Western Australia

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WA TRENDS IN ECSTASY AND RELATED DRUG MARKETS 2014

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

NDARC Technical Report No. 142

WEST AUSTRALIAN TRENDS IN ECSTASY AND RELATED DRUG MARKETS 2014

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 intervals
CNS	central nervous system
DMT	dimethyltriptamine
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders IV
DOI	'death on impact'; 2,5-dimethoxy-4-iodoamphetamine
DXM	dextromethorphan
EDRS	Ecstasy and Related Drugs Reporting System
ERD	Ecstasy and Related Drugs
EPS	Emerging psychoactive substances
FIFO	fly-in-fly-out
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
PIED	performance and image enhancing drugs
PMA	paramethoxyamphetamine
REU	regular ecstasy user
ROA	route of administration
RPU	regular psychostimulant user
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 routes of administration: 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 routes of administration: 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 Western Australian Ecstasy and Related Drugs Reporting System (EDRS; formerly the Party Drugs Initiative, or PDI), an ongoing study monitoring ecstasy and related drug markets within Western Australia (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 Illicit Drug Reporting System (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 market.

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 ecstasy and related drug 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 regular ecstasy users/regular psychostimulant users (REU/RPU) in the general population.

The current report provides findings for the 12th year of data collection in WA obtained from three sources:

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

2. Qualitative interviews with 17 key experts (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.

Demographic characteristics

For the purpose of this study, REU is a population defined by the use of ecstasy pills, powder, capsules or crystals on at least six occasions over the preceding six-month period. This population was recruited for the first nine years of data collection, beginning in 2003. In 2012, the WA EDRS expanded its selection criteria for recruitment of participants. This change was made in WA, as in some other jurisdictions, in response to difficulties experienced in the 2011 EDRS recruitment process. The selection criteria expanded to include both REU regular psychostimulant users (RPU). For the purpose of this study, RPU is a population defined by the use of any psychostimulant drug/s (e.g. methamphetamine,3,4-methylenedioxyamphetamine (MDA), cocaine, ketamine, gamma-hydroxy-butyrate (GHB), LSD, or new psychoactive substances (NPS) such as 2,5-dimethoxy-4-bromophenethylamine (2C-B) and 2,5-dimethoxy-4-iodophenethylamine (2C-I) on at least six occasions over the preceding six-month period. Early in the recruitment phase of 2014, WA EDRS participants were selected and interviewed if they were either REU or RPU. However, because there were no difficulties recruiting REU, only REU were recruited beyond

this early stage. Consequently, while four RPU were interviewed for the 2014 EDRS, these cases were subsequently removed from the data analysis, allowing for a sample that comprised solely REU.

In 2014, in the WA EDRS:

- The sample comprised 100 REU;
- There were a greater proportion of males (69%) than females (31%);
- Participants had a mean age of 20.7 years;
- The vast majority (98%) were of English speaking background;
- The majority had completed high school (95%);
- Under one-third of participants (29%) had completed a tertiary qualification;
- The median weekly income was $590;
- The number of participants employed part-time was 16%, a significant decrease from 29% in 2013;
- More than one-third of participants (39%) reported working and studying simultaneously, a significant increase from 22% in 2013;
- None of the participants reported currently being in drug treatment; and
- These demographics have remained relatively stable across EDRS data collection periods, aside from mild variations in age, employment status, the completion of tertiary education and income.

Patterns of drug use

- Participants reported use of a wide range of drugs; having used a median of 13 different drug types during their lifetimes and 6.5 different drug types recently (during the preceding six-month period).
- Just 2% of the sample reported having ever injected a drug, a significant decrease from 10% in 2013.
- Significant increases from 2013 were seen in recent use of ecstasy crystal and pharmaceutical stimulants.
- Significant decreases from 2013 were seen in both recent and lifetime use of antidepressants. However, these changes were likely due to decreases in the proportion of injecting drug users in the 2014 sample compared to 2013.
- More than one-third (37%) had recently binged on ecstasy and related drugs (ERD), comparable to 38% in 2013.

