consumption patterns and markets

i. Ecstasy

Consumption patterns

- In 2015, the proportion of participants who reported that ecstasy was their 'drug of choice' was 39%, comparable to 40% in 2014.
- The mean age of first ecstasy use was 18 years, consistent with 17 years in 2014.
- Almost one-quarter (23%) of the sample reported 'weekly or more' ecstasy use, the same proportion that was reported in 2014.
- The mean number of days that ecstasy was used in the preceding six-month period was 20 (i.e. less than once a week), consistent with 18 days in 2014.

- On a 'typical' occasion of use, the average number of ecstasy pills used was 2.5, comparable to 2.4 pills in 2014.
- Consistent with previous years, swallowing was the most commonly reported ROA for any form of ecstasy (86%).
- Pills were the most commonly reported form of ecstasy used recently (99%), followed by capsules (65%), crystal (51%) and powder (18%).
- Lifetime use of ecstasy capsules was reported by more than three-quarters (79%) of the sample, a significant increase from 61% in 2014.
- The majority (85%) of the participants reported using other drugs in combination with ecstasy the last time they used it, comparable to 89% in 2014. The drugs most commonly implicated on the last occasion were alcohol (80%), cannabis (53%), tobacco (45%) and pharmaceutical stimulants (29%).
- More than half (52%) of the respondents reported using other drugs to help them come down from ecstasy the last time they used it. The drugs most commonly reported to have been used in this context on the last occasion were cannabis (83%) and benzodiazepines (33%).
- The most commonly reported location where participants reported having spent the most time intoxicated on the last occasion of ecstasy use was 'nightclub' for both pills, powder and capsules (49%) and ecstasy crystal (32%).
- KE commented that ecstasy use was common among young people.

Market Characteristics

In 2015, data on the market characteristics of ecstasy pills, powder and capsules was distinguished from that of ecstasy crystal/MDMA rock.

Ecstasy pills, powder and capsules

- *Price*: A median of $30 per pill, a non-significant decrease from $35 in 2014. A median of $35 per capsule, a significant decrease from $40 in 2014. While price was most commonly perceived as stable, a significantly larger proportion of participants in the current sample (18%) reported the price as decreasing in the preceding six months compared to 2014 (5%).
- *Potency:* Mixed perceptions of current potency; most commonly reported as fluctuating (33%) and medium (31%). Mixed perceptions of recent changes in potency; most frequently reported as stable (29%).
- *Availability*: Most frequently rated as easy or very easy to obtain (92%) and to have been stable over the preceding six months (61%).
- Consistent with the 2014 findings, user perceptions of availability and potency suggest that the ecstasy market has recovered from the declines first seen in 2011.

Ecstasy crystal/MDMA rock

- *Price*: A median of $300 per gram, comparable to $265 in 2014. A median of $35 per cap. Most commonly reported as stable over the preceding six months (64%).
- *Potency:* Most frequently rated as high (62%) and stable over the preceding six months (68%).
- *Availability:* More than half (53%) of the respondents reported that ecstasy crystal was currently easy or very easy to obtain, although perceptions were mixed, with 38% reporting that it was currently difficult to obtain. Availability was most commonly rated as stable over the preceding six months (60%).
- Overall, ecstasy crystal was perceived as more potent but less available than ecstasy pills, powder or capsules.

- KE reported the current potency of ecstasy as high.

ii. Methamphetamine

The 2015 EDRS distinguished between three different forms of methamphetamine: methamphetamine powder (speed); methamphetamine base (base); and crystal methamphetamine (crystal).

Consumption patterns

Speed

- Less than one-quarter (23%) of the respondents reported lifetime use of speed, comparable to 36% in 2014.
- Recent use of speed was reported by 6% of the current sample, a significant decrease from 19% in 2014.
- Speed was used on a median of one day over the preceding six months, the same median number of days reported in 2014.
- Consistent with the 2014 results, snorting was the most common ROA reported (67%).

Base

- Just 2% of the sample reported lifetime use of methamphetamine base. None of the participants reported recent use.
- No further analyses were performed due to the extremely small sample size.

Crystal

- Just less than one-third (31%) of the sample reported lifetime use of crystal methamphetamine, comparable to 24% in 2014.
- Recent use of crystal methamphetamine was reported by 16% of the sample, comparable to 17% in 2014.
- Crystal methamphetamine was used on a median of two days in the preceding six months, comparable to three days in 2014.
- Smoking remained the most commonly reported ROA (87%).
- The median amount used on a 'typical' occasion was two points, comparable to one point in 2014.
- The most commonly cited location where participants spent the most time while intoxicated on the last occasion was 'friend's home' (61%).
- Several KE considered crystal methamphetamine to be the most problematic drug at present.

Market characteristics

Speed

- *Price*: A median of $300 per gram, comparable to $200 in 2014. Rated as stable over the preceding six months (100%).
- *Potency:* Most commonly rated as medium (67%) and decreasing over the preceding six months (100%).
- *Availability*: Mixed perceptions of availability; most commonly rated as very difficult to obtain (67%) and stable over the preceding six months (67%).
- The very small number of participants who were able to comment in 2015 (n=3) necessitates caution in interpreting these results.

Base

- *Price*: No data available.
- *Potency*: No data available.
- *Availability*: No data available.

Crystal

- *Price*: A median of $100 per point (unchanged from 2014) and $700 per gram, comparable to $800 in 2014. Most frequently rated as stable over the preceding six months (91%).
- *Potency*: Mixed perceptions of current potency; most commonly reported as high (58%). Mixed perceptions of recent changes in potency; most commonly reported as stable (44%).
- *Availability*: Currently easy to very easy to obtain (100%) and most frequently rated as stable over the preceding six months (69%).
- Most KE reported that methamphetamine potency was high.

iii. Cocaine

Consumption patterns

- Just more than half (58%) of the participants reported lifetime use of cocaine, comparable to 56% in 2014.
- Recent use was reported by less than one-third (29%) of the sample, comparable to 30% in 2014.
- Cocaine was used on a median of one day in the preceding six months, a significant decrease from two days in 2014.
- Consistent with the 2014 findings, snorting was overwhelmingly the most commonly reported ROA (97%).
- The median amount used on a 'typical' occasion was 0.5 grams, the same median amount reported in 2014.
- Consistent with the 2014 findings, the most commonly reported location where participants spent the most time while intoxicated on the last occasion was 'friend's home' (31%).
- Most KE reported that they very rarely encountered cocaine in their fields.

Market characteristics

- *Price*: A median of $375 per gram, comparable to $400 in 2014. This data should be interpreted with caution given the small number of participants who were able to comment in 2015 (n=8). Price was most commonly perceived as stable over the preceding six months (64%).
- *Potency*: Mixed perceptions of current potency; most commonly reported as medium (42%). Mixed perceptions of recent changes in potency; most commonly reported as stable over the preceding six months (54%).
- *Availability*: Mixed perceptions of current availability; most commonly rated as difficult to obtain (47%). Most frequently reported to be stable over the preceding six months (73%).

iv. Ketamine

Consumption patterns

- Lifetime use of ketamine was reported by 16% of the current sample, a non-significant decrease from 25% in 2014. Recent use was reported by 4%, a non-significant decrease from 11% in 2014.
- Ketamine was used on a median of 3.5 days over the preceding six months, not significantly different from one day in 2014.
- Consistent with the 2014 findings, swallowing was the only recent ROA reported (100%).
- Findings regarding recent consumption patterns for ketamine should be interpreted with caution given the small number of participants who were able to comment in 2015 (n=4).

- Most KE reported that ketamine use was very rarely encountered in their fields.

Market characteristics

- *Price*: No data available.
- *Potency*: No data available.
- *Availability*: No data available.

v. GHB

Consumption patterns

- Just 6% of the current sample reported lifetime use of GHB, consistent with 4% in 2014.
- Recent use was reported by 2% of respondents, comparable to 3% in 2014.
- GHB was used on a median of 1.5 days over the preceding six months.
- Swallowing was the only recent ROA reported (100%).
- Findings on recent consumption patterns for GHB should be interpreted with caution given the very small number of participants able to comment in 2015 (n=2).
- Most KE reported that GHB use was rarely encountered in their fields.

Market characteristics

- *Price*: No data available.
- *Potency*: No data available.
- *Availability*: No data available.

vi. LSD

Consumption patterns

- More than half (58%) of the current sample reported lifetime use of LSD, a non-significant decrease from 67% in 2014.
- Recent use was reported by less than one-quarter (24%) of the sample, a significant decrease from 45% in 2014.
- LSD was used on a mean of two days in the preceding six months, not significantly different from four days in 2014.
- The median amount used on a 'typical' occasion was one tab, the same median amount reported in 2014.
- Consistent with 2014, swallowing or sublingual use was the most commonly reported recent ROA (88%).
- A range of public and private venues were cited as locations where participants spent the most time intoxicated on the last occasion. The most common were 'home', 'friend's home' and 'outdoors' (each 20%).
- Most KE reported that LSD was not commonly encountered in their fields.

Market characteristics

- *Price*: A median of $25 per tab, consistent with previous years. Most commonly rated as stable over the preceding six months (83%).
- *Potency*: Most frequently rated as high (61%) and stable over the preceding six months (69%).
- *Availability*: Most commonly rated as easy or very easy to obtain (79%). Mixed perceptions of recent changes to availability; most commonly rated as stable over the preceding six months (56%).

vii. Cannabis

Consumption patterns

- Consistent with previous years, almost the entire sample (97%) reported lifetime use of cannabis.
- Recent use was reported by 86% of the sample, the same proportion reported in 2014.
- Cannabis was used on a median of 48 days (i.e. approximately twice per week) over the preceding six months, a non-significant increase from 27.5 days in 2014.
- A median of 3.5 cones were consumed on the last occasion of use, comparable to four cones in 2014.
- KE reported that cannabis use was widespread in their fields and was associated with mental health problems.

Market characteristics

Hydro

- *Price*: A median of $25 per gram and $350 per ounce, consistent with previous years. Most frequently reported as stable over the preceding six months (89%).
- *Potency*: Mixed perceptions of current potency; most commonly rated as medium (51%). Most frequently reported to be stable over the preceding six months (60%).
- *Availability*: Most commonly rated as easy or very easy to obtain (95%) and stable over the preceding six months (66%).
- The pattern of results in 2015 suggests that hydro continues to be perceived as easier to obtain than bush.

Bush

- *Price*: A median of $25 per gram and $350 per ounce, consistent with previous years. Most frequently rated as stable over the preceding six months (85%).
- *Potency*: Mixed perceptions of current potency; most commonly rated as medium (43%). Most commonly reported to be stable over the preceding six months (68%).
- *Availability*: Most frequently rated as easy or very easy to obtain (79%) and stable over the preceding six months (83%).

viii. Consumption patterns of other drug use

- Consistent with previous years, the majority of the sample reported both lifetime (98%) and recent (97%) alcohol use.
- KE reported that alcohol continued to be one of the most problematic drugs among RPU.
- Consistent with previous years the majority (91%) of the sample reported lifetime tobacco use. Recent use was reported by 82%, consistent with 77% in 2014.
- Lifetime use of e-cigarettes was reported by two-thirds (66%) of the sample, a significant increase from 47% in 2014. Recent use was reported by approximately one-third (34%) of the sample, comparable to 33% in 2014.
- Lifetime use of MDA was reported by one-fifth (20%) of the sample, consistent with 19% in 2014. Recent use was reported by 11%, not significantly different from 13% in 2014.
- The majority (91%) of the sample reported the lifetime use of licit or illicit pharmaceutical stimulants, the same proportion reported in 2014. Recent use was reported by 78% of the sample, comparable to 81% in 2014. The majority of use was illicit.
- Lifetime use of licit or illicit benzodiazepines was reported by more than half (54%) of the sample, consistent with 52% in 2014. Recent use was reported by 45% of respondents, a non-significant increase from 35% in 2014. The majority of use was illicit.

- Lifetime use of licit or illicit antidepressants was reported by less than one-fifth (18%) of the sample, comparable to 14% in 2014. Recent use was reported by 9% of the sample, consistent with 6% in 2014. The majority of use was licit.
- One-fifth (20%) of the sample reported lifetime use of amyl nitrate, a non-significant increase from 11% in 2014. Recent use was reported by 11% of respondents, not significantly different from 4% in 2014.
- Nitrous oxide continued to be the more popular inhalant with almost half (49%) of the sample reporting lifetime use, not significantly different to 43% in 2014. Recent use was reported by more than one-third (37%) of the sample, comparable to 32% in 2014.
- Consistent with previous years, the use of heroin was uncommon. In 2015, lifetime use was reported by just 3% of the sample, comparable to 4% in 2014. Recent use was reported by 1% of the sample, consistent with 0% in 2014.
- Just 3% of the sample reported lifetime use of methadone, comparable with 2% in 2014. Recent use was reported by 2% of respondents, the same proportion reported in 2014.
- Both lifetime and recent use of buprenorphine was reported by 2% of the participants, comparable to 2% and 0% respectively in 2014.
- Lifetime use of licit or illicit other opiates was reported by one-third (33%) of the sample, a significant increase from 18% in 2014. Recent use was reported by 16% of the respondents, a non-significant increase from 8% in 2014. The majority of use was illicit.
- Lifetime use of OTC codeine was reported by just more than one-quarter (26%) of the sample, the same proportion that was reported in 2014. Recent use was reported by one-fifth (20%) of the sample, not significantly different from 17% in 2014.
- Lifetime use of psilocybin/hallucinogenic mushrooms was reported by more than half of the sample (57%), the same proportion that was reported in 2014. Recent use was reported by just more than one-fifth (21%) of the sample, consistent with 25% in 2014.
- One-fifth (20%) of the sample reported lifetime use of OTC stimulants, a non-significant increase from 10% in 2014. Recent use was reported by one-tenth (10%) of the sample, a non-significant increase from 5% in 2014.
- Consistent with previous years, steroid use remained very low. In 2015, 4% of respondents reported lifetime use and no respondents reported recent use.

IV. New psychoactive substances (NPS)

Since 2010, the EDRS has attempted to systematically investigate a group of drugs commonly referred to as ‘research chemicals’, ‘analogues’, ‘legal highs’, ‘herbal highs’, ‘party pills’ and ‘emerging psychoactive substances’. For the purpose of this report, these drugs are referred to as ‘new psychoactive substances’ (NPS).

- In 2015, more than two-thirds (69%) of the sample reported lifetime use of an NPS and 46% reported recent use.
- The NPS most commonly reported to have been used recently were DMT (13%), DXM (7%) and synthetic cannabis (6%).
- KE reported that synthetic cannabis use was associated with mental health problems such as irrational behaviour, anxiety and psychosis, as well as adverse physical outcomes such as chest pain, seizures and vomiting.

V. Health-related issues

i. Overdose, deaths and hospital admissions

- Since 2007, EDRS participants have been asked about stimulant and depressant drug overdoses.
- Less than one-third (29%) of the sample reported having overdosed on a stimulant drug at some point in their lifetime, consistent with 33% in 2014.
- Just more than one-fifth (22%) of the sample reported having overdosed on a stimulant drug in the preceding 12 months, comparable to 30% in 2014.
- More than one-quarter (28%) of the sample reported having overdosed on a depressant drug in their lifetime, a significant increase from 11% in 2014.
- Just less than one-fifth (19%) of the sample reported having overdosed on a depressant drug in the preceding 12 months, a significant increase from 6% in 2014.
- Consistent with the 2014 findings, ecstasy was the most commonly reported main drug implicated in stimulant overdoses (50%) and alcohol was the most commonly reported main drug implicated in depressant overdoses (94%).

ii. Service usage

- One-tenth (10%) of the sample reported having accessed a service of health professional in relation to their drug or alcohol use in the preceding six months, comparable to 9% in 2014.
- In the 2014/15 period, there were 73 calls to ADIS for which ecstasy was the primary drug of concern, compared to 84 calls in 2013/14. These calls comprised 0.30% of all calls received by ADIS during the 2014/15 period.
- In the 2014/15 period, there were 1,917 calls to ADIS for which (meth)amphetamine was the primary drug of concern, compared to 2,969 calls in 2013/14. These calls comprised 8.0% of all calls received by ADIS during the 2014/15 period. Calls to ADIS involving (meth)amphetamine as the primary drug of concern appear to be on a downward trend since 2014.
- In the 2014/15 period, there were 42 calls to the ADIS involving cocaine the primary drug of concern, a decrease from 286 calls in 2013/14. These calls comprised 0.75% of all calls received by ADIS during the 2014/15 period. Calls to ADIS involving cocaine as the primary drug of concern have been low and stable across survey years.
- In 2013/14, hospital admissions in which amphetamine was the principal diagnosis appear to have increased at the state level and remained stable at the national level; rates for cocaine appear to have remained low and stable at the state level and increased at the national level; and rates for cannabis appear to have decreased at the state level and increased at the national level.

iii. Mental health

- Participants completed the K10. Participants most commonly scored in the 'moderate' distress category (42%) and just more than one-quarter (26%) scored in either the 'high' or 'very high' distress categories. There were no significant differences in the proportion of participants who scored in each category between 2014 and 2015.
- One-third (33%) of the sample reported having experienced a mental health problem in the preceding six months, comparable with 29% in 2014.
- Consistent with the 2014 findings, the most commonly reported recent mental health problems were depression (73%) and anxiety (67%).

VI. Risk behaviours

i. Injecting risk behaviour

- Four per cent of the sample reported having injected a drug at some point in their lifetime, comparable to 2% in 2014.
- Recent injecting was reported by just one participant (1%), the same proportion that was reported in 2014.
- The downward trend in injecting behaviours among WA EDRS participants first seen in 2014 has been maintained into 2015.

ii. Sexual risk behaviour

- Penetrative sex with a casual partner in the preceding six months was reported by 61% of the sample, comparable to 66% in 2014.
- Just more than half (52%) of the sample reported engaging in recent casual sexual activity while under the influence of alcohol or other drugs, comparable to 58% in 2014. Among these participants, 58% reported that they had not used a protective barrier on the last occasion, comparable to 47% in 2014.
- Consistent with the 2014 findings, the drugs most commonly implicated in casual sexual behaviour on the last occasion were alcohol (83%), ecstasy (56%), cannabis (46%) and pharmaceutical stimulants (21%).
- Just more than half (54%) of the sample reported engaging in recent casual sexual activity while sober, comparable to 57% in 2014. Among these participants, 59% reported using no protective barrier on the last occasion, comparable to 42% in 2014.
- Among participants who reported not using a protective barrier on the last occasion, the most commonly reported reason was 'using the contraceptive pill' for sexual activity while under the influence of alcohol and other drugs (39%) and while sober (37%).

iii. Driving risk behaviour

- Among participants who reported driving a car or other vehicle in the preceding six months, 44% reported driving over the legal alcohol limit in that time period, comparable to 37% in 2013.
- Among those who reported driving in the preceding six months, 68% reported driving under the influence of illicit drugs in that time period, comparable to 66% in 2013. The drugs most commonly reported to have been used in this context on the last occasion were cannabis (69%), ecstasy (40%) and dexamphetamine (10%).

iv. Bingeing behaviour

- Bingeing on ERD in the previous six months was reported by less one-third (28%) of the sample, comparable to 37% in 2014.
- Consistent with the 2014 findings, the drugs most commonly implicated in recent bingeing were alcohol (82%), ecstasy (75%), tobacco (71%), cannabis (68%), crystal methamphetamine (43%), pharmaceutical stimulants and energy drinks (each 29%).

v. Alcohol risk behaviour

- Participants completed the AUDIT. The majority of the sample (81%) scored within the 'hazardous or harmful' range for alcohol use, comparable to 87% in 2014.
- Mean AUDIT scores were significantly higher for males than females.

vi. Ecstasy and methamphetamine dependence

- Participants were administered the SDS in regard to both their ecstasy and methamphetamine use.
- For ecstasy, just more than one-fifth (21%) of the sample scored at or above the SDS cut-off score of four, suggesting dependence, comparable to 20% in 2014. There was

no significant difference between the proportion of males and females who reached the cut-off score.

- Among recent methamphetamine users, less than one-third (33%) of respondents scored at or above the SDS cut-off score, suggesting methamphetamine dependence. There was no significant difference between the proportion of males and females who reached the cut-off score. However, this result should be interpreted with caution given the small number of participants who reached the cut-off (n=4).

VII. Criminal and police activity

- Involvement in any criminal activity in the preceding months was reported by more than two-fifths (45%) of the current sample, not significantly different from 40% in 2014. However, this is the largest proportion reported since WA EDRS data collection began in 2003.
- Consistent with previous years, the most commonly reported criminal activity in the preceding months was drug dealing (38%).
- Six per cent of the sample reported having been arrested in the preceding 12 months, a non-significant decrease from 12% in 2014.
- Seven per cent of the sample reported having been the victim of a violent crime in the preceding month. Among these participants, more than one-third (71%) reported that they believed that the perpetrator was under the influence of alcohol or other drugs on the last occasion of violence.
- According to police statistics, both provider and consumer arrests increased in this reporting period, with a total of 16,302 in 2013/14, compared to 11,125 in 2012/13. The most notable increase was for cannabis, with a total of 8,286 arrests in 2013/14, an increase from 5,358 in 2012/13.
- According to police statistics, there were 96 clandestine laboratories detected in WA during 2013/14, a decrease from 136 in 2012/13. The majority were manufacturing non-MDMA ATS.

VIII. Special topics of interest

i. Online purchasing and NPS use

- Just more than two-thirds (68%) of participants reported that their friends had ever purchased an illicit drug online, a significant decrease from 82% in 2014.
- Fourteen per cent of the sample reported having ever personally purchased an illicit drug online, the same proportion that was reported in 2014.
- Just more than one-tenth (11%) of the sample reported purchasing an illicit drug online in the preceding 12 months, comparable to 9% in 2014. The traditional drug most commonly reported to have been purchased was ecstasy (80%) and the NPS most commonly reported to have been purchased were drugs in the 2C-x class (60%).
- Among participants who reported lifetime NPS use, just less than half (47%) reported experiencing an adverse effect on the last occasion of use. The most commonly reported were nausea/vomiting (15%) and restlessness/anxiety (11%).

ii. NPS policy

- The majority of the participants responded with ‘illegal’ or ‘unsure’ when asked to report on the legal status of 2CB, 2CI, DMT, mephedrone and NBOMe.

iii. Cognitive enhancers

- More than two-thirds (69%) of the sample reported having used a cognitive enhancing drug (CE) in the preceding six months.

- The CEs most commonly reported to have been used recently were coffee (70%), dexamphetamine (62%), energy drinks (48%) and methylphenidate (26%).
- The most commonly reported motivations for CE use were to decrease fatigue (43%), to improve concentration (30%) and to offset sleep deprivation (22%).
- Among participants reporting recent use, just less than one-third (29%) reported having experienced a negative side effect on the last occasion of use. The most commonly reported were anxiety (25%) and headache (20%).
- Among recent users, more than one-fifth (22%) of respondents reported having used other drugs with CEs on the last occasion of use. The drug most commonly reported to have been used in this context on the last occasion was cannabis (47%).

IMPLICATIONS FROM THE 2015 WA EDRS FINDINGS

The WA arm of the EDRS ultimately aims to monitor trends in the Perth ERD markets and investigate harms associated with ERD use. The 2015 WA EDRS revealed ongoing fluctuations in drug markets and signs of drug-related harms which are discussed below.

Drug use trends

The findings from the 2014 EDRS suggested that the WA ecstasy market had recovered from declines seen in the 2010/2011 data collection period. The results from the current data collection period indicate that this recovery remained stable into 2015.

Data from the 2012 and 2013 WA EDRS indicated that the resurgence in the ecstasy market at that time was driven by increases in the use of non-pill forms of ecstasy; capsules, powder and crystal. Upward trends in the use of non-pill forms of ecstasy continued into 2014, with significant increases in the proportion lifetime and recent crystal ecstasy use compared to the previous year. In 2015, proportions of use of ecstasy capsules and powder remained stable compared to 2014. However, the proportion of lifetime use of ecstasy capsules in the current sample significantly increased to 79%, compared to 61% in 2014. While non-significant, the proportion of recent use of ecstasy capsules also increased from 2014 to 2015. These data suggest that the higher proportions of use of non-pill forms of ecstasy first seen in 2012 were maintained into 2015 and that there may be an upward trend in the use of ecstasy capsules. It will be interesting to see if this trend continues into 2016.

The 2014 EDRS identified a number of additional drug use trends to be examined into the future. In the first instance, 2014 saw the largest proportion of reported recent pharmaceutical stimulant use since the beginning of WA EDRS data collection in 2003, as well as significant increases in proportions of both lifetime and recent use compared to the previous year. In 2015, these proportions remained stable, rather than continuing to increase. In 2014, the proportion of participants reporting to have ever injected any drug significantly decreased compared to 2013. The proportion of lifetime injecting remained low and stable in 2015.

There are additional drug trends findings in the 2015 EDRS, which will be looked at with interest in 2016 and beyond to see whether they continue. These include: (1) increasing reports of lifetime e-cigarette use; (2) decreasing reports of recent methamphetamine powder (speed) use; (3) increasing reports of lifetime use other (pharmaceutical) opioids.

Harms

The high level of alcohol use among the sample continues to be of concern. The majority of the sample (81%) obtained AUDIT scores that indicated hazardous and harmful use of alcohol, with males obtaining significantly higher risky drinking scores than females. Just less than half (48%) of the respondents reported consuming alcohol on a ‘more than weekly’ basis. The proportion of respondents reporting a depressant overdose in the preceding 12 months significantly increased in the present sample compared to 2014, with alcohol overwhelmingly implicated as the main drug to which the overdose was attributed (94%). Consistent with previous years, the use of stimulant drugs in combination with alcohol was common in the present sample. The majority (85%) of the sample reported using alcohol with ecstasy last time they used it and alcohol was the most commonly reported concomitant drug implicated in stimulant overdoses (62%). Further, among participants who reported recent bingeing behaviour, alcohol was the most commonly implicated drug, most frequently reported to have been combined with ecstasy, tobacco, cannabis, crystal methamphetamine, pharmaceutical stimulants and energy drinks. These findings indicate that harm reduction efforts targeting RPU should continue address risky drinking behaviours, particularly among

males. Focus should be placed on the role of alcohol in overdoses, as well as the concomitant use of alcohol and stimulant drugs.

Findings from the 2013 and 2014 EDRS indicated that NBOMe or 2C-type drugs may have been being sold on the Perth market as LSD. This is concerning because of the increased risk of acute harm posed by 2C-type drugs and NBOMe compared to LSD; 2C-type drugs and NBOMe are highly potent at low doses and can cause cardiovascular complications (Caldicott, Bright & Barratt, 2013). However, a number of findings from the 2015 WA EDRS suggest a decline in this behaviour, specifically: (1) a significant decrease in the proportion of recent LSD use compared to 2014; (2) a lack of KE reports of NBOMe being sold as LSD, and; (3) among RPU who had purchased a drug online in the preceding 12 months, none reported purchasing NBOMe. However, in 2015, proportions of lifetime and recent use of NBOMe and 2C-type drugs remained stable. Further, among participants who reported purchasing drugs online in the preceding 12 months, LSD remained the second most commonly purchased traditional drug and 2C-type drugs were the most commonly purchased NPS. Overall, while there is some evidence that the sale of 2C-type drugs and/or NBOMe as LSD is declining, service providers managing patient presentations involving LSD should continue to consider a diagnosis of an inadvertent 2C-type or NBOMe overdose. Harm reduction interventions targeting RPU should continue to increase awareness of 2C-type drugs and NBOMe on the Perth market, the fact that these drugs may be sold as something else, and the acute harms associated with them.

The large proportion of recent illicit pharmaceutical stimulant use seen in the current sample remains an issue of concern. While the harms associated with recreational use of pharmaceutical stimulants remain largely unknown (Kaye & Darke, 2011), these drugs may facilitate heavy drinking by masking the effects of alcohol intoxication. This may increase the risk of acute alcohol-related harms, such as alcohol toxicity or driving while intoxicated (Green & Moore, 2009). Both ecstasy and pharmaceutical stimulants also increase serotonergic activity. When used in combination with ecstasy, pharmaceutical stimulants may increase the risk of serotonin syndrome, a potentially fatal drug-induced syndrome caused by elevated serotonin levels (Buckley, Dawson & Isbister, 2014; Silins, Copeland & Dillon, 2007). In 2015, alcohol and pharmaceutical stimulants were commonly used with ecstasy on the last occasion of use. Alcohol, ecstasy and pharmaceutical stimulants were frequently implicated in bingeing behaviour as well as driving while intoxicated. Harm reduction interventions with RPU should continue to consider targeting pharmaceutical stimulant use, particularly the concomitant use of alcohol and ecstasy in the context of both bingeing and driving.

Driving while intoxicated continues to be an issue of concern beyond the context of pharmaceutical stimulant use. In 2015, more than two-fifths (44%) of participants who had driven a vehicle in the preceding six months reported having driven under the influence of alcohol in that time period and more than two-thirds (68%) reported having driven under the influence of illicit drugs. The most commonly implicated illicit drugs on the last occasion were cannabis, ecstasy and pharmaceutical stimulants. Both cannabis and alcohol produce dose-dependent impairment of cognitive and psychomotor functions required for driving and increase the risk of driving accidents. While research on the effect of other illicit drugs, including ecstasy and pharmaceutical stimulants, is less equivocal, it is clear that these drugs impair at least some driving-related cognitive functions and increase accident risk; impairment and accident risk also increase when illicit drugs are combined with alcohol (EMCDDA, 2014). REU and regular cannabis users may perceive cannabis, ecstasy and other illicit drugs as less likely than alcohol to cause driving impairment or increase accident risk, which may increase the likelihood of driving under the influence of illicit drugs (Danton, Misselke, Bacon, & Done, 2003; Matthews, Bruno, Dietze, Butler, & Burns, 2014). Harm reduction interventions with RPU should continue to target intoxicated driving, with particular

focus on the impairment and accident risk associated with driving under the influence of cannabis, ecstasy and other illicit drugs, as well as alcohol.

Synthetic cannabis use was an issue of concern arising from the 2014 WA EDRS. In 2014, while proportions of lifetime and recent synthetic cannabis use remained stable from the previous year, several KE reported concerns regarding increasing synthetic cannabis dependence and an associated withdrawal syndrome. In 2015, lifetime and recent synthetic cannabis use again remained stable from the previous year. KE reported that synthetic cannabis use was associated with mental and physical health problems. Several KE also reported that synthetic cannabis use was more problematic than cannabis use, with one KE reporting an increase in hospital presentations where synthetic cannabis was the primary drug of concern. However, none of the KE reported problems with or increases in synthetic cannabis dependence or withdrawal. Overall, KE reports of problematic synthetic cannabis use decreased in 2015 compared to 2014, particularly in regards to dependence and withdrawal. However, synthetic cannabis use remains an issue of concern. Consistent with KE comments, synthetic cannabis intoxication has been associated with several adverse effects, including anxiety, agitation, seizures, chest pain and psychosis (Seely et al., 2012). Adverse effects may be more commonly experienced by users under the age of 25 and when synthetic cannabis and alcohol are used concurrently (Barrat, Cakic, & Lenton, 2013). WA EDRS REU/RPU samples have consistently comprised young people who frequently combine alcohol with other drugs. Educational harm reduction interventions targeting RPU are therefore likely to be especially relevant in regard to the adverse effects of synthetic cannabis, as well as the risks associated with concurrent use of synthetic cannabis and alcohol.

Sexual risk behaviour among RPU continues to be an issue of concern. In 2015, 61% of the sample had engaged in casual sexual behaviour in the preceding six months, the majority (88%) of whom had also engaged in casual sexual behaviour while under the influence of alcohol and/or other drugs; the drugs most commonly reported to have been used in this context on the last occasion were alcohol, ecstasy, cannabis and pharmaceutical stimulants. Among participants who reported recent casual sexual activity, more than half reported that they had not used a protective barrier on the last occasion both while sober (59%) and while under the influence of alcohol and/or other drugs (58%). The most commonly reported reason for not using a protective barrier on the last occasion was ‘using the contraceptive pill’ for both casual sexual behaviour while sober and under the influence of alcohol and/or other drugs. These findings suggest that a sizeable proportion of RPU are likely to be at risk of contracting STIs, both while under the influence of drugs and while sober. Just 4% of the sample reported being diagnosed with an STI within the last 12 months; however, less than half (42%) of the respondents reported having had a sexual health check-up within that time period. Educational harm reduction efforts with RPU should therefore seek to increase awareness of the importance of protective barriers for preventing STIs in addition to pregnancy, as well as the importance of obtaining regular sexual health check-ups.

1. INTRODUCTION

The EDRS is an ongoing project funded by the AGDH and modelled on the more established IDRS. As the focus of the IDRS was on injecting drug users, it did not directly acknowledge the distinct population regularly using ecstasy and related drugs (ERD). Consequently, in 2000, NDLERF funded a two-year, two-state trial of the feasibility of monitoring emerging trends in the markets for ERD using the extant IDRS methodology. In 2015, the EDRS was supported by funding from the Australian Government under the Substance Misuse Prevention and Service Improvement Grants Fund.

The EDRS terms of reference are the drugs that are routinely associated in the context of entertainment venues such as nightclubs, festivals or dance parties. This includes drugs such as MDMA (ecstasy), amphetamines, cocaine, LSD, ketamine, MDA and GHB. This marked the beginning of the PDI, which became a national survey in 2003, and was re-named the EDRS in 2006.

This report presents the findings of the 13th year of data collection for the PDI/EDRS in WA. Like the IDRS, results are based on three data sources: interviews with current illicit drug users – in this case RPU; KE interviews with people who have regular contact with these users; and the collation of secondary indicator data. Also consistent with the paradigm of the IDRS as an early warning system, participants resided in the capital city, reflecting the likelihood that emerging trends in illicit drug markets are more likely to occur initially in large cities rather than regional centres or rural areas.

1.1. Study aims

The specific aims of the WA EDRS 2015 were to:

1. Describe the characteristics of a sample of current RPU in Perth;
2. Examine patterns of ecstasy and other drug use among this sample;
3. Document market aspects of ERD in Perth, such as price, potency and availability;
4. Examine participants' experiences of the nature and incidence of ecstasy-related harm including physical, psychological, social and legal harms;
5. Compare key findings of this study with those reported in previous years; and
6. Identify emerging trends in the ERD markets that may require further investigation.

2. METHOD

A triangulated approach was used for the EDRS to provide an indication of emerging trends in use of ERD markets. Using multiple data sources minimises the impact of biases inherent in each source and permits validation of observed trends across the different data sources. The three main sources of information used to document trends were:

1. A survey of RPU consisting of face-to-face interviews;
2. A KE survey of professionals working in the field using semi-structured qualitative interviews; and
3. An examination of existing indicator data, such as statistical data collected from legal and health services.

2.1. Survey of REU/RPU

There is an established market for ecstasy, i.e. tablets that are purported to contain MDMA, which has existed for more than two decades. According to the AIHW, between 1995 and 2010, recent ecstasy use (use in the previous 12 months) among Australians over 14 years of age peaked at 3.5% in 2007, then, for the first time since 1995, ecstasy use declined between 2007 and 2010 (3%) (AIHW, 2011). In WA, 2.5% of the general population reported use of ecstasy in 2013 (AIHW, 2014). 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 of the EDRS. Therefore, from 2003 to 2011, the sentinel population for the EDRS consisted of regular users of pills, powder or capsules sold as ecstasy. However, in recent years, recruitment based on this criteria alone has proved challenging for some jurisdictions including WA. It was speculated that this could be a result of declines in the potency and availability of ecstasy in WA and across Australia.

As in other parts of the world, there was evidence for a decline in ecstasy purity first seen in 2010 report by the ACC. This declining purity provided potential for an expanding market of NPS as existing ecstasy users sought alternative substances (Bruno et al., 2012). Essentially, due to a decline in the purity and availability of ecstasy, people may have been seeking out and using alternative psychoactive substances. In order to capture these users, in 2012 the decision was made by the EDRS chief investigators to broaden the selection criteria for the study in those jurisdictions where the decline in ecstasy availability had made the samples too small to undertake meaningful analysis. Consequently, in 2012, the WA EDRS selection criteria were expanded to include RPU in addition to REU. It was intended that an annual review of this strategy be undertaken in those jurisdictions where these changes were made, in order to decide on the future of these recruitment criteria. In 2015, in WA, while the expanded criteria were in employed, there were no difficulties recruiting participants who had used ecstasy on at least six occasions in the preceding six months. Consequently, the 2015 sample comprised only REU. However, given that the expanded criteria was employed, and to allow for standardisation across jurisdictions, 2015 WA EDRS participants are referred to as RPU in this report.

2.1.1. Recruitment

For the 2015 WA EDRS, 100 RPU were interviewed, all of whom reported that they had lived in the Perth metropolitan area for more than 12 months. Participants were recruited through a purposive sampling strategy (Kerlinger, 1986) that involved advertisements in entertainment street press and on social media websites, as well as participant snowballing techniques as described by Barnard (1995). For the past four data collection periods, recruitment methods have expanded to keep in line with advancing technology. Some of the additions included:

1. An EDRS webpage went live on the NDRI website; and
2. The study was advertised on the Facebook sites of entertainment street press

Ethics approval was granted from the Curtin University Human Research Ethics Committee (HR27/2015) with a stipulation that interviews be conducted with participants aged 16 years or older.

2.1.2. Procedure

In 2015, potential participants contacted the research co-ordinator by either telephone, SMS (trialled for the first time in 2009), or by a generic email address, and were then screened for eligibility only on the telephone. Participants were asked to leave either a first name or pseudonym and a contact phone number if they contacted the co-ordinator via SMS or email. Three criteria were to be met for participation:

1. Use of ecstasy (pills, powder, capsules or crystals) or a psychostimulant drug (e.g. methamphetamine, MDA, cocaine, ketamine, GHB, LSD, mephedrone, or NPS such as 2C-B, 2C-I) at least monthly or on six separate occasions over the preceding six months;
2. Aged 16 years or older; and
3. Resident in the Perth metropolitan area for a minimum of 12 months prior to the interview.

Participants meeting these criteria were informed that the study consisted of a confidential face-to-face interview conducted at a public place of convenience for both parties. It was explained that the structured interview would take approximately 60 minutes to complete, and that all data would be collected anonymously. In 2015, participant reimbursement remained at $40 to cover participants' time and travel expenses to attend the interview. Upon meeting the interviewer, the nature and purpose of the study was again explained to participants, and informed consent was obtained. All interviewers were trained in administration of the specific interview schedule and had a range of interviewer materials contained in a display folder to assist them.

2.1.3. Measures

Participants were administered a structured interview schedule based on a national study of ecstasy users conducted by NDARC in 1997 (Topp et al., 1998; Topp et al., 2000). The original survey incorporated items from a number of previous NDARC studies of users of ecstasy (Solowij, Hall & Lee, 1992) and amphetamines (Darke et al., 1994; Hando & Hall, 1993; Hando, Topp & Hall, 1997) and has been revised over successive years of PDI/EDRS data collection. The interview schedule focused primarily on the six months preceding the interview. The survey allowed assessment of sample characteristics related to demographic information; ecstasy and other drug use history, including frequency and quantity of use and ROA; physical and psychological side effects of ecstasy; price, potency and availability of different drugs; sexual and health-related behaviours; self-reported criminal activity; and general trends in the ERD markets such as new drug types and new drug users.

2.1.4. Data analysis

Quantitative data from the RPU survey were analysed using SPSS Statistics 22 for Windows. For continuous, normally distributed variables, *t*-tests were employed. Where continuous variables were skewed, the Mann-Whitley *U*-test, a non-parametric analogue of the *t*-test, was employed. Non-parametric median difference tests were used to calculate median differences between groups. Differences between proportions were analysed by calculating Newombe-Wilson Hybrid Score Intervals, using an Excel spreadsheet available at http://www. cebm.net/index.aspx?o=1023; all CIs based on these scores presented in this report are at 95%. Differences in the spread of frequencies across multiple responses were

analysed using Pearson's Chi Square tests. Qualitative data collected from RPU and KE were analysed using the word processing and table-making options of Microsoft Word 2010.

2.2. Survey of KE

To maintain consistency with the central IDRS, eligibility criterion for KE participating in the EDRS was regular contact in the course of employment with a range of ecstasy/psychostimulant drug users. Regular contact was defined as average weekly contact and/or contact with 10 or more ecstasy/psychostimulant drug users throughout the past six months. Twelve KE from areas of law enforcement and health participated in the 2015 WA EDRS.

2.3. Other indicators

Secondary data sources were examined to complement and validate the data collected from both the REU and KE interviews. Data sources included in this report are from:

- The 2013 NDSHS;
- ACC drug potency and seizure data, and arrest data;
- AIHW hospital admissions; and
- Telephone advisory service data from ADIS.

3. DEMOGRAPHICS

3.1. Overview of the REU/RPU sample

Interviews were conducted with 100 RPU in the Perth metropolitan area in April and May of 2015. Table 1 presents key demographic data for the samples of REU/RPU recruited in WA since 2006.

The mean age of the participants in the 2015 sample was 21.7 years (range 17-45) and comprised 64 males and 36 females. The vast majority of participants identified as coming from an English speaking background (99%) and as having been born in Australia (82%). None of the participants identified as Aboriginal or Torres Strait Islander. The mean number of years of high school education that the participants had completed was 11.8 (range 9-12). Thirty-eight per cent of the sample had a tertiary qualification; 15% held university degree and 23% held a trade or technical qualification. The majority of the participants identified as heterosexual (95%) and almost two-thirds (61%) reported their current relationship status as single. More than two-thirds (69%) of the participants reported residing in their parents'/family home, followed by rented house/flat (27%). The mean reported income was $503 per week (range $11-$2,800).

The overall demographic characteristics of the 2015 sample were very similar to the 2014 sample. However, as shown in Table 1, there were three significant differences between the groups. The mean number of years of school completed by participants was statistically significantly lower in the current sample (11.8 years) than in 2014 (11.9 years), although unlikely to be clinically or manifestly significant. Forty-seven per cent of the current sample reported their employment status as 'part-time employed', a significant increase from 16% in 2014 (CI=0.18 to 0.42). Finally, just 2% of the present sample reported that they were 'working and studying', a significant decrease from 39% in 2014 (CI: -0.27 to -0.47).