Drug use and markets in the 2013 EDRS

Ecstasy

Consumption patterns

- The proportion reporting ecstasy as their drug of choice was 30%, comparable to 38% in 2013.
- The mean age of first ecstasy use was approximately 17 years, which has been consistent across survey years.
- Just under a quarter of the sample (23%) reported weekly or more ecstasy use, not significantly different from 30% in 2013.
- The median number of days ecstasy was used in the preceding six-month period was 14 days, the same number reported in 2013.
- The proportion reporting use of more than one ecstasy tablet per session was 71%, comparable to 72% in 2013.

- On a typical occasion, the average number of pills used was 2.4, comparable to 2.2 pills in 2013.
- Consistent with previous years, swallowing was the main route of administration (ROA) (91%).
- Pills were the most commonly reported form of ecstasy used recently (100%), followed by crystals (58%), capsules (51%) and then powder (20%).
- There appears to be a recent upward trend in the use of ecstasy crystal; both lifetime and recent use of crystal ecstasy significantly increased in the present sample compared to 2013.
- The vast majority of participants (89%) reported using other drugs in combination with ecstasy the last time they used it, most commonly alcohol, tobacco, cannabis and pharmaceutical stimulants. This is consistent with the 2013 findings.
- More than half (55%) reported using other drugs to help them come down from ecstasy the last time they used it, most commonly cannabis, alcohol and benzodiazepines.
- Ecstasy was most commonly last used at nightclubs (40%).
- KE commented that ecstasy use was common among young people, as were associated adverse effects.

Market Characteristics

- *Price*: $35 per tablet (unchanged from 2013).
- *Purity*: Currently medium, with mixed perceptions of recent changes in potency.
- *Availability*: Currently easy to obtain and stable.
- Consistent with 2013 findings, user perceptions of availability and potency suggested that ecstasy potency and availability may have likely recovered, following suspected declines in 2011.
- KE believed that the purity of ecstasy had increased since 2013.

Methamphetamine

The 2014 EDRS distinguished between three different forms of methamphetamine: methamphetamine powder (speed); methamphetamine base (base); and crystal methamphetamine (crystal).

Consumption patterns

Speed

- Approximately one-third (36%) had used speed in their lifetime, the same proportion as reported in 2013.
- Recent use was reported by 19%, which did not significantly change from 17% in 2013.
- Among recent users, speed was used on a median of one day over the preceding six months.
- Snorting was the most common ROA reported (58%).
- Overall, the frequency and quantity of use appeared to be stable from 2013 to 2014.

Base

- Only 3% of the sample had used base in their lifetime and 0% had done so in the previous six months.
- No further analyses were performed due to the extremely small sample size.

Crystal

- Approximately one-quarter (24%) had used crystal methamphetamine in their lifetime, a non-significant change from 32% in 2013.
- Recent use was reported by 17%, which did not significantly change from 22% in 2013.
- Among recent users, crystal methamphetamine was used on a median of three days over the preceding six months, comparable to six days in 2013.
- Smoking was the most common ROA reported (88%).
- The median amount used on a typical occasion was half a point with a maximum of one point.
- There are significant decreases in lifetime and recent methamphetamine use in the present sample compared to 2012, providing some evidence of a downward trend in methamphetamine use amongst REU/RPU.

- The most commonly reported locations of last use for speed were at a private party and a live music event.
- The most commonly reported location of last use for crystal methamphetamine was a friend's home.
- Several KE considered crystal methamphetamine use to be the most problematic drug-related issue currently.

Market characteristics

Speed

- *Price*: $100 per point (unchanged from 2013), $200 per gram ($700 in 2013).
- *Purity*: Currently high and stable.
- *Availability*: Currently easy to obtain and stable.
- The very small number of participants here (n=3) and in 2013 (n=7) precluded drawing any meaningful comparisons or conclusions from these data.

Base

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

Crystal

- *Price*: $100 per point (unchanged from 2013), $800 per gram (unchanged from 2013).
- *Purity*: Currently medium and fluctuating.
- *Availability*: Currently easy to obtain and stable or easier to obtain since 2013.
- Most KE reported that methamphetamine purity and availability remained high.

Cocaine

Consumption patterns

- Just over half (56%) reported lifetime use of cocaine, comparable to 54% in 2013.
- Approximately less than one-third (30%) reported recent use, which was not significantly different from 2013 (34%).
- Cocaine was used on a median of two days over the preceding six months, which was comparable to one day in 2013.
- Snorting remained the most commonly reported ROA (83%).

- Overall, the frequency and quantities of cocaine use remained relatively stable from 2013 to 2014.
- The most commonly reported location of last use of cocaine was a friend's home.
- KE reported that they believed that cocaine use was generally rare due to its expense and relative low availability in WA.

Market characteristics

- *Price*: $400 per gram and stable to increasing.
- *Purity*: Currently medium and stable.
- *Availability*: Currently difficult and stable.

Ketamine

Consumption patterns

- Consistent with 2013, a quarter of the sample (25%) reported lifetime ketamine use and only 11% reported recent use.
- Ketamine was used on a median of one day over the preceding six months, comparable to two days in 2013.
- Swallowing was the most commonly reported ROA and reported by all recent users.
- Several different quantities were reported across 2013 and 2014 (e.g., bumps grams, lines, milligrams, points), making comparison between years difficult.
- Most KE reported that ketamine use was very rarely encountered in their fields.
- Findings related to ketamine should be interpreted with caution due to the small number of participants able to comment.

Market characteristics

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

GHB

Consumption patterns

- Reported GHB use has been consistently low across EDRS data collection years.
- Lifetime use of GHB was reported by 4% of the sample, comparable to 9% in 2013.
- Recent use of GHB was reported by 3% of the sample, which is the same proportion that was reported in 2013.
- GHB was used on a median of two days (i.e. less than monthly) over the preceding six months, the same number of days reported in 2013.
- As in 2013, swallowing was the only ROA reported.
- While some KE reported an increase in GHB use in this period, most reported that GHB use continued to be rarely encountered in their fields.

Market characteristics

- *Price*: No data available.
- *Purity*: No data available.

- *Availability*: No data available.

LSD

Consumption patterns

- Approximately two-thirds (67%) of the current sample reported LSD use in their lifetime and about two-fifths (45%) reported recent use.
- While there were no significant increases observed for LSD, the rate for recent use represents the highest recorded since WA data collection commenced in 2003.
- LSD was used on a median of two days over the preceding six months, comparable to four days in 2013.
- LSD was taken orally by all participants (i.e. swallowing or sub-lingual administration).
- The most commonly reported locations of last LSD use were rave/doof/dance party and live music event.
- KE comments continued to indicate concern over NBOMe and synthetic cannabis being sold on the market at LSD.

Market characteristics

- *Price*: $25 per tab and stable (consistent with 2013).
- *Purity*: Currently high and stable (compared to medium to high and stable 2013).
- *Availability*: Currently mixed perceptions on availability, although availability was viewed stable (compared with easy to obtain and stable in 2013).

Cannabis

Consumption patterns

- Almost the entire sample (98%) reported lifetime use of cannabis, the same proportion that was reported in 2013.
- Recent cannabis use was reported by 86% of the sample, a non-significant decline from 92% in 2013.
- The 2013 EDRS saw the highest proportion of participants reporting recent cannabis use since WA data collection commenced in 2003. The current data suggests rates of recent cannabis use in REU may be returning to levels seen prior to this brief spike.
- Cannabis was used on a median of 27.5 days (i.e. approximately once per week) over the preceding six months.
- The use of cannabis has remained relatively stable across survey years.
- KE reported that cannabis use continued to be one of the most problematic drug issues in their field, particularly in relation to mental health.

Market characteristics

Hydro

- *Price*: $25 per gram, $350 per ounce and stable.
- *Potency*: Currently high and stable.
- *Availability*: Currently easy to very easy to obtain and stable.
- Market characteristics for hydro appear to be predominantly stable from 2013 to 2014.

Bush

- *Price*: $25 per gram, $350 per ounce and stable.
- *Potency*: Currently medium and stable.
- *Availability*: Easy to very easy and stable

- Market characteristics for bush appear to be predominantly stable from 2013 to 2014, with the possibility of a slight increase in price per ounce.