Table 1: Demographic characteristics of WA REU/RPU samples, 2006-2015

	2006 N=100	2007 N=100	2008 N=58	2009 N=100	2010 N=100	2011 N=28	2012 N=90	2013 N=100	2014 N=100	**2015 N=100**
Mean age (years)	24.7	26.4	22.9	23.1	23.4	26.8	23.7	20.8	20.7	**21.7**
Male (%)	60	55	48	65	48	68	60	63	69	**64**
English speaking background (%)	95	95	98	97	99	96	97	96	98	**99**
ATSI (%)	2	1	0	2	4	4	2	2	0	**0**
Heterosexual (%)	86	88	97	84	86	100	96	90	93	**95**
Mean number school years	11.5	11.5	11.8	11.5	11.7	11.4	11.6	11.6	11.9	**11.8***
Tertiary qualifications (%)	51	52	59	46	48	36	67	32	29	**38**
Full-time students (%)	19	3	3	13	8	7	4	5	4	**8**
Employed full-time (%)	52	24	55	22	31	14	28	16	23	**22**
Employed part-time (%)	13	38	12	23	29	21	22	29	16	**47***
Both studying and employed	-	-	24	27	17	18	21	22	39	**2***
Unemployed (%)	14	25	5	15	13	25	21	20	16	**12**
Mean income per week	-	-	-	$425	$467	$471	$634	$524	$590	**$503**
Current drug treatment (%)	5	8	3	5	3	7	3	3	0	**1**

Source: WA EDRS REU/RPU interviews, 2006-2015

* Indicates significant changes from the 2014 results according to 95%CI and p=0.05

4. DRUG CONSUMPTION PATTERNS

4.1. Drug use history and current drug use

Participants were asked about lifetime (ever used) and recent use (last six months) of a variety of different drugs. Polydrug use has been common among REU/RPU samples since the WA EDRS commenced in 2003. In the current sample, the median number of drug types that participants reporting using in their lifetime was 12 (range 3-35) and the median number they reported using recently was eight (range 1-23). Consistent with previous data collection years, the majority of the sample reported recent use of alcohol (97%), cannabis (86%) and tobacco (82%). A more thorough analysis of each drug class can be found in later sections of this report.

Table 2 presents the rates of lifetime and recent use of a variety of drugs among REU/RPU since 2006. The EDRS began to systematically investigate other less commonly used drugs in 2010 (e.g. mephedrone, MDPV, DMT and synthetic cannabis). These drugs are currently referred to as NPS and are reported separately to the drugs presented in Table 2 (see section 3.10 'New psychoactive substances' for a detailed analysis).

While rates of drug use largely remained stable from 2014, there were some significant differences in 2015 compared to 2014. These were:

- A significant increase in lifetime use of ecstasy capsules;
- A significant increase in lifetime use of e-cigarettes;
- A significant decrease in recent use of methamphetamine powder (speed);
- A significant decrease in recent use of LSD; and
- A significant increase in lifetime use of other opioids.

Table 2: Lifetime and recent polydrug use of WA REU/RPU samples, 2006-2015

	2006 N=100	2007 N=100	2008 N=58	2009 N=100	2010 N=100	2011 N=28	2012 N=90	2013 N=100	2014 N=100	**2015 N=100**
Ever inject any drug (%)	20	27	10	11	10	36	10	10	2	**4**
Ecstasy pills										
ever used (%)	100	100	100	100	100	100	100	100	100	**100**
used last 6 months (%)	100	100	100	100	100	100	100	99	98	**99**
Ecstasy powder										
ever used (%)	29	23	24	19	18	29	42	32	27	**29**
used last 6 months (%)	9	11	9	10	6	7	26	25	20	**18**
Ecstasy capsules										
ever used (%)	-	-	47	42	41	61	58	62	61	**79***
used last 6 months (%)	-	-	28	15	14	11	32	48	51	**65**
Ecstasy crystal										
ever used (%)	-	-	-	-	-	-	-	46	67	**64**
used last 6 months (%)	-	-	-	-	-	-	-	34	58	**51**
Alcohol										
ever used (%)	100	97	100	100	100	100	100	100	100	**98**
used last 6 months (%)	99	92	98	99	98	93	96	96	98	**97**
Cannabis										
ever used (%)	100	96	100	99	99	100	99	98	98	**97**
used last 6 months (%)	86	80	85	85	81	86	77	92	86	**86**
Tobacco										
ever used (%)	97	79	90	92	84	89	96	88	91	**91**
used last 6 months (%)	74	52	69	76	67	89	67	75	77	**82**
E-cigarettes										
ever used (%)	-	-	-	-	-	-	-	-	47	**63***
used last 6 months (%)	-	-	-	-	-	-	-	-	33	**34**
Methamphetamine powder (speed)										
ever used (%)	87	72	72	63	60	67	62	36	36	**23**
used last 6 months (%)	65	46	38	37	38	44	27	17	19	**6***
Methamphetamine base (base)										
ever used (%)	56	22	22	13	8	36	8	9	3	**2**
used last 6 months (%)	32	10	5	3	4	11	1	0	0	**0**
Crystal methamphetamine (crystal)										
ever used (%)	89	69	62	41	40	64	58	32	24	**31**
used last 6 months(%)	77	52	36	20	22	46	33	22	17	**16**

Source: WA EDRS REU/RPU interviews, 2006-2015

* Indicates significant changes from the 2014 results according to 95%CI and p=0.05

- Data not collected

Table 2: Lifetime and recent polydrug use of WA REU/RPU samples, 2006-2015 (continued)

	2006 N=100	2007 N=100	2008 N=58	2009 N=100	2010 N=100	2011 N=28	2012 N=90	2013 N=100	2014 N=100	**2015 N=100**
Pharmaceutical stimulants										
ever used (%)	92	71#	85#	82#	83#	89#	93#	77#	91#	**91#**
used last 6 months (%)	60	53#	53#	60#	58#	68#	64#	64#	81#	**78#**
Cocaine										
ever used (%)	55	56	66	52	51	82	71*	54	56	**58**
used last 6 months (%)	29	27	40	24	26	32	31	34	30	**29**
LSD										
ever used (%)	67	49	47	55	48	71	57	66	67	**58**
used last 6 months (%)	25	23	21	31	35	36	33	41	45	**24***
MDA										
ever used (%)	6	22	16	9	11	25	17	18	19	**20**
used last 6 months (%)	0	3	5	2	5	14	4	12	13	**11**
Ketamine										
ever used (%)	14	22	21	18	14	18	18	20	25	**16**
used last 6 months (%)	4	2	3	6	4	0	3	7	11	**4**
GHB										
ever used (%)	5	8	7	7	3	14	4	9	4	**6**
used last 6 months (%)	2	0	2	2	0	0	1	3	3	**2**
Amyl nitrate										
ever used (%)	34	27	21	20	20	29	24	14	11	**20**
used last 6 months (%)	8	7	3	6	5	7	10	7	4	**11**
Nitrous oxide										
ever used (%)	57	46	48	39	39	50	53	46	43	**49**
used last 6 months (%)	23	20	21	13	16	18	26	32	32	**37**
Mushrooms										
ever used (%)	53	46	45	50	43	79	70	44	57	**57**
used last 6 months (%)	13	14	10	15	12	11	26	17	25	**21**
Benzodiazepines										
ever used (%)	57	48#	36#	41#	44#	61#	56#	55#	52#	**54#**
used last 6 months (%)	32	37#	24#	22#	28#	39#	25#	33#	35#	**45#**
Anti-depressants										
ever used (%)	29	26#	17#	21#	24#	29#	29#	31#	14#	**18#**
used last 6 months (%)	14	13#	9#	6#	10#	4#	8#	18#	6#	**9#**

Source: WA EDRS REU/RPU interviews, 2006-2015

Includes licit and illicit use

* Indicates significant changes from the 2014 results according to 95%CI and p=0.05

Table 2: Lifetime and recent polydrug use of WA REU/RPU samples, 2006-2015 (continued)

	2006 N=100	2007 N=100	2008 N=58	2009 N=100	2010 N=100	2011 N=28	2012 N=90	2013 N=100	2014 N=100	**2015 N=100**
Heroin										
ever used (%)	10	16	3	6	4	25	6	6	4	**3**
used last 6 months (%)	1	10	2	2	3	11	1	2	0	**1**
Methadone										
ever used (%)	4	12	5	4[#]	3[#]	7	2	1	2	**3**
used last 6 months (%)	2	6	0	1[#]	2[#]	0	0	0	2	**2**
Buprenorphine										
ever used (%)	3	10	3	2[#]	2[#]	11[#]	3[#]	3	2	**2**
used last 6 months (%)	1	4	2	-[#]	1[#]	11[#]	0[#]	0	0	**2**
Other opiates										
ever used (%)	24	35	24	20	27	43[#]	46[#]	29[#*]	18[#]	**33[#]***
used last 6 months (%)	13	21	12	10	10	14[#]	20[#]	15[#]	8[#]	**16[#]**
OTC codeine										
Ever used (%)	-	-	-	20	29	57	20	23	26	**26**
Used last 6 months (%)	-	-	-	15	22	43	14	15	17	**20**
OTC stimulants										
ever used (%)	-	-	-	19	36	43	8	7	10	**20**
used last 6 months (%)	-	-	-	8	26	11	2	5	5	**10**
Steroids										
ever used (%)	-	-	-	-	1	0	2	1	1	**4**
used last 6 months (%)	-	-	-	-	0	0	1	1	1	**0**

Source: WA EDRS REU/RPU interviews, 2006-2015

[#] Includes licit and illicit use

* Indicates significant changes from the 2014 results according to 95%CI and p=0.05

- Data not collected

4.2. Ecstasy use

'Ecstasy' is the term used in popular street culture for the drug MDMA. This drug is classed as an hallucinogenic amphetamine and commonly associated with what was previously termed the 'party drug' scene. Tablets (pills), powder, caps and crystals sold as ecstasy may include a range of substances, perhaps in combination with a hallucinogenic such as ketamine. They may also contain illicit chemicals like MDA, PMA or MDEA, or licit substances such as caffeine or paracetamol. The results presented in this section relate to the participants' use and knowledge of pills, powder, capsules and crystals sold as ecstasy.

4.2.1. Ecstasy use among REU/RPU

Presented in Table 3 are key findings regarding ecstasy use collected from WA REU/RPU samples recruited since 2006. Overall, patterns of ecstasy use have remained stable in the current sample compared to 2014, with only one significant difference.

In 2015, the average age at which ecstasy was first used was 18 years (range 14-34), not significantly different 17 years in 2014. More than one-third (39%) of the present sample nominated ecstasy as their 'drug of choice', consistent with 40% in 2014.

Less than one-quarter (23%) of the sample reported using ecstasy 'weekly or more' in the six months preceding the interview, the same proportion reported in 2014. The mean number of days that any form of ecstasy was reported to have been used in the preceding six month period was 20 (i.e. less than once a week), not significantly different from 18 in 2014.The mean number of ecstasy tablets reported to have been used on a 'typical' occasion in the preceding six months was 2.5 (range 1-8), comparable to 2.4 in 2014. The mean number of ecstasy tablets reported to have been used on the 'heaviest' occasion in the preceding six months was 4.6 (range 1-14), which is the same mean reported in 2014.

As in previous years, ecstasy pills were the most commonly reported form of ecstasy used in the current sample. All participants (100%) reported lifetime use of ecstasy pills and 99% reported recent use. The most commonly used non-pill form of ecstasy was capsules, followed by crystal and then powder. Less than one-third (29%) of the current sample reported lifetime use of ecstasy powder and just under one-fifth (18%) reported recent use, consistent with 27% and 20% respectively in 2014. Lifetime use of ecstasy capsules was reported by more than three-quarters (79%) of the sample, a significant increase from 61% in 2014 (CI: 0.05 to 0.29). Recent use of ecstasy capsules was reported by 65% of the sample, a non-significant increase from 51% in 2014. Almost two-thirds (64%) of the present sample reported lifetime ecstasy crystal use and 51% reported recent use, not significantly different from 67% and 58% respectively in 2014.

Consistent with previous years, among those who commented in the current sample (n=98), the most commonly reported main ROA for any form of ecstasy in the preceding six months was swallowing (n=84, 86%) followed snorting (n=13, 13%) and then shelving/shafting (n=1, 1%). None of the participants reported having injected ecstasy in their lifetime.

Table 3: Patterns of ecstasy use, 2006-2015

Ecstasy	2006 N=100	2007 N=100	2008 N=58	2009 N=100	2010 N=100	2011 N=28	2012 REU n=65	2012 REU/RPU N=90	2013 N=100	2014 N=100	**2015 N=100**
Ecstasy pills											
ever used (%)	100	100	100	100	100	100	100	100	100	100	**100**
used last 6 months (%)	100	100	100	100	100	100	100	100	99	98	**99**
Ecstasy powder											
ever used (%)	29	23	24	19	18	29	54	42	32	27	**29**
used last 6 months (%)	9	11	9	10	6	7	34	26	25	20	**18**
Ecstasy capsules											
ever used (%)	-	-	47	42	41	61	63	58	62	61	**79***
used last 6 months (%)	-	-	28	15	14	11	42	32	48	51	**65**
Ecstasy crystal											
ever used (%)	-	-	-	-	-	-	-	**-**	46	67	**64**
used last 6 months (%)	-	-	-	-	-	-	-	**-**	34	58	**51**
Mean age first used ecstasy (years)	19	20	18	18	18	18	18	18	18	17	**18**

Source: WA EDRS REU/RPU interviews, 2006-2015

* Indicates significant changes from the 2014 results according to 95%CI and p=0.05

- Data not collected.

Table 3: Patterns of ecstasy use, 2006-2015 (continued)

Ecstasy	2006 N=100	2007 N=100	2008 N=58	2009 N=100	2010 N=100	2011 N=28	2012 REU n=65	2012 REU/RPU N=90	2013 N=100	2014 N=100	**2015 N=100**
Mean days used ecstasy last 6 months	21	16	13	12	14	17	13	11	20	18	**20**
Ecstasy 'favourite' drug (%)	41	46	38	42	45	26	39	36	38	40	**39**
Use ecstasy weekly or more (%)	35	27	10	29	14	29	14	12	30	23	**23**
Mean ecstasy tablets in typical session	2.0	1.8	2.1	2.5	2.1	2.3	2	1.8	2.2	2.4	**2.5**
Median ecstasy crystals used in a typical session (caps)	-	-	-	-	-	-	-	-	-	2	**2**
Median ecstasy crystals used in a heavy session (caps)	-	-	-	-	-	-	-	-	-	2	**2**
Typically use >1 ecstasy pill (%)	70	54	74	86	81	75	77	66	72	86	**88**
Recently binged~ on ecstasy or related drugs (%)	45	29	22	40	27	54	29	26	38	37	**28**

Source: WA EDRS REU/RPU interviews, 2006-2015

* Indicates significant changes from the 2014 results according to 95%CI and p=0.05

~ 'Binge' defined as use of ecstasy for more than 48 hours continuously without sleep

Table 3: Patterns of ecstasy use, 2006-2015 (continued)

Ecstasy	2006 N=100	2007 N=100	2008 N=58	2009 N=100	2010 N=100	2011 N=28	2012 REU n=65	2012 REU/RPU N=90	2013 N=100	2014 N=100	**2015 N=100**
Ever injected ecstasy (%)	12	14	7	4	6	21	3	4	3	2	**0**
Main ROA of ecstasy in the last 6 months (%)											
Swallow	98	95	91	99	94	93	94	93	90	91	**86**
Snort	1	5	9	1	5	7	6	7	9	8	**13**
Inject	-	-	-	-	1	-	-	-	1	_	**-**
Shelve/shaft^	1	-	-	-	-	-	-	-	-	1	**1**
Used other drugs in conjunction with ecstasy on last occasion of use[#] (%)	94	93	97	73	84	68	89	92	93	89	**85**
Use other drugs to 'come down' from ecstasy on last occasion of use[#] (%)	86	86	90	54	39	54	42	39	49	54	**52**

Source: WA EDRS REU/RPU interviews, 2006-2015

*Indicates significant changes from the 2014 results according to 95%CI and p=0.05

^ 'Shelve/shaft' defined as use via insertion into vagina (shelving) or the rectum (shafting)

- Data not collected

4.2.2. Use of other drugs with ecstasy and during comedown

In 2015, the majority (85%) of the participants reported using other drugs in combination with ecstasy last time they used it, comparable to 89% in 2014. Comparable to the 2014 results, the drug most commonly reported to have been used with ecstasy on the last occasion was alcohol (80% overall; 19% less than five standard drinks and 61% more than five standard drinks). This was followed by cannabis (53%), tobacco (45%), pharmaceutical stimulants (29%), nitrous oxide (12%), benzodiazepines (7%), crystal methamphetamine, energy drinks and LSD (each 5%), amyl nitrate and cocaine (each 3%) and ketamine, MDA, over the counter codeine, DXM and No-Doz (each 1%).

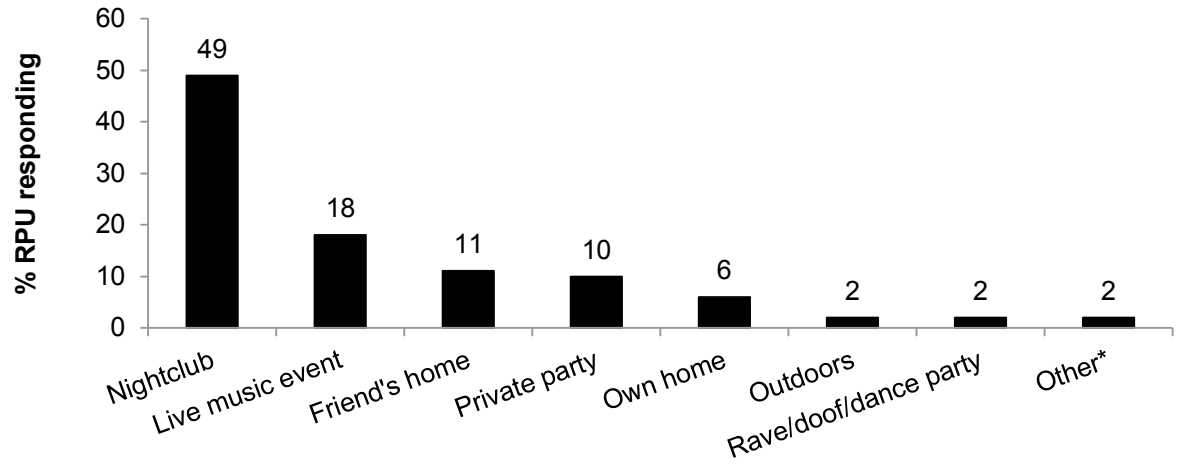
Just more than half (52%) of the sample reported using other drugs to help them come down from ecstasy the last time they used it, consistent with 54% in 2014. Comparable to the 2014 results, the drug most commonly reported to have been used for this purpose on the last occasion was cannabis (83%), followed by benzodiazepines (33%), alcohol (8% overall; 2% less than five standard drinks and 6% more than five standard drinks), tobacco (4%) and nitrous oxide, OTC codeine, pharmaceutical stimulants, 5HTP and tramadol (each 2%).

4.2.3. Locations of ecstasy use

Ecstasy pills, powder and capsules

As shown in Figure 1, the most commonly cited location where participants reported spending the most time while intoxicated on the last occasion that they used ecstasy pills, powder or capsules was 'nightclub' (49%). This was followed by 'live music event' (18%), 'friend's home' (11%), 'private party' (10%), 'own home' (6%), and 'rave/doof/dance party' (2%). These findings are consistent with the 2014 results.

Figure 1: Location of most recent ecstasy pills, powder and capsules use, 2015 (N=100)

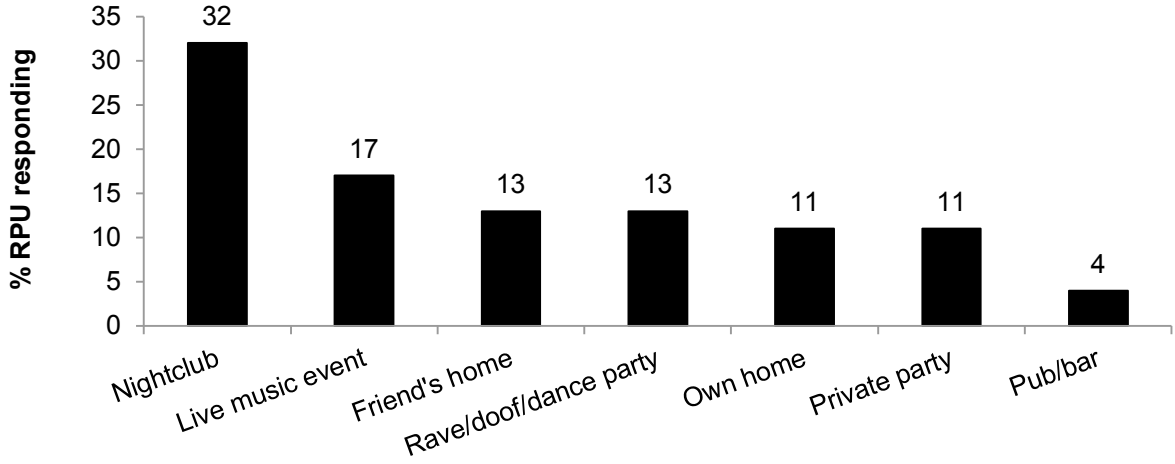


Source: WA EDRS RPU interviews, 2015
*Other locations were: 'public place' and 'pub/bar'.

Ecstasy crystal/MDMA rock

As shown in Figure 2, among those who commented (n=47), the most commonly cited location where participants reported spending the most time while intoxicated on the last occasion of ecstasy crystal/MDMA rock use was 'nightclub' (n=15, 32%). This was followed by 'live music event' (n=8 17%), 'friend's home' and 'rave/doof/dance party' (each n=6, 13%), 'own home' and 'private party' (each n=5, 11%) and 'pub/bar' (n=2, 4%). These findings are consistent with the 2014 results.

Figure 2: Location of most recent ecstasy crystal/MDMA rock use, 2015 (N=47)

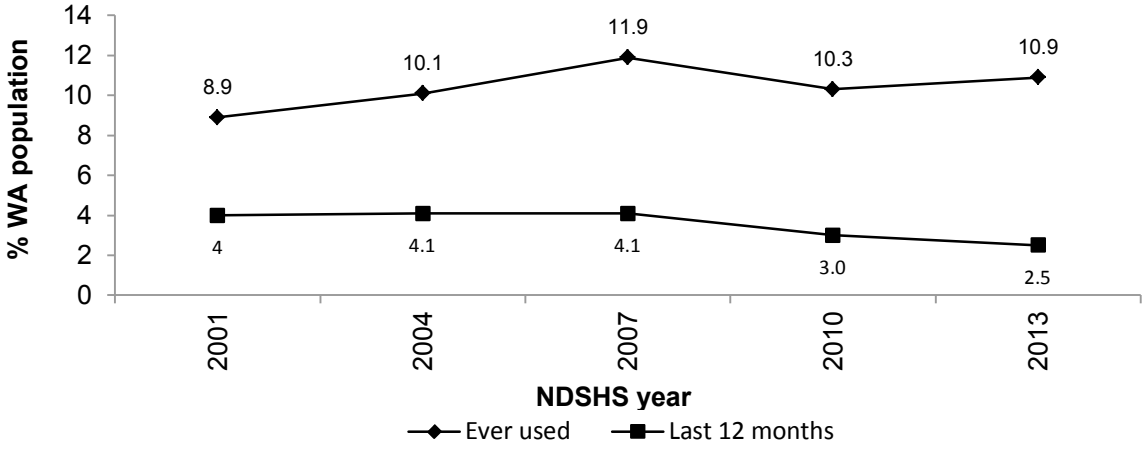


Source: WA EDRS RPU interviews, 2015

4.2.4. Use of ecstasy in the general population

The NDSHS has conducted research on drug use at various intervals in Australia since 1988. As shown in Figure 3, in WA, lifetime use of ecstasy reported in this survey steadily increased from 2001 to 2007, whereas recent use has remained comparable. In WA in 2013, ecstasy was reported as a drug used in the last 12 months by 2.5% of those aged 14 years and over. WA was the state with the fourth highest proportion of use of ecstasy in the last 12 months in those 14 years and over, behind Tasmania, Northern Territory, and South Australia (AIHW, 2014).

Figure 3: Prevalence of ecstasy use among the population aged 14 years and over in Western Australia, 2001-2013



Source: NDSHS supplementary tables, 2001 to 2013
Note: Data concerning lifetime use of ecstasy refers to the Australian population; WA specific data was not available at time of writing.

KE comments

- KE noted that that ecstasy continued to be commonly used recreationally among young people in Perth.
- Most KE agreed that ecstasy was used by both genders and was most commonly used in the 18-25 year old age group.
- A KE who worked in law enforcement reported that ecstasy was commonly used in conjunction with alcohol.
- A KE who worked in community outreach noted that pills containing ecstasy and hallucinogens (known as 'tripstasy') had emerged on the Perth market. This KE noted that tripstasy is visually indistinguishable from ecstasy pills.
- Most KE reported that ecstasy pills were the most common form of the drug.
- A KE who worked in health education reported that pills that are being sold on the Perth market as ecstasy may actually contain NBOMe rather than MDMA.

4.2.5. Summary of ecstasy consumption

- The mean age of first ecstasy use was approximately 18 years, not significantly different from 17 years in 2014.
- The proportion of participants reporting ecstasy as their 'drug of choice' was 39%, comparable to 40% in 2014.
- The mean number of days that ecstasy was used in the preceding six months was 20, not significantly different from 18 in 2014.
- The average number of ecstasy tablets used on a typical occasion was 2.5, not significantly different from 2.4 in 2014.
- Less than one-quarter (23%) of the sample reported 'weekly or more' ecstasy use, the same proportion reported in 2014.
- Consistent with previous years, swallowing was the most common main ROA (86%).
- The proportion reporting typically using more than one tablet in a single session was 87%, consistent with 84% in 2014.
- Lifetime use of ecstasy capsules appears to be on an upward trend, with 79% of the sample reporting lifetime use, a significant increase from 61% in 2014.
- Consistent with 2014, the majority of the participants (85%) reported using other drugs in combination with ecstasy the last time they used it. The most commonly reported drugs used concomitantly were alcohol, cannabis, tobacco, and pharmaceutical stimulants.
- Just over half (52%) of the sample reported using other drugs to help them come down from ecstasy the last time they used it, consistent with 54% in 2014. The drugs most commonly used in this context were cannabis, benzodiazepines and alcohol.
- The most commonly cited last location of last ecstasy use was 'nightclub' for pills, powder or capsules (49%) as well as ecstasy crystal/MDMA rock (32%).
- KE reported that recreational ecstasy use was common among young people and that ecstasy was often used in combination with alcohol.

4.3. Methamphetamine use

Methamphetamine became a primary focus of the IDRS in 2001, in recognition of its increasing prevalence over amphetamine during the 1990s. These drug types differ in molecular structure but have a similar effect of stimulating the release of monoamines such as dopamine, noradrenaline, adrenaline and serotonin in the body (Seiden, Sobol & Ricaurte, 1993). Throughout the 1980s, amphetamine sulfate was the dominant form of illicit amphetamine in Australia, but due to legislative controls on the availability of primary precursor chemicals, there was a shift toward alternative recipes for cooking amphetamine (Wardlaw, 1993). During the 1990s, the proportion of amphetamine-type substance seizures that were methamphetamine (rather than amphetamine) steadily increased, until methamphetamine clearly dominated the market (Australian Bureau of Criminal Intelligence [ABCI], 1999, 2000, 2001). Across Australia today, the powder traditionally known as speed is almost exclusively methamphetamine rather than amphetamine. For example, in the 2006/07 financial year, of the 4,396 seizures of (non-phenethylamine) amphetamine-type seizures analysed for potency in Australia, 97.9% (by number) were methamphetamine rather than amphetamine (ACC, 2008).

As methamphetamine markets across the country have expanded over the past few years, it has become apparent that there is a diversity of forms, or presentations, of methamphetamine sold in the Australian illicit drug market.

Powder form methamphetamine is the presentation of the drug which has traditionally been available in Australia. This is commonly a powder that can range from fine to more crystalline or coarse, and may take different colours (commonly white, yellow, brown, orange or pink), depending on the chemical process used in its production and the quality of that process. It is typically produced within Australia, most commonly in small, portable laboratories, and is usually based on pharmaceutical pseudoephedrine (extracted from, e.g., Sudafed tablets). Because of its powder form, it is fairly easy to cut (dilute) and is commonly sold at fairly low purity/potency, although this can vary substantially.

The two other forms of methamphetamine are traditionally higher in potency (at least partially due to being more difficult to cut) (Topp et al., 2002). The first, referred to in some jurisdictions as base or paste, is commonly a gluggy, waxy, oily, ‘wet’ powder. This form of the drug appears oily because the conversion process from pseudoephedrine to methamphetamine produces the alkaline (base) form of methamphetamine, which is oily. To convert this to a more easily usable form (methamphetamine hydrochloride crystals, which may take the appearance of powder or, when no impurities are present, and carefully crystallised, may take the form of the ‘ice’ crystals – discussed below) requires a high level of skill and, when not completed correctly, the result of this process is an oily powder that often has a yellow or brownish tinge due to the presence of iodine and other impurities (Topp & Churchill, 2002).

The final form of methamphetamine examined in the current study is often referred to as ice or crystal meth(amphetamine). This is the product of a careful production process, and is believed to be chiefly imported into Australia from Asian countries (Topp & Churchill, 2002), although there are also indications of local production in recent years (ACC, 2007). It commonly appears as clear, ice-like crystals, and, as such, is difficult to cut, resulting in a relatively high purity/potency product.

4.3.1. Methamphetamine powder use among REU/RPU

Table 4 presents patterns of use of methamphetamine powder, or speed, among REU/RPU since 2006. Less than one-quarter (23%) of the current sample reported lifetime use of speed, a non-significant decrease from 36% in 2014. Recent use was reported by 6% of the sample, a significant decrease from 19% in 2014 (CI: -0.04 to -0.22).

Other analyses regarding recent speed use should be interpreted with caution given the very small number of participants able to provide information. Among participants who had used speed recently (n=6), it was reported to have been used on a mean of eight days (median 1, range 1-40) over the preceding six-month period, which did not significantly differ from 15 days (median 1) in 2014. Only one participant reported the amount of methamphetamine powder they used on 'typical' and 'heaviest' occasions in the preceding six months in grams; comparison with the 2014 sample was therefore not possible.

Consistent with the 2014 results, in the present sample, snorting was the most common recent ROA, reported (n=4, 67%), followed by swallowing (n=2, 33%). None of the participants reported injecting, shelving/shafting or smoking methamphetamine powder.

Table 4: Patterns of methamphetamine powder (speed) use, 2006-2015

Speed	2006 N=100	2007 N=100	2008 N=58	2009 N=100	2010 N=100	2011 N=28	2012 N=90	2013 N=100	2014 N=100	**2015 N=100**
Ever used (%)	87	72	72	63	60	67	62	36	36	**23**
Used preceding six months (%)	65	46	38	37	38	44	27	17	19	**6***
Of those who had used										
Mean days used last 6 months	13	19	15	7	6	44	4	11	15	**8**
Median amount used (grams)										
Typical	0.35	0.1	0.4	1	0.5	0.5	0.25	1	0.5	**1^**
(range)	(0.1-1)	(0.1-1)	(0.2-.50)	(0.25-1)	(0.1-1)	(0.1-1)	(0.2-2)	(1-1)	(0.1-6)	**(-)**
Heavy	0.5	0.3	0.5	1	1.5	1	0.5	1	0.5	**2.5^**
(range)	(0.1-8)	(0.1-7)	(0.25-7)	(0.25-10)	(0.25-4)	(0.2-2)	(0.2-4)	(1-1)	(0.1-11)	**(-)^**

Source: WA EDRS REU/RPU interviews, 2006-2015

* Indicates significant changes from the 2014 results according to 95%CI and *p*=0.05

^ n=1. Results should be interpreted with caution

4.3.2. Methamphetamine base use among RPU

In 2015, just 2% of the sample reported lifetime use of methamphetamine base, a non-significant decrease from 3% in 2014. Given that no participants in the current sample reported recent use, further analyses were not performed on data concerning methamphetamine base.

4.3.3. Crystal methamphetamine use among REU/RPU

Table 5 presents patterns of use of crystal methamphetamine among REU/RPU since 2006. Lifetime use of crystal methamphetamine was reported by 31% of the current sample, a non-significant increase from 24% in 2014. Recent use of crystal was reported by 16% of the sample, comparable to 17% in 2014. These results suggest that the downward trend in methamphetamine use in WA EDRS samples that began in 2012 has been maintained into 2015.

Of those who reported recent use of crystal methamphetamine (n=16), it was reported to have been used on a median of two days in the preceding six months (mean 19, range 1-180), a non-significant difference from three days (mean 26, range 1-180) in 2014. The median amount of crystal methamphetamine reported to have been used on a 'typical' occasion in the preceding six months was two points (range 0.33-4), not significantly different from one point in 2014. The median amount reported to have been used on the 'heaviest' occasion in the preceding six months was four points (range 1-4), not significantly different from 1.5 points in 2014. The most commonly reported ROA over the preceding six months remained smoking (n=14, 87%), followed by snorting and swallowing (each n=2, 12%) and then injecting (n=1, 6%). Among participants who reported using other drugs with ecstasy on the last occasion of use (n=85), crystal methamphetamine was reported to have been used in this context by 5% (n=4) of the respondents.

Table 5: Patterns of crystal methamphetamine use, 2006-2015

Crystal methamphetamine	2006 N=100	2007 N=100	2008 N=58	2009 N=100	2010 N=100	2011 N=28	2012 REU n=65	2012 REU/RPU N=90	2013 N=100	2014 N=100	**2015 N=100**
Ever used (%)	89	69	62	41	40	64	52	58	32	24	**31**
Used last six months (%)	77	52	36	20	22	46	29	33	22	17	**16**
Of those who had used recently											
Mean days used last 6 months	13.6	27.7	11.9	9.2	7.9	19.0	11.8	10.4	20	26	**19**
Median quantities used (points)											
Typical	1	1	1	2	1	1	1	1	2	1	**2**
(range)	(0.5-10)	(0.1-5)	(0.1-3)	(0.25-5)	(0.1-4)	(0.5-2.5)	(0.2-7)	(0.2-7)	(0.5-6)	(0.5-5)	**(0.3-4)**
Heavy	2	2	1	2	2	1	2	2	3	1.5	**4**
(range)	(0.5-40)	(0.2-5)	(0.1-8)	(0.25-8)	(0.4-8.5)	(0.5-2.5)	(0.2-14)	(0.2-14)	(0.5-10)	(0.5-5)	**(1-4)**

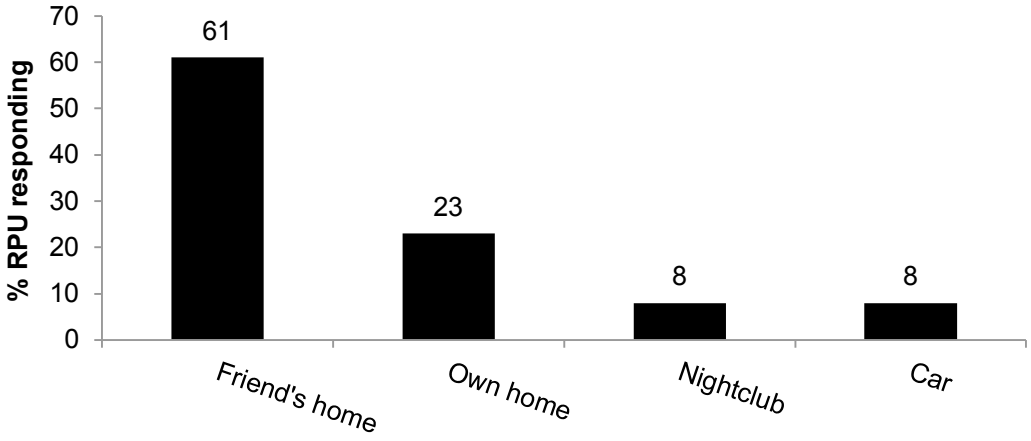
Source: WA EDRS REU/RPU interviews, 2006-2015

* Indicates significant changes from the 2014 results according to 95%CI and *p*=0.05

4.3.4. Locations of methamphetamine use

Participants who reported using methamphetamine in the last six months were asked to report the location where they spent the greatest amount of time while intoxicated on the last occasion. Of the six participants who reported recent speed use, only one participant reported the location: 'friend's home' (n=1, 100%). Figure 4 presents the reported locations for crystal methamphetamine, among recent users (N=13). Consistent with previous years, private settings were more commonly reported than public settings. The most commonly cited location was 'friend's home' (n=8, 61%), followed by 'own home' (n=3, 23%), and then 'nightclub' and 'car/other vehicle' (each n=1, 8%).

Figure 4: Location of most recent crystal methamphetamine use, 2015 (N=13)



Source: WA EDRS RPU interviews, 2015

4.3.5. Methamphetamine use in the general population

Figures from the 2013 NDSHS showed that along with cocaine, (meth)amphetamine was the equal third most common illicit drug reported to have been used in the last 12 months in Australia by those 14 years or over, preceded by cannabis and ecstasy. Among the general population in Australia aged 14 years and over, 7% reported lifetime use of (meth)amphetamine and 2.1% reported use in the last 12 months. In WA, (meth)amphetamine was the second most common illicit drug reported to have been used in the last 12 months, following cannabis. In 2013, WA continued to be the jurisdiction with the highest rates of recent use of (meth)amphetamine, with recent use reported by 3.8% of the population aged 14 years or older (AIHW, 2014).

KE comments

- Several KE reported that methamphetamine was the main drug used by people they encountered in their fields.
- Most KE also reported that it was one of the main drugs they perceived to be most problematic at this point in time.
- Most KE reported that crystal was the most common form of methamphetamine, and that it was most frequently smoked, but also snorted or injected.
- Several KE who worked in health fields reported that crystal methamphetamine users that they saw in their fields experienced physical health problems, such as stroke, heart attack as well as endocarditis and abscesses resulting from risky injecting practices. KE also reported that users commonly experienced mental health and behavioural problems, including paranoia, agitation, drug-induced psychosis and skin picking.
- KE reported that use of crystal methamphetamine often precipitates criminal activity as a result of drug-induced paranoia.

4.3.6. Summary of methamphetamine consumption

Speed

- Just less than one-quarter (23%) of the sample had used speed in their lifetime, not significantly different to 36% in 2014. Recent use was reported by 6%, a significant decrease from 19% in 2014.
- Consistent with 2014, speed was used on a median of one day over the preceding six months and snorting was the most common ROA (67%).

Base

- Only 2% of the sample had used base in their lifetime and none (0%) had done so recently, consistent with the 2014 results.
- No further analyses were performed due to the small sample size.

Crystal

- Just less than one-third (31%) of the sample reported lifetime crystal methamphetamine use, a non-significant increase from 24% in 2014. Recent use was reported by 16% of the sample, a non-significant change from 17% in 2014.
- Crystal was used on a median of two days over the preceding six months, consistent with three days in 2014. Again consistent with 2014, smoking was the most common ROA reported (87%).
- The median amount used on a 'typical' occasion was two points and on the 'heaviest' occasion was four points.

- Many KE considered crystal methamphetamine use to be the most problematic drug in their fields at present.
- KE reported that crystal methamphetamine users experienced physical harms such as endocarditis and mental health problems such as aggression and paranoia.

4.4. Cocaine use among REU/RPU

As presented in Table 6, more than half (58%) of the respondents in the present sample reported lifetime cocaine use, comparable to 56% in 2014. There was a brief increase in reported lifetime cocaine use in 2011 and 2012; however, the current data suggest that in 2015 lifetime use remains at the levels seen both before and after this peak. Recent cocaine use was reported at 29% in the current sample, not significantly different from 30% in 2014.

Among recent users (n=29), cocaine was used on an average of two days in the preceding six months (median 1, range 1-20), significantly less than five days (median 2) in 2014. The median quantity participants reported using on a 'typical' occasion in the preceding six months was 0.5 grams (range 0.25-2); this is the same median that was reported in 2014. The median quantity that participants reported using on the 'heaviest' occasion in the preceding six months was also 0.5 grams (range 0.25-2), significantly lower than one gram in 2014.

Consistent with the 2014 findings, snorting was the most common recent ROA, reported by the vast majority of participants (n=28, 97%). Swallowing was reported by two participants (7%).

In this sample, 4% of respondents nominated cocaine as their 'drug of choice', the same proportion reported in 2014. Cocaine was the fifth most commonly reported drug of choice following ecstasy, cannabis, alcohol and LSD. Among participants who reported using other drugs with ecstasy on the last occasion of use (n=85), cocaine was reported in this context by 3% (n=3) of the respondents.