Consumption patterns of other drug use

- Consistent with previous years, the entire sample (100%) reported lifetime use of alcohol and the vast majority also reported recent use (98%).
- KE reported that alcohol continued to be one of the most problematic drugs among REU.
- The majority of the sample (91%) reported lifetime tobacco use, comparable to 88% in 2013. More than three-quarters (77%) reported recent use, also comparable to 75% in 2013.
- Consistent with low rates in previous years, lifetime use of MDA was reported by 19%, consistent with 18% in 2013. Recent use was reported by 13%, comparable to 12% in 2013.
- The majority of the sample (91%) reported the use of pharmaceutical stimulants in their lifetime, a significant increase from 77% in 2013. Approximately four-fifths (81%) reported recent use of pharmaceutical stimulants, which also significantly increased from 64% in 2013. These reported proportions are the highest recorded since the beginning of the EDRS in 2003. As in 2013, the vast majority of this use was illicit.
- More than half the sample (52%) reported lifetime use of a benzodiazepine, comparable to 55% in 2013. Just over one-third (35%) reported recent use, also comparable to 2013 (33%).
- Lifetime use of any anti-depressant was reported by 14% the sample, a significant decrease from 31% in 2012. Recent use was reported by just 6%, which was again a significant decrease from 18% in 2013.
- Lifetime use of amyl nitrate was reported by 11% of the sample, which did not significantly change from 14% in 2013. Recent use was reported by 4%, which again did not significantly change from 10% in 2013.
- Nitrous oxide appeared to be the more popular inhalant with almost half (43%) reporting lifetime use, comparable to approximately half (46%) in 2013. Approximately one-third (32%) reported recent use, the same proportion reported in 2013.
- Consistent with previous years, the use of heroin was uncommon, with 4% reporting lifetime use, which was unchanged from 6% 2013. No participants reported recent use, comparable to 2% in 2013.
- Comparable to 2013, only two participants reported lifetime and recent use of methadone.
- Lifetime use of buprenorphine was reported by 2% of the sample, not significantly different from 3% in 2013. No participants reported recent use, consistent with the 2013 findings.
- Lifetime use of other opiates was reported by almost one-fifth (18%) of the sample, which did not significantly differ from 29% in 2013. Recent use was reported by 8%, which again did not significantly change from 15% in 2013. The majority of this use was illicit.
- Lifetime use of over-the-counter (OTC) codeine was reported by approximately one-quarter of the sample (26%), not significantly different from 23% in 2013. Recent use was reported by 17%, comparable to 15% in 2013.
- Lifetime use of psilocybin/hallucinogenic mushrooms or magic mushrooms was reported by more than half of the sample (57%), a non-significant increase from 44% in 2013. Recent use was reported by a quarter of the sample (25%), again a non-significant increase from 17% in 2013.

- Consistent with 2013, the use of OTC stimulant products remained low with 10% reporting lifetime use, compared to 7% in 2013. Recent use was reported by 5%, the same proportion as reported in 2013.
- Steroid use also remained low with only one participant reporting lifetime and recent use.

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).

- The most common NPS ever used were synthetic cannabis (46%), DMT (33%), 2C-I (19%), 2CB and NBOMe (each 18%).
- The most commonly reported NPS recently used were DMT (22%), synthetic cannabis (13%), 2C-B (11%) and NBOMe (8%).
- There were no significant differences in the reported proportion of lifetime or recent use of any NPSs between 2013 and 2014.
- The most concerning NPS reported by KE was synthetic cannabis, particularly in regard to dependence, withdrawal and related mental health problems.
- KE and participant comments indicate that NBOMe and/or synthetic cannabis may be getting sold on the Perth market as LSD.

Health-related issues

Overdose, deaths and hospital admissions

- Since 2007, EDRS participants were asked about overdose on a stimulant drug and on a depressant drug.
- Just over one-third of participants (34%) reported having overdosed on a stimulant drug at some point in their lifetime, which did not significantly change from 2012 (39%).
- Recent stimulant overdose (in the past 12 months) was reported by 30% of the sample, comparable to 29% in 2013.
- Just more than one-tenth of participants (11%) reported having overdosed on a depressant drug at some point in their lifetime, which significantly increased from 30% in 2013.
- Recent depressant overdose (in the past 12 months) was reported by 6% of the sample, a significant decrease from 19% in 2013.
- Ecstasy was the most commonly implicated drug attributed to stimulant overdoses (63%) and alcohol was the most commonly implicated drug in depressant overdoses (67%).
- Hospital admissions in which amphetamine was the principal diagnosis appear to have increased on both state and national levels; rates for cocaine appear to have increased very slightly at the state level with a small increase at the national level; and rates for cannabis appear to have increased at both the national and state levels.

Service usage

- Access to medical or health services in relation to their drug use in the past six months was reported by only 9%.
- In the 2013/14 period, there were 84 calls to the Alcohol and Drug Information Service (ADIS) in which ecstasy was the primary drug of concern, compared

to 51 calls in 2012/13. While the number of calls remains low, this appears to be on an upward trend.
- In the 2013/14 period there were 2,969 calls to ADIS in which (meth)amphetamine was the primary drug of concern, compared to 2,816 in 2012/13.

Mental health

- The most commonly reported problem related to participant drug use was in the area of risk of injury (47%), followed by interference with school or work responsibilities (27%) and then social problems (21%). Recurrent drug-related legal problems were uncommon (7%).
- Alcohol, cannabis and ecstasy were the most commonly implicated substances for all drug-related problems (social, legal, risk and responsibility).
- Less than one-third (29%) of the current sample reported experiencing a mental health problem in the preceding six months, comparable to 36% in 2013. Consistent with previous years, anxiety (72%) and depression (62%) were those most commonly reported issues. However, of those experiencing a mental health problem, significantly fewer participants reported experiencing depression in the last six months in the present sample (62%) compared to 2013 (78%).
- Participants completed the Kessler Psychological Distress Scale (K10). The most common category participants fell into was moderate distress (37%), followed by low to no distress (34%), high distress (25%), and then very high distress (4%). Overall, there were no differences in the proportion of participants in each category between 2013 and 2014.

Risk behaviours

- Only 2% of the sample had injected a drug at some point in their lifetime, a significant decrease from 10% in 2013. Recent injecting behaviour was reported by one participant (1%), comparable to 5% in 2013.
- Steroids were reported as the last drug injected.
- Penetrative sex with a casual partner in the six months preceding the interview was reported by two-thirds of the sample (66%), comparable to 59% in 2013. Causal sex occurred most commonly with two different people during the six-month period.
- Of those who had engaged in casual sex, most (89%) had done so while under the influence of alcohol and/or other drugs. This equates to 58% of the overall sample, comparable to 51% in 2013. The most commonly implicated drugs used were alcohol (86%), ecstasy (43%), cannabis (36%) and pharmaceutical stimulants (10%). Of these participants, just more than half (52%) reported that they did not use a protective barrier with their last casual partner. The main reason was that they were using the contraceptive pill (32%).
- Bingeing on ERD in the previous six months was reported by more than one-third of the sample (37%), comparable to 38% in 2013. The most commonly reported drugs implicated in bingeing were ecstasy and alcohol (>5 standard drinks) (each 73%), tobacco (62%), and cannabis and pharmaceutical stimulants (each 35%).
- Participants completed the Alcohol Use Disorders Identification Test (AUDIT). The majority of the group (87%) fell in the hazardous or harmful drinking range, comparable to 85% in 2013.

- In 2014, 20% of the sample scored high enough on the Severity of Dependence Scale (SDS) to be considered dependent on ecstasy, which did not significantly change from 13% in 2013.