Table 6: Patterns of cocaine use, 2006-2015

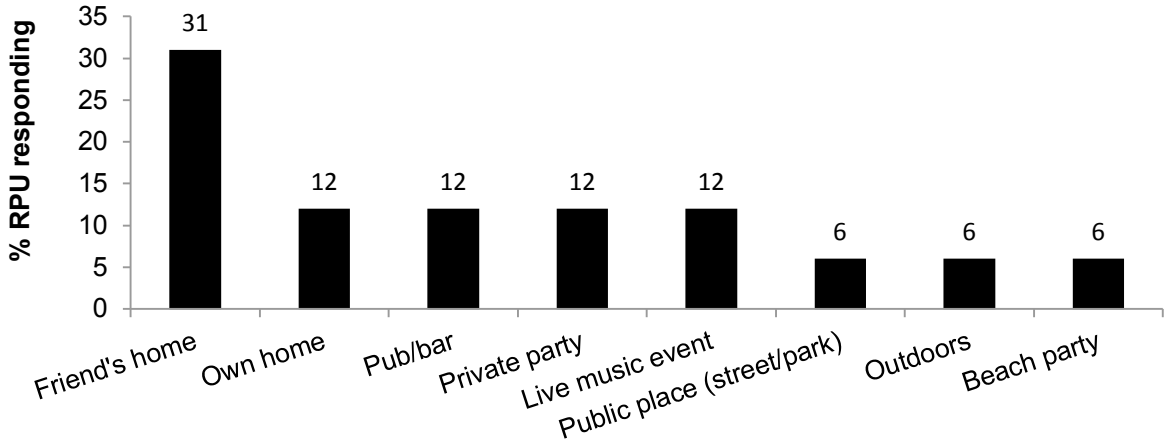
Cocaine	2006 N=100	2007 N=100	2008 N=58	2009 N=100	2010 N=100	2011 N=28	2012 REU/RPU N=90	2013 N=100	2014 N=100	**2015 N=100**
Ever used (%)	55	56	66	52	49	82	71	54	56	**58**
Used last six months (%)	29	27	40	24	26	32	31	34	30	**29**
Of those who had used in preceding 6 months										
Mean days used last 6 months	2	6	3	11	11	4	4	4	5	**2***
Median quantities used (grams)										
Typical (range)	0.4 (0.1-4.0)	1.0 (0.1-3.5)	0.5 (0.5-1)	0.5 (0.3-2)	0.5 (0.5-1)	1.0 (0.5-1)	0.5 (0.2-2)	0.5 (0.1-5)	0.5 (0.1-4)	**0.5 (0.25-2)**
Heavy (range)	0.5 (0.1-6)	1.0 (0.1-5)	0.5 (0.5-1)	0.5 (0.3-5)	1.0 (0.5-3.6)	1.0 (0.5-2)	1.0 (0.25-3.5)	1.0 (0.1-5)	1 (0.1-4.5)	**0.5* (0.25-2)**

Source: WA EDRS REU/RPU interviews, 2006-2015
* Indicates significant changes from the 2014 results according to 95%CI and *p*=0.05

4.4.1. Locations of cocaine use

In the current sample, 16 participants commented on the location where they spent the most time intoxicated on the last occasion of cocaine use. As presented in Figure 5, the most commonly reported location was 'friend's home' (n=5, 31%), followed by 'own home' 'pub/bar' and 'private party' and 'live music event' (each n=2, 12%) and then 'public place' 'outdoors' and 'beach party' (each n=1, 6%). These results are consistent with the 2014 findings.

Figure 5: Location of most recent cocaine use, 2015 (N=16)



Source: WA EDRS RPU interviews, 2015

4.4.2. Cocaine use in the general population

Findings from the 2013 NDSHS show recent cocaine use amongst Western Australians aged 14 and older to be at 1.6%, below the national average of 2.1% (AIHW, 2014).

KE comments

- While most KE reported that they very rarely encounter cocaine use in their fields, two KE noted that cocaine had become more prevalent recently.
- A KE, who worked in health education, noted that cocaine use tended to increase in the summer and during school leavers celebrations.

4.4.3. Summary of cocaine consumption

- Just more than half (58%) of the sample reported lifetime use of cocaine, comparable to 56% in 2014. Approximately one-third (29%) of the sample reported recent use, which did not significantly change from 30% in 2014.
- Cocaine was used on a mean of two days over the preceding six months, significantly less than five days in 2014.
- Snorting remained the most commonly reported recent ROA (97%).
- Most KE reported that they rarely encountered cocaine use in their fields.

4.5. Ketamine use

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

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

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

4.5.1. Ketamine use among REU/RPU

Presented in Table 7 are patterns of ketamine use among REU/RPU for the period 2006-2015. In 2015, lifetime use of ketamine was reported by 16% of the sample, not significantly different from 25% in 2014. Recent use of ketamine has remained relatively low and stable across data collection years. In 2015, 4% reported recent use, comparable to 11% in 2014.

Other data pertaining to ketamine use needs to be considered in the light of the very small number of participants able to provide information. Of those who reported recent use of ketamine in 2015 (n=4), it was used on an average of five days in the preceding six months (median 3.5, range 1-12), comparable to two days (median 1) in 2014.

Only one participant reported 'typical' and the 'heaviest' amounts of ketamine used in the preceding six months in bumps. The 'typical' amount reported was 0.5 bumps, not significantly different from a median of four bumps (range 2-15) in 2014. The amount used on the 'heaviest' occasion was 2.5 bumps, not significantly different to a median of 5.5 bumps (range 4-20) in 2014. Among recent users, swallowing was the only ROA reported (n=4, 100%).

Table 7: Patterns of ketamine use, 2006-2015

Ketamine	2006 N=100	2007 N=100	2008 N=58	2009 N=100	2010 N=100	2011 N=28	2012 N=90	2013 N=100	2014 N=100	**2015 N=100**
Ever used (%)	14	22	21	18	14	**0**	18	20	25	**16**
Used last six months (%)	4	2	3	6	4	**0**	3	7	11	**4**
Of those who had used in the preceding 6 months										
Mean days used last 6 months	2.5	2.5	2.5	1.2	2.8	**-**	3.7	3	2	**5^**
Median quantities used (bumps*)										
	4	1	0.5	3	1.5	**-**	-	-	4	**0.5^**
Typical (range)	-	-	-	(1-5)	(1-2)	**-**	-	-	(2-15)	**(-)**
Heavy	4	1	0.5	3	2	**-**	-	-	5.5	**2.5^**
(range)	-	-	-	(1-5)	(1-3)	**-**	-	-	(4-20)	**(-)**

Source: WA EDRS REU/RPU interviews 2006-2015

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

^ n≤ 10. Results should be interpreted with caution

- Data not available due to low use proportions

KE comments

- Most KE reported that ketamine use was very rarely encountered in their fields.

4.5.2. Summary of ketamine consumption

- Consistent with recent years, only a small proportion of the sample reported lifetime use of ketamine (16%) and recent use was reported by just 4% of the sample.
- Among recent users, ketamine was used on a mean of five days over the preceding six month period, not significantly different to two days in 2014.
- Among recent users, the median amount of ketamine used on a 'typical' occasion in the preceding six months was 0.5 bumps and on the 'heaviest' occasion was 2.5 bumps.
- Swallowing was the only ROA reported among recent users.
- Consistent with previous years, most KE reported that ketamine use was very rarely encountered in their fields.

4.6. GHB use

Gamma-hydroxy-butyrate (GHB) has been classified as a central nervous system (CNS) depressant that produces effects of sedation and anaesthesia (Kam & Yoong, 1998; Nicholson & Balster, 2001). Clinical studies have found that GHB has some similarities to other CNS depressants such as benzodiazepines and alcohol (Nicholson & Balster, 2001). GHB has been used for a variety of medical purposes, such as anaesthesia, and for the treatment of a variety of conditions including sleep disorders, obesity, alcohol dependence and opiate withdrawal (Chin, Kreutzer & Dyer, 1992; Kam & Yoong, 1998; Nicholson & Balster, 2001). However, clinical trials have revealed a wide array of potential adverse effects including dizziness, nausea, weakness, confusion and agitation, drowsiness, and coma (Chin, Kreutzer & Dyer, 1992; Galloway et al., 1997; Nicholson & Balster, 2001). There is also some evidence indicating that tolerance and physical dependence can occur (Galloway et al., 1997).

For over a decade, GHB has been acknowledged as a recreational drug in Australia and in other parts of the world, including the United States (Degenhardt, Darke & Dillon, 2002). On the streets, GHB is also illicitly known as GBH, 'grievous bodily harm', 'fantasy', and 'liquid ecstasy'. An Australian study that interviewed GHB users revealed that the majority of those who reported using this drug recreationally experienced significant adverse effects, including loss of consciousness, vomiting, profuse sweating, and a small proportion experienced fitting or seizure (Degenhardt, Darke & Dillon, 2002).

4.6.1. GHB use among REU/RPU

Rates of lifetime and recent GHB use have remained consistently low since 2003. In 2015, only 6% of the sample reported lifetime use of GHB, consistent with 4% in 2014. Recent use was reported by 2% of the current sample, not significantly different from 3% in 2014. Consistent with the 2014 finings, GHB was used of a median of 1.5 days over the preceding six months (range 1-2), and swallowing was the only ROA reported among recent users. Given the very small proportions of both lifetime and recent users in 2014 and 2015, these results should be interpreted with caution. In light of these small sample sizes, no further analyses were performed for GHB.

KE comments

- Most KE reported that GHB was very rarely encountered in their fields.

4.6.2. Summary of GHB consumption

- Just 6% of the sample reported lifetime GHB use and 2% reported recent use, comparable to 4% and 3% respectively in 2014.
- Consistent with the 2014 results, GHB was used on a median of 1.5 days over the preceding six months.
- Again consistent with 2014, swallowing was the only ROA reported among recent users.
- Most KE reported that GHB was very rarely encountered in their fields.

4.7. LSD use

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

LSD is usually adhered to perforated sheets (ACC, 2007). Small paper squares ('tabs') are detached from these sheets and usually decorated with designs which can often be culturally specific to the user groups. LSD is potent, so trips are often cut into halves or quarters and shared with others.

4.7.1. LSD use among REU/RPU

As presented in Table 8, lifetime use of LSD was reported by more than half (58%) of the current sample, a non-significant decrease from 67% in 2014. Recent use of LSD was reported by 24% of the present sample, a significant decrease from 45% in 2014 (CI: -0.08 to -0.33). This significant decline should be interpreted in the context of the fact that the 2014 results saw the highest proportion of recent use since WA EDRS data collection commenced in 2003.

In 2015, LSD was used on an average of two days over the preceding six months (range 1-6), not significantly different to four days (range 1-24) in 2014. The median amount of LSD tabs used a 'typical' occasion was one (range 0.5-4) and on the 'heaviest' occasion was also one (range 0.5-8), consistent with the 2014 findings. Again consistent with 2014, the most commonly reported recent ROA was swallowing or sublingual use (n=22, 88%), followed by snorting, shelving/shafting and intravitreal (using an eye dropper) (each n=1, 4%). Of those who reported using other drugs in combination with ecstasy on the last occasion of use (n=85), LSD was reported in this context by 5% (n=4) of participants, comparable to 7% in 2014.

Table 8: Patterns of LSD use, 2006-2015

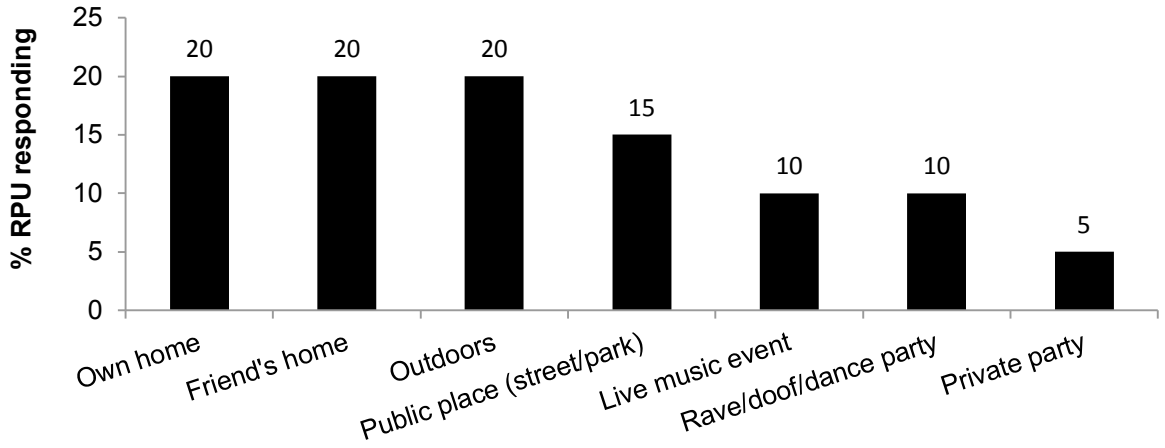
LSD	2006 N=100	2007 N=100	2008 N=58	2009 N=100	2010 N=100	2011 N=28	2012 N=90	2013 N=100	2014 N=100	**2015 N=100**
Ever used (%)	67	49	47	69	48	71	57	66	67	**58**
Used last six months (%)	25	23	21	31	35	36	33	41	45	**24***
Of those who had used in the preceding 6 months										
Mean days used last 6 months	3	5	8	6	5	6	5	6	4	**2**
Median quantities used (tabs)										
Typical (range)	1.0 (0.25-2)	1.0 (0.25-4)	1.0 (0.50-2)	1.0 (1-2.5)	1.0 (1-2)	1.0 (0.50-2)	1.4 (0.25-4)	1.0 (0.25-10)	1 (0.5-4)	**1 (0.5-4)**
Heavy (range)	1.0 (0.25-3)	1.0 (0.25-5)	1.0 (0.50-2)	1.75 (1-7)	1.5 (1-5)	1.75 (0.5-3)	1.9 (0.5-7)	1.0 (0.25-50)	1.25 (0.66-10)	**1 (0.5-8)**

Source: WA EDRS REU/RPU interviews, 2006-2015

* Indicates significant changes from the 2014 results according to 95%CI and *p*=0.05

In 2015, 20 participants commented on the location where they spent the most time while intoxicated on the last occasion of LSD use. A variety of private and public locations were reported. As shown in Figure 6, the most commonly reported locations were 'own home', 'friend's home' and 'outdoors' (each n=4, 20%), followed by 'public place (street/park)' (n=3, 15%), 'live music event' and 'rave/doof/dance party' (each n=2, 10%) and then 'private party' (n=1, 5%). These results were consistent with the 2014 findings.

Figure 6: Location of most recent LSD use, 2015 (N=20)



Source: WA EDRS RPU interviews, 2015

KE comments

- Most KE reported that LSD use was not commonly encountered in their fields.
- A KE who worked at an NSP stated that LSD use had increased recently.
- A KE who worked in law enforcement stated that LSD use appeared to be related to DMT use and that both of these substances were commonly used at bush doofs and raves.

4.7.2. Summary of LSD consumption

- More than half (58%) of the sample reported lifetime LSD use, a non-significant decrease from 67% in 2014. Just less than one-quarter (24%) of the sample reported recent use, a significant decrease from 45% in 2014.
- LSD was used on a mean of two days over the preceding six months, not significantly different from four days in 2014.
- Consistent with 2014, the median number of LSD tabs used on both a 'typical' and the 'heaviest' occasions in the preceding six months was one.
- The majority of users reported swallowing/sublingual use as a recent ROA (88%). A small proportion reported snorting, shelving/shafting and intravitreal (using an eye dropper) (each 4%).
- Consistent with 2014, the most commonly reported locations of last LSD use were 'own home', 'friend's home' and 'outdoors'.
- Most K reported that LSD use was not commonly encountered in their fields.

4.8. Cannabis use among REU/RPU

As shown in Table 9, consistent with previous years, nearly the entire sample (97%) reported lifetime use of cannabis. Recent use of cannabis was also reported by the majority (86%) of the sample, the same proportion reported in 2014.

Cannabis use patterns have remained relatively stable across survey years. Of those reporting recent use of cannabis (n=86), it was used on a median of 48 days (i.e. approximately twice per week) (mean 66, range 1-180) in the preceding six-month period, which was not significantly different from 27.5 days in 2014. Daily cannabis use was reported by 13% of the current sample, not significantly different from 18% in 2014. Comparable to the 2014 results, the most commonly reported ROA in the preceding six months was smoking (n=80, 93%), followed by inhaling/vaporising (n=24, 28%) and swallowing (n=20, 23%).

Participants were asked how much cannabis they consumed during their last session. Of those who reported their use in 'cones' (n=38), a median of 3.5 cones (range 1-10) were consumed, not significantly different from four cones in 2014. Of those who reported their use in 'joints' (n=23), a median of one joint (range 0.25-3) was consumed, the same median that was reported in 2014.

The median age of first cannabis use in the current sample was 16 years (range 11-21), not significantly different from 15.5 years in 2014. Cannabis was the second most commonly reported 'drug of choice' behind ecstasy, nominated by one-third (33%) of the sample, comparable to 22% in 2014. Of those participants who reported using other drugs with ecstasy on the last occasion of use (n=85), cannabis was reported in this context by 53% (n=45) of participants, comparable to 47% in 2014. Among those reporting the use of other drugs to come down from ecstasy on the last occasion (n=52), the majority (n=43, 83%) reported using cannabis in this context, not significantly different from 79% in 2014.

Table 9: Patterns of cannabis use, 2006-2015

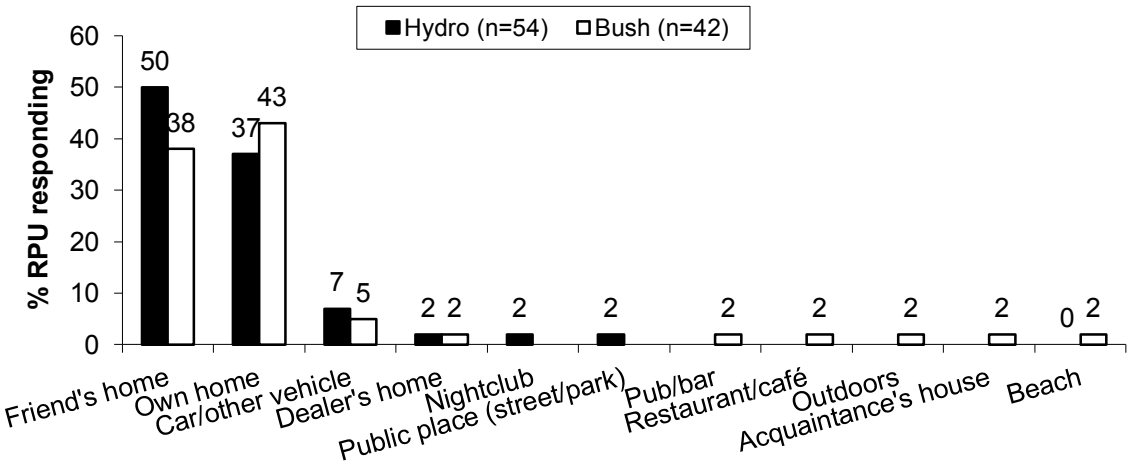
Cannabis	2006 N=100	2007 N=100	2008 N=58	2009 N=100	2010 N=100	2011 N=28	2012 N=90	2013 N=100	2014 N=100	**2015 (N=100)**
Ever used (%)	100	96	100	99	99	100	99	98	98	**97**
Used last six months (%)	86	80	85	85	81	86	77	92	86	**86**
Mean days used recently*	77	75	49	81	60	113	71	65	63	**66**

Source: WA EDRS REU/RPU interviews, 2006-2015
* Among participants who reported recent cannabis use

Participants were asked to report the location where they spent the most time while intoxicated on the last occasion of cannabis use. A full breakdown of these results is shown in Figure 7. Of those participants who commented on hydro (n=54), the greatest proportion reported that the most time was spent at a 'friend's home' (n=27, 50%). This was followed by 'own home' (n=20, 37%), 'car/other vehicle' (n=4, 7%), 'dealer's home' 'nightclub' and 'public place (street/park)' (each n=1, 2%). The locations reported by the present sample were comparable to the 2014 results. For participants who commented on bush (n=42), the most

commonly cited location was 'own home' (n=18, 43%). This was followed by 'friend's home' (n=16, 38%), 'car/other vehicle' (n=2, 5%), and then 'dealer's home', 'pub/bar', 'restaurant/café', 'outdoors', 'acquaintance's house' and 'beach' (each n=1, 2%).These results were again consistent with the 2014 findings. Consistent with previous years, it is evident that cannabis is typically used in private, rather than public, settings.

Figure 7: Location of most recent cannabis use, 2015



Source: WA EDRS RPU interviews, 2015

4.8.1. Cannabis use in the general population

Findings from the 2013 NDSHS indicate that recent use of cannabis in Western Australians aged 12 years or older was 10.9%, compared with the national average of 9.9%. WA had the equal third highest proportion of reported recent cannabis use along with Queensland, behind the Northern Territory and Tasmania (AIHW, 2014).

KE comments

- KE reported that cannabis was very widely used across WA.
- KE reported that cannabis use was associated with mental health problems.
- A KE who worked in venue security noted that cannabis use was often occurred in conjunction with alcohol use.
- One KE who worked in a hospital setting reported seeing cannabis users present to the emergency department with a condition known as cannabinoidal hyperemesis syndrome, a condition that is characterised by recurrent nausea, vomiting and abdominal pain.
- A number of KE reported that they believed that cannabis use was generally not as problematic as synthetic cannabis use.

4.8.3. Summary of cannabis consumption

- Consistent with previous years, almost the entire sample (97%) reported lifetime cannabis use and 86% reported recent use.
- Cannabis was used on a median of 48 days (i.e. twice per week) over the preceding six months, not significantly different from 27.5 days in 2014.
- For those commenting on cones, a median of 3.5 were consumed during the last session.
- For those commenting on joints, a median of one joint was consumed during the last session.
- Cannabis consumption patterns among REU/RPU have remained relatively stable across survey years.
- Among participants who reported using other drugs with ecstasy on the last occasion, cannabis was used in this context by 55% of the respondents.
- Among participants who reported using other drugs to come down from ecstasy on the last occasion, cannabis used in this context by 83% of respondents.
- The most frequently cited location of last use was 'friend's home' for hydro (50%) and 'own home' for bush (43%).
- KE reported that cannabis use was widespread and was associated with mental health problems.

4.9. Other drug use

4.9.1. Alcohol

Consistent with previous years, lifetime (98%) and recent (97%) alcohol use was reported by almost the entire sample (see Table 2). The median age of first alcohol use was 14 years (range 6-20), the same median age reported in 2014. Alcohol was used on a median of 24 days (range 1-180) in the preceding six months, which equates to approximately once a week; this is the same median that was reported in 2014. Just less than half (48%) of the sample reported drinking alcohol on more than 24 days (i.e. more than once a week) in the previous six months, the same proportion reported in 2014. One participant reported drinking alcohol daily, not significantly different from four participants in 2014.

KE comments

- Most KE reported that alcohol use was widespread, with several noting that alcohol was the most problematic drug in their fields.
- KE reported that alcohol use was commonly associated with aggression, violence and traumatic injuries, particularly among young males.
- A KE who worked in community outreach reported that alcohol intoxication was often a factor in assaults being committed, which commonly had legal repercussions.
- KE reported that alcohol was commonly used in combination with other drugs.
- A KE who worked as a clinical nurse reported that patients related to alcohol comprised 70% of the patient load and consumed the majority of time and resources at the service. The KE reported that alcohol use was associated with a number of physical harms, including gastrointestinal bleeds, liver disease and withdrawal seizures.
- Several KE reported that alcohol use was commonly associated with mental health problems, including depression, anxiety and self-harm.

4.9.2. Tobacco

Rates of tobacco use among EDRS samples have been consistently high across survey years. In 2015, the majority (91%) of the sample reported tobacco use at some point in their lifetime, the same proportion that was reported in 2014. The majority (82%) of the current sample also reported recent use of tobacco, not significantly different from 77% in 2014. The median age of first tobacco use was 16 years (range 10-20), which is the same median age that was reported in 2014. Among those that had used tobacco in the preceding six months, the median number of days of use during this period was 48 (range 1-180), comparable to 72 days in 2014. Less than one-third (27%) of the sample were daily smokers, consistent with 28% in 2014.

4.9.3. E-Cigarettes

EDRS participants were asked about their use of e-cigarettes for the first time in 2014. In the current sample, just less than two-thirds (63%) of the sample reported lifetime use of e-cigarettes, significantly higher than 47% in 2014 (CI: 0.02 to 0.29). Recent use was reported by approximately one-third (34%) of the sample, consistent with 33% in 2014. The median age of first use of e-cigarettes was 19 years (range 10-35), not significantly different from 18 years in 2014. E-cigarettes were on a median of 4.5 days over the preceding six months (range 1-90), not significantly different from three days in 2014. These findings suggest that while the proportion of participants who have ever used e-cigarettes has increased since 2014, there has not been an increase in the proportion of those who go on to use them regularly.

For the first time in 2015, EDRS participants who reported recent used of e-cigarettes were asked if the main brand they had used in the preceding six months contained nicotine or cannabis and if they had ever used e-cigarettes as a cigarette smoking cessation tool. The majority of recent users (n=28, 85%) reported that main brand they had used contained only nicotine. A further 9% (n=3) reported that they contained neither nicotine nor cannabis and 6% (n=2) reported they had contained both cannabis and nicotine. The majority of recent users (n=23, 72%) reported that they had not used e-cigarettes as a cigarette smoking cessation tool, with less than one-third (n=9, 28%) reported that they had.

4.9.4. MDA

MDA is part of the phenethylamine family and, like ecstasy, is classed as a stimulant hallucinogen. In 2015, lifetime use of MDA was reported by one-fifth (20%) of the sample, not significantly different from 19% in 2014. Recent use was reported by 11% of the current sample, which was again not significantly different from the 2014 findings (13%).

Of those who had used recently (n=11), MDA was used on a median of two days in the preceding six months (range 1-12), comparable to one day in 2014. The median number of capsules used on a 'typical' occasion in the preceding six months was one (range 0.5-3) and on the 'heaviest' occasion was also one (range 0.5-6), comparable with the 2014 results. Again aligned with the 2014 sample, the majority of participants (91%, n=10) reported swallowing as an ROA in the preceding six months and a further 45% (n=5) reported snorting.

4.9.5. Pharmaceutical stimulants

Pharmaceutical stimulants have been included as a separate drug class since the 2005 EDRS. This category includes dexamphetamine and methylphenidate drugs, such as Ritalin® and Attenta®.

Since 2007, licit use (i.e. prescribed) has been distinguished from illicit use in the EDRS. Taken together (licit or illicit use), the majority (91%) of the sample reported pharmaceutical

stimulant use at some point in their lifetime, the same proportion reported in 2014. Recent use of licit and illicit pharmaceutical stimulants was reported by 78% of the sample, a non-significant change from 81% in 2014. Proportions of lifetime and recent pharmaceutical stimulant use significantly increased in the 2014 sample compared to 2013; the current results suggest that these rates of use remain at the higher levels seen in 2014.

Table 10 presents a comparison of participants who reported recent illicit (n=75) versus recent licit use (n=5) of pharmaceutical stimulants. Given the small number of participants reporting recent licit use, analyses based on this group should be interpreted with caution.

Licit pharmaceutical stimulants

In 2015, 10% of the sample reported lifetime use of pharmaceutical stimulants that were prescribed to them (i.e. licitly obtained) and 5% reported recent use. These results were not significantly different to the 2014 sample, in which 9% reported lifetime use and 6% reported recent use.

The median age of first use was 17 years (range 7-24), comparable to 16 years in 2014. The median number of days of use in the preceding six months was 120 (range 20-130; i.e. approximately five times per week), comparable to 180 days (i.e. every day) in 2014. The median number of tablets used on a 'typical' occasion in the last six months was six (range 5-6), consistent with three in 2014. The median number of tablets used on the 'heaviest' occasion was 8.5 (range 7-10), consistent with five in 2014. Again consistent with the 2014 results, swallowing was the most common recent ROA, reported by all recent users (n=5, 100%). An additional one participant (20%) reported snorting. For the first time in 2015, EDRS participants who reported recent use were asked if they had used licit pharmaceutical stimulants as prescribed most of the time in the preceding six months. All participants (n=5, 100%) reported that they had.

Illicit pharmaceutical stimulants

In 2015, the majority (87%) of the participants reported having ever used pharmaceutical stimulants when they were not prescribed to them (i.e. illicitly obtained), comparable to 88% in 2014. Recent use of illicit pharmaceutical stimulants was reported by 75% of the sample, not significantly different from 77% in 2014.

The pattern of results suggests that predominantly illicit, rather than licit, use accounts for the majority of pharmaceutical stimulant use seen in the 2014 and 2015 samples.

The median age of first use of illicit pharmaceutical stimulants was 18 years (range 14-42), the same median age reported in 2014. The median number of days of use over the preceding six months was six (range 1-144), the same number of days reported in 2014. Again consistent with 2014, on a 'typical' occasion in the preceding six months, the median number of tablets used was three (range 0.25-12) and on the 'heaviest' occasion was six (range 1-40). Among those who commented on ROAs in the preceding six months (n=74), the most common was swallowing (n=70, 95%). This was followed by snorting (n=34, 46%) and smoking (n=1,1%). These findings were consistent with the 2014 results.

Table 10: Recent illicit versus licit use of pharmaceutical stimulants, 2015

Use of pharmaceutical stimulants	Illicit (n=75)	Licit (n=5)
Median age first used	18	17^
Days used last six months (median)	6	120^
Amount typically used (median tabs)	3	6^
Most amount used (median tabs)	6	8.5^
Route of administration (%)		
Swallowed	95	100^
Snorted	46	20^
Smoked	1	0^
Injected	0	0^

Source: WA EDRS RPU interviews, 2015
^ n<10. Results should be interpreted with caution

4.9.6. Benzodiazepines

Use of benzodiazepines was also divided into licit and illicit use in 2009. Taken together (licit or illicit use), lifetime use of benzodiazepines was reported by more than half (54%) of the current sample, which did not significantly differ from 52% in 2014. More than two-fifths (45%) of the sample reported using benzodiazepines in the preceding six months, a non-significant increase from 35% in 2014.

Licit benzodiazepines

In the current sample, 12% of participants reported having ever used benzodiazepines when they were prescribed to them (i.e. licitly obtained), comparable to 9% in 2014. Recent licit benzodiazepine use has remained low and stable since 2008. Recent use was reported by 8% in the current sample, consistent with 6% in 2014.

Licitly obtained benzodiazepines were first used at a median age of 21 years (range 17-35), not significantly different from 20 years in 2014. Benzodiazepines were used on a median of 36 days in the preceding six months (range 4-176), a non-significant increase from eight days in 2014. Consistent with the 2014 findings, all recent users reported swallowing (n=8, 100%) as an ROA. One participant reported snorting (n=1, 12%).

Participants who reported recent use of licit benzodiazepines (n=8) were asked to report the main brand they had used over the preceding six months. The spread of responses across brands in the current sample did not significantly differ from 2014. The most commonly reported brand was Valium® (diazepam) (n=4, 50%), followed by Alprax® (alprazolam), diazepam (generic), oxazepam (generic) and Valpax® (clonazepam) (each n=1, 12%). Given the very small number of participants reporting recent licit benzodiazepine use these findings should be interpreted with caution.

Illicit benzodiazepines

Just less than half (49%) of the current sample reported having ever used a benzodiazepine when they were not prescribed to them (i.e. illicitly obtained), comparable to 47% in 2014. More than one-third (38%) reported recent use, comparable to 31% in 2014.

The median age of first use was 18 years (range 14-42), the same median age reported in 2014. Benzodiazepines were used on a median of six days over the preceding six months (range 1-60), a non-significant increase from five days in 2014. Consistent with the 2014 findings, swallowing was the most commonly reported recent ROA, reported by the vast

majority of respondents (n=36, 95%). This was followed by snorting (n=5, 13%) and smoking (n=1, 3%).

Participants reporting recent use were asked to report the main brand they had used over the preceding six months. Among those who commented (n=35), consistent with the 2014 results, the most common brand was Valium® (diazepam) (n=19, 54%), followed by Xanax® (alprazolam) (n=9, 26%), diazepam (generic) (n=5, 14%), alprazolam (generic) and clonazepam (generic) (each 2%, n=1).

4.9.7. Anti-depressants

Use of anti-depressants was also divided into licit and illicit use. Taken together (licit or illicit use), lifetime use of anti-depressants was reported by 18% of the sample, a non-significant increase from 14% in 2014. Recent use was reported by 9% of the sample, a non-significant increase from 6% in 2014.

Licit anti-depressants

In 2015, 16% of participants reported having ever used an anti-depressant when they were prescribed to them (i.e. licitly obtained), a non-significant increase from 12% in 2014. Eight per cent of the sample reported recent licit antidepressant use, a non-significant difference from 5% in 2014.

The median age of first use was 18 years (range 16-21), comparable to the 2014 findings. Licit anti-depressants were used on a median of 140 days over the preceding six months (i.e. approximately six times per week; range 30-180), comparable to 90 days in 2014. As in previous years, swallowing was the only recent ROA reported (n=8, 100%).

Illicit anti-depressants

Just 2% of the current sample reported having ever used anti-depressants when they were not prescribed to them (i.e. illicitly obtained), comparable to 3% in 2014. In the present sample, just one participant reported recent use, the same proportion reported in 2014.

The median age of first use was 16 years, comparable to 19 years in 2014. The participant who had used illicit anti-depressants recently had used them on 24 days in the preceding six months (i.e. once per week), and reported swallowing, smoking and snorting as recent ROAs. Given that only one participant reported recent illicit anti-depressant use, these results should be interpreted with caution.

4.9.8. Inhalants

Participants were asked about their use of the inhalants amyl nitrate and nitrous oxide.

Amyl nitrate

In 2015, lifetime use of amyl nitrate was reported by 20% of the sample, a non-significant increase from 11% in 2014. Recent use was reported by 11% of the sample, a non-significant increase from 4% in 2014.

Consistent with the 2014 findings, the median age of first use was 18.5 years (range 15-28). Amyl nitrate was used on a median of three days during the preceding six months (range 1-30), comparable with one day in 2014.

Nitrous oxide

Throughout survey years, nitrous oxide has consistently been the more popular inhalant among REU/RPU, and it remained so in the current sample. In 2015, lifetime use of nitrous oxide was reported by just less than half (49%) of the sample, a non-significant increase from 43% in 2014. Recent nitrous oxide use was reported at 37%, a non-significant increase from 32% in 2014.

The median age of first use was 18 years (range 14-25), the same median age reported in 2014. Nitrous oxide was used on a median of four days in the preceding six months (range 1-72), consistent with the 2014 results. Further consistent with the 2014 findings, the median amount reported to have been used on a 'typical occasion' in the last six months was ten bulbs (range 1-250) and the median amount used on the 'heaviest' occasion over this time period was 20 bulbs (range 1-1000).

4.9.9. Heroin and other opiates

Given extremely small sample sizes for recent heroin and other opiate use in the current sample, the findings related to these drugs should be interpreted with caution.

Heroin

Rates of heroin use among EDRS samples have been consistently low across survey years. In the current sample, 3% of respondents reported lifetime use of heroin, consistent with 4% in 2014. One participant (1%) reported recent use, comparable to 0% in 2014.

The median age of first heroin use was 19 years (range 18-32), comparable to 16 years in 2014. The participant who reported recent use had used heroin on three days over the preceding six months. Injecting was the only recent ROA reported.

KE comments

- Most KE reported that they rarely encountered heroin and other opioids in association with ERD users.
- Of those KE who had contact with heroin users, several reported that there had been a sizeable increase in availability recently, with heroin "flooding the market", and that there had been a subsequent increase in heroin overdoses.
- Several KE reported that the potency of heroin was currently high.
- KE reported that the heroin currently on the Perth market was commonly white or clear, which was reported to be more potent than grey or brown heroin.

Methadone and buprenorphine

Rates of methadone and buprenorphine use have also been consistently low across EDRS survey years. In 2015, 3% of the sample reported lifetime use of methadone, comparable to 2% in 2014. Two per cent of the present sample reported recent use, the same proportion reported in 2014.

The median age of first use was 19 years (range 19-30), not significantly different from 21 years in 2014. Methadone was used on a median of two days in the preceding six months (range 2-2), comparable to 1.5 days in 2014. Of the two participants who had used methadone recently, one participant (n=1, 50%) reported injecting as a recent ROA and the other (50%, n=1) reported shelving/shafting.

Lifetime use of buprenorphine was reported by 2% of the current sample, the same proportion reported in 2014. A further 2% of the sample reported recent use, comparable to 0% in 2014.

The median age of first use of buprenorphine was 18.5 years (range 18-19), comparable to 18 years in 2014. Buprenorphine was used on a median of three days in the preceding six months (range 1-5). Reported recent ROAs were injecting (50%, n=1) and swallowing (50%, n=1).

Other opiates

This drug class includes morphine, pethidine, oxycodone and various additional pharmaceutical opiate preparations containing codeine. Use of 'other opiates' was divided into illicit and licit use for the first time in 2009. Taken together (licit and illicit), 33% reported lifetime use of other opiates in the present sample, a significant increase from 18% in 2014 (CI: .03 to 0.26). Recent use was reported by 16% of the participants in the present sample, a non-significant increase from 8% in 2014.

Licit other opiates

In the present sample, 14% of participants reported having ever used another opiate when it was prescribed to them (i.e. licitly obtained), a non-significant increase from 5% in 2014. Five percent of the sample reported recent use, comparable to 3% in 2014.

The median age of first use was 18 years (range 12-27), comparable to 16 years in 2014. Licit other opiates were used on a median of 21 days (range 12-72) in the preceding six months, not significantly different from six days in 2014. Of those who commented (n=4), all participants reported swallowing as a recent ROA (n=4, 100%). A smaller proportion of participants reported injecting, smoking and snorting as recent ROAs (each n=1, 25%).

Illicit other opiates

Just under one-quarter (24%) of the participants reported having ever used other opiates when they were not prescribed to them (i.e. illicitly obtained), a non-significant increase from 15% in 2014. Recent use was reported by 13%, a non-significant increase from 6% in 2014.

In 2015, illicitly obtained other opiates were first used at a median age of 19 years (range 14-25), not significantly different from 18 years in 2014. Illicit other opiates were used on a median of four days in the preceding six-month period (range 1-140), not significantly different from two days in 2014. Consistent with 2014, recent ROAs were swallowing (n=13, 100%), smoking and snorting (each n=3, 23%).

OTC codeine

For the first time in 2009, EDRS participants were asked about their use of OTC codeine for non-pain use (i.e. recreational purposes). Reported lifetime and recent rates of use have remained relatively stable over this time period. In 2015, lifetime use of OTC codeine was reported by just more than one-quarter (26%) of the sample, the same proportion that was reported in 2014. Recent use was reported by one-fifth (20%) of the sample, comparable to 17% in 2014.

The median age of first use was 18 years (range 15-21), not significantly different from 17.5 years in 2014. OTC codeine was used on a median of 6.5 days over the preceding six months (range 1-130), comparable with six days in 2014. Consistent with 2014, all participants reported swallowing as a recent ROA (n=20, 100%) and one reported snorting (5%, n=1).

4.9.10. Psilocybin/hallucinogenic mushrooms

In 2015, the proportion of participants reporting lifetime use of psilocybin/hallucinogenic mushrooms was 57%, the same proportion that was reported in 2014. Recent use was reported by 21% of the sample, comparable to 25% in 2014.

The median age of first use was 18 years (range 15-29), the same median age reported in 2014. Hallucinogenic mushrooms were used on a median of two days in the preceding six months (range 1-8), comparable to one day in 2014. Consistent with 2014, swallowing was the only recent ROA reported (n=21, 100%).

4.9.11. OTC stimulants

Since 2009, REU/RPU have been questioned about their use of OTC stimulants for non-pain use (i.e. recreational purposes). This drug class includes cold and flu medication containing pseudoephedrine. There was a brief peak in both lifetime and recent use of OTC stimulants beginning in 2010. However, reported rates of use have remained relatively low since 2012. In the present sample, one-fifth (20%) of the participants reported lifetime use and one-tenth (10%) reported recent use, not significantly different from 10% and 5% respectively in 2014.

The median age of first use was 19 years (range 15-24), comparable to 18 years in 2014. OTC stimulants were used on a median of 5.5 days in the preceding six months (range 1-72), not significantly different from one day in 2014. Consistent with 2014, swallowing was the most commonly reported recent ROA (n=8, 89%), followed by smoking and snorting (each n=2, 22%).

4.9.12. Steroids

For the first time in 2010, EDRS participants were asked to report on their steroid use. Consistent with all previous years, the proportion reporting steroid use in 2015 remained low. In 2015, 4% of the sample reported lifetime steroid use, comparable to 1% in 2014. No participants in the current sample reported recent use of steroids. The median age of first use was 20.5 years (range 18-24), comparable to 28 years in 2014.

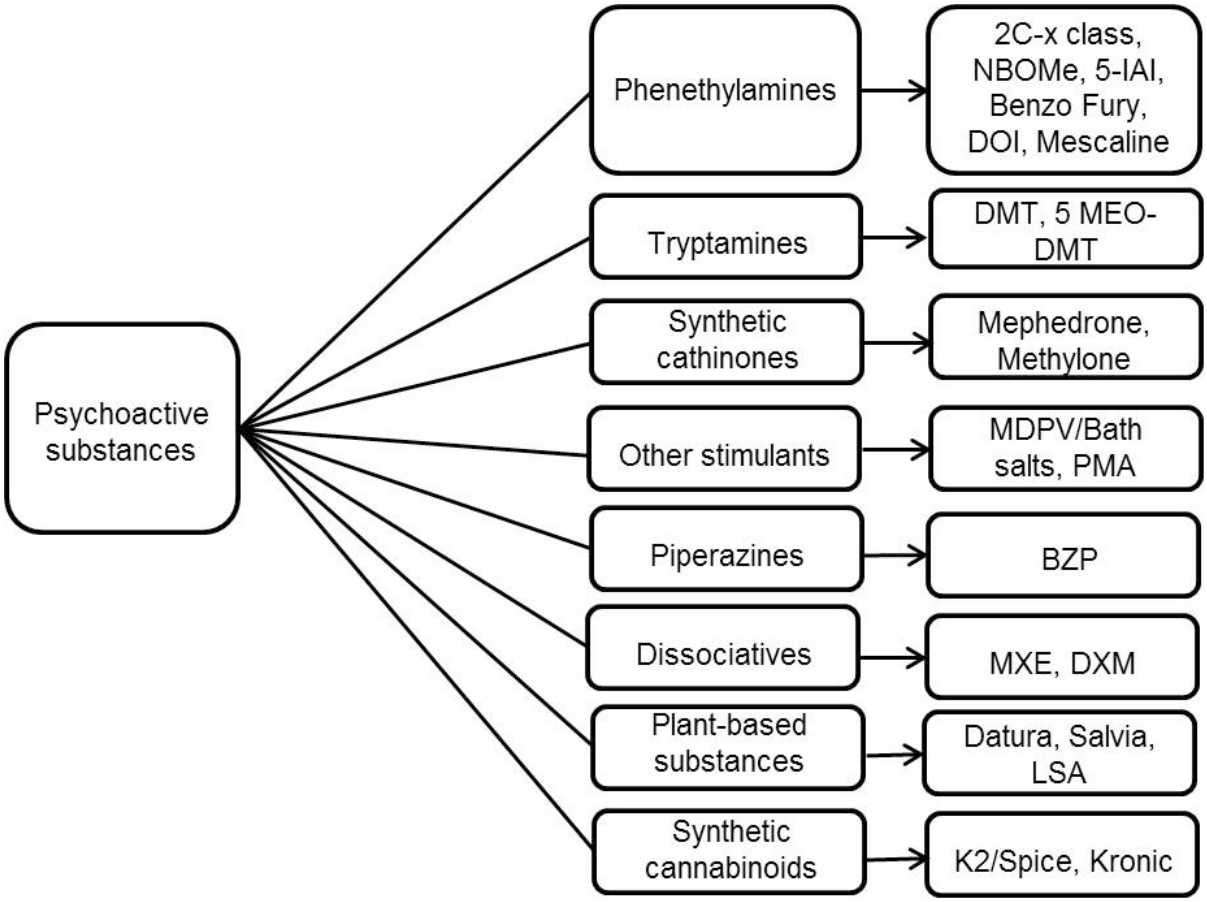
4.9.13. Summary of other drug use

- Consistent with previous years, the vast majority of the sample reported lifetime (98%) and recent (97%) use of alcohol.
- Several KE reported that alcohol was the most problematic drug in their fields.
- The majority of the sample (91%) reported lifetime tobacco use, the same proportion that was reported in 2014. The majority of the sample (82%) also reported recent use, not significantly different from 77% in 2014.
- Lifetime use of MDA was reported by one-fifth (20%) of the sample and recent use was reported by 11% of the sample, consistent with 19% and 13% respectively in 2014.
- The vast majority (91%) of the sample reported the use of pharmaceutical stimulants in their lifetime, the same proportion reported in 2014. Recent use was reported by 78%, not significantly different from 81% in 2014.
- More than half (54%) of the sample reported lifetime use of benzodiazepines, comparable to 52% in 2014. Recent use was reported by 45% of the sample, not significantly different from 35% in 2014.
- Lifetime use of anti-depressants was reported by 18% of the sample, a non-significant increase from 14% in 2014. Recent use was reported by 9%, comparable to 6% in 2014.
- Lifetime use of amyl nitrate was reported by 20% of the sample, a non-significant increase from 11% in 2014. Recent use was reported by 11%, a non-significant increase from 4% in 2014.
- Nitrous oxide was the more popular inhalant, with almost half (49%) the sample reporting lifetime use. Recent use was reported by 37%, consistent with 32% in 2014
- Consistent with previous years, the use of heroin was uncommon, with 3% of the sample reporting lifetime use and 1% reporting recent use.
- Several KE reported recent increases in heroin availability, potency and overdoses.
- Consistent with previous years, only 3% of the current sample reported lifetime use of methadone and 2% reported recent use.
- Consistent with previous years, use of buprenorphine remained very low; 2% of the sample reported both lifetime and recent use.
- Lifetime use of other opiates (licit and illicit) was reported by 33% of the sample, a significant increase from 18% in 2014. Recent use was reported by 16%, not significantly different from 8% in 2014. The majority of use was illicit.
- Lifetime use of OTC codeine was reported by just more than one-quarter (26%) of the sample, the same proportion reported in 2014. Recent use was reported by one-fifth (20%) of the sample, comparable to 17% in 2014.
- Lifetime use of psilocybin/hallucinogenic mushrooms was reported by 57% of the sample, the same proportion that was reported in 2014. Recent use was reported by 21% of the sample, comparable to 25% in 2014.
- One-fifth (20%) of the sample reported lifetime use of OTC stimulants and 10% reported recent use. These proportions are consistent with 10% and 5% respectively in 2014.
- Consistent with previous years, steroid use remained very low, with 4% reporting lifetime use. No participants reported recent use.