Criminal and police activity

- Involvement in any criminal activity was reported by two-fifths of the current sample (40%), which did not significantly change from 42% in 2013.
- The most commonly reported crime was drug dealing (33%).
- Of those participants who reported engaging in criminal activity in the past month, 11% reported property crime, a significant decrease from 25% in 2013. This result was unaffected by controlling for the changes between years in the proportion of injecting drug users in the samples, suggesting that this was not the reason for the decrease in reported property crime. The upward trend in property crime seen in WA EDRS samples in previous years appears to have ended.
- Of the current sample, 12% had been arrested in the preceding 12 months, compared to 13% in 2013. Alcohol and driving was the most commonly reported cause of arrest.
- According to police statistics, both provider and consumer arrests increased in this reporting period, with a total of 10,250 in 2011/12 and 11,125 in 2012/13. With the exception of cocaine and cannabis, all drug classes also increased. The most notable increase in drug class for which the person was arrested was amphetamine-type stimulants (ATS), but the most commonly implicated drug for both arrest types was cannabis.
- According to police statistics, there were 136 clandestine laboratories detected during 2012/13, compared with 160 the previous year. The majority were manufacturing ATS.
- A KE from law enforcement reported that there was a downturn in the number of methamphetamine clan labs being detected in Perth because manufacturers were increasingly able to circumvent police detection methods.

Special topics of interest

- Fourteen percent of the sample reported ever having purchased a drug online. Almost a tenth of the sample (9%) reported purchasing a drug online in the past year.
- The majority of the 14 participants who had ever purchased drugs online obtained them from the online marketplace Silk Road (77%). The vast majority of purchases made within the last year were also from Silk Road (67%).
- Of participants who purchased a drug online in the past year, ecstasy was the most common (78%), followed by LSD (44%) and then cannabis and cocaine (each 22%).
- Of participants who purchased on NPS online in the past year, NBOMe was the most common (11%).
- The vast majority of participants (98%) reported that making NPS illegal would not stop them using these drugs in the future.
- DMT was the most common NPS used on the last occasion (27%). This was followed by 2C-series drugs (22%) and NBOMe (14%).
- Overall, participants who had ever used on NPS rated value for money as the most influential factor in precipitating the last occasion of use.

Implications

The WA arm of the EDRS aims ultimately to monitor trends in the Perth ERD markets and investigate harms associated with ERD use. The 2014 WA EDRS revealed ongoing fluctuations in drug markets and signs of drug-related harms which are discussed below.

Drug use trends

Over the 2011/12 and 2012/13 EDRS data collection periods, there was growing evidence that the suspected declines experienced in the WA ecstasy market in the 2010/11 period were coming to an end. The data from the 2014 EDRS appears to confirm that the WA ecstasy market has likely recovered from this decline. The EDRS data from 2012 and 2013 suggested that the initial resurgence in the market was attributable to increases in the use of non-pill forms of ecstasy; capsules, powder and crystal. While the use of capsule and powder forms of ecstasy have remained stable in 2014, there is a continuing upward trend in the use of crystal ecstasy. It will be interesting to see if this trend continues in the future.

The 2013 EDRS identified a number of further drug use trends to be examined into the future. The 2013 EDRS revealed increasing reports of recent cannabis use. Rather than suggesting a continued upward trend in recent cannabis use, the 2014 EDRS data suggest a return to proportions of recent cannabis use seen prior to the brief peak in 2013. Data from the 2013 EDRS further revealed decreases in the reporting of methamphetamine powder and crystal use within the sample. While no further decreases were seen in the present sample, the lower proportions of lifetime and recent use seen in 2013 have remained stable in 2014. Increasing of 2C-series drug use was also seen in the 2013 EDRS; these proportions have again remained stable in 2014. For the first time in 2014, EDRS participants were asked about their use of the 2C-series drug NBOMe, which was identified as fourth most commonly used NPS in the present sample. It will be of interest to examine trends in reports of NBOMe use in future EDRS samples. Finally, the 2013 findings included anecdotal reports of NBOMe being sold on the market as LSD. These anecdotal reports have continued into 2014.

There are a number of additional drug trends findings in the 2014 EDRS which will be looked at with interest in 2015 and beyond to see whether they continue. These include: (1) continued indications of the recovery of the WA ecstasy market; (2) increasing reports of crystal ecstasy use; (3) decreasing reports of injecting drug use; (4) increasing reports of pharmaceutical stimulant use; (5) increasing reports of LSD use over time; and (6) continued anecdotal reports that NBOMe and/or other NPS are being sold on the market as LSD.

Harms

The high level of alcohol use among the sample continues to be of concern. The majority of the sample (87%) obtained AUDIT scores that indicated hazardous and harmful use of alcohol. Additionally, just less than half of the sample (48%) consumed alcohol on a more than weekly basis. Alcohol was also the main drug implicated in depressant overdoses. These findings are consistent with previous years and suggest that harm reduction efforts targeting REU should continue to focus on risky alcohol use.