4.10. New psychoactive substance (NPS) use

From 2010 onward, the EDRS has attempted to systematically investigate a range of new psychoactive substances (analogues, legal highs, herbal highs, party pills). Some of these drugs can be classified according to Figure 8.

Figure 8: Psychoactive substances investigated by the EDRS



*For abbreviations, see list on page viii.

Psychedelic refers to “a mental state of enlarged consciousness, involving a sense of aesthetic joy and increased perception transcending verbal concepts” or “denoting or relating to any of a group of drugs inducing such a state, especially LSD” (Macquarie Dictionary).

Phenethylamine is a neurotransmitter that is an amine resembling amphetamine in structure and pharmacological properties. Derivatives of phenethylamine are referred to as ‘phenethylamines’ (Merriam-Websters Medical Dictionary).

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

Table 11 provides a very brief introduction to these drugs to provide a rough guide for interpreting trends data. Interested readers are directed toward online sources such as Erowid (http://www.erowid.org/splash.php) and Drugscope (http://www.drugscope. org.uk/) for more comprehensive information on these drugs.

Table 11: New psychoactive substances (NPS)

Street name	Chemical name	Information on drug	Information on use and effects
2C-I	2,5-dimethoxy-4-iodophenethyl-amine	A psychedelic drug with stimulant effects	A standard oral dose is between 1-25mg Recent reports suggest that 2-CI is slightly more potent than the closely related 2-CB
2C-B	2,5-dimethoxy-4-bromophenethy-amine	A psychedelic drug with stimulant effects	The dosage range is listed as 16-24mg. 2CB is sold as a white powder sometimes pressed in tablets or gel cap. Usually taken orally but can be snorted
2C-E	2,5-dimethoxy-4-ethylphenethyl-amine	A psychedelic drug with stimulant effects	Active orally in 10-20mg range. Commonly taken orally and highly dose-sensitive. Snorting requires a much lower dose, normally not exceeding 5mg
NBOMe	4-idio-2,5-dimethoxy-N-(2-methoxybenzyl) phenethylamine	Psychedelic phenethylamines	An umbrella term for several related substances, including 25I-NBOMe and 2CI-NBOMe. Powerful psychedelic powders, typically found on blotting paper. Requires only barely visible, sub-milligram doses to produce full effects[1]
DOI (death on impact)	2,5-dimethoxy-4-iodoamphetamine	A psychedelic phenethylamine	Requires only very small dosages to produce full effects. It is uncommon as a substance for human ingestion but common in research. Has been found on blotting paper and may be sold as LSD[2]
Mescaline	3,4,5-trimethoxyphene-thylamine	A hallucinogenic alkaloid	First isolated in 1896 from the peyote cactus of northern Mexico
DMT	N, N- dimethyltryptamine	A psychadelic drug in the tryptamine family	Similar to LSD, though its effects are said to be more powerful. DMT is a powerful, visual psychedelic which

[1] Erowid: https://www.erowid.org/chemicals/2ci_nbome/2ci_nbome.shtml

[2] Erowid: http://www.erowid.org/chemicals/doi/doi.shtml.

Street name	Chemical name	Information on drug	Information on use and effects
			produces short-acting effects when smoked[3] Pure DMT is usually found in crystal form but has been reportedly sold in powder form[4]
5MEO-DMT	5-methoxy-N,N-dimethyltryptamine	A naturally occurring psychedelic tryptamine present in numerous plants and in the venom of the *Bufo alvarius* toad	It is found in some traditional South American shamanic snuffs and sometimes in Ayahuasca brews. It is comparable in effects to DMT; however, it is substantially more potent. 5 MEO-DMT is mostly seen in crystalline form[5]
Mephedrone	4-methyl-methcathin-one	A stimulant which is closely chemically related to amphetamines	Reportedly produces a similar experience to drugs like amphet-amines, ecstasy or cocaine. Mephedrone is a white, off-white or yellowish powder although it may also appear in pill or capsule form. Mephedrone is probably the most well-known of a group of drugs derived from cathinone (a chemical found in the plant called khat)[6]
BZP	1-benzylpiperazine	A piperazine; a CNS stimulant.	Gained popularity in some countries in the early 2000s as a legal alternative to amphetamines and ecstasy. One of the more common piperazines, providing stimulant effects which people describe as noticeably different than those of amphetamines. Not particularly popular as many people find that it has more unpleasant side

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

Street name	Chemical name	Information on drug	Information on use and effects
			effects than amphetamines[7]
Ivory wave or 'bath salts'	3,4-methylenedioxypyrovalerone or MDPV	A cathinone derivative.	More potent than other cathinones. Lidocaine (a common local anaesthetic) is frequently used as a cutting agent, to give users the numbing sensation in the mouth or nose which is associated with drugs of high potency (e.g. high-potency cocaine)[8]. It is known for its tendency to cause compulsive re-dosing and some users report sexual arousal as an effect. MDPV has been found in products sold as 'bath salts' and 'plant food/fertilizer'.[9] It has recently received media attention for its involvement in a number of bizarre deaths in the US and Australia
DXM	Dextromethorphan	A semisynthetic opiate derivative which is legally available over the counter in the US	DXM is most commonly found in cough suppressants, especially those with 'DM' or 'Tuss' in their names. DXM is a dissociative drug[10]
PMA	Paramethoxyamphetamine; 4-methoxy-amphetamine	A synthetic hallucinogen that has stimulant effects	Ingesting a dose of less than 50 mg (usually one pill or capsule), without other drugs or alcohol, induces symptoms reminiscent of MDMA although PMA is more toxic than MDMA. Doses over 50 mg are considered potentially lethal (due to the risk of overheating)
Datura	(commonly *Datura inoxia* and *Datura strammonium*) Contains: Atropine and Scopolamine	Atropine is a potent anticholinergic agent. Scopolamine is a CNS depressant and has antimuscarinic properties	The plant's effects make the user feel drowsy, drunk-like and detached from things around them. They can also bring on hallucinations. Doses are

[7] Erowid: http://www.erowid.org/chemicals/bzp/bzp_basics.shtml.
[8] Drugscope: http://www.drugscope.org.uk/ourwork/pressoffice/pressreleases/ivory_wave_MDP.
[9] Erowid: http://www.erowid.org/chemicals/mdpv/
[10] Erowid: http://www.erowid.org/chemicals/dxm/dxm_basics.shtml

Street name	Chemical name	Information on drug	Information on use and effects
			difficult to judge and can cause unconsciousness and death[11]
Salvia	*Salvia divinorum* (contains Salvinorin A)	Salvia is derived from the American plant *Salvia divinorum*, a member of the mint family	At low doses (200-500 mcg) salvia produces profound hallucinations that last from 30 minutes to an hour or so. In higher doses the hallucinations last longer and are more intense[12]
LSA	*d*-lysergic acid amide	LSA is a naturally occurring psychedelic found in many plants such as morning glory and hawaiian baby woodrose seeds	LSA has some similarities in effect to LSD, but is generally considered much less stimulating and can be sedating in larger doses
K2/Spice	Synthetic cannabinoid	Usually sold as loose, generic plant material with a mix of chemicals on it (containing synthetic cannabinoids)	A psychoactive herbal and chemical product that, when consumed, mimics the effects of cannabis
Methylone	3,4-methylenedioxy-*N*-methylcathinone	An entactogen and stimulant of the phenethylamine, amphetamine, and cathinone classes	Reported dosages range from 100 to 250 mg orally. Effects are primarily psychostimulant in nature
MPTP	1-methyl-4-phenyl-1,2,5,6-tetrahydropyridine	MPTP is a contaminant that can result during the synthesis of MPPP, an illicit analogue of the opioid meperidine	MPTP is a known industrial toxin which causes Parkinsonian symptoms on users by destroying dopaminergic neurons in the substantia nigra. It was responsible for a rash of Parkinsons-like cases in the early 1980s

4.10.1. NPS classes

More than two-thirds (69%) of the present sample reported having used an NPS in their lifetime and 46% reported having used an NPS in the preceding six months. Consistent with the 2014 findings, the NPS most commonly reported to have been ever used in the present sample was synthetic cannabis (34%), followed by DMT (24%), DXM (16%) 2C-B (15%), NBOMe (14%), 2C-I (13%) and herbal highs (12%). Again consistent with the 2014 results, the NPS most commonly reported to have been used recently were DMT (13%), DXM (7%), synthetic cannabis (6%) and herbal highs, capsule with unknown contents and methylone (each 5%). A complete breakdown of new psychoactive substances used among Perth REU/RPU since 2010 is presented by class in Table 12.

[11] Drugscope: http://www.drugscope.org.uk/resources/drugsearch/drugsearchpages/datura
[12] Drugscope: http://www.drugscope.org.uk/resources/drugsearch/drugsearchpages/salvia

Phenethylamines

As shown in Table 12, there were no significant differences in the proportion of lifetime or recent use of any phenethylamines between 2014 and 2015. For the first time in 2014, participants were asked about their use of NBOMe. In 2015, lifetime use was reported at 14% of the sample and recent use was reported by 4%, not significantly different from 18% and 10% respectively in 2014.

Table 12: Patterns of phenethylamine class of NPS, 2010-2015

	2010 N=100	2011 N=28	2012 N=90	2013 N=100	2014 N=100	**2015** **N=100**
Phenethylamines (2C-x class)						
2C-I						
ever used (%)	9	4	3	20	19	**13**
used last 6 months (%)	1	0	1	17	7	**4**
2C-B						
ever used (%)	5	14	8	15	18	**15**
used last 6 months (%)	2	7	3	8	11	**3**
2C-E						
ever used (%)	0	4	1	5	2	**4**
used last 6 months (%)	0	4	0	1	1	**2**
2C-Other						
ever used (%)	-	7	3	6	2	**2**
used last 6 months (%)	-	4	2	6	0	**0**
NBOMe						
ever used (%)	-	-	-	-	18	**14**
used in the last 6 months (%)	-	-	-	-	10	**4**
Phenethylamines (Amphetamine-based)						
6-(2-aminopropyl)benzofuran/6-APB/Benzo Fury						
ever used (%)	-	-	2	1	0	**1**
used last 6 months (%)	-	-	1	0	0	**0**
Mescaline						
ever used (%)	7	14	6	6	4	**4**
used last 6 months (%)	4	4	1	0	3	**0**
5,6-Methylenedioxy-2-aminoindane/MDAI						
ever used (%)	-	-	1	0	2	**0**
used last 6 months (%)	-	-	0	0	2	**0**

Source: WA EDRS REU/RPU interviews, 2010-2015

Other classes

There were no significant differences in the proportions of lifetime or recent use of any of any synthetic cathinones, tryptamies, dissociatives or plant-based drugs included in the survey between 2014 and 2015. A complete breakdown of reported proportions of use across these drug classes is presented in Table 13.

Table 13: Patterns of other classes of NPS, 2010-2015

NPS	2010 N=100	2011 N=28	2012 N=90	2013 N=100	2014 N=100	**2015 N=100**
Synthetic cathinones						
Mephedrone						
ever used (%)	19	18	16	6	9	**7**
used last 6 months (%)	16	14	3	3	2	**3**
Methylone						
ever used (%)	-	11	3	6	8	**7**
used last 6 months (%)	-	4	2	5	4	**5**
Other stimulants						
MDPV/ Ivory Wave						
ever used (%)	0	0	2	3	2	**0**
used last 6 months (%)	0	0	1	1	0	**0**
PMA						
ever used (%)	7	4	1	1	3	**2**
used in the last 6 months (%)	0	0	0	0	2	**1**
Tryptamines						
5MEO-DMT						
ever used (%)	4	4	0	0	1	**2**
used last 6 months (%)	1	0	0	0	1	**0**
DMT						
ever used (%)	13	40	32	33	33	**24**
used last 6 months (%)	8	25	22	22	19	**13**
Dissociatives						
DXM/ Cough syrup						
ever used (%)	7	21	11	7	11	**16**
used last 6 months (%)	3	4	2	5	6	**7**
Methoxetamine/ MXE						
ever used (%)	-	-	0	3	1	**0**
used last 6 months (%)	-	-	0	0	0	**0**
Plant-based substances						
Datura						
ever used (%)	4	7	4	5	1	**1**
used last 6 months (%)	1	0	1	0	0	**0**
Salvia divinorum						
ever used (%)	-	18	11	6	9	**4**
used last 6 months (%)	-	11	3	2	3	**0**
LSA/ Hawaiian Baby Woodrose						
ever used (%)	-	4	7	6	3	**3**
used last 6 months (%)	-	0	1	2	1	**0**

NPS	2010 N=100	2011 N=28	2012 N=90	2013 N=100	2014 N=100	**2015 N=100**
Piperazines						
BZP						
ever used (%)	37	7	14	2	3	**1**
used last 6 months (%)	25	7	1	0	0	**0**

Source: WA EDRS REU/RPU interviews, 2010-2015
- Data not collected

Synthetic cannabis

NOTE

The proportions of lifetime and recent use of 'any synthetic cannabis' for 2013 and 2014, shown in Table 14, have been amended from previous versions of this report to rectify an error in analysis.

In 2015, rates of reported synthetic cannabis use did not significantly change from 2014. Just more than one-third (34%) of the participants in the current sample reported having ever used any form of synthetic cannabis and 6% reported having used it recently. Proportions of lifetime and recent Kronic and K2/Spice use in the current sample similarly did not significantly change from 2014. A breakdown of findings related to synthetic cannabis use is presented in Table 14.

Table 14: Patterns of synthetic cannabis use, 2010-2015

	2010 N=100	2011 N=28	2012 N=90	2013 N=100	2014 N=100	**2015 N=100**
Any synthetic cannabis						
ever used (%)	-	32	44	40	37	**34**
used last 6 months (%)	-	32	18	19	12	**6**
Kronic						
ever used (%)	-	-	-	24	26	**26**
used last 6 months (%)	-	-	-	9	4	**4**
K2/Spice						
ever used (%)	-	-	-	3	7	**1**
used last 6 months (%)	-	-	-	1	3	**0**
Other synthetic cannabinoids						
ever used (%)	**-**	**-**	**-**	18	13	**13**
used last 6 months (%)	**-**	**-**	**-**	10	6	**3**

Source: WA EDRS REU/RPU interviews, 2010-2015
- Data not collected

KE comments

- A KE who worked in community outreach reported the continuing emergence of NBOMe and other phenethylamines, as well as MDPV, referred to on the street as 'flacka' or 'gravel'.
- A KE who worked in health education reported that drugs being sold as ecstasy may actually be NBOMe.
- While some KE noted that the prevalence of synthetic cannabis use had increased, others reported recent decreases in use or that rates of use had remained stable.
- A number of KE reported that synthetic cannabis use was often more problematic than cannabis use.
- KE reported that synthetic cannabis use was associated with mental health problems, including irrational behaviour, anxiety, and psychosis.
- A KE who worked as an alcohol and drug nurse reported an increase in presentations of patients where synthetic cannabis was a primary drug of concern. This KE noted that common presenting symptoms are thought disorder/anxiety, chest pain/palpitations, seizures and vomiting.

Herbal highs and capsules with unknown contents

As presented in Table 15, 12% of the participants in the current sample reported having ever used herbal highs, not significantly different from 14% in 2014. Five percent of the sample reported recent use, comparable to 4% in 2014.

The proportion of the sample that reported having ever consumed a capsule where the contents were unknown was 7%, comparable to 8% in 2014. Recent use of capsules with unknown contents was 5%, not significantly different from 6% in 2014.

This pattern of results suggests that the significant decline seen in the use of herbal highs and capsules with unknown contents seen in 2013 has been maintained into 2015.

Table 15: Patterns of herbal high use, 2010-2015

NPS	2010 N=100	2011 N=28	2012 N=90	2013 N=100	2014 N=100	**2015 N=100**
Herbal highs						
ever used (%)	-	-	39	12	14	**12**
used last 6 months (%)	-	-	11	5	4	**5**
Capsule (contents unknown)						
ever used (%)	**-**	**-**	17	5	8	**7**
used last 6 months (%)	**-**	**-**	7	2	6	**5**

Source: WA EDRS REU/RPU interviews, 2010-2015

* Indicates significant changes from the 2014 results according to 95%CI and p=0.05

- Data not collected

4.10.2. Summary of NPS use

- The proportion of lifetime and recent use for all NPS remained stable in the current sample compared to 2014.
- Consistent with the 2014 findings, the most common NPS ever used were synthetic cannabis (34%), DMT (34%), NBOMe (14%) 2C-I (13%) and herbal highs (12%).
- Comparable to 2014, the most commonly reported NPS to have been used recently were DMT (13%), DXM (7%), synthetic cannabis (6%) and herbal highs, unknown capsules and methylone (each 5%).
- KE reported that synthetic cannabis use was associated with both physical and mental health problems.

5. DRUG MARKET: PRICE, POTENCY, AVAILABILITY AND SUPPLY

5.1. Ecstasy pills, powder and capsules

5.1.1. Price

In 2015, 96 participants reported on the price of ecstasy pills, four reported on the price of powder per gram, four reported on the price of powder per point and 57 reported on the price of ecstasy capsules.

Ecstasy pills

Of those who commented on the price of ecstasy pills (n=96), the median price per pill was $30 (range $16-$40), a non-significant decrease from $35 (range $10-$60) in 2014.

Ecstasy powder

Of those who were able to comment on the price of ecstasy powder per point (n=4), the median price was $35 (range $30-$50), comparable to $40 (range $30-$50) in 2014. Of those who were able to comment on the price of powder per gram (n=4), the median price was $300 (range $40-$400), comparable to $280 (range $40-$350) in 2014. These results should be interpreted with caution given the small number of participants who commented on the price of ecstasy powder in 2015.

Ecstasy capsules

Of those participants who commented on the price of ecstasy capsules (n=57), the median price was $35 (range $20-$50), significantly lower than $40 ($30-$50) in 2014.

Price changes

Participants were asked whether the price of ecstasy pills, powder and capsules had changed in the preceding six-month period. As shown in Table 16, in 2015, participants most commonly reported that the price was stable (56%). This was followed by decreasing (18%), fluctuating (14%), increasing (9%) and don't know (3%). While most of these proportions were consistent with the 2014 findings, a significantly larger proportion of participants in the present sample reported that the price was decreasing in the current sample (18%) compared to 2014 (5%; CI: 0.04 to 0.22).

KE comments

- A KE who worked in community outreach reported that the current price of ecstasy $35-$40 per pill.
- A KE who worked in law enforcement reported that the current price for 1000 ecstasy pills was $15 and has decreased recently.

Table 16: Price of ecstasy pills, powder and capsules and price variations, 2006-2015

	2006	2007	2008	2009	2010	2011	2012	2013	2014	**2015**
Median price per tablet Range	$40 ($25-$50)	$40 ($30-$50)	$40 ($20-$45)	$35 ($17-$50)	$35 ($20-$50)	$30 ($15-$40)	$35 ($20-$50)	$35 ($6-$60)	$35 ($10-$60)	**$30** **($16-$40)**
Price change (%)										
Increasing	6	11	17	9	18	4	10	16	18	**9**
Stable	61	59	48	52	56	57	57	59	65	**56**
Decreasing	19	16	19	25	18	14	8	11	5	**18***
Fluctuating	12	9	10	9	5	11	8	10	9	**14**
Don't know	2	5	5	5	3	14	18	4	3	**3**

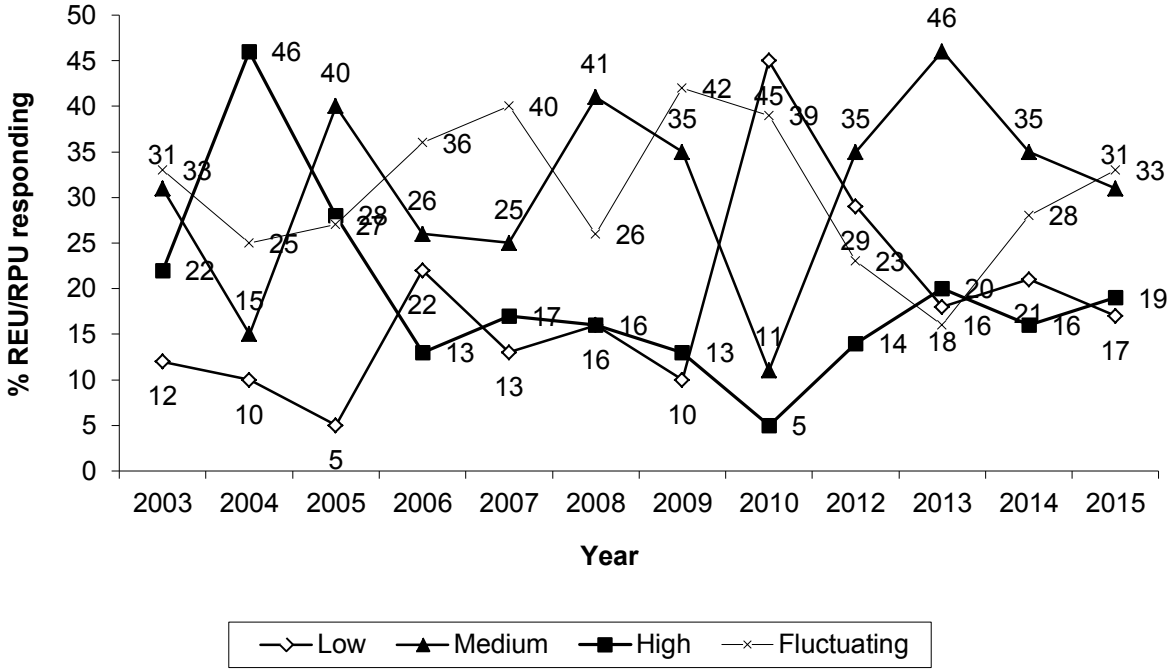
Source: WA EDRS REU/RPU interviews, 2006-2015

* Indicates significant changes from the 2014 results according to 95%CI and p=0.05

5.1.2. Potency

Participants were asked to comment on the current potency of ecstasy pills, powder and capsules. Participants most commonly rated the current potency as fluctuating (n=33, 33%), followed by medium (n=31, 31%), high (n=19, 19%) and then low (n=17, 17%). These results were consistent with the 2014 findings. As is evident in Figure 9, user reports of ecstasy potency were on an upward trend in 2012 and 2013 but have remained stable since that time.

Figure 9: User reports of current ecstasy pills, powder and capsules potency, 2003-2015



Source: WA EDRS REU/RPU interviews, 2003-2015

Participants were also asked about perceived changes in the potency of ecstasy pills, powder and capsules in the preceding six months. Consistent with the 2014 findings, the most frequent response was stable (n=29, 29%), followed by fluctuating (n=27, 27%), decreasing (n=19, 19%) increasing (n=18, 18%) and don't know (n=7, 7%).

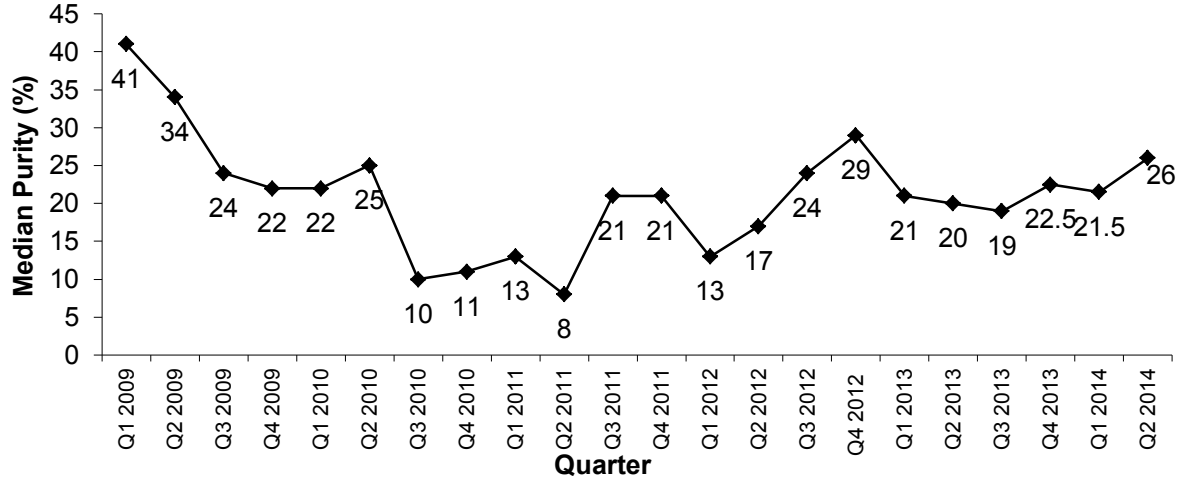
ACC statistics

Data obtained from the ACC indicates that, in WA during 2013/14, a single tablet or capsule of MDMA cost $15; half the price reported by WA EDRS participants in the current sample. The price per tablet/capsule when 100 to 999 tablets/capsules were purchased in bulk was reported as $24 (ACC, 2015).

While potency estimates provided by users are subjective perceptions, laboratory analyses of ecstasy seizures provide a more objective assessment. However, it must be noted that the seizures analysed do not represent a random or comprehensive sample of all seizures made. Figure 14 presents the median purity of phenethylamine seizures in WA according to data provided by the WA State Police and the ACC since January 2009 (ACC, 2011-2015). Purity levels during the 2013/14 period varied significantly, reported at between 2% and

92%. While there were reports for seizures of two grams and less and more than two grams, this data has not been consistently reported across years. Therefore, the median for the total of all samples (<=2 g and >2 g) is presented in Figure 14. The 2013/14 represents a slight overall increase in purity compared to the previous reporting period. The total median phenethylamine purity for the 2013/14 was 25%, a small increase from 21% in 2012/13 (ACC, 2014 and 2015).

Figure 10: Median purity of phenethylamine seizures in WA by quarter, January 2009 to June 2014



Source: ACC, 2009-2015

KE comments

- A KE who worked in law enforcement reported that current potency of ecstasy pills was high.
- An additional KE who worked in law enforcement reported that the potency of ecstasy pills was stable and that ecstasy pills contained 15% to 25% MDMA.

5.1.3. Availability

Participants were asked how easy ecstasy pills powder and capsules were to obtain currently. The majority (n=92, 92%) of the sample rated pills, powder and capsules as easy or very easy to obtain, consistent with 94% in 2014. Again consistent with the 2014 results, participants most commonly reported that availability was stable over the preceding six months (n=61, 61%), followed by easier (n=26, 26%) more difficult (n=7, 7%) and fluctuating (n=6, 6%). Availability reports across survey years are presented in Table 17.

Table 17: Reports of ecstasy pills, powder and capsules availability, 2006-2015

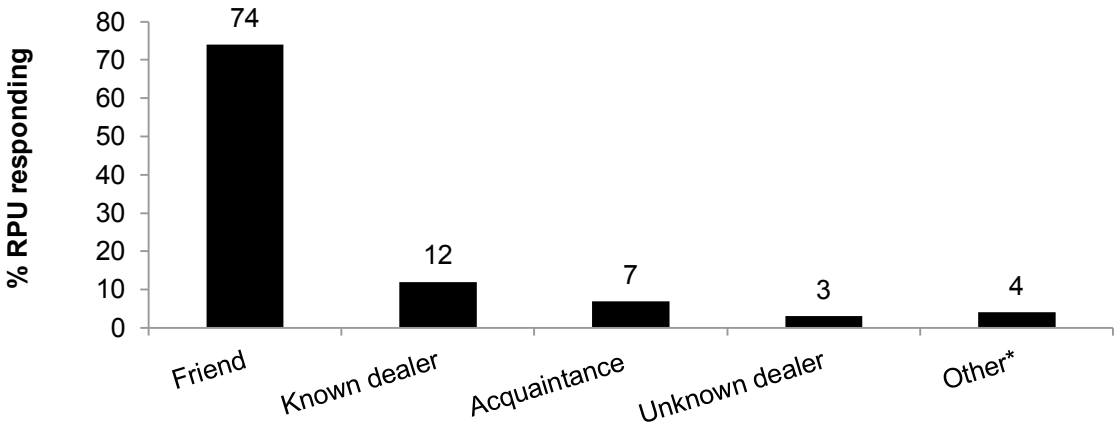
(%)	2006 N=100	2007 N=99	2008 N=58	2009 N=98	2010 N=100	2011 N=28	2012 N=90	2013 N=100	2014 N=100	**2015 N=100**
Current availability										
Very easy	47	30	52	61	22	14	18	48	53	**62**
Easy	42	59	41	35	58	50	65	48	41	**30**
Availability changes										
Stable	55	65	59	62	54	64	44	51	61	**61**
Easier	17	10	24	20	7	4	32	33	27	**26**

Source: WA EDRS REU/RPU interviews, 2006-2015

5.1.4. Source person and source location

Participants were asked to comment on whom ecstasy pills, powder or capsules were obtained from on the last occasion in the preceding six months. As demonstrated in Figure 10, 'friend' was the most commonly reported person, nominated by 74% (n=74) of the sample. This was followed by 'known dealer' (n=12, 12%) and 'acquaintance' (n=7, 7%). These findings were consistent with 2014.

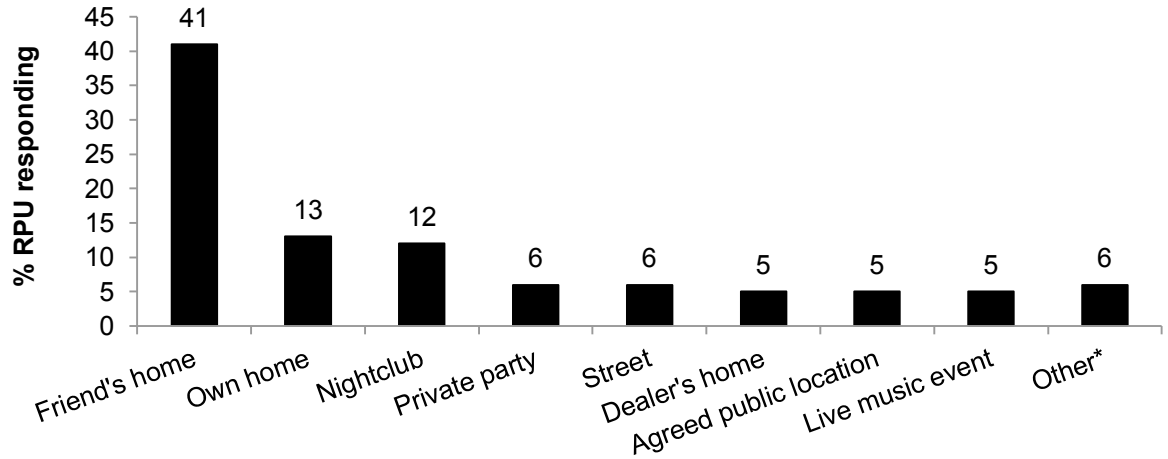
Figure 11: People from whom ecstasy pills, powder and capsules were last obtained in the preceding six months, 2015 (N=100)



Source: WA RPU interviews, 2015
*Other responses were: 'workmate', 'relative' and 'online'

Participants were asked to report the location from where ecstasy pills, powder or capsules were obtained on the last occasion in the preceding six months. As presented in Figure 11, consistent with 2014, among those who commented (n=98) 'friend's home' was the most commonly reported location (n=40, 41%). This was followed by 'own home' (n=13, 13%) and 'nightclub' (n=12, 12%). These results were consistent with the 2014 findings.

Figure 12: Locations at which ecstasy pills, powder and capsules were last obtained in the preceding six months, 2015 (N=98)



Source: WA EDRS RPU interviews, 2015
*Other responses were: 'work', 'car', 'hotel', 'educational institution' and 'online'

5.2. Ecstasy crystal/MDMA rock

5.2.1. Price

Participants were asked to comment on the current price of ecstasy crystal/MDMA rock. As shown in Table 18, among those able to comment (n=14), the median price per gram was $300 ($40-$400) comparable to $265 (range $35-$400) in 2014. Of those who were able to comment on the price per point (n=6), the median was $30 (range $30-$40), comparable to $37.50 (range $30- $100) in 2014. However, this result should be interpreted with caution given the small sample size. Among those able to comment on the price per cap (n=34) the median was $35 (range $22-$50).

Participants were also asked to comment on changes to the price of ecstasy crystal/MDMA rock in the preceding six months. Among those who commented (n=47), almost two-thirds (n=30, 64%) reported that the price was stable, consistent with 68% in 2014. Table 18 shows a complete breakdown of these results.

Table 18: Price of ecstasy crystal/MDMA rock and price variations, 2014 and 2015

	2014	**2015**
Median price per gram Range	$265 ($35-$400)	**$300** **($40-$400)**
Median price per cap Range	- -	**$35** **($22-$50)**
Price change (%)	(n=53)	**(n=47)**
Increasing	11	**11**
Stable	68	**64**
Decreasing	4	**4**
Fluctuating	7	**8**
Don't know	9	**13**

Source: WA EDRS RPU interviews, 2014 and 2015
- Data not collected

5.2.1. Potency

Participants were asked to comment on the current potency of ecstasy crystal/MDMA rock. Among those able to comment (n=47), more than three-fifths (n=29, 62%) rated it as high. This was followed by medium (n=10, 21%) and then low and fluctuating (each n=4, 8%). These results were consistent with the 2014 findings.

Participants were also asked about changes in the potency of ecstasy crystal/MDMA rock over the preceding six months. Again consistent with the 2014 findings, approximately two-thirds (n=32, 68%) reported potency as stable. This was followed by don't know (n=6, 13%), increasing (n=4, 8%), fluctuating (n=3, 6%) and decreasing (n=2, 4%).

The pattern of results suggests that the perceived potency of ecstasy crystal/MDMA rock tended to be higher than that of ecstasy pills, powder and capsules.

5.2.2. Availability

Participants were asked how easy ecstasy crystal/MDMA rock was to obtain currently. Among those who commented (n=47), more than half (n=25, 53%) rated it as easy or very easy, consistent with 68% in 2014. As shown in Table 19, a significantly smaller proportion

of participants in the current sample (25%) reported that ecstasy crystal/MDMA rock was currently easy to obtain compared to 2014 (49%; CI: -0.04 to -0.40).

Participants most commonly reported availability to be stable over the preceding six months (n=28, 60%), followed by more difficult (n=10, 21%), easier (n=5, 11%) and don't know (n=4, 8%). A significantly smaller proportion of participants in the present sample reported that availability was fluctuating (0%) compared to 2014 (15%; CI: -0.04 to -0.27).

The pattern of results suggests that compared to ecstasy pills, powder and capsules, ecstasy crystal/MDMA rock tended to be perceived as more difficult to obtain. RPU availability reports for 2014 and 2015 for crystal ecstasy/MDMA rock are presented in Table 19.

Table 19: Reports of ecstasy crystal/MDMA rock availability, 2014 and 2015

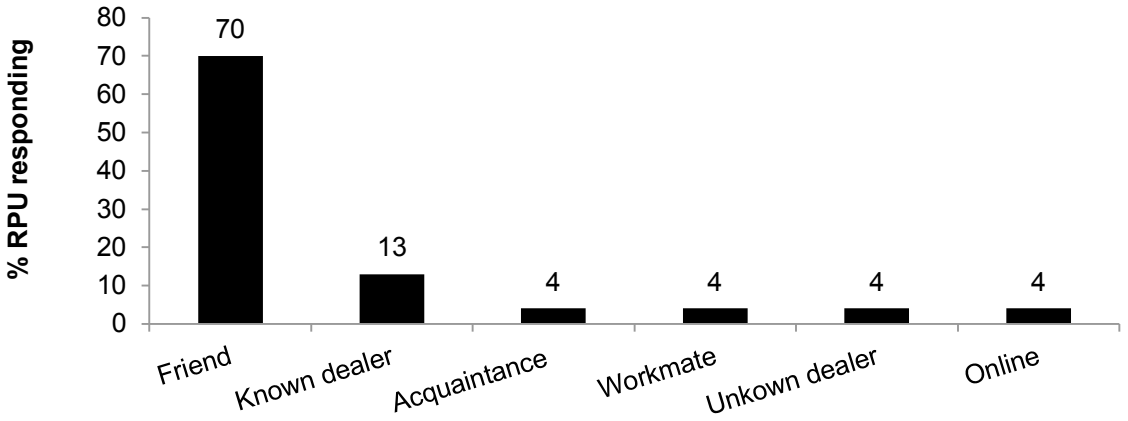
(%)	2014 N=53	**2015 N=47**
Current availability		
Very easy	19	**28**
Easy	49	**25***
Difficult	26	**38**
Very difficult	2	**4**
Don't know	4	**4**
Availability changes		
Stable	45	**60**
Easier	19	**11**
More difficult	11	**21**
Fluctuating	15	**0***
Don't know	9	**8**

Source: WA EDRS RPU interviews, 2014 and 2015
* Indicates significant changes from the 2014 results according to 95%CI and p=0.05

5.2.3. Source person and source location

Participants were asked whom they had obtained ecstasy crystal/MDMA rock from on the last occasion in the preceding six months. Consistent with the 2014 findings, 'friend' was the most commonly reported person, nominated by 70% (n=33) of the respondents. A full breakdown of these data is presented in Figure 12.

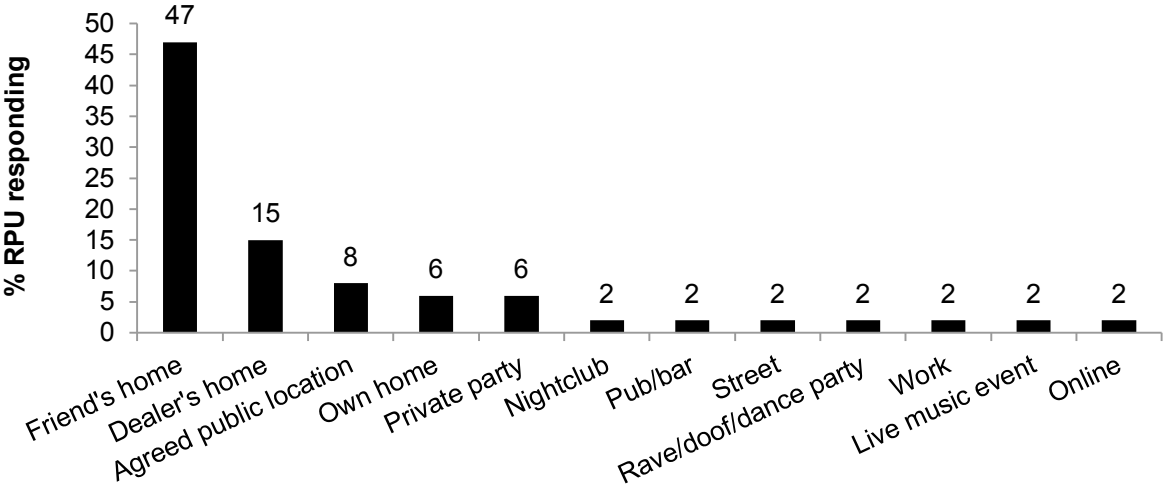
Figure 13: People from whom ecstasy crystal/MDMA rock was last obtained in the preceding six months, 2015 (N=47)



Source: WA RPU interviews, 2015

Participants were asked to report the last location at which they had obtained crystal ecstasy/MDMA rock on the last occasion in the preceding six months. Among those who commented (n=47), 'friend's home' was the most common location (n=22, 47%), consistent with the 2014 results. A full breakdown of these locations is shown in Figure 13.

Figure 14: Locations at which ecstasy crystal/MDMA rock was last obtained in the preceding six months, 2015 (N=47)



Source: WA RPU interviews, 2015

5.3. Ecstasy purchasing patterns

As presented in Table 20, the median number of people from whom ecstasy was purchased in in the preceding six-month period was four (range 0-30). Among participants who purchased pills, a median of four pills (range 1-100) were purchased on the last occasion. Participants most frequently reported purchasing ecstasy for 'self and others' on the last occasion (57%). The most common number of times ecstasy was purchased in the preceding six months was one to six (44%). Only one participant reported purchasing ecstasy 25 times or more over that time period. Ecstasy purchasing patterns in the current sample were consistent with the 2014 results.

Table 20: Patterns of purchasing ecstasy in the last six months, 2006-2015

	2006	2007	2008	2009	2010	2011	2012	2013	2014	**2015**
Median no. of people purchased from	3 (0-30)	3 (0-20)	4 (1-15)	3 (1-55)	3 (1-20)	3 (1-10)	2 (0-20)	4 (1-20)	4 (0-20)	**4 (0-30)**
Median no. of ecstasy tablets purchased	5 (1-100)	6 (1-100)	6 (1-100)	5 (1-100)	5 (1-100)	4 (1-100)	3 (1-150)	4 (1-200)	4 (1-100)	**4 (1-100)**
Purchased for (%)										
Self only	22	25	22	22	30	46	43	33	34	**41**
Self and others	77	70	78	75	69	50	54	66	63	**57**
Others only	-	-	-	3	1	-	-	1	1	**1**
Didn't buy ecstasy	1	5	-	-	-	4	2	-	2	**1**
No. of times purchased recently (%)										
1-6	37	53	60	31	61	48	77	48	51	**44**
7-12	32	25	35	46	31	26	8	32	30	**33**
13-24	28	16	5	21	8	22	11	17	16	**21**
25 or more	1	1	-	2	-	-	2	2	1	**1**
None	-	5	-	-	-	4	2	1	2	**1**

Source: WA EDRS REU/RPU interviews, 2006-2015

5.4. Summary of ecstasy trends

Pills, powder and capsules

- The median price of ecstasy was $30 per pill, a non-significant decrease from $35 in 2014.
- More than half (56%) of the sample rated the price of ecstasy pills, powder and capsules as stable over the preceding six months, comparable to 65% in 2015.
- Less than one-fifth (18%) of the sample rated the price of ecstasy pills, powder and capsules as decreasing over the preceding six months, a significant decrease from 5% in 2014.
- The largest proportion of participants rated the current potency of ecstasy pills, powder and capsules as fluctuating (33%), followed by medium (31%).
- The vast majority (92%) of participants rated ecstasy pills, powder and capsules as easy or very easy to obtain currently.
- Just more than three-fifths (61%) rated availability as stable over the preceding six months.
- 'Friend' remained the most commonly reported person from whom ecstasy pills, powder or caps were last obtained (74%) and 'friend's home' was the most commonly reported location (41%).
- KE reported that the current price of ecstasy was $35-$40 per pill and that ecstasy pills currently contained 15% to 25% MDMA.

Ecstasy crystal/MDMA rock

- The median price of ecstasy crystal was $35 per cap.
- Just less than two-thirds (64%) of the respondents rated the price of ecstasy crystal/MDMA rock as stable over the preceding six months.
- Consistent with 2014, the potency of ecstasy crystal/MDMA rock was most commonly reported as high (62%), followed by medium (21%).
- More than half (53%) of the sample rated ecstasy crystal/MDMA as easy or very easy to obtain currently, comparable to 68% in 2014.
- Less than two-thirds (61%) of the sample reported that the availability of ecstasy crystal/MDMA rock was stable over the preceding six months, comparable to 45% in 2014.
- Compared to ecstasy pills, powder and capsules, ecstasy crystal/MDMA rock tended to be perceived as more potent and more difficult to obtain.
- Consistent with 2014, 'friend' was the most commonly reported person from whom ecstasy crystal/MDMA rock was last obtained (70%) and 'friend's home' was the most commonly reported location (47%).

Ecstasy purchasing patterns

- Ecstasy was purchased from a median of four people in the preceding six months, and a median of four tablets were obtained on the last occasion.
- Ecstasy was most commonly purchased for 'self and others' on the last occasion (57%).
- Ecstasy was most commonly reported to have been obtained one to six times in the preceding six months (44%).
- Ecstasy purchasing patterns in the current sample were consistent with the 2014 results.
- Police analyses of phenethylamine seizures during 2013/14 suggest a small increase in the overall purity of ecstasy compared to 2012/13.

5.5. Methamphetamine

5.5.1. Price

Participants were asked about the price of the various forms of methamphetamine on the last occasion of purchase (See Table 21). Given the small number of participants who were able to comment in 2015, these results should be interpreted with caution.

Speed

None of the participants in the present sample reported the price of methamphetamine powder (speed) per point. One participant reported price of a gram of methamphetamine powder ($300). A comparison with the 2014 data was not possible due to the small sample size.

Base

No participants from the current sample were able to report on the price of methamphetamine base.

Crystal

Of those participants who were able to comment on the price of crystal methamphetamine per point (n=8), the median was $100 (range $80-$100), the same median reported in 2014. One participant was able to report the price of crystal methamphetamine per gram ($700); comparison with the 2014 findings was not possible due to the small sample size.

Table 21 Price of various methamphetamine forms purchased, 2006-2015

Median price ($)	2006	2007	2008	2009	2010	2011	2012	2013	2014	**2015**
Speed										
Point	50	50	50	50^	50^	100^	100^	100^	100^	**-**
Gram	300	350	100	275	300^	800^	400^	700^	200^	**300^**
Base										
Point	50	50	50	50^	-	100^	-	-	-	**-**
Gram	350	380	-	400^	300^	1000^	-	-	-	**-**
Crystal										
Point	50	50	50	50^	50^	100	100	100	100	**100^**
Gram	400	400	425	400^	400^	400^	525^	800^	800^	**700^**

Source: WA EDRS REU/RPU interviews, 2006-2015
^ n<10.Results should be interpreted with caution.

Participants were asked to comment on changes in the price of the three forms of methamphetamine over the preceding six months (see Figure 15).

Speed

Of those able to comment (n=3), all participants (100%) reported the price of speed as being stable over the preceding six months (see Figure 15). While this result was consistent with the 2014 findings, it should be interpreted with caution given the very small sample size.

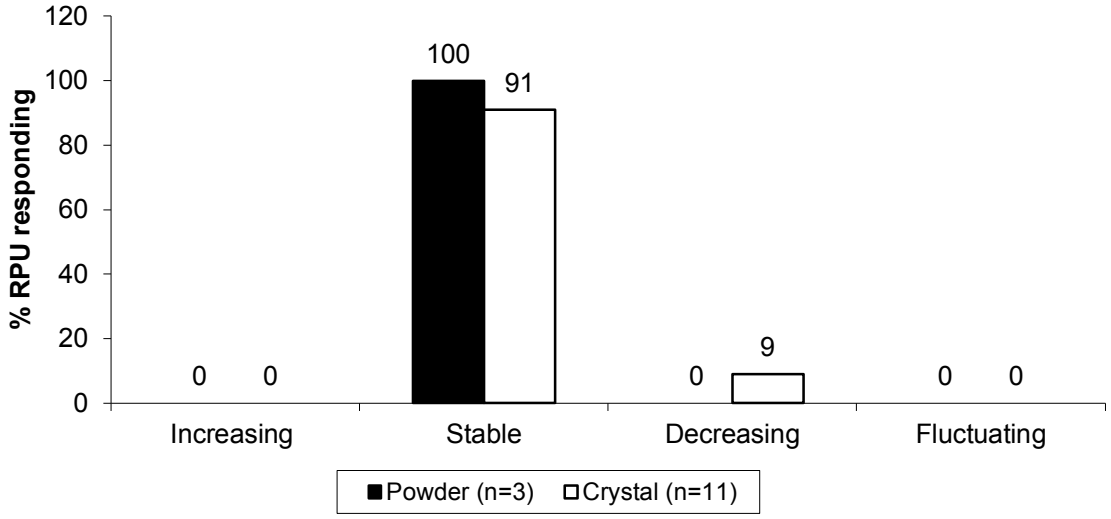
Base

In 2015, no participants were able to comment on price changes for methamphetamine base.

Crystal

Of those able to comment on crystal methamphetamine (n=11), the majority (n=10, 91%) reported the price as stable over the preceding six months, and the remaining one participant (9%) reported that it was decreasing. These results were consistent with the 2014 findings.

Figure 15: Recent changes in the price of powder and crystal forms of methamphetamine, 2015



Source: WA EDRS RPU interviews, 2015

ACC statistics

ACC data on the price of crystal methamphetamine in WA were not available for the 2013/14 reporting period (ACC, 2015).

5.5.2. Potency

Participants were asked to comment on the current potency of the three forms of methamphetamine (see Figure 16).

Speed

Of those able to comment on the current potency of speed (n=3), two-thirds (n=2, 67%) rated it as medium and one-third (n=1, 33%) rated it as high. These results were consistent with the 2014 findings but should be interpreted with caution given the small sample size.

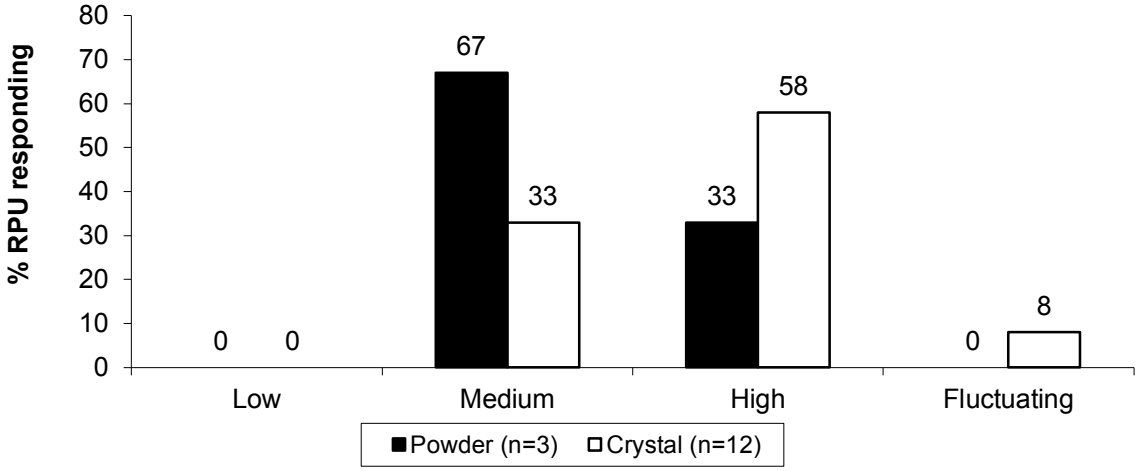
Base

In 2015, no participants were able to comment on the current potency of methamphetamine base.

Crystal

Of those participants who were able to comment on crystal methamphetamine (n=12), perceptions were mixed. The greatest proportion of participants rated the potency as high (n=7, 58%), followed by medium (n=4, 33%) and then fluctuating (n=1, 8%). These results are consistent with 2014.

Figure 16: User reports of current methamphetamine potency, 2015



Source: WA EDRS RPU interviews, 2015

Participants were asked to comment on perceived changes in the potency of methamphetamine over the preceding six months (see Figure 17). The small number of respondents necessitates caution in interpreting these results.

Speed

Of those participants able to comment on speed (n=3), all (100%) reported potency as decreasing.

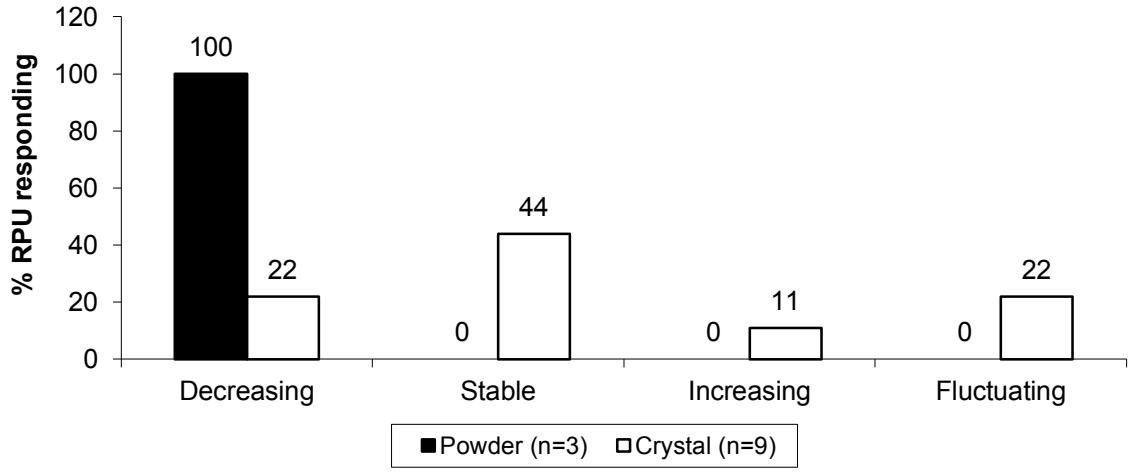
Base

No participants commented on potency changes for methamphetamine base.

Crystal

Of those participants able to comment on crystal methamphetamine (n=9), the largest proportion (n=4, 44%), reported that potency was stable, followed by decreasing and fluctuating (each n=2, 22%) and then increasing (n=1, 11%). These results were consistent with 2014.

Figure 17: User reports of changes in methamphetamine potency in the preceding six months, 2015

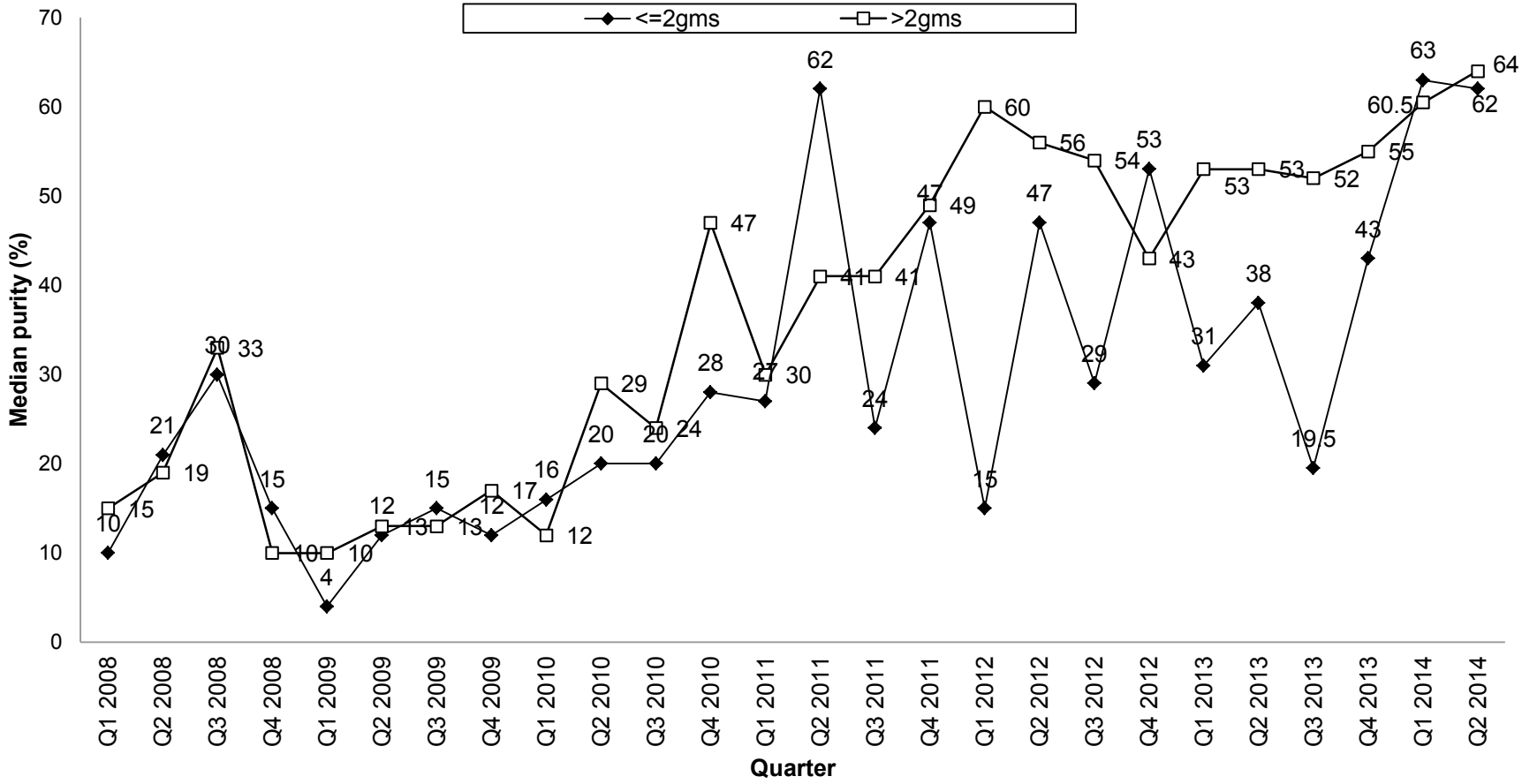


Source: WA EDRS RPU interviews, 2015

ACC statistics

Figure 18 illustrates ACC data on the median purity of methamphetamine seizures in WA, by quarter, from January 2008 to June 2014. Seizures by the WA State Police in the 2013/14 period varied in purity from 0% to 88%, with a median of 57%, compared to a median of 50% in 2012/13 (ACC, 2014, 2015).

Figure 18: Median purity of methamphetamine seizures analysed in WA by quarter, January 2008 to June 2014



Source: ACC, 2008-2014

5.5.3. Availability

Participants were asked to comment on the current availability of the three forms of methamphetamine (see Figure 19).

Speed

Of those who were able to comment on speed (n=3), perceptions were mixed. Approximately two-thirds (n=2, 67%) reported that it was very difficult to obtain and the remaining participant (n=1, 33%) reported that it was easy to obtain. Although these results are consistent with the 2014 findings, they should be interpreted with caution due to the small number of participants who were able to comment.

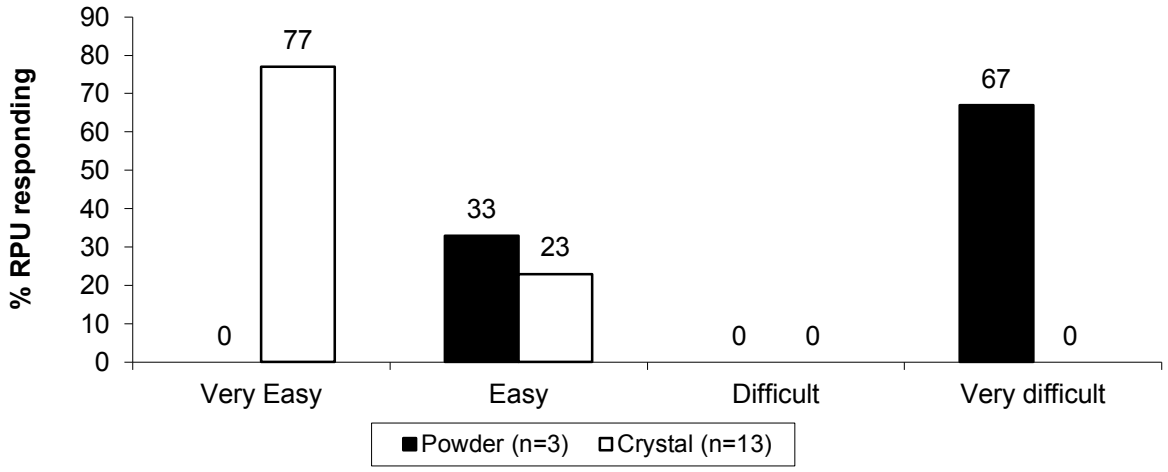
Base

No participants commented on current availability of methamphetamine base.

Crystal

Among participants who were able to comment on crystal methamphetamine (n=13), all reported that it was either very easy (n=10 77%) or easy (n=3, 23%) to obtain. These results are comparable to the 2014 findings.

Figure 19: User reports of current availability of methamphetamine forms, 2015



Source: WA EDRS RPU interviews, 2015

Participants were asked to comment on the perceived changes to availability of methamphetamine over the preceding six months (see Figure 20). Given the small number of participants who were able to comment, these results should be interpreted with caution.

Speed

Of those respondents able to comment on speed (n=3), perceptions were mixed. While the majority (n=2, 67%) reported that availability had remained stable, one participant reported that availability was more difficult (33%). These results are comparable to the 2014 sample.

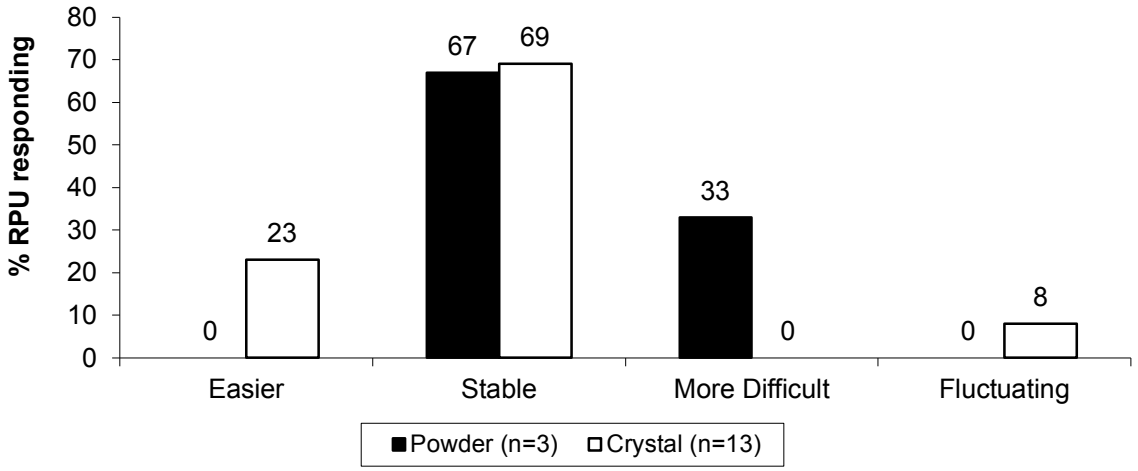
Crystal

Of those participants able to comment on crystal methamphetamine (n=13), more than one-third (n=9, 69%) reported that they perceived availability to be stable. A further three participants (23%) reported that availability was easier and one participants reported the availability as fluctuating (8%). These findings are consistent with the 2014 results.

Base

No participants commented on this form of methamphetamine.

Figure 20: Change in the availability of methamphetamine in the preceding six months, 2015



Source: WA EDRS RPU interviews, 2015

5.5.4. Source person and source location

Participants were asked to report whom they had obtained methamphetamine from on the last occasion. A full breakdown of these results is shown in Figure 21.

Speed

Among participants who commented on speed (n=2), it was last obtained from 'known dealer' (n=1, 50%) and 'workmate' (n=1, 50%). Comparison with the 2014 results was not possible due to the small sample size.

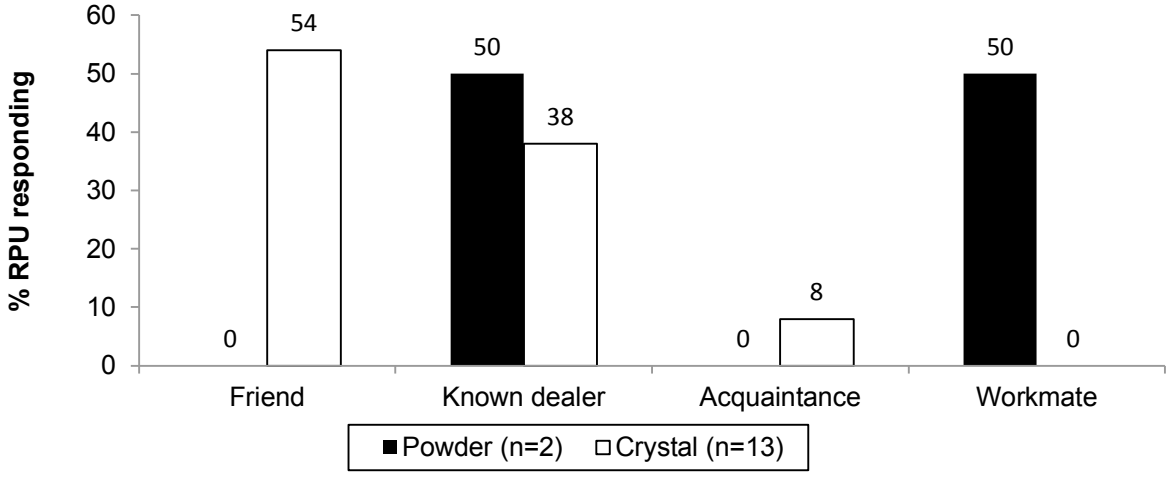
Crystal

Consistent with 2014, among those who commented on crystal methamphetamine (n=13), the most commonly reported person was 'friend' (n=7, 54%), followed by 'known dealer' (n=5, 38%) and 'acquaintance' (n=1, 8%).

Base

No participants commented on methamphetamine base.

Figure 21: Person from whom methamphetamine was last obtained in the preceding six months, 2015



Source: WA EDRS RPU interviews, 2015

Participants were asked where they were when they purchased methamphetamine on the last occasion in the preceding six months. A full breakdown of these responses is shown in Figure 22.

Speed

Among those who commented on speed (n=2), the reported locations were 'dealer's home' (n=1, 50%) and 'nightclub' (n=1, 50%). The small number of participants who commented precluded statistical comparison of the 2014 and 2015 samples.

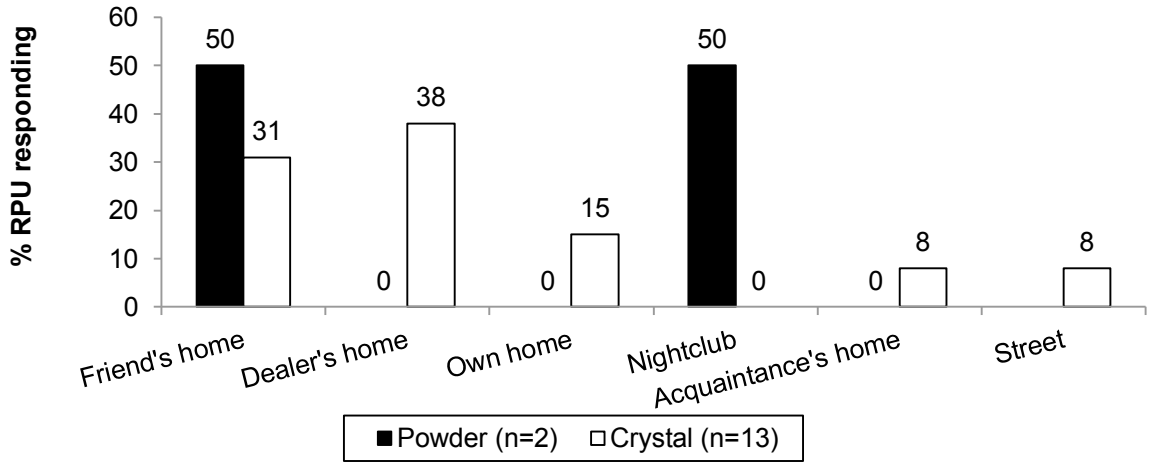
Crystal

For those participants able to comment on crystal methamphetamine (n=13), the most commonly reported location was 'dealer's home' (n=5, 38%), followed by 'friend's home' (n=4, 31%), 'own home' (n=2, 15%), 'acquaintance's home' and 'street' (each n=1, 8%). These results were consistent with the 2014 findings.

Base

No participants commented on methamphetamine base.

Figure 22: Locations where methamphetamine was last obtained in the preceding six months, 2015



Source: WA EDRS RPU interviews, 2015

KE comments

- KE reported the price of crystal methamphetamine as $80-$100 per point.
- There were mixed reports from KE on recent changes in the price of crystal methamphetamine; while some KE reported a decrease in price, others reported that the price had been stable.
- Several KE reported that that the current potency of crystal methamphetamine was high.
- There were mixed reports on recent changes in the potency of methamphetamine; while some KE reported recent increases in potency, others reported that potency had been stable.
- Two KE who worked in law enforcement noted that the current potency of crystal methamphetamine was between 50% and 80%.
- A KE who worked at an NSP reported that, compared to speed or base, crystal was the more available form of methamphetamine on the Perth market.

ACC statistics

The most recent IDDR (ACC, 2015) reported on seizures of ATS in the period 2013/14. ATS incorporate MDMA, amphetamine and methamphetamine. In WA in 2013/14, State Police and Australian Federal Police were responsible for 5,942 seizures totalling 122, 747 grams, compared with 4,580 seizures totalling 74,688 grams in 2012/13.

5.5.5. Summary of methamphetamine trends

Speed

- Findings regarding speed should be interpreted with caution given the small number of participants who were able to comment.
- A single articipant reported the price of speed per gram as $300.
- The majority of those commenting (91%) reported that the price of speed was stable over the preceding six months, consistent with 100% in 2014.
- Comparable with the 2014 findings, the current potency of speed was most commonly reported as medium (67%).
- All participants who commented (100%) reported that the potency of speed was decreasing over the preceding six months.
- Speed was most commonly rated as very difficult to obtain (67%).
- Availability was most commonly perceived as stable (67%).
- 'Known dealer' and a 'workmate' were reported as the people from whom speed was last obtained on the last occasion.

Base

- No participants commented on methamphetamine base.

Crystal

- Consistent with 2014, the median price of crystal methamphetamine per point was $100 and the median price per gram was $700.
- The majority commenting reported that the price of crystal was stable over the preceding six months (91%), comparable to 86% in 2014.
- More than half (58%) of those commenting rated the current potency of crystal methamphetamine as high.
- Crystal methamphetamine potency was most commonly reported as stable over the preceding six months (44%).
- Consistent with 2014, all participants who commented rated crystal methamphetamine as very easy or easy to obtain currently (100%).
- More than two-thirds (69%) of the respondents reported that availability of crystal methamphetamine was stable over the preceding six months.
- Consistent with 2014, 'friend' was the most commonly reported person from whom crystal methamphetamine was last obtained and 'dealer's home' was the most commonly reported location that it was obtained from (38%).
- KE reported that the price of crystal methamphetamine was $80-$100 per point.
- KE reported current crystal methamphetamine potency as high, between 50% and 80%.

5.6. Cocaine

5.6.1. Price

Participants were asked to report the current price of cocaine per gram. Table 22 shows a breakdown of these results across survey years. These findings should be interpreted with caution given the small number of participants able to comment. As shown in Table 20, in 2015, among participants who were able to comment (n=8), the median price of cocaine per gram was $375 (range $100-$500), not significantly different from $400 in 2014.

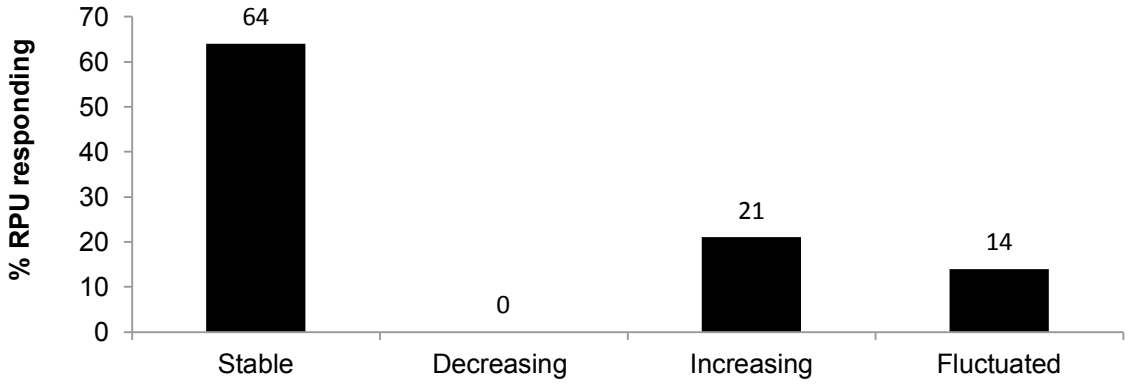
Table 22: Price of cocaine purchased, 2006-2015

	2006 (n=14)	2007 (n=8)	2008 (n=8)	2009 (n=9)	2010 (n=4)	2011 (n=5)	2012 (n=10)	2013 (n=10)	2014 (n=15)	**2015 (n=8)**
Median price per gram	$350^	$390^	$325^	$375^	$365^	$375^	$325	$400	$400	**$375^**
Price range	($210-$600)^	($200-$500)^	($300-$400)^	($200-$300)^	($300-$500)^	($350-$500)^	($100-$700)	($300-500)	($150-$600)	**($100-$500)^**

^n<10. Results should be interpreted with caution.
Source: WA EDRS REU/RPU interviews, 2006-2015

Participants were asked to comment on recent changes to the price of cocaine. A breakdown of these results is shown in Figure 23. Of those participants able to comment (n=14), less than two-thirds (n=9, 64%) reported the price was stable over the preceding six months. This was followed by increasing (n=3, 21%) and fluctuated (n=2, 14%). These results are consistent with the 2014 findings.

Figure 23: User reports of recent changes in the price of cocaine, 2015 (N=14)



Source: WA EDRS RPU interviews, 2015

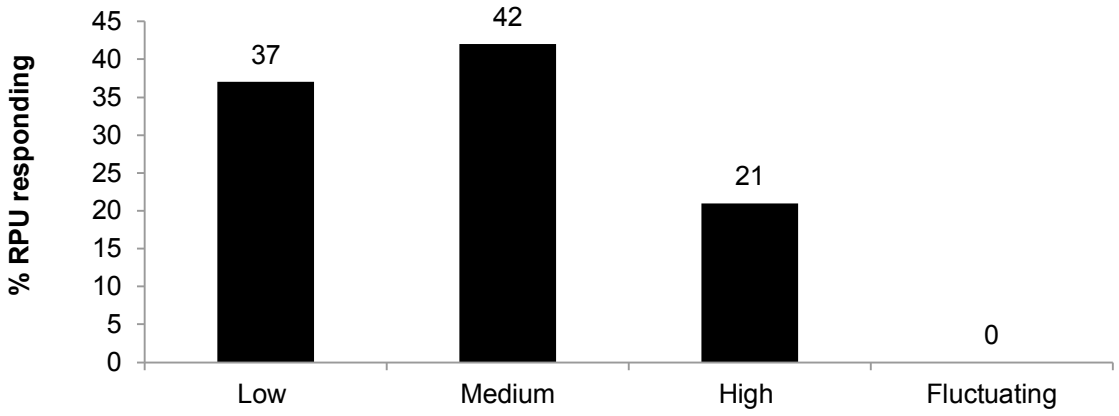
ACC statistics

Data obtained from the ACC indicates that, in WA during 2013/14, the price per ounce (28 grams) of cocaine was $10,000, which is the same price that was reported in 2012/13. In the 2013/14 period, the price of cocaine per gram was $750, again the same price reported in 2012/13. The price of an 8 ball (3.5 grams) was $2500 in 2013/14; this price was not reported in 2012/13.

5.6.2. Potency

Participants were asked to comment on the current potency of cocaine. A full breakdown of these results is shown in Figure 24. Of the 19 participants who were able to comment, perceptions were mixed. The greatest proportion of participants rated potency as medium (n=8, 42%), followed by low (n=7, 37%) and then high (n=4, 21%). These results were comparable to the 2014 findings.

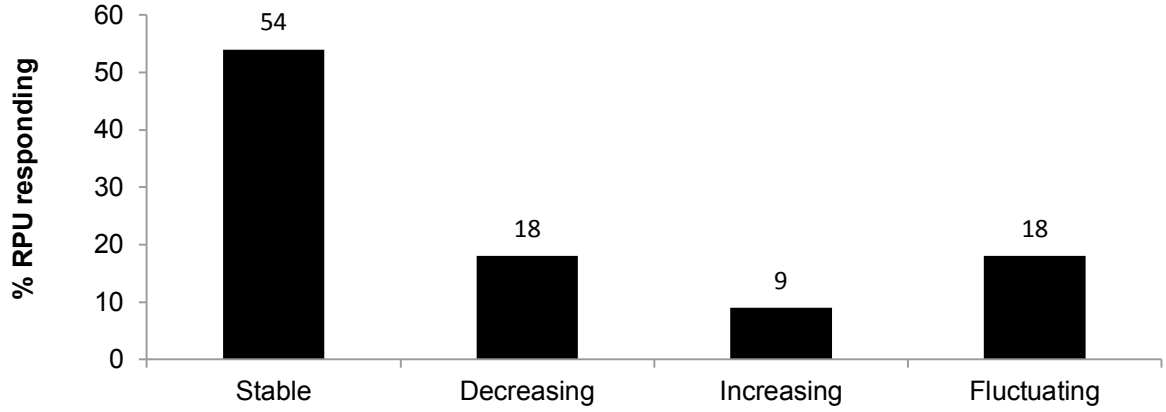
Figure 24: User reports of current potency of cocaine, 2015 (N=19)



Source: WA EDRS RPU interviews, 2015

Participants were asked to report on perceived changes to potency in the preceding six months. As presented in Figure 25, among the 11 participants who were able to comment, perceptions were mixed. The greatest proportion (n=6, 54%) reported that potency had been stable, followed by decreasing and fluctuating (each n=2, 18%), and then increasing (n=1, 9%). These findings were consistent with the 2014 results.

Figure 25: User reports of changes in cocaine potency in the preceding six months, 2015 (N=11)



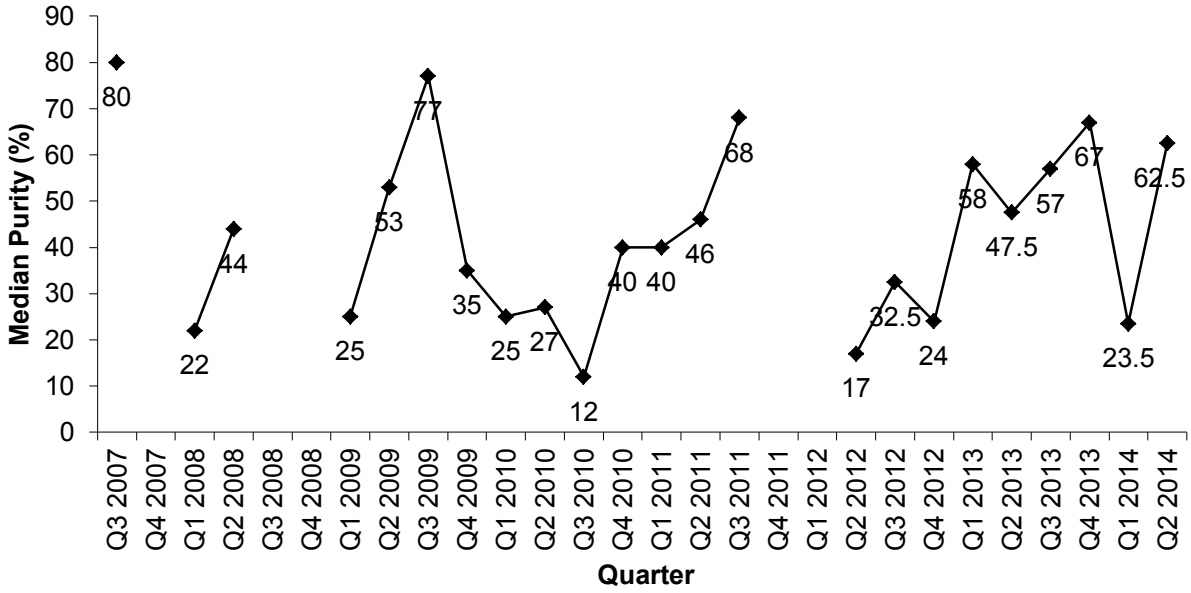
Source: WA EDRS RPU interviews, 2015

ACC statistics

Figure 26 presents ACC data on the median purity of cocaine seizures by WA State Police per quarter from July 2007 to June 2014. It is difficult to interpret meaningful findings from

these data due to the number of seizures historically being extremely low, or unreported, in WA. In 2013/14, cocaine seizure purity ranged from 12% to 87%, with a median purity of 64.5%. In 2012/13, purity ranged from 6% to 80%, with a median purity of 36% (ACC, 2014, 2015). It would appear that the potency of cocaine seizures analysed in WA increased in purity in 2013/14 compared to the previous period, but continued to fluctuate.

Figure 26: Median purity of cocaine seizures analysed in WA by quarter, July 2007 to June 2014

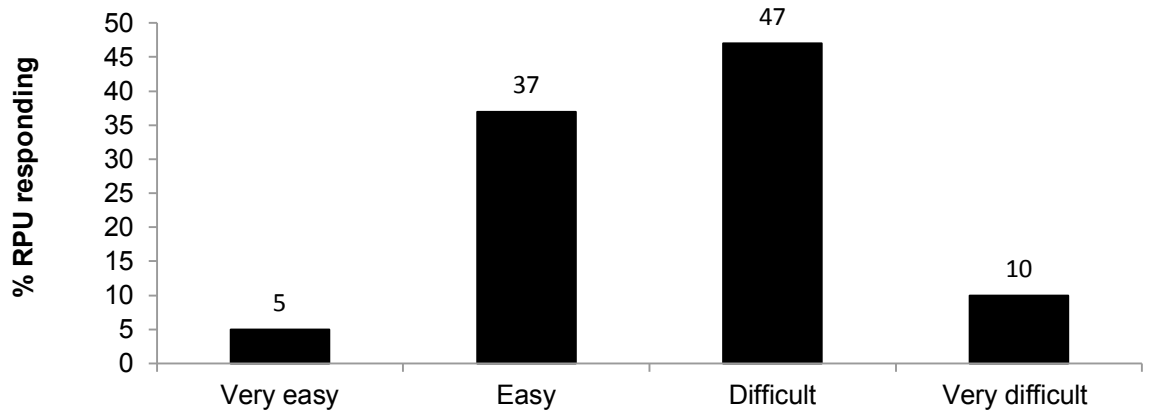


Source: ACC, 2008-2014

5.6.3. Availability

Participants were asked how easy cocaine was to obtain currently (see Figure 27). Among the 19 participants who commented, consistent with 2014, perceptions were mixed. The greatest proportion (n=9, 47%) rated it as difficult. This was followed by easy (n=7, 37%), very difficult (n=2, 10%) and very easy (n=1, 5%).