Alcohol use in combination with other drug use also continues to present a concern. Among the current sample, the use of stimulant drugs concurrently with alcohol was common. The majority of the sample (85%) reported using alcohol with ecstasy last time they used it. A further indication of concurrent alcohol and stimulant drug use is that depressant drugs were implicated in stimulant overdoses. This finding has implications for harm-reduction efforts targeting the concurrent use of alcohol and stimulants like ecstasy, pharmaceutical stimulants and energy drinks. Interestingly, there were decreasing reports of depressant overdoses in 2014. The findings from the 2014 EDRS also reveal decreasing reports of the use of stimulant drugs in combination with depressant drugs at the time of a depressant overdose compared to previous years. These results may suggest a decrease in depressant overdose related harm amongst REU; it will be of interest to see whether this trend continues with future EDRS samples. A decrease in harms related to depressant overdose presents an important window of opportunity for interventions with REU to be used to reinforce any increases in harm-reduction behaviour.

Increasing reports of 2C-series drug use was an issue of concern arising from the 2013 EDRS findings. While the proportion of 2C-series drug use has not increased in the present sample, rates of reported use have remained stable into 2014 and thus continue to be a concern, as is the finding that NBOMe is a relatively commonly used NPS. Recently, 2C-series drugs, particularly NBOMe, have sparked widespread concern in Australia and internationally due to their link to a number of deaths. The use of this class of drugs is concerning because: (1) there is a lack of scientific literature examining the short and long-term effects of these drugs, and (2) this drug series comprises several different drugs with varying potency, and if users are unaware of this it may lead to misuse. Mirroring the 2013 results, in 2014 there were anecdotal reports by KE that 2C-series drugs may be continuing to be sold as LSD in the Perth market. As posited in light of the 2013 results, there are various reasons why this may occur, including: (1) 2C drugs are easy to obtain online; (2) 2C drugs can be purchased cheaply online (for as little as $1.50 per tab); (3) 2C drugs are available in tab/blotter form (i.e. may appear to look like LSD); and (4) both LSD and 2C drugs have psychedelic effects. Several findings from the 2014 EDRS lend support to the notion that this behaviour is continuing to occur in the Perth market: (1) Of all NPS purchased online, NBOMe was the most common; (2) KE reports that NBOMe is commonly being purchased online; (3) KE reports of increasing use of synthetic LSD that users cannot identify; and (4) reports of recent LSD use were at the highest levels seen since the beginning of EDRS data collection in 2003. The sale of 2C-series drugs as LSD presents significant ongoing concern; 2C-series drugs pose a greater risk of acute harm than LSD due to high potency at low doses, as well as sympathomimetic (i.e. stimulant type) effects which can cause cardiovascular complications (Caldicott, Bright & Barratt, 2013). While it is not possible to determine whether these are behaviours are actually occurring in Perth, it is an issue that has several harm-reduction implications. It is important that service providers and emergency services that are managing drug use presentations involving LSD consider the diagnosis of an inadvertent 2C-type drug overdose, which mandates a higher level of care than what might be otherwise assumed is needed (Caldicott, Bright & Barratt, 2013). Harm-reduction initiatives targeting REU should also seek to increase awareness of the presence of 2C-series drugs in the Perth market, the fact that these drugs may be sold as something else, and the risk of acute harm associated with 2C-series drug use. Finally, ongoing monitoring of the use and sale of these drugs is needed, as well as further investigation of online purchasing patterns.