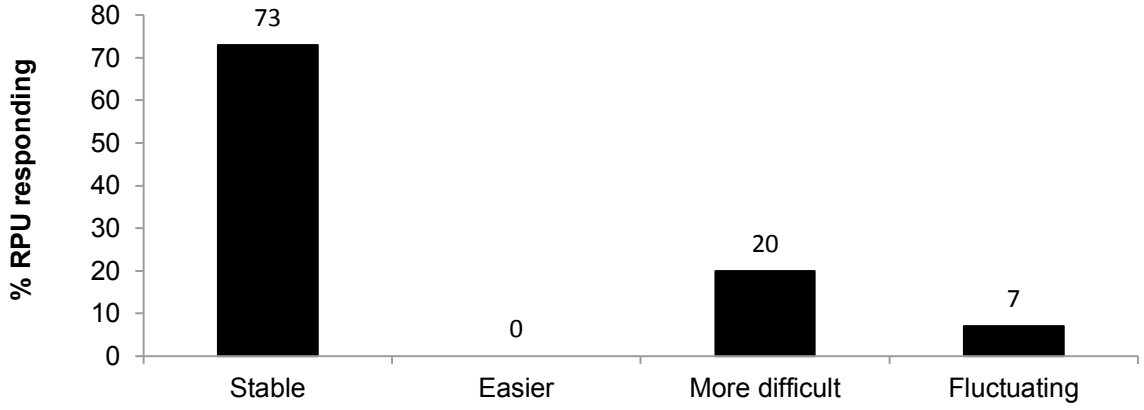
Figure 27: Current availability of cocaine, 2015 (N=19)



Source: WA EDRS RPU interviews, 2015

Participants were asked to comment on changes in the availability of cocaine over the preceding six months. A full breakdown of these results is shown in Figure 28. Of the 15 participants who were able to comment, almost three-quarters (n=11, 73%) reported that cocaine availability was stable. A further three participants (20%) reported that it was difficult to obtain, followed by fluctuating (n=1, 7%). These results were consistent with the 2014 findings.

Figure 28: Changes in cocaine availability in the preceding six months, 2015 (N=15)



Source: WA EDRS RPU interviews, 2015

5.6.4. Source person and source location

Participants were asked whom they obtained cocaine from on the last occasion in the preceding six months. Of those able to comment (n=16), the most commonly reported person was 'friend' (n=10, 62%), followed by 'known dealer' and 'acquaintance' (each n=2, 12%) and then 'street dealer' and 'online' (each n=1, 6%).

Participants were also asked to comment on the location at which cocaine was obtained on the last occasion in the preceding six months. Among those able to comment (n=16), the most commonly reported location was 'friend's home' (n=6, 37%). This was followed by 'pub/bar', 'hotel', and 'agreed public location' (each n=2, 12%) and then 'own home', 'private party', 'street' and 'online' (each n=1, 6%). These results were consistent with the 2014 findings.

KE comments

- Most KE reported that cocaine use was not commonly encountered in their fields.
- A KE who worked in community outreach reported the current price of cocaine as $500 per half gram.
- KE reports on the current potency of cocaine were mixed. Two KE who worked in law enforcement reported that the current potency of cocaine was high, at approximately 50%-60%. Conversely, a KE who worked in community outreach reported current potency as low.
- Several KE reported that cocaine was difficult to obtain currently.

5.7.1. Summary of cocaine trends

- The median reported price of cocaine per gram was $375, comparable to $400 in 2014.
- Consistent with 2014, more than three-fifths (64%) of the respondents reported that the price of cocaine was stable over the preceding six months.
- Consistent with 2014, the current potency of cocaine was most commonly rated as medium (42%) followed by low (37%).
- Consistent with 2014, cocaine potency was most commonly reported as stable over the preceding six months (54%).
- Analysis of cocaine seizures in WA revealed that cocaine potency in the 2013/14 period was between 12% to 87%, indicating a slight increase in purity from 2012/13.
- Cocaine was most commonly rated as difficult to obtain currently (47%), with availability was most commonly rated as stable over the preceding six months (73%). These findings were consistent with 2014.
- Aligned with the 2014 findings, 'friend' (62%) was most commonly reported person from whom cocaine was last obtained and 'friend's home' (37%) was the most commonly reported location.
- KE reported that cocaine use was not often encountered in their fields. Among those able to comment on cocaine use, reports of potency were mixed.

5.8. Ketamine and GHB

In 2015, only two participants were able to comment on the price, potency or availability of ketamine and none were able to comment on the price, potency or availability of GHB. Data on the market characteristics of ketamine and GHB are therefore not presented in this report.

5.9. LSD

5.9.1. Price

Participants were asked to comment on the current price of LSD as well as changes in price over the preceding six months. A breakdown of these results across survey years is shown in Table 23. In 2015, the median reported price of LSD per tab was $25 (range $10-$80), the same median reported in 2014. Among those who commented on price changes (n=18), consistent with 2014, the majority (n=15, 83%) reported that the price was stable over the preceding six months. This was followed by decreasing (n=2, 11%) and increasing (n=1, 6%). These results were not significantly different to the 2014 findings.

Table 23: Price of LSD purchased and price changes in the preceding six months, 2006-2015

	2006 N=20	2007 N=16	2008 N=9	2009 N=25	2010 N=32	2011 N=12	2012 N=19	2013 N=39	2014 N=35	**2015 N=20**
Median price per tab ($)	20	25	25	25	25	25	20	25	25	**25**
Range ($)	(10-50)	(10-30)	(20-45)	(5-40)	(10-40)	(15-50)	(10-50)	(1-35)	(12-40)	**(10-80)**
Price change (%)	(n=13)	(n=10)	(n=7)	(n=19)	(n=27)	(n=11)	(n=19)	(n=37)	(n=35)	**(n=18)**
Increasing	15	0	29	21	11	9	0	11	17	**6**
Stable	69	90	57	74	78	64	68	60	71	**83**
Decreasing	8	10	14	5	7	0	26	16	6	**11**
Fluctuating	8	0	0	0	4	27	5	14	6	**0**

Source: WA EDRS RPU interviews, 2006-2015

KE comments

- A KE who worked in law enforcement reported that the current price of LSD per tab was $15-$25.

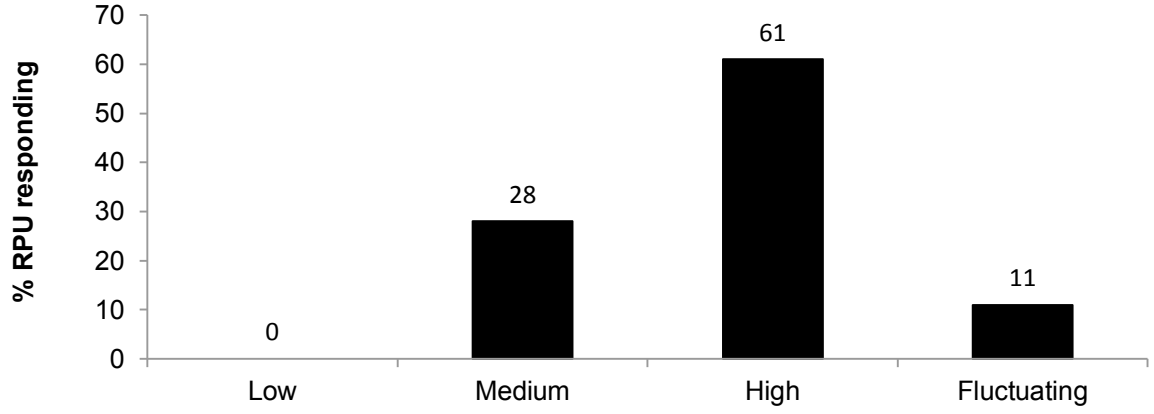
ACC statistics

Data obtained from the ACC in 2013/14 indicated that in WA in this period LSD cost $25 per tab for one to nine tabs (ACC, 2015), compared to $30-$50 in 2012/13 (ACC, 2014).

5.9.2. Potency

Participants were asked to comment on the current potency of LSD (see Figure 29). Among those who commented (n=18), LSD potency was most commonly rated as high (n=11, 61%).This was followed by medium (n=5, 28%) and fluctuating (n=2, 11%). These results were consistent with the 2014 findings.

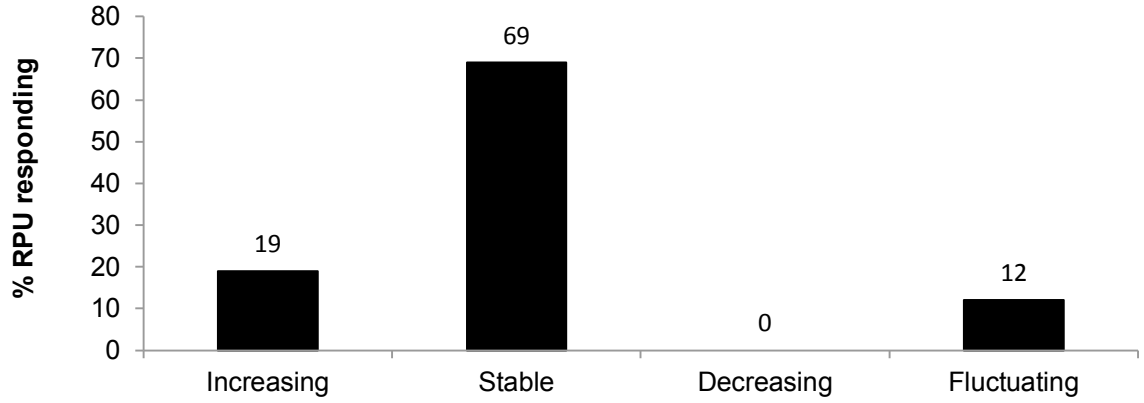
Figure 29: User reports of current LSD potency, 2015 (N=18)



Source: WA EDRS RPU interviews, 2015

Participants were also asked about changes in the potency of LSD in the preceding six months (see Figure 30). Of those who commented, (n=16), more than two-thirds (n=11, 69%) reported that potency was stable. This was followed by increasing (n=3, 19%) and fluctuating (n=2, 12%). These results were consistent with the 2014 findings.

Figure 30: User reports of changes in LSD potency in the preceding six months, 2015 (N=16)

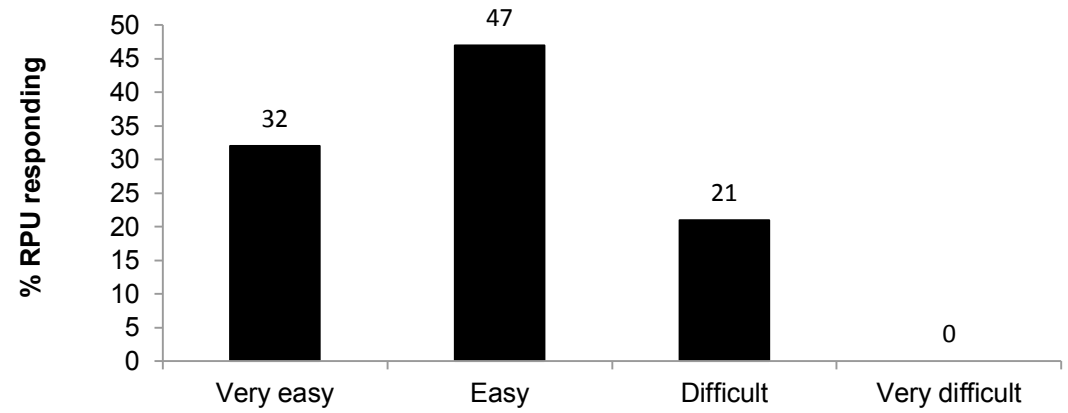


Source: WA EDRS RPU interviews, 2015

5.9.3. Availability

Participants were asked to comment on the current availability of LSD. Figure 31 shows a full breakdown of these results. Of those who commented (n=19), the largest proportion (n=9, 47%) reported that LSD was currently easy to obtain. This was followed by very easy (n=6, 32%) and then difficult (n=4, 21%).These results were consistent with the 2014 findings.

Figure 31: User reports of current availability of LSD, 2015 (N=19)

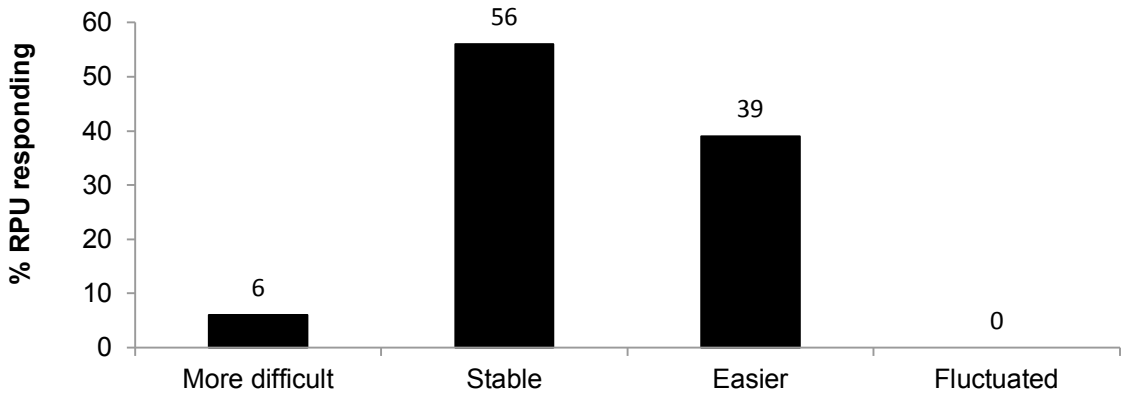


Source: WA EDRS RPU interviews, 2015

Participants were also asked to comment on changes in the availability of LSD over the preceding six months (see Figure 32). Of those who commented (n=18), perceptions were mixed. More than half (n=10, 56%) reported that availability was stable. This was followed by easier (n=7, 39%) and more difficult (n=1, 6%). In the current sample, a significantly larger

proportion of participants reported that LSD was easier to obtain in the preceding 6 months (n=7, 39%) compared to the 2014 sample (n=4, 11%) (CI: 0.04 to 0.51). However, this result should be interpreted with caution given the small number of participants responding with 'easier' in both 2014 and 2015. All other results concerning reported changes in LSD availability in the current sample were consistent with the 2014 findings.

Figure 32: Changes in availability of LSD during the preceding six months, 2015 (N=18)

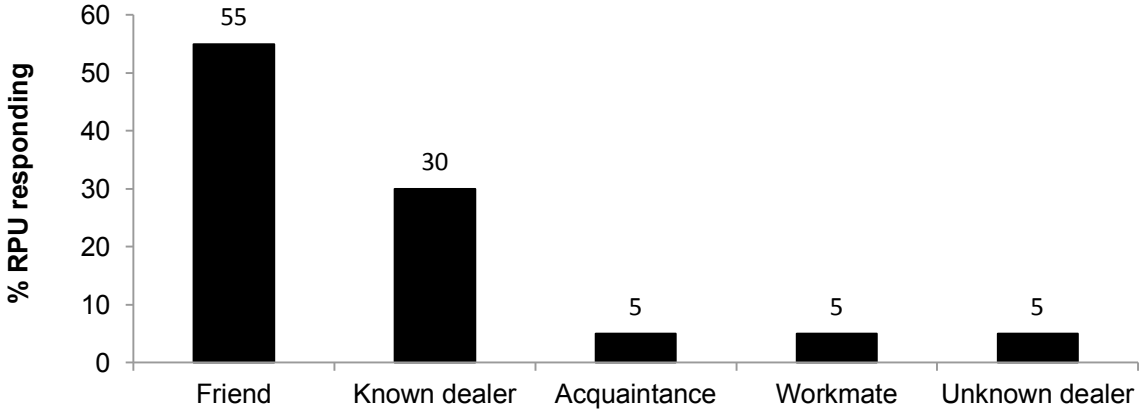


Source: WA EDRS RPU interviews, 2015

5.9.4. Source person and source location

Participants were asked to report the person from whom LSD was obtained on the last occasion in the preceding six months (see Figure 33). Consistent with 2014, of those who commented in 2015 (n=20), 'friend' was the most commonly reported person (n=11, 55%) This was followed by 'known dealer' (n=6, 30%), 'workmate', 'acquaintance' and 'unknown dealer' (each n=1, 5%).

Figure 33: Person from whom LSD was last obtained in the preceding six months, 2015 (N=20)

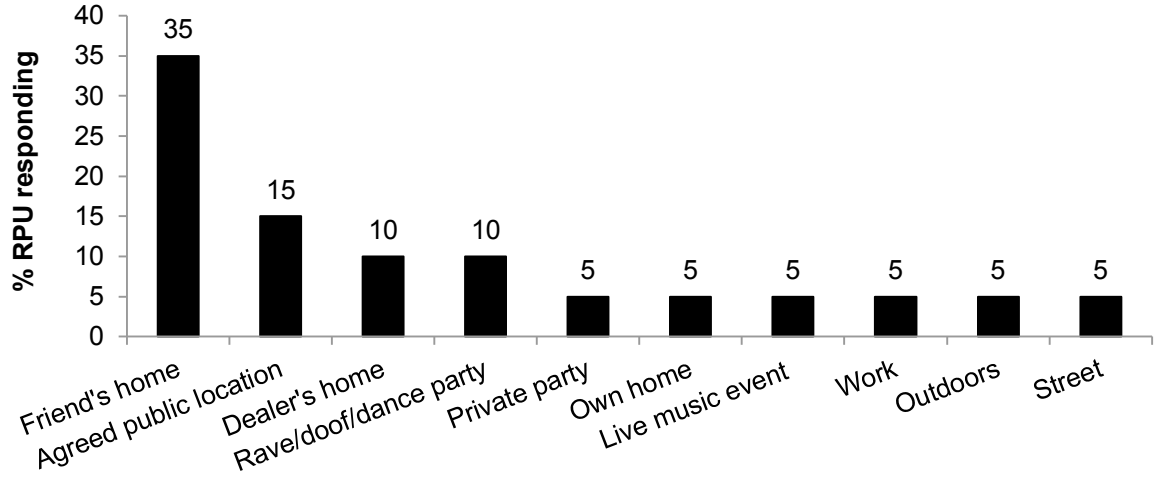


Source: WA EDRS RPU interviews, 2015

Participants were also asked to report the location where LSD was obtained on the last occasion in the preceding six months. Again consistent with the 2014 findings, the most

commonly reported location was 'friend's home' (n=7, 35%), followed by a range of different public and private locations. Figure 34 shows a full breakdown of these results.

Figure 34: Locations from where LSD was last obtained in the preceding six months, 2015 (N=20)



Source: WA EDRS RPU interviews, 2015

5.9.5. Summary of LSD trends

- Consistent with previous years, RPU reported the median price of LSD per tab as $25.
- KE reported the price of LSD as $15-$25 per tab.
- That majority (83%) of the respondents reported that the price of LSD was stable over the preceding six months, comparable to 2014.
- Consistent with 2014, almost two-thirds (61%) of the respondents rated the current potency of LSD as high.
- More than two-thirds (69%) of the respondents reported that the potency of LSD was stable over the preceding 6 months, consistent with 2014.
- Aligned with the 2014 results, perceptions of the current availability of LSD were mixed, but it was most commonly rated as easy to obtain (47%).
- More than half (56%) of the respondents reported that the availability of LSD was stable over the preceding six months, consistent with 2014.
- Consistent with 2014, 'friend' was the most commonly reported person from whom LSD was last obtained (55%) and 'friend's home' was the most commonly reported location (35%).

5.10. Cannabis

5.10.1. Price

In 2006, the EDRS began collecting data on various aspects of the cannabis market. Consistent with the IDRS, a distinction was made between indoor cultivated hydroponic cannabis (hydro) and outdoor cultivated bush cannabis (bush).

Table 24 presents the median price for an ounce of hydro and bush across survey years. In 2015, among those who commented on hydro (n=44), the median price was $350 per ounce (range $250-$400), which has been the consistent reported market price since 2009. The price of bush per ounce was also $350 (range $100-$370), the same median price reported by the 2014 sample.

Participants also commented on the price of cannabis per gram. The median price of both hydro (n=18) and bush (n=19) per gram was $25 (hydro range $12.50-$25, bush range $12.50-$35), which remains unchanged since 2010. A 'stick' (typically ranging from 0.8-1.8 grams) was also reported to cost a median of $25 for both hydro (n=43) and bush (n=30) (hydro range $20-$39, bush range $20-$25). This is the same median price that was reported in 2014.

Two participants were able to comment on the price of hash. Both participants reported the price of hash per gram as $25, not significantly different to $35 in 2014. However, the very small number of participants able to comment necessitates caution in interpreting these results.

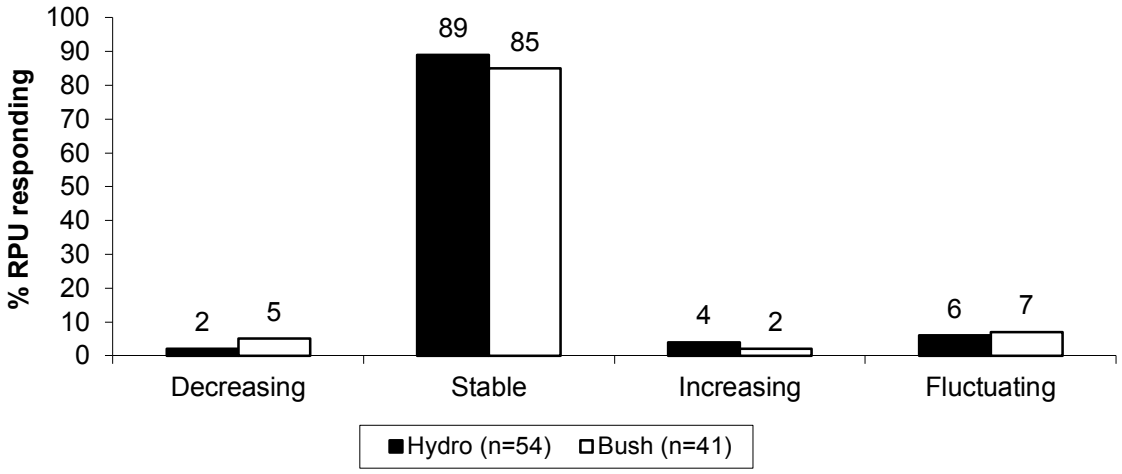
Table 24: Median price of cannabis per ounce, 2006-2015

Form	2006	2007	2008	2009	2010	2011	2012	2013	2014	**2015**
Hydro	(n=42) $280	(n=33) $300	(n=24) $305	(n=23) $350	(n=25) $350	(n=14) $350	(n=20) $350	(n=23) $350	(n=33) $350	**(n=44) $350**
Bush	(n=28) $250	(n=20) $250	(n=16) $275	(n=16) $280	(n=16) $280	(n=12) $250	(n=9) $300	(n=10) $300	(n=30) $350	**(n=35) $350**

Source: WA EDRS REU/RPU interviews, 2006-2015

Participants were asked to comment on changes in the price of cannabis over the preceding six months. A breakdown of these results is shown in Figure 35. Of those who commented (n=54), the vast majority reported the price of hydro as stable (n=48, 89%), followed by fluctuating (n=3, 6%), increasing (n=2, 4%) and decreasing (n=1, 2%). For bush, of those who commented (n=41), again the vast majority reported the price as stable (n=35, 85%), followed by fluctuating (n=3, 7%), decreasing (n=2, 5%) and increasing (n=1, 2%). These results were consistent with the 2014 findings.

Figure 35: User reports of recent changes in price of cannabis, 2015



Source: WA EDRS RPU interviews, 2015

ACC statistics

There was no ACC data available concerning the price of hash in WA in the 2013/14 reporting period. Data from ACC (2015) indicated that in WA, during 2013/14, bush cost $25 per gram, $350 per ounce (28 grams) and $300-$4800 per pound. During 2012/13, bush cost $25 per gram, $350 per ounce (28 grams) and $4,200 per pound (ACC, 2014). For the 2013/14 period, hydro was reported to cost $400 per pound. There was no data available concerning the prices of any other amounts of hydro for this period at the time of writing.

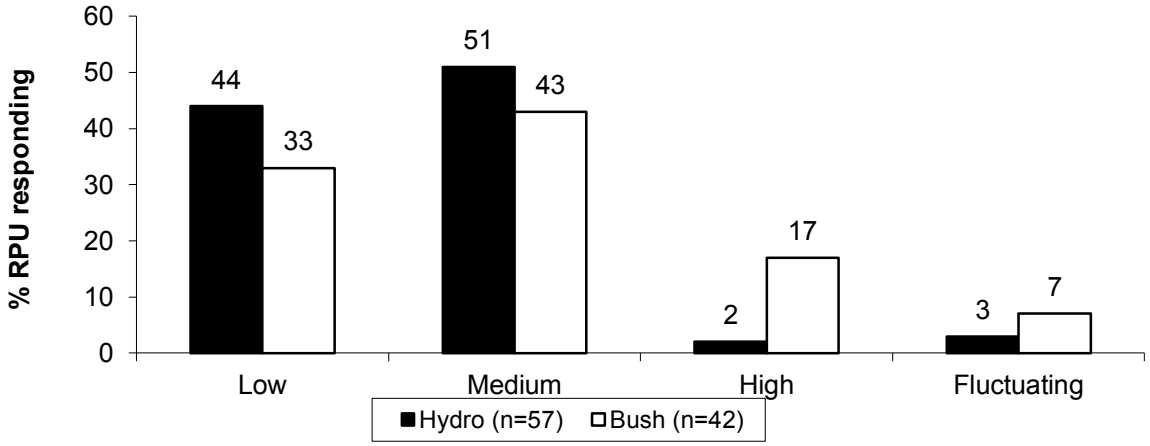
5.10.2. Potency

Participants were asked to comment on the current potency of cannabis. A full breakdown of these results is shown in Figure 36.

Of those participants who commented on hydro (n=57), perceptions were mixed. Just more than half (n=29, 51%) rated current potency as medium. This was followed by low (n=25, 44%), fluctuating (n=2, 3%) and high (n=1, 2%). Compared to the 2014 findings, a significantly smaller proportion of participants in the present sample rated current potency as high (CI: -0.39 to -0.67), a significantly larger proportion rated it as medium (CI: 0.08 to 0.43), a significantly larger proportion rated it as low (CI: 0.27 to 0.55) and a significantly smaller proportion rated it as fluctuating (CI: -0.02 to -0.27). This pattern of results suggests that participants perceived the current potency of hydro to be lower in the present sample compared to 2014.

Among participants who commented on bush (n=42), perceptions were also mixed. It was most commonly rated as medium (n=18, 43%), followed by low (n=14, 33%), high (n=7, 17%) and fluctuating (n=3. 7%). This pattern of results was consistent with the 2014 findings.

Figure 36: User reports of current potency of cannabis, 2015

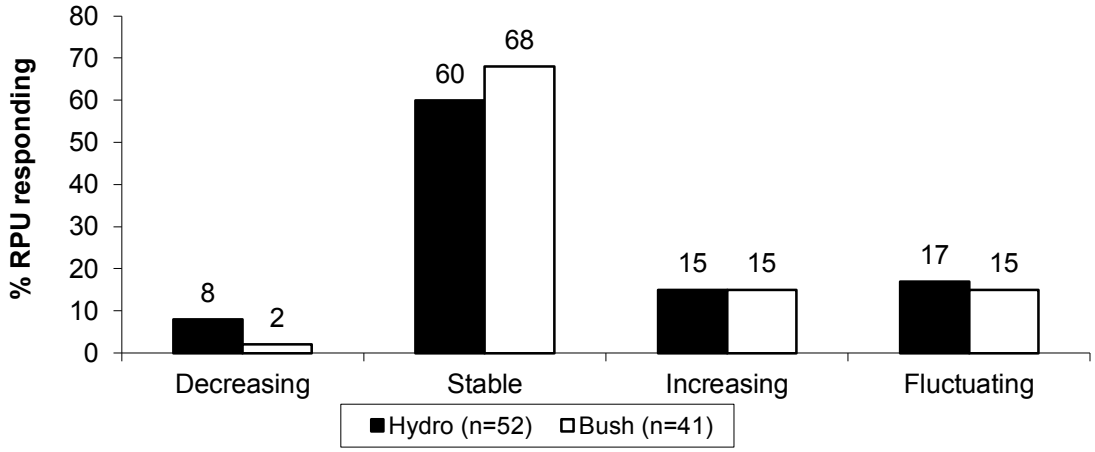


Source: WA EDRS RPU interviews, 2015

Participants were asked to comment on changes in the potency of cannabis over the preceding six months. A full breakdown of these results is shown in Figure 37.

Of those who commented on hydro (n=52), consistent with 2014, three-fifths (n=31, 60%) reported that potency was stable, followed by fluctuating (n=9, 17%), increasing (n=8, 15%) and decreasing (n=4, 8%). For those who commented on bush (n=41), potency was also most commonly reported as stable over the preceding six months (n=28, 68%), followed by increasing and fluctuating (each n=6, 15%) and then decreasing (n=1, 2%). These results were again consistent with the 2014 findings.

Figure 37: User reports of changes in cannabis potency in the preceding six months, 2015



Source: WA EDRS RPU interviews, 2015

5.10.3. Availability

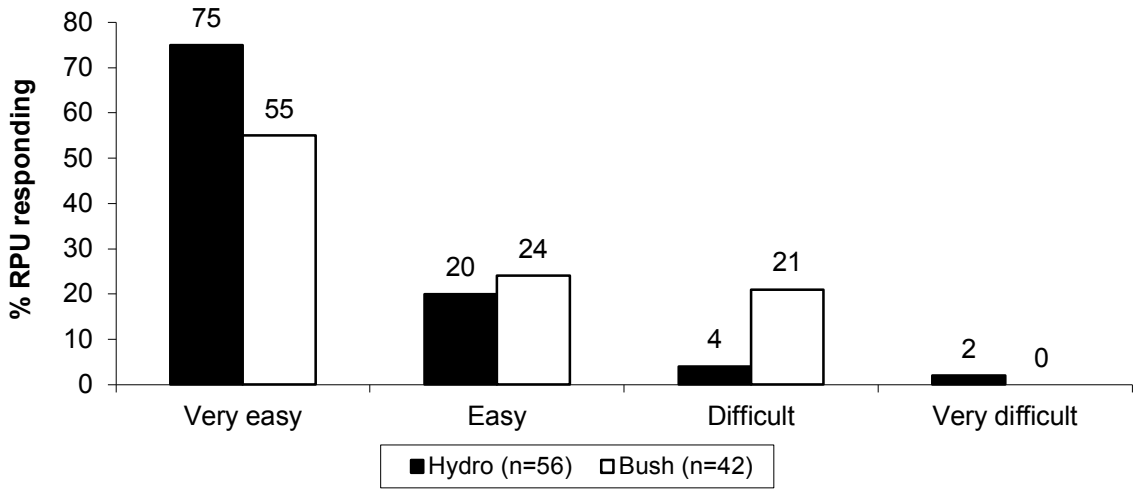
Participants were asked to rate the current availability of cannabis. A full breakdown of these results is shown in Figure 38.

Among those able to comment hydro (n=56), the vast majority (n=53, 95%) reported that it was either very easy or easy to obtain, consistent with the 2014 findings. A further two

participants (4%) reported that it was difficult to obtain and one participant (2%) reported that it was very difficult to obtain.

For bush, among those who commented (n=42), more than half (n=23, 55%) reported that it was very easy to obtain. This was followed by easy (n=10, 24%) and then difficult (n=9, 21%). These results were also consistent with the 2014 findings. Overall, as evident in Figure 38, these results suggest that hydro continues to be the more available form of cannabis in Perth.

Figure 38: Current availability of cannabis, 2015

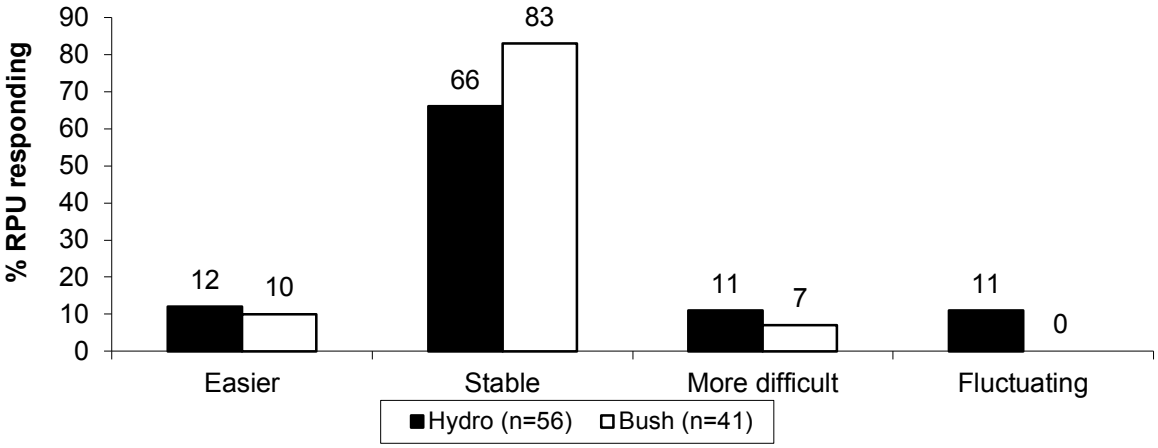


Source: WA EDRS RPU interviews, 2015

Participants were asked to comment on changes in the availability of cannabis over the preceding six months. A complete breakdown of these results is shown in Figure 39.

Of those who commented on hydro (n=56), approximately two-thirds (n=37, 66%) reported that availability was stable. This was followed by easier (n=7, 12%) and then fluctuating and more difficult (each n=6, 11%). These results are consistent with the 2014 findings. Among participants who commented on bush (n=41), the majority (n=34, 83%) reported that availability was stable, again consistent with the 2014 results.

Figure 39: Changes in cannabis availability in the preceding six months, 2015

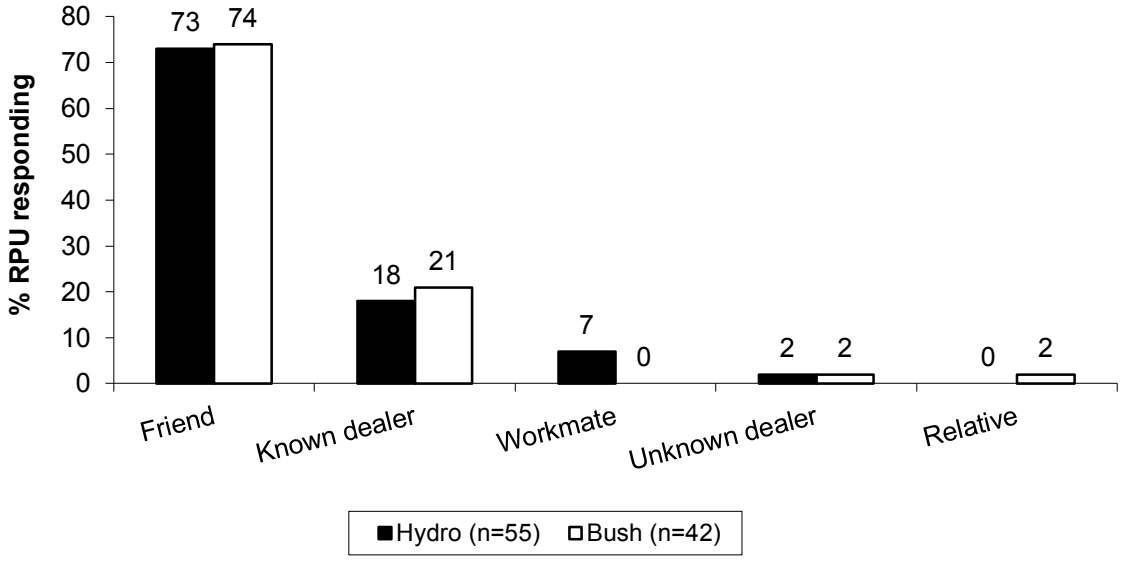


Source: WA EDRS RPU interviews, 2015

5.10.4. Source person and source location

Participants were asked to indicate who they had obtained cannabis from on the last occasion in the preceding six months. See Figure 40 for a full breakdown of these results.
For hydro (n=55), the most commonly reported person was 'friend' (n=40, 73%), followed by 'known dealer' (n=10, 18%). For bush (n=42), 'friend' (n=31, 74%) and 'known dealer' (n=9, 21%) were similarly the most commonly reported people.

Figure 40: Person from whom cannabis was last obtained in the preceding six months, 2015

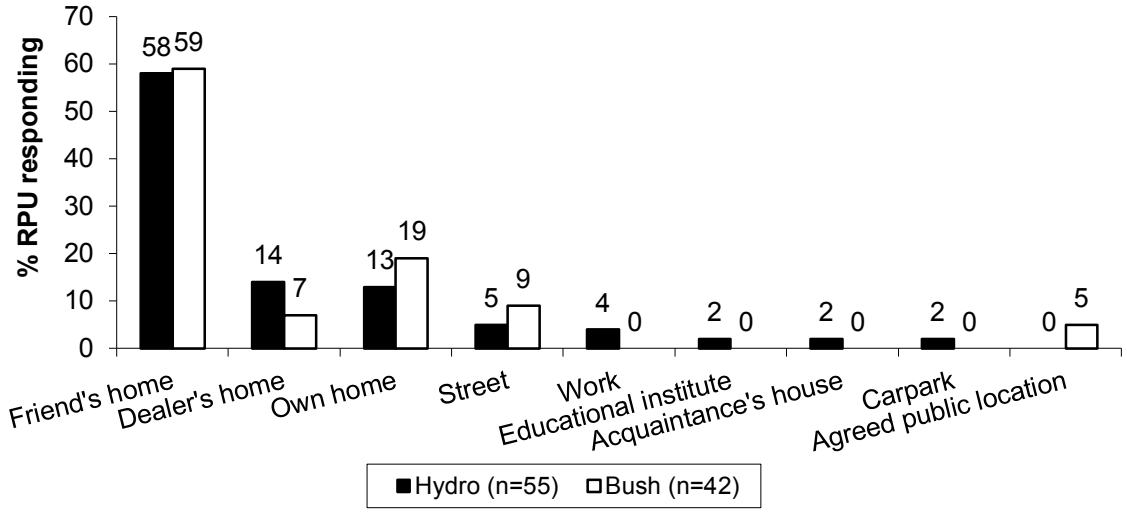


Source: WA EDRS RPU interviews, 2015

Participants were asked to indicate the locations at which cannabis was obtained on the last occasion in the preceding six months.

Of those who commented on hydro (n=55), 'friend's home' was the most frequently reported location (n=32, 58%), followed by 'dealer's home' (n=8, 14%) and 'own home' (n=7, 13%). For bush, among those who commented (n=42), the most commonly reported location was also 'friend's home' (n=25, 59%), followed by 'own home' (n=8, 19%) and 'street' (n=4, 9%). Reported locations were not significantly different from the 2014 findings. A full breakdown of these results is presented in Figure 41.

Figure 41: Locations where cannabis was last obtained in the preceding six months, 2015



Source: WA EDRS RPU interviews, 2015

KE comments

- A KE who worked in community outreach reported that the current price of cannabis was $500 per ounce.
- KE reported that the price, availability and potency of cannabis were stable.

ACC statistics

The ACC reported that in 2013/14 there were 11, 626 seizures of cannabis in WA, compared to 10,294 seizures in the 2012/13 reporting period. In the 2013/14 period, the total weight for WA cannabis seizures was 230,759 grams, a slight decrease from 276,466 grams in 2012/13.

5.10.5. Summary of cannabis trends

Hydro

- The median price of hydro per ounce was $350, which has been consistent since 2009.
- Consistent with previous years, the median of hydro price per gram was $25.
- Consistent with 2014, the majority (89%) of respondents reported that the price of hydro was stable over the preceding six months.
- RPU perceptions of the current potency of hydro were mixed, but it was most commonly rated as medium (51%).
- Consistent with 2014, less than two-thirds (60%) of respondents reported that the potency of hydro was stable over the preceding six months.
- Consistent with previous years, the vast majority (95%) of participants rated the hydro as easy or very easy to obtain currently.
- Consistent with previous years, two-thirds (66%) of respondents reported that the availability of hydro was stable over the preceding six months.
- These findings suggest that hydro continues to be more available than bush in Perth.

Bush

- The median price of bush per ounce was $350, the same median price reported in 2014.
- The median price of bush per gram was $25, consistent with previous years.
- Consistent with previous years, the majority (85%) of respondents reported that the price of bush was stable over the preceding six months.
- RPU perceptions of the current potency of bush were mixed, but it was most commonly reported as medium (43%).
- Consistent with 2014, just more than two-thirds (68%) of respondents reported that the potency of bush was stable over the preceding six months.
- The majority (79%) of respondents rated bush as easy or very easy to obtain currently, the same proportion reported in 2014.
- Consistent with previous years, the majority (83%) of respondents reported that the availability of bush was stable over the preceding six months.

Hash

- The median price of hash per gram was $25, not significantly different from $35 in 2014.
- These findings should be interpreted with caution due to the small number of participants able to comment on the price of hash.

- Consistent with previous years, 'friend' was the most commonly reported person from whom cannabis was last obtained for both hydro (73%) and bush (74%). Accordingly, 'friend's home' was the most commonly reported location from where cannabis was last obtained for both hydro (58%) and bush (59%).
- KE reported that the price of cannabis was $500 per ounce and had been stable recently.

6. HEALTH-RELATED TRENDS ASSOCIATED WITH ECSTASY AND RELATED DRUG USE

6.1. Overdose

Since 2007, EDRS participants have been asked about stimulant and depressant drug overdoses. 'Overdose' was defined as the experience of symptoms consistent with either stimulant toxicity (e.g. nausea and vomiting, chest pains, tremors, increased body temperature or heart rate, seizure, extreme paranoia, anxiety or panic, hallucinations) or depressant overdose (e.g. reduced level of consciousness, respiratory depression, turning blue, collapsing). As such, the following sections are based on participants' understanding of these definitions and their opinions as to whether they had overdosed.

6.1.1. Stimulant overdose

As shown in Table 25, in 2015, less than one-third (27%) of the sample reported overdosing on a stimulant drug at some point in their lifetime, not significantly different from 33% in 2014. Of those who had ever overdosed on a stimulant drug, the median number of times they had done so in their lifetime was two (range 1-25), not significantly different from one in 2014. The most recent overdose occurred on a median of six months ago (range 1-30), consistent with five months in 2014.

Table 25: Ever overdosed on a stimulant drug, 2015

(%)	2015 N=99
Ever overdosed	27
Median number of times (range)*	2 (1-25)
Months since most recent overdose*	6 (1-30)
Overdosed in last 12 months*	81

Source: WA EDRS RPU interviews, 2015
* Of those who had ever overdosed

Of those participants who had experienced a stimulant overdose in their lifetime (n=27), the majority (n=22, 81%) had experienced one in the past 12 months. This equates to just more than one-fifth (22%) of the overall sample, comparable to 30% in 2014.

Among those who had overdosed in the preceding 12 months (n=22), the most frequently cited main drug to which the overdose was attributed was ecstasy (n=11, 50%), consistent with the 2014 findings. The majority (n=16, 73%) of those who had overdosed in the last 12 months reported taking at least one other drug in combination with the main drug at the time of the overdose, comparable to 80% in 2014. The most commonly cited drug used concomitantly was alcohol (n=10, 62%), followed by cannabis (n=8, 50%), nitrous oxide (n=3, 19%), pharmaceutical stimulants, crystal methamphetamine and ecstasy (each n=2, 12%) and LSD, antidepressants, MDA and antipsychotics (each n=1, 6%). Consistent with 2014, the most commonly reported location of last overdose was 'friend's home' (n=7, 32%). This was followed by 'own home' (n=4, 18%) and 'live music event' (n=3, 14%). Again consistent with the 2014 findings, almost two-thirds (n=14, 64%) of these overdoses occurred during a heavy session rather than a normal night out (n=8, 36%).

Consistent with the 2014 findings, among participants who had experienced an overdose in the last 12 months, the median amount of time spent partying prior to overdose was six hours (range 1-90), comparable to five hours in 2014. Approximately two-fifths (n=9, 41%) of these respondents reported that there was a sober person present to assist them at the time of their last overdose, not significantly different from 58% in 2014. More than two-thirds

(n=9, 41%) reported not receiving any immediate treatment at the time of the last overdose. An additional 41% reported being watched/monitored by friends and one participant (4%) reported being attended to by ambulance personnel. Four participants (18%) reported 'other' immediate treatment. These were: 'red frog tent' 'EpiPen®' 'smoked more weed' and 'watched by a stranger'.

A full breakdown of the data regarding the reported causes and circumstances of stimulant overdose is presented in Table 26.

Table 26: Overdosed on a stimulant drug in the preceding 12 months – reported causes and circumstances, 2015

(%)	2015 N=22
Main drug	
Ecstasy	50
LSD	9
Crystal methamphetamine	9
Pharmaceutical stimulants	4
Cocaine	4
Ketamine	4
Other[#]	14
Location of most recent overdose	
Friend's home	32
Own home	18
Live music event	14
Nightclub	9
Private party	9
Rave/doof/dance party	4
Acquaintance's home	4
Other[##]	9
Sober person available to assist	
Yes	41
No	59
Median time spent partying prior to overdose*	6 hrs

Source: WA EDRS RPU interviews, 2015
[#] 'Other' main drugs were: 'antidepressants' 'mushrooms' and 'NBOMe'.
[##] 'Other' locations were: 'hotel' and 'stranger's front lawn'.

Participants who reported experiencing an overdose in the preceding 12 months were asked to indicate the symptoms they experienced during their last overdose. The most frequent main symptom was 'visual hallucinations' (n=4, 18%). All of these respondents also reported experiencing at least one secondary symptom in addition to the main symptom. The most frequent secondary symptom was 'extreme anxiety' (n=9, 41%). These results were consistent with the 2014 findings. A full breakdown of these results is shown in Table 27.

Table 27: Overdosed on a stimulant drug in the preceding 12 months – reported symptoms, 2015

(%)	2015 N=22
Main symptom	
Hallucination - visual	18
Vomiting	14
Increased body temperature	9
Increased heart rate	9
Nausea	4
Chest pain	4
Extreme anxiety	4
Panic	4
Hallucination-tactile	4
Muscle twitches	4
Passed out	4
Other[#]	18
Secondary symptoms	
Extreme anxiety	41
Panic	27
Delirium/confusion	27
Nausea	23
Increased heart rate	23
Irregular breathing-shallow	23
Paranoia	23
Headache	18
Dizziness	14
Irregular breathing-rapid	14
Tremors	14
Increased body temperature	14
Hallucination-auditory	14
Hallucination-visual	14
Agitation	14
Hallucination-tactile	9
Vomiting	9
Chest pain	9
Extreme agitation	4
Passed out	4
Muscle twitches	4
Other[##]	27

Source: WA EDRS RPU interviews, 2015

Other main symptoms were: 'couldn't walk', 'impaired depth perception', 'hives/anaphylaxis', and 'didn't feel comfortable in space'.

Other secondary symptoms were: 'eyes rolling into back the of back of my head', 'numb, talking to myself', 'sad', 'scared, worried', 'shakiness' and 'throat closing'.

6.1.2. Depressant overdose

In 2015, 28% of the sample reported overdosing on a depressant drug at some point in their lifetime, a significant increase from 11% in 2014 (CI=.06 to 0.28). Of those who had ever overdosed on a depressant drug, the median number of times they had done so was four (range 1-20), a significant increase from one time in 2014. The most recent depressant overdose occurred on a median of 4.5 months ago (range 1-60), consistent with the 2014 findings. These data are presented in Table 28.

Table 28: Ever overdosed on a depressant drug, 2015

(%)	2015 N=99
Ever overdosed	28
Median number of times (range)*	4 (1-20)
Median months since last overdose	4.5
Overdosed in last 12 months*	68

Source: WA EDRS RPU interviews, 2015
* Of those who had overdosed in past 12 months

Of those participants who reported ever experiencing a depressant overdose (n=28), just more than two-thirds (n=19, 68%) had experienced one in the preceding 12 months. This equates to 19% of the overall sample, a significant increase from 6% in 2014 (CI: 0.04 to 0.22).

Consistent with the 2014 findings, among participants reporting a depressant overdose in the last 12 months, the most frequent main drug that the last overdose was attributed to was alcohol (n=16, 94%), followed by pharmaceutical opiates (n=1, 6%). More than one-third (37%) of those who had experienced a depressant overdose in the preceding 12 months reported having used additional drugs with the main drug at the time of the overdose. The most frequently cited drug used concomitantly was cannabis (n=5, 26%), followed by benzodiazepines (n=2, 10%), alcohol, ecstasy, nitrous oxide and opiates (each n=1, 5%).

Consistent with 2014, among participants who had experienced a depressant overdose in the preceding 12 months, 'private party' was the most commonly reported location of last overdose (39%), followed by 'nightclub' (22%), 'dealer's home' (17%), 'friend's home' (11%), 'car' and 'brewery' (each 6%). The median time spent partying prior to the last overdose was six hours (range 1-12). The majority reported that the last overdose occurred during a heavy session (72%) rather than a normal night out (28%). More than half (53%) of the respondents reported that there was a sober person present who was able to assist them at the time of the overdose. More than half (52%) reported not receiving any immediate treatment at the time of the last overdose and 47% (n=9) reported being watched/monitored by friends. Two participants (10%) reported having sought advice or treatment later; this was sought from a GP (n=1) and the Internet/website information (n=1).

A breakdown of this data is presented in Table 29.

Table 29: Overdosed on a depressant drug in the preceding 12 months – reported causes and circumstances, 2015

(%)	2015
Main drug*	**(n=17)**
Alcohol	94
Pharmaceutical opiates	6
Location of most recent overdose*	**(n=18)**
Private party	39
Nightclub	22
Dealer's home	17
Friend's home	11
Car	6
Brewery	6
Sober person available to assist*	**(n=19)**
Yes	53
No	47
	(n=17)
Median time spent partying prior to overdose*	6 hrs

Source: WA EDRS RPU interviews, 2015
* Of those who had overdosed in past 12 months

The most commonly reported main symptom during the last depressant overdose in the preceding 12 months was 'losing consciousness/unable to be woken' (n=10, 53%). This was followed by 'vomiting' (n=6, 32%), 'dizziness' (n=2, 10%) and 'collapsing' (n=1, 5%). Among those who commented (n=18), the majority (n=16, 89%) reported experiencing secondary symptoms in addition to the main symptom. These were 'vomiting' (n=8, 44%), 'losing consciousness/unable to be woken' (n=4, 22%), 'collapsing' (n=3, 17%), 'turning blue' (n=1, 6%). These results are again consistent with the 2014 findings. A full breakdown of reported depressant overdose symptoms is presented in Table 30.

Table 30: Overdosed on a depressant drug in the preceding 12 months – reported symptoms, 2015

(%)	2015 N=19
Overdose main symptom*	
Losing consciousness/unable to be woken	53
Vomiting	32
Dizziness	10
Collapsing	5
Overdose secondary symptoms*	(n=18)
None	11
Vomiting	44
Losing consciousness/unable to be woken	22
Collapsing	17
Turning blue	6
Other**	33

Source: WA EDRS RPU interviews, 2015
* Of those who had overdosed in past 12 months
** Other secondary symptoms were: 'cold' 'confusion' 'dizziness and nausea' and 'tired'

It must be emphasised that only a small number of participants are represented in these overdose samples. Therefore, these samples may not be representative of trends occurring within the general population of party drug users. It may also be important to note that the drugs that influence these overdoses may be more a reflection of the drug preferences of the sample than the various substances' relative potential to result in overdose.

6.2. Help-seeking behaviour

Participants were asked if they had accessed a service or health professional in relation to their drug use in the preceding six months (see Table 31). In the current sample, 10% of respondents reported accessing a service over this time period, consistent with 9% in 2014. A further 8% reported that they had thought about seeking help but had not acted, consistent with 9% in 2014. Various reasons were reported for not accessing help. The most common was 'I couldn't be bothered' (n=2, 25%), followed by 'no time', 'not a priority', 'I worked it out on my own', 'it was a brief transient thought', 'I was scared', 'I woke up the next day and got over it' (each n=1, 12%).

Table 31: Recently accessed health services in relation to drug use, 2015

Service (%)	2015 N=100
Accessed medical/health service (%)	10
Thought about accessing a medical/health service, but did not act	8

Source: WA EDRS RPU interviews, 2015

Participants were presented with a list of health professionals and services and asked which ones they had accessed over the past six months, how many visits had occurred and how many visits were related to alcohol and other drugs. As expected, GPs were the most frequently reported, accessed by three-quarters (75%) of the sample. Smaller proportions reported visiting dentists (37%), psychologists (18%) and a number of other health professionals. A full breakdown of this data is presented in Table 32.

A significantly larger proportion of participants in the current sample (18%) reported accessing the services of a psychologist in the preceding six months compared to 2014 (5%; CI: 0.04 to 0.22). There were no significant differences in the proportion of participants who had accessed the services of any other health professionals between 2014 and 2015.

Table 32: Recently accessed a health service for any issue, 2015

Service (%)	2015 N=100
Doctor (GP)	75
Dentist	37
Psychologist	18
Emergency Department	16
Specialist doctor (excluding psychiatrists)	12
Psychiatrist	9
Hospital (admissions)	7
Drug and alcohol counsellor	5
Medical tent	4
Hospital (outpatient)	3
Ambulance	3
Social welfare workers	1
Other health professional	23

Source: WA EDRS RPU interviews, 2015

In 2015, 11% of the sample reported accessing a health service for an alcohol or drug related issue in the preceding six months, comparable to 7% in 2014. The health services

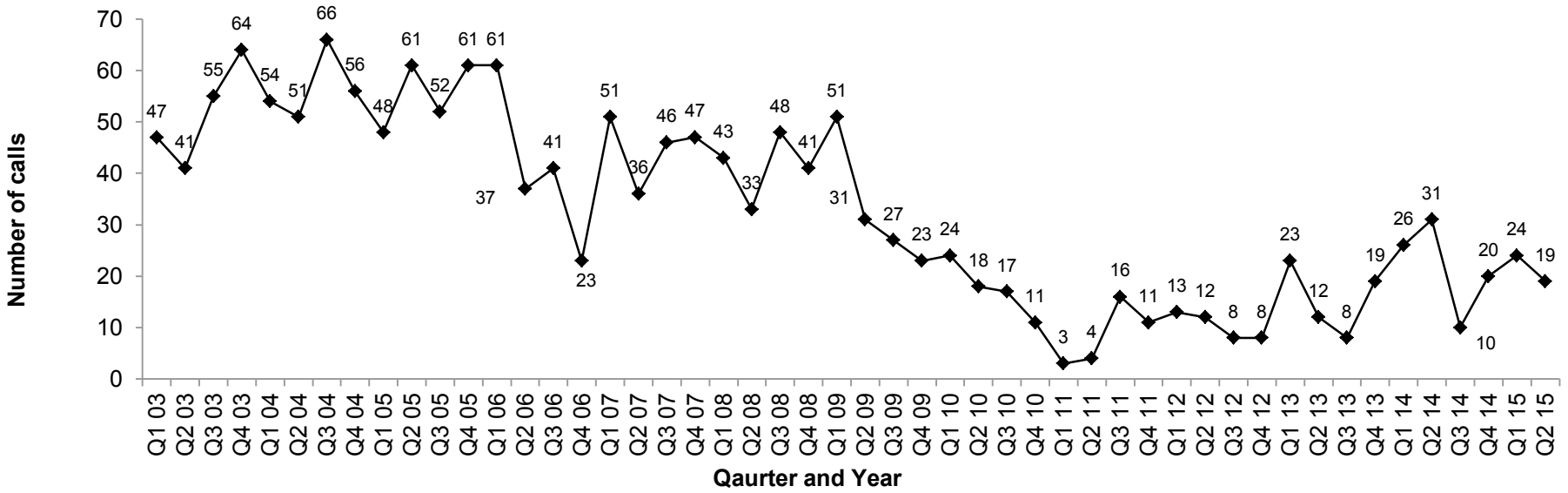
they reported accessing were GP (n=10, 91%) and psychologist (n=3, 27%). Among the ten participants who reported visiting a GP, the median number visits was 1.5 (range 1-3). Among those who reported visiting a psychologist (n=3), all participants reported a single visit in the preceding six months.

6.2.1. Calls to ADIS in 2014/15

ADIS provides a free, anonymous and confidential telephone information and referral alcohol and other drug service in WA. As such, calls to ADIS provide a general indicator of the levels of use and concerns experienced by users of different drugs. During the 2014/15 period, ADIS received 23,977 calls, in comparison to 25,757 calls during the 2013/14 reporting period.

Calls to ADIS involving ecstasy as the primary drug of concern are presented by quarter in Figure 42. In the 2014/15 period, there were 73 calls to ADIS involving ecstasy as the primary drug of concern, compared to 84 calls in the 2013/14 period. These calls comprised 0.30% of all calls received by ADIS during the 2014/15 period. As evident in Figure 42, the proportion of calls where ecstasy was the main drug of concern has remained relatively low across data collection years, but appears to be on a slight upward trend since 2011.

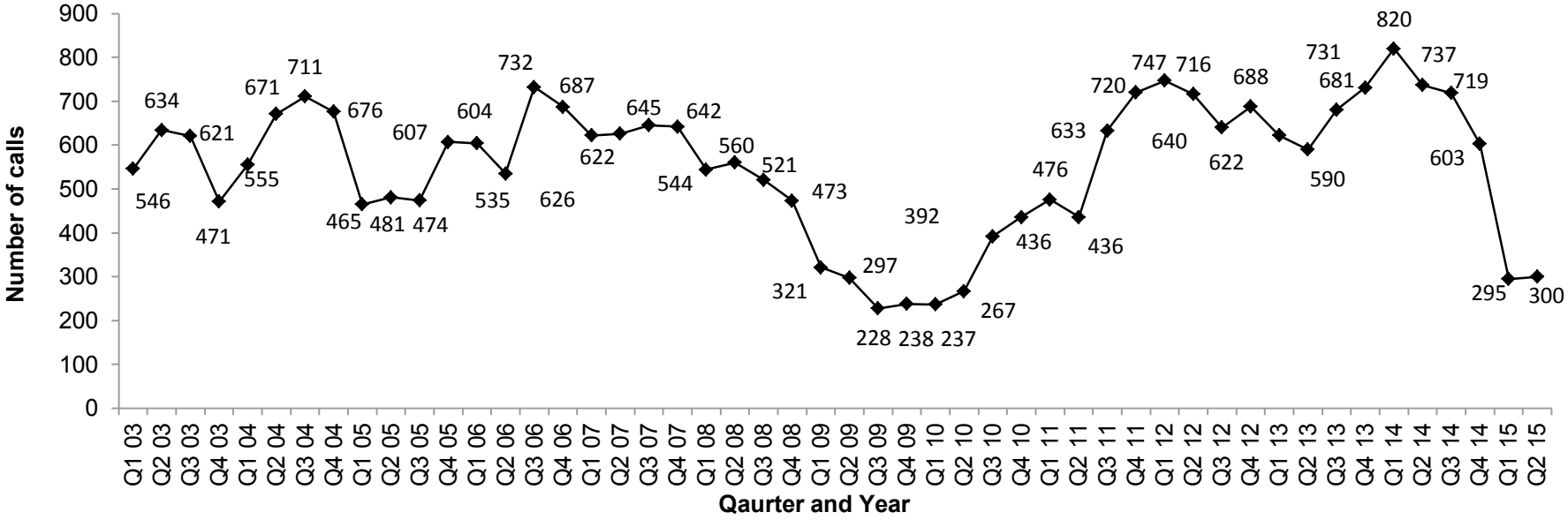
Figure 42: Number of ADIS inquiries concerning ecstasy as primary drug of concern, WA January 2003 to June 2015



Source: WA ADIS, 2015

In the 2014/15 period, there were a total of 1,917 calls to ADIS involving (meth)amphetamine as the primary drug of concern, a decrease from 2,969 in 2013/14. These calls comprised 8.0% of all calls received by ADIS during the 2014/15 period, a slight decrease from 11.53% during the 2013/14 period. Calls to ADIS involving (meth)amphetamine as the primary drug of concern are presented by quarter in Figure 43.These data suggest a downward trend in the number of calls since 2014.

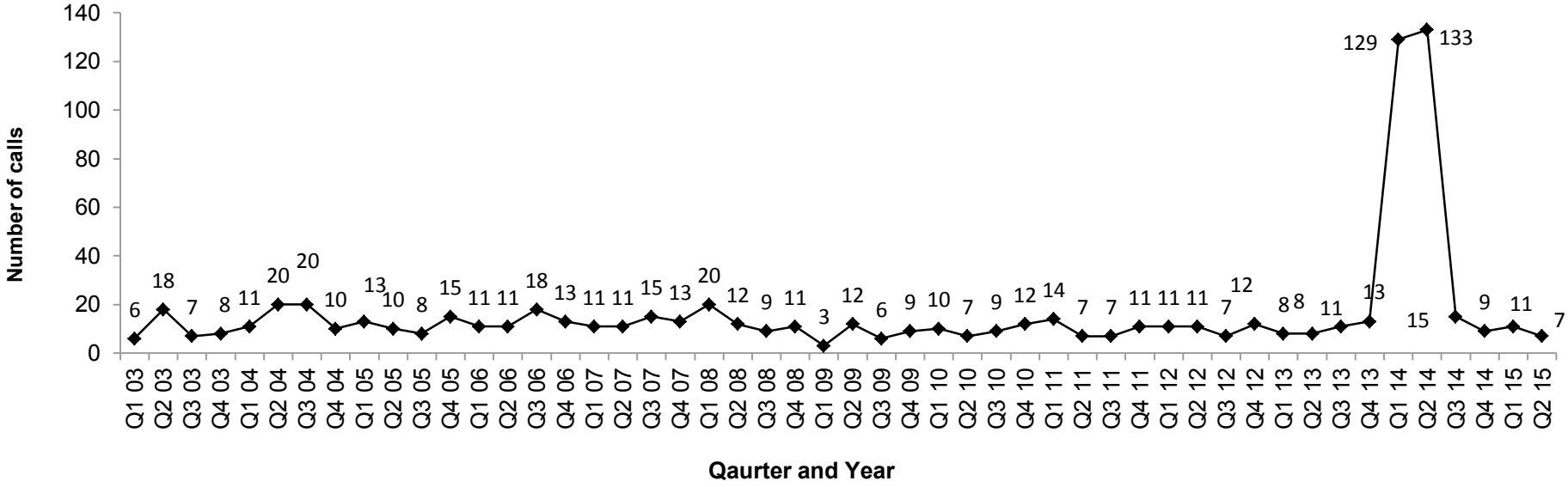
Figure 43: Number of ADIS inquiries concerning (meth)amphetamines as primary drug of concern, WA January 2003 to June 2015



Source: WA ADIS, 2015

In the 2014/15 period there were 42 calls to ADIS involving cocaine as the primary drug of concern, a decrease from 286 calls on 2013/14. These calls comprised 0.75% of all calls received by ADIS during 2014/15, compared to 1.11% in the 2013/14 period. Calls to ADIS involving cocaine as the primary drug of concern are presented by quarter in Figure 44. The steep increase in calls in the first and second quarter of 2014 is accounted for by multiple calls from a single caller, rather than an overall increase in calls. As shown in Figure 44, excluding this steep increase, the number of calls to ADIS where cocaine was the primary drug of concern have been low and stable across survey years.

Figure 44: Number of ADIS inquiries concerning cocaine as primary drug of concern, WA January 2003 to June 2015



Source: WA ADIS, 2015

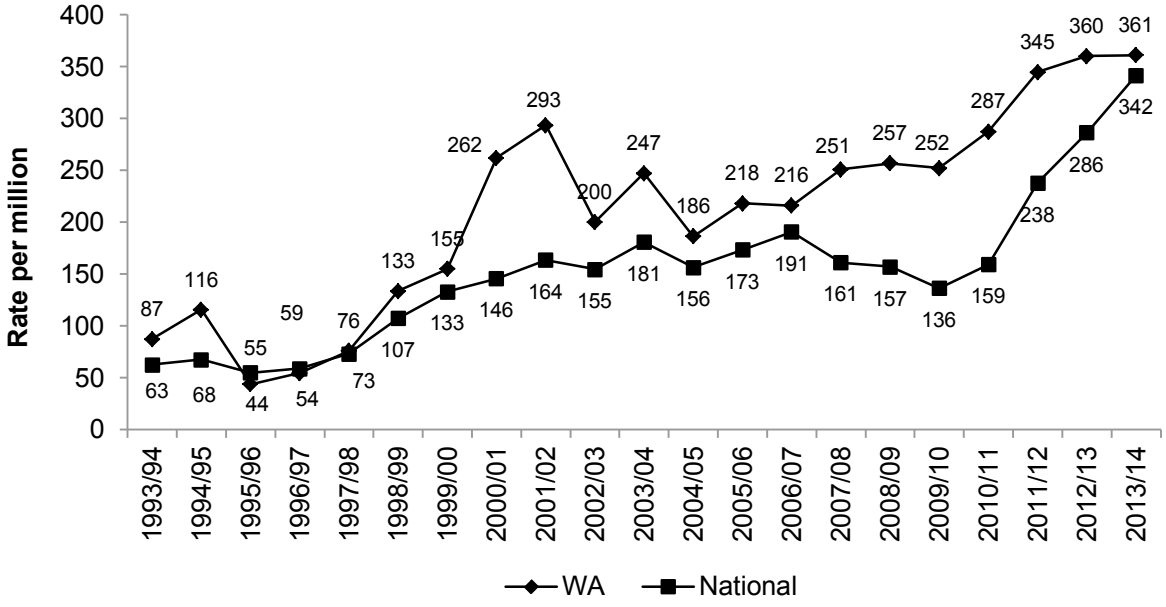
6.3. Hospital admissions

CAVEAT

There was a change in the data collection process for hospital admissions from the 2010/11 reporting period onwards. It is possible that this change could have impacted on trends in data reported within this section.

Figure 45 presents the rate of hospital admissions in WA and nationally in which (meth)amphetamines were identified as the primary diagnosis. The AIHW defines a primary diagnosis as the diagnosis established (after study) to be chiefly responsible for occasioning the patient's episode of care in hospital. As evident in Figure 45, in 2013/14, rates of methamphetamine hospital admissions appear to have continued to increase at the state level while remaining stable nationally.

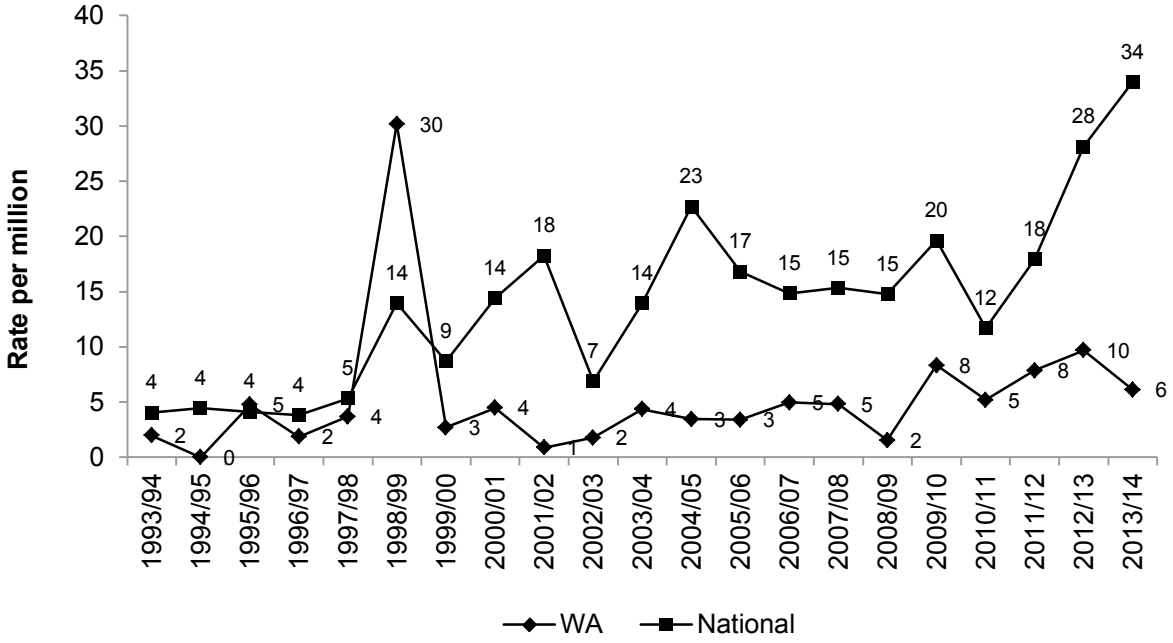
Figure 45: Rate of in-patient hospital admissions where (meth)amphetamines were the primary diagnosis in persons aged 15-54 in WA and nationally, July 1993-June 2014



Source: AIHW

As evident in Figure 46, WA rates of hospital admissions where cocaine was the primary diagnosis have remained consistently low over the past two decades, with the exception of 1998/99. In 2013/14, rates of cocaine-related hospital admissions increased at the national level compared to 2012/13.

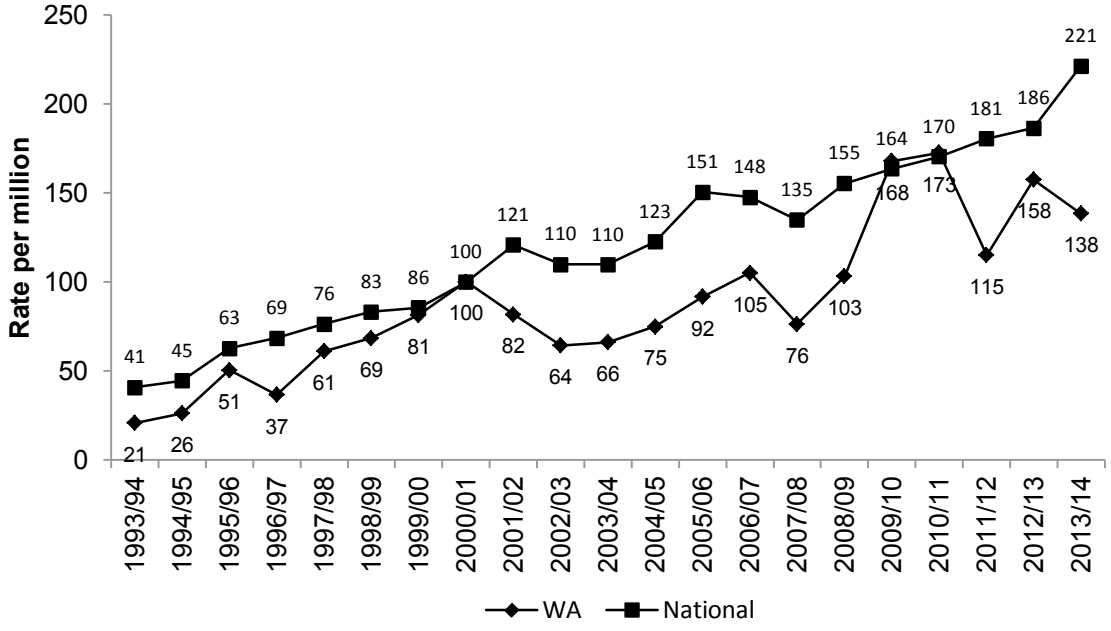
Figure 46: Rate of hospital admissions where cocaine was the primary diagnosis in persons aged 15-54 years, WA and nationally, July 1993-June 2014



Source: AIHW

Figure presents rates per million of hospital admissions where cannabis was the primary diagnosis. In the 2013/14 reporting period, rates increased slightly at the national level but decreased at the state level.

Figure 47: Rate of hospital admissions where cannabis was the primary diagnosis in persons aged 15-54 years, WA and nationally, July 1993-June 2014



Source: AIHW

Secondary indicator data regarding drug-related hospital admissions in the 2014/15 period was not available at the time of writing. Data used to report on rates of hospital admissions can be located in Roxburgh and Breen (2016).

KE comments

- A KE who worked as a clinical nurse reported that there had been an increase in the number of people presenting to hospital with ecstasy related problems in the preceding 12 months. This KE further noted that ecstasy related hospital presentations usually increase during the summer months when music festivals are held.

6.4. Mental health problems

6.4.1. Mental health problems and psychological distress (K10)

The K10 was administered to all participants. The K10 is a 10-item standardised measure that measures clinical levels of psychological distress based on the Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV)/the Structured Clinical Interview for DSM disorders. It has been found to have sound psychometric properties (Andrews & Slade, 2001; Furukawa et al., 2003).

The minimum score on the K10 is 10 (indicating no distress) and the maximum is 50 (indicating very high distress). Work conducted at the Clinical Research Unit for Anxiety Disorders found that those scoring 30 or more have 10 times the population risk of meeting criteria for an anxiety or depressive disorder.

The K10 was included in the EDRS for the first time in 2006. Consistent with the 2014 sample, in 2015, the largest proportion of participants scored in the 'moderate' distress category (score of 16-21; 42%). This was followed by 'low to no' distress (score of 10-15; 32%), 'high' distress (score of 22-29, 23%), and then 'very high' distress (score of 30-50; 3%). Table 33 shows K10 scores among RPU from 2012 to 2015.

Table 33: K10 scores, 2012-2015

Score category (%)	2012	2013	2014	**2015**
Low to no distress	40	31	34	**32**
Moderate distress	40	37	37	**42**
High distress	18	24	25	**23**
Very high distress	1	8	4	**3**

Source: WA EDRS RPU interviews, 2012-2015

6.4.2. Self-reported mental problems and medication

Questions regarding mental health problems were included for the first time in the 2008 EDRS. Participants were asked whether they had experienced any mental health problems in the preceding six months, including those issues that they had and had not spoken to a health professional about.

In the current sample, one-third (33%) of the participants reported experiencing a mental health problem in the preceding six months, comparable to 29% in 2014. The most frequently reported problem was depression (n=24, 73%), followed by anxiety (n=22, 67%). Among participants reporting a recent mental health problem, more than two-thirds (n=23, 70%) reported attending a mental health professional in the preceding six months, a significant increase from 34% in 2014 (CI: .10 to .55). A complete breakdown of reported mental health problems for 2013 and 2014 is presented in Table 34. There were no significant differences in the proportion of respondents who reported a particular mental health problem between 2014 and 2015.

Table 34: Recent mental health problems, 2014 and 2015

(%)	2014 N=100	**2015 N=100**
Recent mental health problem	29	**33**
Of those who reported a mental health problem		
Types of problems reported[#]	(n=29)	**(n=33)**
Depression	62	**73**
Anxiety	72	**67**
ADHD	-	**9**
Bipolar	3	**6**
Panic	7	**3**
OCD	3	**3**
Paranoia	21	**3**
PTSD	7	**3**
Personality disorder	3	**0**
Other[**]	16	**12**
Attended a professional for the treatment of a mental health problem	34	**70[†]**
Prescribed psych med*	70	**56**

Source: WA EDRS RPU interviews, 2014 and 2015
[#] Participants could select multiple categories of problems allowing percentage totals to exceed 100
* Of those who attended a health professional
[**] Other reported mental health problems were: 'drug induced psychosis', 'grief', 'social anxiety' and 'stress'
[†] Indicates significant changes from the 2014 results according to 95%CI and *p*=0.05
- Data not collected

Of those participants who reported attending a mental health professional (n=23), just more than half (n=13, 56%) reported being prescribed a medication in the last six months, not significantly different from 70% in 2014. Medications prescribed were anti-depressants (n=8, 67%), benzodiazepines (n=5, 42%), anti-psychotics (n=3, 25%) and pharmaceutical stimulants (n=2, 17%). Prescribed anti-depressants were Lovan® (n=3, 37%) and Cymbalta®, Efexor®, Luvox®, Pristiq® and Avanza® (each n=1, 12%). Benzodiazepines were Valium® (n=3, 60%), Alprax® and alprazolam (each n=1, 20%). Antipsychotics were Seroquel® (n=2, 67%) and olanzapine (n=1, 33%). Prescribed pharmaceutical stimulants were dexamphetamine (n=2, 100%).

KE comments

- A KE who worked in community outreach reported that there had been a recent increase in the number of people seeking services for mental health issues related to alcohol and other drug use.
- The main drugs that KE expressed mental health concerns over were alcohol, crystal methamphetamine and synthetic cannabis.
- Mental health concerns reported by KE related to alcohol use were depression and anxiety, and aggressive or violent behaviour. Concerns regarding methamphetamine were psychosis/thought disorder, paranoia, irrational behaviour and aggression. Concerns regarding synthetic cannabis were depression, anxiety and psychosis/thought disorder.

6.5. Summary of health-related trends

Overdose, deaths and hospital admissions

- Less than one-third (27%) of the sample reported having overdosed on a stimulant drug in their lifetime, comparable to 33% in 2014.
- More than two-fifths (22%) of the sample reported having overdosed on a stimulant drug in the past 12 months, comparable to 30% in 2014.
- Less than one-third (28%) of the sample reported having overdosed on a depressant drug in their lifetime, a significant increase from 11% in 2014.
- Just less than one-fifth (19%) of the sample reported having overdosed on a depressant drug in the past 12 months, a significant increase from 6% in 2014.
- Consistent with 2014, ecstasy was the most commonly implicated main drug in stimulant overdoses (50%).
- Consistent with 2014, alcohol was the most commonly implicated main drug in depressant overdoses (94%).
- In 2013/14, hospital admissions in which amphetamine was the principal diagnosis increased at the state level and remained stable at the national level; rates for cocaine remained low and stable at the state level and increased at the national level; and rates for cannabis decreased at the state level and increased at the national level.
- A KE who worked as a clinical nurse reported that there had been an increase in the number of people presenting to hospital with ecstasy related problems in the preceding 12 months.

Service usage

- One-tenth (10%) of the sample reported accessing a service or health professional in relation to their drug use in the preceding six months, comparable to 9% in 2014.
- Just less than one-tenth (9%) of the sample reported having thought about accessing a health service or professional in relation to their drug use but not acting, comparable to 9% in 2014.
- The number of calls to ADIS concerning ecstasy remained low, with 73 calls made in the 2014/2015 period compared to 84 calls in 2013/14.
- There were 1,917 calls to ADIS involving methamphetamines as the primary drug of concern in 2014/15, in comparison to 2,969 in 2013/14; calls regarding methamphetamines appear to be on a downward trend since 2014.
- Calls to ADIS involving cocaine as the primary drug of concern have been low and stable across survey years.

Mental health

- Consistent with previous years, the largest proportion of participants scored within the 'moderate distress' category of the K10 (42%).
- One-third (33%) of the sample reported experiencing a mental health problem in the preceding six months, comparable to 29% in 2014.
- Consistent with 2014, the most commonly reported mental health problems were depression (73%) and anxiety (67%).
- Among participants reporting a mental health problem in the last six months, a greater proportion of participants in the current sample (70%) reported having attended a mental health professional for treatment in that period compared to 2014 (34%).
- One KE reported a recent increase in the number of people seeking services for mental health problems related to alcohol and drug use.

7. RISK BEHAVIOURS

7.1. Injecting risk behaviours

As presented in Table 35, four participants reported having injected a drug in their lifetime in 2015, comparable to two in 2014. One participant reported injecting in the last six months, the same number reported in 2014.The mean of first first injecting was 18.2 years (range 16-22), comparable to 16.5 years in 2014. However, given the very small sample size, this result should be interpreted with caution.

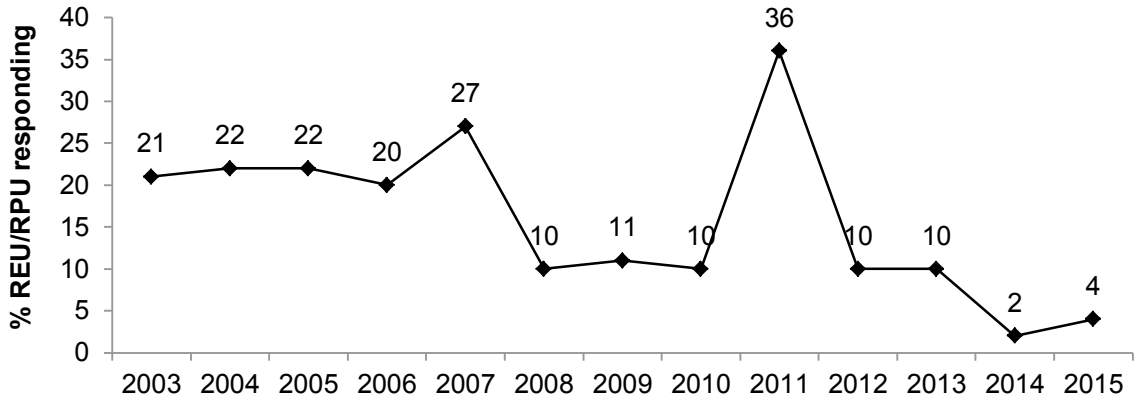
Table 35: Injecting risk behaviours, 2014 and 2015.

(%)	2014 N=100	**2015 N=100**
Ever injected	2	4
Mean age first injected any drug*	16.5^	18.2^
Injected in the last six months	1	1

Source: WA EDRS RPU interviews, 2014 and 2015
*Among those who had injected
^ n<10. Results should be interpreted with caution

As presented in Figure 48, with the exception of 2011 (which had a disproportionate representation, attributed to substantial difficulties during the recruitment process), rates of lifetime injecting use among REU/RPU declined in 2008 and then remained stable until 2013. In 2014 there was a significant decrease in the proportion of lifetime injecting drug use compared to 2013. Results from the present sample suggest that this downward trend has been maintained in 2015.

Figure 48: Ever injected drugs, 2003-2015



Source: WA EDRS REU/RPU interviews, 2003-2015

7.1.1. Recent injectors

The single participant who reported injecting in the last six months was a 19 year old male who had injected 50 times over that time period. Table 36 details the recent injecting behaviour for this participant compared with the 2014 sample. However, meaningful comparisons of these samples cannot be made given the very small sample size.

Table 36: Recent injecting drug use patterns, 2014 and 2015

(%)	2014 (n=1)	**2015 (n=1)**
Median age	24^	**19^**
Median number of times injected in last 6 months	180^	**50^**
Last drug injected		
Crystal methamphetamine	0^	**100^**
Steroids	100^	**0^**
Injected while under the influence/coming down*		
Neither	0^	**0^**
Under the influence	0^	**100^**
Coming down	0^	**0^**
Both	100^	**0^**
Median number of times injected while under the influence/coming down	3^	**50^**

Source: WA EDRS RPU interviews, 2014 and 2015
* Of those who had injected
^n<10. Results should be interpreted with caution

Contexts of injecting and sharing of injecting equipment

The participant that reported injecting in the preceding six months reported 'chemist' as his only needle source in that time period. He did not report who he usually injected with. The last location of injecting was reported as 'friend's home'. The participant reported that he had not used a needle after someone else in last six months but reported having used tourniquets after other people in that time period. See Table 37 for a summary of this data. As only one participant reported recent injecting in 2014 and 2015, statistical comparisons of these samples were not conducted.

Table 37: Context and patterns of recent injecting, 2014 and 2015

(%)	2014 (n=1)	**2015 (n=1)**
Needle source*		
NSP	100^	**0^**
Chemist	0^	**100^**
Friend	0^	**0^**
Dealer	0^	**0^**
People usually inject with*		
Close friends	100^	**-**
No one	0^	**-**
Location at the time of last injecting		
Own home	100^	**0^**
Friend's home	0^	**100^**
Dealer's home	0^	**0^**

Source: WA EDRS RPU interviews, 2014 and 2015
***** Multiple responses permitted
^ n<10. Results should be interpreted with caution
- Missing data

7.2. Sexual risk behaviour

Penetrative sex was defined as penetration by the penis or hand of the vagina or anus. Casual partner was defined as anyone that a participant had had penetrative sex with who was not a regular partner. Given the sensitive nature of these questions, participants were given the option of self-completing this section of the questionnaire.

7.2.1. Recent sexual activity

Participants were asked about the number of casual partners they had engaged in penetrative sex with in the preceding six months (see Table 38). Of the 96 participants who responded, approximately three-fifths (n=59, 61%) reported engaging in casual penetrative sex with at least one person in the last six months, comparable to 66% in 2014. The most common number of casual partners was none (n=37, 38%), followed by three to five people (n=25, 26%), one person (n=17, 18%), two people (n=12, 12%), and six to ten people (n=5, 5%). These findings are comparable to the 2014 results.

7.2.2. Protective barriers during sex while sober

Just more than half (54%) of the sample reported engaging in casual sexual activity while sober in the preceding six months, comparable to 57% in 2014. Among these participants, more than half (n=32, 59%) reported not having used a protective barrier (i.e. condoms or dams) on the last occasion, comparable to 42% in 2014. Participants reported various reasons as to why a barrier was not used. Of those who commented (n=32), mirroring the 2014 results, the greatest proportion reported 'using the contraceptive pill' (n=12, 37%), followed by 'we agreed not to use' (n=7, 22%), 'my partner didn't wish to use' (n=4, 12%), 'I didn't wish to use' (n=3, 9%), 'lack of availability' (n=2, 6%), and 'it wasn't mentioned' (n=1, 3%).

A breakdown of this data is presented in Table 38.

Table 38: Recent sexual activity, 2015

(%)	2015
Number of casual sexual partners	**(n=96)**
No casual partner	38
1 person	18
2 people	12
3-5 people	26
6-10 people	5
10 or more	0
Use of protection during sex with casual partner while sober*	**(n=54)**
Yes	41
No	59

Source: WA EDRS RPU interviews, 2015

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

7.2.3. Casual sex while under the influence

Of those participants who had engaged in casual sex in the preceding six months (n=59), the majority (n=52, 88%) reported having done so while under the influence of alcohol or other drugs. This equates to 52% of the overall sample, comparable to 58% in 2014. Participants were asked how many times they had engaged in sex while under the influence

of alcohol or other drugs in the preceding six months. The spread of scores across responses was comparable to 2014. The most common response was three to five times (n=17, 33%), followed by six to ten times (n=14, 27%), twice (n=8, 15%), more than ten times (n=7, 13%), and once (n=6, 11%). Consistent with the 2014 results, the drug most commonly reported to have been used on the last occasion was alcohol (n=43, 83%), followed by ecstasy (n=29, 56%,), cannabis (n=24, 46%), pharmaceutical stimulants (n=11, 21%), crystal methamphetamine and benzodiazepines (each n=6, 11%), cocaine (n=4, 8%), amyl nitrate and nitrous oxide (each n=2, 4%) and other opiates, mushrooms and MDA (each n=1, 2%).

7.2.4. Protective barriers during casual sex while under the influence

Among participants who commented (n=52), more than half (n=30, 58%) reported that they had not used a protective barrier on the last occasion of casual sex while under the influence of alcohol or other drugs, not significantly different from 47% in 2014. Participants reported various reasons as to why a barrier was not used; consistent with 2014, among those who commented (n=28), the greatest proportion reported 'using the contraceptive pill' (n=11, 39%), followed by 'we agreed not to use' (n=4, 14%), 'lack of availability' (n=3, 11%) it wasn't mentioned' and 'I didn't wish to use' (each n=2, 7%) and 'my partner didn't wish to use' (n=1, 4%).

A complete breakdown of this data is presented in Table 39.

Table 39: Casual sex while under the influence, 2015

(%)	2015 (N=96)
Penetrative casual sex	61
Penetrative casual sex while on drugs*	88
Of those who had penetrative casual sex under the influence of drugs	(n=52)
Number of times	
Once	11
Twice	15
3-5 times	33
6-10 times	27
More than 10 times	13
Drug used	
Alcohol	83
Ecstasy	56
Cannabis	46
Pharmaceutical stimulants	21
Crystal methamphetamine	11
Benzodiazepines	11
LSD	10
Cocaine	8
Nitrous oxide	4
Amyl Nitrate	4
Other opiates	2
Mushrooms	2
MDA	2
Use of protection	
Yes	42
No	58

Source: WA EDRS RPU interviews, 2015

7.2.5. Sexual health check-ups and sexually transmitted infections

Participants were asked if they had ever had a sexual health check-up, including a swab, urine test or blood test, and whether they had ever been diagnosed with an STI. Consistent with the 2014 findings, more than half (55%) of the sample reported having had a sexual health check-up; 42% reported that they had received a check-up in the last year, and a further 13% reported that they had received a check-up more than one year ago. More than two-fifths (45%) reported that they had never had a sexual health check-up in their lifetime.

Of those who commented (n=94), the majority (88%) reported that they had never been diagnosed with an STI; this is the sample proportion reported in 2014. Seven per cent of the sample reported being diagnosed with an STI more than one year ago. Four participants (4%) reported being diagnosed with an STI in the preceding 12 months, comparable to 1% in

2014. Among these participants, most were diagnosed with chlamydia (n=3, 75%), and one participant (25%) was diagnosed with herpes.

7.3. Driving risk behaviour

WA EDRS participants were asked a series of questions regarding their driving behaviour. These questions were not included in the 2014 EDRS survey; data on driving behaviour in 2015 were therefore compared to data from the 2013 sample.

In 2015, the majority of the sample (87%) reported having driven a car in the last six months, comparable to 82% in 2013. Of these respondents, more than two-fifths (n=38, 44%) reported that they had driven while over the legal alcohol limit in that time period, not significantly different from 37% in 2013. The median number of times that participants had driven over the legal alcohol limit was three (range 1-96; i.e. less than monthly). Less than one-third (n=22, 60%) of these participants had their full licence, 39% (n=15) had their provisional licence and 3% (n=1) did not have a current licence. More than half (n=51, 59%) of these participants had been breathalysed in the preceding six months and 4% (n=2) reported that the last time they were breathalysed they tested above the legal limit for alcohol.

Participants were also asked if they had driven after taking an illicit drug in the past six months. Of those who had driven recently (n=87), just more than two-thirds (n=59, 68%) reported that they had, comparable to 66% in 2013. The median number of days on which participants had driven after taking an illicit drug in the past six months was four (range 1-180; i.e. less than monthly). The median time participants reported driving after consuming drugs was 90 minutes (range 0 minutes-24 hours). The drug most commonly implicated on the last occasion was cannabis (n=40, 69%), followed by ecstasy (n=23, 40%), dexamphetamine (n=6, 10%) crystal methamphetamine (n=2, 3%), ketamine, benzodiazepines and other opiates (each n=1, 2%).

A complete breakdown of this data across survey years is presented in Table 40.

Table 40: Drug driving in the preceding six months, 2009-2015

(%)	2009 N=100	2010 N=100	2011 N=28	2012 N=90	2013 N=100	**2015 N=100**
Driven a car in last 6 months	80	84	61	91	82	**87**
Driven under influence of alcohol[#]	69	61	77	64	-	**-**
Driven while over the limit of alcohol*	75	73	77	52	37	**44**
Driven soon after taking a drug[#]	75	58	53	55	66	**68**
Of those who had driven soon after	(n=60)	(n=49)	(n=9)	(n=45)	(n=54)	**(n=58)**
Drug						
Cannabis	63	55	56	64	67	**69**
Ecstasy	72	71	44	56	59	**40**
Pharmaceutical stimulants	7	4	22	24	15	**10**
Crystal methamphetamine	12	18	22	24	6	**3**
Ketamine	0	0	0	0	0	**2**
Benzodiazepines	3	0	0	2	2	**2**
Other opiates	-	2	0	2	0	**2**
Cocaine	7	16	0	2	2	**0**
Mushrooms	2	0	0	4	4	**0**
Nitrous oxide	2	2	11	0	2	**0**
Heroin	0	0	11	0	0	**0**
Base	0	0	0	0	0	**0**
Salvia	-	-	11	0	0	**0**
LSD	10	6	22	7	17	**0**
Speed	12	18	0	0	2	**0**

Source: WA EDRS REU/RPU interviews, 2009-2015
[#] Of those who had driven a car in the last 6 months
- Data not collected

Drug driving testing was introduced in WA in October 2007, allowing police to randomly stop motorists and motorcyclists and test them for illicit drug use. Since the 2008, EDRS participants have been asked if they have ever been tested for drug driving by police roadside drug testing. Consistent with previous years, only a small proportion (n=5, 6%) reported having been drug tested on one occasion and just 1% (n=1) reported being tested on more than one occasion. All drug tests were reported to have returned a negative result.

7.4. Bingeing behaviour

Bingeing is defined as the use of any stimulants or related drugs for 48 hours or more continuously without sleep. Less than one-third (28%) of the current sample reported bingeing on ERD in the preceding six months, comparable to 37% in 2014. Bingeing occurred on a median of three occasions in that time period (range 1-20), not significantly different from two occasions in 2014. The median length of the longest recent binge was 53 hours (range 48-120 hours; i.e. approximately two days), comparable to 50 hours in 2014.
Consistent with the 2014 findings, the drugs most commonly implicated in recent bingeing were alcohol (n=23, 82%; 18% <5 standard drinks and 64% >5 standard drinks) ecstasy

(n=21, 75%), tobacco (n=20, 71%), cannabis (n=19, 68%), crystal methamphetamine (n=12, 43%), and pharmaceutical stimulants and energy drinks (each n=8, 29%). While a range of NPS were implicated in binges in 2014, no participants reported the use of an NPS during a recent binge in 2015.

A complete breakdown of this data is presented in Table 41.

Table 41: Bingeing behaviour, 2015

(%)	2015 N=100
Recent binge	28
Median amount of recent binges*	3 (1-20)
Median length of binge* (hours)	53 (48 -120)
Drugs implicated in binge*	**(n=28)**
Alcohol (>5 standard drinks)	64
Alcohol (<5 standard drinks)	18
Ecstasy	75
Tobacco	71
Cannabis	68
Crystal methamphetamine	43
Pharmaceutical stimulants	29
Energy drinks	29
LSD	18
Nitrous oxide	18
Benzodiazepines	18
Cocaine	14
Speed	4
Ketamine	4
Mushrooms	4
Amyl nitrate	4
MDA	4
OTC codeine	4
Mushrooms	4
Other**	11

Source: WA EDRS RPU interviews, 2015

***** Of those who had binged on ERD in the last six months

** Other drugs were: 'pseudoephedrine' 'caffeine' 'Viagra®' and 'other opiates'

7.5. The Alcohol Use Disorders Identification Test (AUDIT)

The AUDIT was designed by the WHO as a brief screening tool to identify individuals with alcohol problems, including those in the early stages (Saunders et al., 1993). It is a 10-item scale, designed to assess three conceptual domains: alcohol intake; dependence; and adverse consequences (Reinert & Allen, 2002). Total scores of eight or more are recommended as indicators of hazardous and harmful alcohol use and may also indicate

alcohol dependence (Babor et al., 1992). Higher scores indicate greater likelihood of hazardous and harmful drinking; such scores may also reflect greater severity of alcohol problems and dependence, as well as a greater need for more intensive treatment (Babor & Higgins-Biddle, 2000).

Table 42 shows AUDIT data from the 2014 and 2015 WA EDRS samples. Ninety-eight EDRS participants completed the AUDIT in the current sample. The mean score was 12.83 (range 3-29), not significantly different from 13.18 in 2014. The majority (81%) scored equal to or greater than the cut-off of eight, indicating likelihood of hazardous or harmful alcohol use, comparable to 87% in 2014.

The total AUDIT scores place participants into one of four 'zones' or risk levels. In the 2015 sample, 19% scored in Zone 1 (low-risk drinking or abstinence), 48% scored in Zone 2 (alcohol use in excess of low risk guidelines), 20% scored in Zone 3 (harmful or hazardous drinking) and 12% scored in Zone 4 (those in this zone may be referred to evaluation and possible treatment for alcohol dependence). None of these proportions were significantly different from the 2014 sample. In 2015, males a had significantly higher mean AUDIT score than females, implicating males as being more likely to exhibit hazardous drinking behaviour than females in the current sample. There was no significant difference in mean AUDIT scores between males and females in the 2014 sample.

Table 42: AUDIT scores, 2014 and 2015

	2014 N=100	**2015** **N=98**
Mean AUDIT score (range)	13.18 (0-27)	**12.83** **(3-29)**
Males (range) Females (range)	13.22 (0-27) 13.10 (2-25)	**13.73 (3-29)** **11.28 (4-20)**
Score 8 or above (%)	87	**81**
Zone 1 (%)	13	**19**
Zone 2 (%)	55	**48**
Zone 3 (%)	19	**20**
Zone 4 (%)	13	**12**

Source: WA EDRS RPU interviews, 2014 and 2015

7.6. Ecstasy and methamphetamine dependence

The question as to whether it is possible to be dependent on ecstasy is a controversial one. Currently, according to the DSM-5, it is possible to be diagnosed with ecstasy dependence (coded as either amphetamine dependence or hallucinogen dependence), and there are clear case studies in the literature of people who are dependent on ecstasy. Animal models have demonstrated that dependence on ecstasy is biologically plausible and Topp, Hall and Hando (1997) found that 64% of a sample of regular ecstasy users met diagnostic criteria for ecstasy dependence.

Since 2012, all participants in the EDRS have been asked questions from the SDS regarding their ecstasy use. For the first time in 2015, all EDRS participants reporting recent use of methamphetamine were also administered the SDS regarding their methamphetamine use.
The SDS is a five-item questionnaire designed to measure the degree of dependence on a variety of drugs. The SDS focuses on the psychological aspects of dependence, including impaired control of drug use, and preoccupation with and anxiety about use. The SDS

appears to be a reliable measure of the dependence construct. It has demonstrated good psychometric properties with heroin, cocaine, amphetamine, and methadone maintenance patients across five samples in Sydney and London (Dawe et al., 2002). A total score is created by summing responses to each of the five questions. Possible scores range from 0 to 15. A cut-off score of four is used to determine those whose scores were suggestive of dependence (Bruno, Gomez & Matthews, 2011).

7.6.1. Ecstasy dependence

In 2015, as presented in Table 43, 21% of the sample reached the SDS cut-off score of four or more, suggesting ecstasy dependence, not significantly different from 20% in 2014.

Among participants who reached the SDS cut-off score (n=21) there was no significant difference between the proportion of males (n=13, 62%) and females (n=8, 38%).

Table 43: Ecstasy dependence, 2012-2015

(%)	2012 N=90	2013 N=100	2014 N=69	**2015 N=100**
Ecstasy SDS score				
Zero to three (below dependency cut off)	96	87	80	**79**
Four or more (dependency cut off)	4	13	20	**21**
Gender*	(n=4)	(n=13)	(n=14)	**(n=21)**
Male	0	46	57	**62**
Female	100	54	43	**38**

Source: WA EDRS REU/RPU interviews, 2012-2015
***** Of those with score of four or more (dependency cut-off)

Approximately two-thirds (66%) of the respondents reported that they never/almost never thought their use of ecstasy was out of control, comparable to 67% in 2014. The majority (77%) reported that they never or almost never wished they could stop, comparable to 70% in 2014. Seventy-two per cent reported that they would not find it difficult to stop or go without ecstasy, comparable to 70% in 2014.

7.6.2. Methamphetamine dependence

Fourteen participants answered the SDS questions in regard to their methamphetamine use. As presented in Table 44, 29% (n=4) of these participants reached the SDS cut off score of four or more, suggesting methamphetamine dependence.

Among participants who reached the SDS cut off score, there was no significant difference between the proportion of males (n=3, 75%) and females (n=1, 25%). However, given the small number of participants able to comment, this result should be interpreted with caution.

Table 44: Methamphetamine dependence, 2015

(%)	2015 N=14
Methamphetamine SDS score	
Zero to three (below dependency cut off)	**71**
Four or more (dependency cut off)	**29**
Gender*	**(n=4)**
Male	**75^**
Female	**25^**

Source: WA EDRS RPU interviews, 2015
***** Of those with score of four or more (dependency cut-off)
^ n<10. Results should be interpreted with caution.

Among participants who answered the SDS questions regarding their methamphetamine use (n=14), 64% (n=9) reported that they had never/almost never thought their use of methamphetamine was out of control, 71% (n=10) reported they had never/almost never wished they could stop, and 79% (n=11) reported that they would not find it difficult to stop or go without methamphetamine.

7.7. Summary of risk behaviours

Injecting risk behaviour

- Four per cent of the sample reported injecting a drug in their lifetime, consistent with 2% in 2014.
- Just one participant (1%) reported injecting in the preceding six months, the same proportion reported in 2014.
- Crystal methamphetamine was the only drug reported to have been injected in the preceding six months.

Sexual risk behaviour

- Penetrative sex with a casual partner in preceding six months was reported by less than two-thirds (61%) of the sample, consistent with 66% in 2014. The most common number of sexual partners among participants who had engaged in casual sexual activity was three to five (26%), consistent with 2014.
- More than half of the sample (52%) reported engaging in casual sex while under the influence of alcohol and/or other drugs, comparable to 58% in 2014. The most commonly implicated drugs used were alcohol (83%) and ecstasy (56%).
- Among participants who had engaged in casual sex while under the influence of drugs, 58% reported that they had not used a protective barrier on the last occasion, comparable to 47% in 2014. The most commonly cited reason for not using a protective barrier was 'using the contraceptive pill' (39%).
- Consistent with 2014, more than half (55%) of the participants reported ever having had a sexual health check-up, with 42% reporting having had one in the last year.
- Four participants reported being diagnosed with an STI in the preceding 12 months, consistent with 1% in 2014.

Driving risk behaviour

- Among participants who reported recent driving, more than two-fifths (44%) reported driving over the legal limit for alcohol in that time period, consistent with 37% in 2013.
- Among participants who reported recent driving, 68% reported driving under the influence of illicit drugs in the preceding six months, comparable to 66% in 2013. The most commonly implicated drugs were cannabis (69%) and ecstasy (40%).

Bingeing behaviour

- Recent bingeing on an ERD was reported by less than one-third (28%) of the sample, comparable to 37% in 2014.
- The drugs most commonly implicated in bingeing were alcohol (82%), tobacco (71%) and cannabis (68%).

Alcohol risk behaviour

- Participants completed the AUDIT. The majority (81%) of respondents fell in the hazardous or harmful drinking range, comparable to 87% in 2014.
- Contrary to the 2014 findings, males had significantly higher AUDIT scores than females in the current sample.

Ecstasy and methamphetamine dependence

- Just more than one-fifth (21%) of the sample reached the SDS dependency cut-off score suggesting ecstasy dependence, consistent with 20% in 2014.
- Among recent methamphetamine users, less than one-third (29%) reached the SDS cut-off score, suggesting methamphetamine dependence.

8. LAW ENFORCEMENT-RELATED TRENDS ASSOCIATED WITH ECSTASY AND RELATED DRUG USE

8.1. Reports of criminal activity among REU/RPU

Table 45 presents the proportion of REU/RPU reporting criminal activity in the month preceding the interview since 2006. In 2015, more than two-thirds (45%) sample reported engaging in criminal activity in the past month. While this proportion was not significantly different from 40% in 2014, it is the largest proportion reported since the beginning of WA EDRS data collection in 2003. The most commonly reported crime in this period was drug dealing, reported by 38% of respondents, comparable to 33% in 2014. Eleven per cent of participants reported engaging in property crime in the last month, the same proportion reported in 2014. Consistent with previous years, only a very small number of participants reported engaging in fraud (4%) and violent crime (3%).

Of those who reported drug dealing in the past month (n=38), almost two-thirds (n=24, 63%) reported doing so less than once a week in that time period. A further 16% (n=6) reported doing so once a week, 13% (n=5) reported doing so more than once a week (but less than daily) and 8% (n=3) reported doing so daily. Among participants who reported engaging in property crime in the last month (n=11), the majority (n=10, 91%) reported doing so less than once a week in that time period and a further 9% (n=1) reported doing so once a week. Of those participants who reported engaging in fraud in the preceding month (n=4), all (100%) reported doing so less than once a week in that time period. Finally, among those participants who reported engaging in violent crime in the past month (n=3) all (100%) reported doing so less than once a week in that time period.

For the first time in 2015, all EDRS participants were asked if they had been a victim of a violent crime in the preceding month. Seven per cent of participants reported that they had, with all of these participants (n=7, 100%) reporting that this had occurred less than once a week in that time period. More than two-thirds of these participants (n=5, 71%) reported that they believed that perpetrator was under the influence of alcohol or other drugs on the last occasion of violence. Specifically, 29% (n=2) reported that they believed the perpetrator was under the influence of solely alcohol, 29% (n=2) reported that they believed the perpetrator was under the influence of solely other drugs and 14% (n=1) reported that they believed the perpetrator was under the influence of both alcohol and other drugs.

In 2015, 6% of the sample reported being arrested in the preceding 12 months, a non-significant decrease from 12% in 2014. The most common reason for arrest was property crime (n=4, 67%), followed by fraud, alcohol and driving, public order (drunk and disorderly) and public urination (each n=1, 17%). Consistent with the 2014 findings, only 4% of participants reported having ever been to prison.

Table 45: Criminal activity in the past month, 2006-2015

Criminal activity in the last month	2006 N=100	2007 N=100	2008 N=58	2009 N=100	2010 N=100	2011 N=28	2012 N=90	2013 N=100	2014 N=100	**2015 N=100**
Any crime (%)	26	39	31	38	35	39	29	42	40	**45**
Drug dealing (%)	23	31	24	32	24	21	18	25	33	**38**
Property crime (%)	9	16	7	6	13	11	16	25	11	**11**
Fraud (%)	2	4	2	0	2	7	2	2	5	**4**
Violent crime (%)	1	5	3	3	3	7	1	3	5	**3**
Arrested last 12 months (%)	14	12	5	19	13	18	11	13	12	**6**

Source: WA EDRS REU/RPU interviews, 2006-2015

8.2. ACC statistics

Table 46 shows the number of consumer and provider arrests for ATS, cannabis, cocaine and hallucinogens in WA from 2011 to 2014 according to the ACC (2015). ATS include amphetamine, methamphetamine, crystal methamphetamine, and phenethylamines such as MDMA, MDEA, MDA, DMA and PMA.

According to the ACC (2015), in 2013/14, there were a total of 16,302 drug-related consumer and provider arrests, compared to 11,125 in 2012/13. Broken down, there were a total 13, 414 drug related consumer arrests and 2,888 provider arrests. As in 2012/13, the most commonly implicated drug for both types of arrest in 2013/14 was cannabis, followed by ATS. The most notable increase for drug classes during the 2013/14 period is for cannabis related arrests.

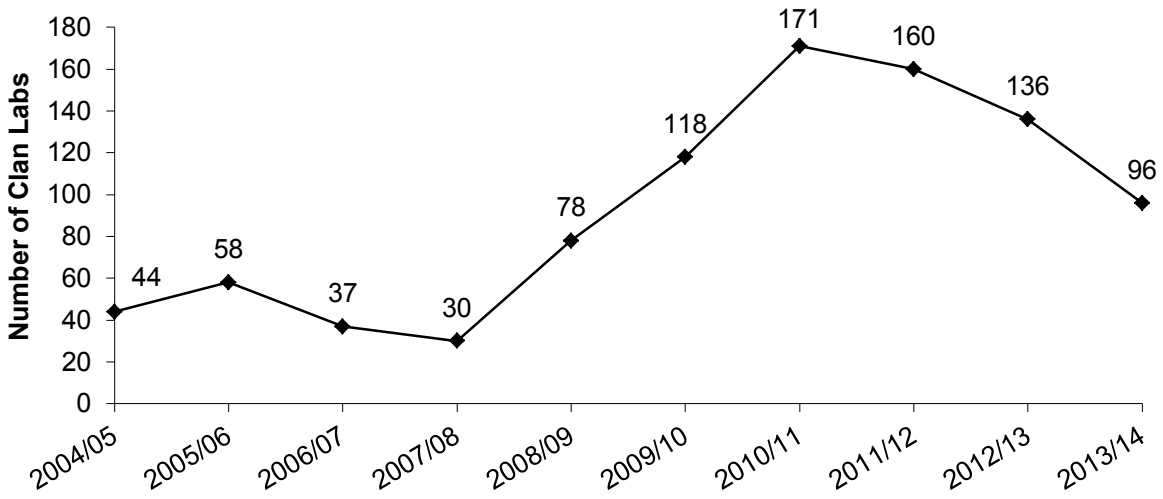
Table 46: Consumer and provider arrests by drug type, 2011/12 to 2013/14

Year and Drug	Consumer Arrests	Provider Arrests	Total
2011/12			
ATS	1,616 (69%)	731 (31%)	2,347 (100%)
Cannabis	4,117 (76%)	1,304 (24%)	5,421 (100%)
Cocaine	23 (55%)	19 (45%)	42 (100%)
Hallucinogens	58 (64%)	33 (36%)	91 (100%)
All drugs	7,629 (74%)	2,621 (26%)	10,250 (100%)
2012/13			
ATS	2,024 (71%)	846 (29%)	2,870 (100%)
Cannabis	4,165 (78%)	1,193 (22%)	5,358 (100%)
Cocaine	45 (49%)	46 (51%)	91 (100%)
Hallucinogens	80 (72%)	31 (28%)	111(100%)
All drugs	8,349 (75%)	2,776 (25%)	11,125 (100%)
2013/14			
ATS	2,709 (72%)	1,047 (28%)	3,756 (100%)
Cannabis	7,329 (88%)	957 (12%)	8,286 (100%)
Cocaine	57 (53%)	51 (47%)	108 (100%)
Hallucinogens	127 (71%)	53 (29%)	180 (100%)
All drugs	13, 414 (82%)	2,888 (18%)	16,302 (100%)

Source: ACC, 2013, 2014 and 2015

As presented in Figure 49, according to data from the ACC, clandestine laboratory, or 'clan lab', detections have been decreasing since 2011/12. According to the ACC, in 2013/14, there were 96 methamphetamine clandestine laboratory detections in WA compared to 136 in 2012/13. The current WA figure is exceeded by Queensland, Victoria and New South Wales, with 340, 114 and 98 detections reported respectively for those jurisdictions in the 2013/14 period. Of the 96 labs detected in WA in 2013/14, almost all (n=92, 96%) were manufacturing ATS other than MDMA. The vast majority of labs detected in this period (n=84, 87%) were using the Nazi/Birch method of production (involving red phosphorous and liquid ammonia) (ACC, 2015).

Figure 49: Number of clandestine (meth)amphetamine laboratories detected by WA police 2004/05 to 2013/14



Source: ACC, 2006-2015

KE comments

- A KE who worked in law enforcement reported that the number of 'clan labs' detected in WA had decreased recently.

8.3. Summary of law enforcement-related trends

- Involvement in any criminal activity was reported by more than two-fifths (45%) of the sample. While not significantly different from 40% in 2014, this is the highest proportion reported since the beginning of EDRS data collection in 2003.
- Consistent with 2014, the most commonly reported crimes were drug dealing (38%) and property crime (11%).
- Less than one-tenth (7%) of the sample reported having been a victim of violent crime in the last month.
- Six per cent of the sample reported being arrested in the preceding 12 months, consistent with 12% in 2014. Property crime was the most commonly reported reason for arrest.
- According to data from the ACC, during 2013/14, there were 13, 414 drug-related consumer arrests and 2,888 provider arrests.
- ACC data indicates that there were 96 clandestine laboratories detected in WA during 2013/14. The vast majority (96%) were producing non-MDMA ATS.
- A KE who worked in law enforcement reported a decrease in the number of methamphetamine clan labs detected in WA recently.

9. SPECIAL TOPICS OF INTEREST

9.1. Online purchasing and NPS use

In 2015, the EDRS continued to investigate and monitor the practice of purchasing drugs online among recreational drug users in Australia. Of particular interest was the use of 'dark web' market places that are only accessible using a specially routed, anonymous connection. These market places makes it possible for people around the world to get illicit drugs, like MDMA and cocaine, delivered to their door (Burns & Van Buskirk, 2013). The EDRS places particular focus on the attainment of NPS online given the changes in legislation and negative effects of particular NPS (such as NBOMe and synthetic cannabis). The aim of this module was to investigate: (1) the prevalence of online drug purchasing among the 2015 EDRS sample and (2) the patterns of online drug purchasing, with a focus on NPS.

In 2015, among those who commented (n=99), just more than two-thirds (n=67, 68%) of respondents reported that their friends had ever purchased an illicit drug online, significantly lower than 82% in 2014 (CI: -0.02 to -0.26). Participants were asked what proportion of their friends had purchased an illicit drug online, to which 66% reported 'a few', 4% reported 'about half' and 2% reported 'most'.

Fourteen per cent of the sample reported having ever purchased an illicit drug online, the same proportion that was reported in 2014. Just more than one-tenth (11%) reported that they had purchased an illicit drug online in the past 12 months, comparable to 9% in 2014. Participants who had purchased an illicit drug online in the preceding 12 months were asked how many times they had done so in that time period (see Table 47). None of the reported proportions were significantly different from the 2014 findings. However, the results should be interpreted with cation given the small number of participants who were able to comment in 2014.

Table 47: Number of times purchased illicit drugs online in the preceding 12 months, 2015

(%)	2014 (n=9)	**2015 (n=11)**
Once	33^	**36**
Twice	11^	**36**
3-5 times	33^	**18**
More than 5 times	22^	**9**

Source: WA EDRS RPU interviews, 2014 and 2015
^ n<10. Results should be interpreted with caution

In 2015, purchases of illicit drugs were reported to have been made from either international webstores ('surface web'; n=2, 18%), dark net marketplaces such as Silk Road (n=4, 36%) or other dark net marketplaces (not specified) (n=8, 73%). If participants had purchased from a dark net marketplace, they were asked to specify whether the retailer they purchased from was Australian (n=7, 78%), International or both (each n=1, 11%). These results were consistent with the 2014 findings.

Table 48 illustrates the specific illicit drugs that participants reported purchasing online in the preceding 12 months for both the 2014 and 2015 EDRS samples. In 2015, of the ten participants who reported purchasing a traditional illicit drug online, ecstasy was the most commonly purchased drug (n=8, 80%), followed by LSD (n=4, 40%), cannabis (n=3, 30%), and methamphetamine, pharmaceutical stimulants, cocaine, MDA and benzodiazepines

(each n=1, 10%). These results were consistent with the 2014 findings, but should be interpreted with caution given the small sample sizes.

Five participants in the current sample reported purchasing an NPS online, with drugs in the 2C-x class being the most commonly purchased (n=3, 60%), followed by DMT (n=2, 40%), 5-MeO-DMT and Benzo Fury (each n=1, 20%). While these results are again comparable with the 2014 findings, they should be interpreted with caution given the small sample sizes.

Table 48: Illicit substances reportedly purchased online in the preceding 12 months, 2015

Online substance purchased (%)	2014	**2015**
Traditional illicit substances	(n=8)	**(n=10)**
Ecstasy (any form)	87^	**80**
LSD	50^	**40**
Cannabis	25^	**30**
Methamphetamine (any form)	0^	**10**
Pharmaceutical stimulants	0^	**10**
Cocaine	25^	**10**
MDA	0^	**10**
Benzodiazepines	0^	**10**
NPS illicit substances	(n=4)	**(n=5)**
2C-x class	25^	**60^**
DMT	25^	**40^**
5-MeO-DMT	0^	**20^**
Benzo Fury	0^	**20^**
NBOMe	50^	**0^**
3-MEO-PCP	25^	**0^**

Source: WA EDRS RPU interviews, 2014 and 2015
^ n<10. Results should be interpreted with caution

More than two-thirds (69%) of the current sample indicated that they had used an NPS in their lifetime, a non-significant increase from 55% in 2014. The median number of days ago that participants reported using an NPS was 140 (i.e. approximately 5 months; range 3-2688 days). Participants were asked to indicate which NPS they had last used. Of the 54 participants who responded, DMT was the most commonly reported NPS (n=20, 37%), followed by drugs in the 2C-x class (n=10, 18%), DXM (n=6, 11%,), synthetic cannabis (n=5, 9%), mephedrone, methylone/bk-MDMA and NBOMe (each n=3, 6%), herbal highs (n=2, 4%) PMA, salvia divinorum and other (unspecified) (each n=1, 2%).

Participants who reported lifetime NPS use were asked if the NPS they had used on the last occasion was personally purchased online. Among those who commented (n=54), just 2% (n=1) reported that it had been. The remaining participants were asked if the person from whom they obtained an NPS on the last occasion had purchased it online. Among those who commented (n=35), just less than a quarter (n=8, 23%) reported that it had been purchased online, 71% (n=25) reported that it had not and 6% (n=2) reported that they did not know.

Participants were asked whether they had experienced any adverse effects on the last occasion of NPS use. Of the 47 participants who responded, 47% (n=22) reported at least

one adverse effect. Of the listed adverse effects, 'nausea/vomiting' was the most common (n=7, 15%), followed by 'restlessness/anxiety' (n=5, 11%), 'heart racing' and 'shortness of breath' (each n=3, 6%,), 'anger/aggression', 'cold or numb fingers and/or toes', 'hearing things that were not there', 'seeing things that were not there' and 'paranoia' (each n=1, 2%). An additional 13 participants (28%) specified an 'other' unexpected adverse effects that were not listed. See Table 49 for a complete breakdown of these results.

Table 49: Unexpected adverse NPS effects experienced on last occasion of use, 2015

Unexpected adverse effect (%)	2015 N=47
No adverse effects	53
Nausea/vomiting	15
Restlessness/anxiety	11
Heart racing	6
Shortness of breath	6
Anger/aggression	2
Cold/numb fingers and/or toes	2
Hearing things that were not there	2
Seeing things that were not there	2
Paranoia	2
Other*	28

Source: WA EDRS RPU interviews, 2015

* Other effects were: 'bad come down' 'drained' 'dazed' 'pressure in head' 'general discomfort' 'light headedness' 'sleepiness' and 'suicidal thoughts'

9.2. NPS policy

The laws about selling and possessing new psychoactive substances are complex. The 2015 WA EDRS aimed to investigate participants' understanding of current laws for the NPS reported to have been used most commonly in the 2014 EDRS: 2CB, 2CI, DMT, Mephedrone and NBOMe. All of these substances were illegal in WA when the 2015 survey was administered. Participant responses are shown in Table 50.

Table 50: Perceptions of the legal status of particular NPS, 2015

Substance and legal status (%)	2015 N=99
2CB	
Legal	0
Illegal	46
Unsure	53
2CI	
Legal	1
Illegal	36
Unsure	63
DMT	
Legal	1
Illegal	74
Unsure	25
Mephedrone	
Legal	7
Illegal	42
Unsure	50
NBOMe	
Legal	4
Illegal	39
Unsure	57

Source: WA EDRS RPU interviews, 2015

9.3. Cognitive enhancers

Cognitive enhancers (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. However, there is evidence that at least some CEs are likely improve cognitive performance in limited cognitive domains (Farah, Smith, Ilieva, & Hamilton, 2014); 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 prevalence 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).

At present, 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 full-time 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 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.

More than two-thirds (69%) of the present sample reported having used a CE in the preceding six months. These participants were asked to indicate which CEs they had used (see Table 50). The majority reported using coffee (n=48, 70%), followed by non-prescribed dexamphetamine (n=39, 57%), energy drinks (n=33, 48%), non-prescribed methylphenidate (n=18, 26%), omega 3 fish oil (n=14, 20%), non-coffee caffeine products (e.g. strips, tabs) (n=12, 17%), non-prescribed modafinil (n=9, 13%), gingko biloba (n=6, 9%), prescribed methylphenidate, non-prescribed racetams and ginseng (each n=2, 3%) and prescribed modafinil (n=1, 1%).

Table 50: Use of CEs in the preceding six months, 2015

Substance (%)	2015 N=69
Methylphenidate	
Prescribed	3
Non-prescribed	26
Any[#]	26
Modafinil	
Prescribed	1
Non-prescribed	13
Any[#]	13
Dexamphetamine	
Prescribed	4
Non-prescribed	57
Any[#]	62
Racetams	
Prescribed	0
Non-prescribed	3
Any[#]	3
Anti-dementia drugs	
Prescribed	0
Non-prescribed	0
Any[#]	-
Other	
Energy drinks	48
Coffee	70
Other caffeine products (caffeine tablets, caffeine sublingual strips)	17
Gingko biloba	9
Ginseng	3
Omega 3 fish oil	20
Other*	6

Source: WA EDRS RPU interviews, 2015

[#] Includes prescribed and non-prescribed

* Other reported CEs were: 'tea', 'tarine' 'noopepte' and 'hydroxycut hardcore'.

Participants who had used CEs in the previous six months (n=69) were also asked to report the last CE that they had used. Coffee was the most commonly reported CE (n=28, 41%), followed by dexamphetamine (n=20, 29%), energy drinks (n=10, 14%), methylphenidate (n=6, 9%), modafinil (n=2, 3%), non-coffee ('other') caffeine products, omega 3 fish oil and racetams (each n=1, 1%).

Motivations for using these substances on the last occasion of use were also explored. Table 51 shows a complete breakdown of these results. Participants most commonly reported using CEs to decrease fatigue (n=30, 43%), while almost one-third (n=21, 30%) used them to improve concentration and more than one-fifth (n=15, 22%) to offset sleep

deprivation. Smaller proportions reported using them to improve academic performance (n=10, 14%), to complete an assignment or task on time (n=8, 12%) to improve motivation for study (n=7, 10%), to enhance mood (n=5, 7%), to improve memory (n=5, 6%) and out of curiosity (n=2, 3%).

Table 51: Motivations for CE use in the last six months, 2015

Motivation (%)	2015 N=69
To decrease fatigue	43
To improve concentration	30
To offset sleep deprivation	22
To improve academic performance	14
To complete an assignment or task on time	12
To improve motivation for study	10
To enhance mood	7
To improve memory	6
Curiosity	3
Other*	4

Source: WA EDRS RPU interviews, 2015

*Other reasons were: 'to be more awake', 'to be more alert' and 'to increase energy'.

Of those participants who had used CEs in the preceding six months (n=69), less than one-third (n=20, 29%) reported experiencing negative side effects on the last occasion of use. The most commonly reported side effect was anxiety (n=5, 25%), followed by headache (n=4, 20%), nausea, loss of appetite, stomach problems, tremor and heart palpitations (each n=2, 10%), and depression, jolt and crash, rapid and/or irregular heartbeat, sleeping difficulties/insomnia, tics and/or twitching and urination problems, agitation, bruxism, fatigue 'being fidgety and having fuzzy thinking' 'overheating and dry mouth' 'scattered thoughts' and 'sweating' (each n=1, 5%).

Among participants reporting recent use of CEs, more than one-fifth (n=15, 22%) reported using other licit or illicit drugs in conjunction with CEs on the last occasion. The drug reported to have been used most commonly in this context was cannabis (n=7. 47%) Table 52 shows a complete breakdown of these results.

Table 52: Other substances (licit or illicit) consumed with CEs on the last occasion, 2015

Other substances (%)	2015 N=15
Cannabis	47
Alcohol (less than 5 standard drinks)	13
Alcohol (more than 5 standard drinks)	7
Nitrous oxide	7
Pharmaceutical stimulants	7
Tobacco	7
Other	20

Source: WA EDRS RPU interviews, 2015

9.4. Summary of special topics of interest

Online purchasing and NPS use

- Just more than two-thirds of the sample (68%) reported that their friends had ever purchased an illicit drug online, significantly lower than 82% in 2014.
- Fourteen percent of the sample reported having ever purchased a drug online, the same proportion reported in 2014.
- Eleven cent of the sample reported purchasing a drug online in the past 12 months, comparable to 9% in 2014.
- Consistent with the 2014 results, among participants who had purchased traditional illicit drugs online, ecstasy was the most commonly purchased drug (80%) followed by LSD (40%) and cannabis (30%).
- Among participants who had purchased NPS online, drugs in the 2C-x class were purchased most commonly (60%) followed by DMT (40%).
- More than two-thirds (69%) of the sample reported using an NPS in their lifetime, a non-significant increase from 55% in 2014.
- Among participants who had used an NPS, less than half (47%) experienced an adverse side effect on the last occasion of use. The most commonly reported was nausea/vomiting (15%).

NPS policy

- The majority of the participants responded with 'illegal' or 'unsure' when asked to report the legal status of 2CB, 2CI, DMT, mephedrone and NBOMe.

Cognitive enhancers

- More than two-thirds of the sample (69%) reported having used a CE in the preceding six months; the most frequently used were coffee (70%), dexamphetamine (62%) and energy drinks (48%).
- The most commonly cited motivation for using a CE on the last occasion was to decrease fatigue (43%).
- Among participants who reported recent CE use, just less than one-third (29%) reported experiencing a negative side effect on the last occasion of use. The most commonly reported side effect was anxiety (25%).
- Among participants who reported recently using a CE, more than one-fifth (22%) reported consuming other drugs with CEs on the last occasion of use; the most commonly reported was cannabis (47%).

10. GENERAL TRENDS

Participants were asked what proportion of their friends had used ecstasy in the preceding six months. Consistent with the 2014 sample, the most common response was 'most' (50%); followed by 'about half' (22%), 'all' (9%) and then 'a few' (18%).

Participants were also asked if there was anything new happening in drug use among themselves or their friends in the preceding six months. Less than two-thirds (61%) of respondents reported that there was. Among these, less than one-third (n=18, 30%) reported that there was an increase in drug use by some types of users, 15% (n=9) reported that there were new drug types, and 54% (n=32) reported an 'other' general trend.

Comments made in relation to ecstasy were that there had been a general increase in use (n=19, 31%), and that it had become easier to obtain (n=2, 3%). Regarding other drug use, a small number of participants made general comments about recent increases in overall drug use (n=5, 8%). A small number of participants (n=5, 8%) reported increasing NPS use, including DMT (n=2) NBOMe (n=1), mephedrone (n=1) and DXM (n=1). An additional participant reported increases in use of the CE modafinil. Two participants (3%) commented on increasing use of mixed drinks containing cough syrup (known as 'lean'). There were also comments concerning increasing use of nitrous oxide and crystal methamphetamine (each n=3, 5%) as well as GHB (n=2, 3%). While there were comments regarding increasing cannabis use (n=5, 9%), one participant reported stable cannabis use and another reported decreasing use (each n=1, 2%). One participant reported that vaporising was an increasing ROA among cannabis users. Finally, three participants (5%) commented on increasing trends towards drugs being purchased online and received in the post. A breakdown of these results is shown in Table 53.

Table 53: New issues reported, 2015

(%)	2015 N=61
General themes	
Increase in drug use by some types of users	30
New drug types	15
Other	54
Ecstasy	
Increase in ecstasy use	31
Increase in availability of ecstasy	3
Other drug use	
Increase in use of NPS or CE drugs	10
Increase in use of cannabis	9
Increase in drug use generally	8
Increase in use of nitrous oxide	5
Increase in crystal methamphetamine use	5
Increase in use of cough syrup drinks	3
Increase in use of GHB	3
Increase in vaporising cannabis	2
Online purchasing	
Increases in online purchasing	5

Source: WA EDRS RPU interviews, 2015

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