Increasing illicit use of pharmaceutical stimulants among REU is a further concern arising from the 2014 WA EDRS data. The current sample reported the highest proportions of both lifetime and recent pharmaceutical stimulant use since the

beginning of the WA EDRS in 2003. The harms associated with recreational use of pharmaceutical stimulants remain largely unknown (Kaye & Darke, 2011). However, there is some evidence that pharmaceutical stimulants may facilitate heavy drinking by masking the effects of alcohol intoxication. This increases the risk of acute alcohol-related harms, such as alcohol toxicity or driving while intoxicated (Green & Moore, 2009). Further, both ecstasy and pharmaceutical stimulants increase serotonergic activity in the central nervous system. 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 the 2014 WA EDRS, both alcohol and pharmaceutical stimulants were commonly used with ecstasy on the last occasion of use, and ecstasy, alcohol and pharmaceutical stimulants were commonly implicated in binges. Additionally, alcohol, pharmaceutical stimulants and ecstasy were commonly cited as drugs implicated in stimulant overdose. The 2014 WA EDRS findings suggest that not only is the use of pharmaceutical stimulants increasing among REU, but that these drugs are likely to be commonly used in combination with others, particularly ecstasy and alcohol. Harm-reduction interventions with REU should consider targeting pharmaceutical stimulant use, with particular attention to concomitant use of alcohol and ecstasy.

Synthetic cannabis use amongst REU is an issue of concern. Several KE reported synthetic cannabis use to be one of the most problematic drug-related issues for them to manage currently. A number of KE also expressed concern regarding synthetic cannabis dependence, with anecdotal reports that dependent users may experience a potentially serious withdrawal syndrome. In the 2014 WA EDRS, the proportion of synthetic cannabis use did not increase in the compared to 2013. However, in the current sample synthetic cannabis remained the most commonly reported NPS that participants had used in their lifetime (46%) and the second most commonly reported NPS used recently (13%). Consistent with KE comments, extant literature has documented a large number of adverse effects associated with synthetic cannabis intoxication, including anxiety, agitation, seizures, chest pain and psychosis (Seely et al., 2012). Again consistent with KE comments, case studies have documented that tolerance to synthetic cannabis may develop rapidly, and is associated with a withdrawal syndrome characterised by anxiety, muscle aches, profuse sweating, increased blood pressure and heart rate, chills and appetite loss. Withdrawal may require medical intervention, and is typically more severe than cannabis withdrawal, given the potency of synthetic cannabis and the potential that it contains amphetamine-like substances (Nacca et al., 2013; Zimmerman et al., 2009). There is evidence that adverse effects associated with synthetic cannabis are commonly experienced by users and occur more frequently among younger users (18 to 25 years) than those 26 years and older. Adverse effects may also be more likely when alcohol and synthetic cannabis are used concurrently (Barrat, Cakic, & Lenton, 2013). REU/RPU samples have consistently comprised young people across EDRS data collection years, with a mean age of 20.7 years in the current sample. Educational harm-reduction interventions targeting REU are likely to therefore be especially relevant in regard to the potential for adverse physical and psychological effects, dependence and withdrawal, and risks associated with concurrent use of synthetic cannabis and alcohol.

Sexual risk behaviour among REU also continues to be an issue of concern. In the 2014 WA EDRS, most participants had engaged in casual sexual behaviour in the preceding six months (66%), the majority of whom had also engaged in casual sexual behaviour while under the influence of alcohol or other drugs (89%). Of those participants who had engaged in casual sexual behaviour in the preceding six

months, a sizeable proportion had not used a protective barrier on the last occasion while sober (42%) and while under the influence of drugs (47%). For both casual sex while under the influence of drugs and while sober, the most commonly reported reason for not using a protective barrier was that they were using the contraceptive pill. These findings suggest that a sizeable proportion of REU are likely to be at risk of contracting sexually transmitted infections (STIs) both while under while under the influence of drugs and while sober. Although only one participant reported being diagnosed with an STI within the last 12 months, these findings are of additional concern given that only 43% of the sample reported undergoing STI testing in the preceding 12 months. Educational harm-reduction efforts with REU should seek to increase awareness of the importance of protective barriers during sexual encounters for preventing STIs in addition to pregnancy.

Implications related to changes in methodology

Considerable difficulties were experienced during the 2011 WA EDRS participant recruitment process which were believed to be a result of a decline in the perceived potency and availability of ecstasy. These recruitment difficulties suggested that a trend away from ecstasy could have been occurring, and it was therefore proposed that changes to the WA EDRS methodology be considered in future years to account for this trend. As a result, in 2012 the EDRS selection criteria were expanded in WA to include both REU and RPU. These methodological modifications were subject to change according to annual review of the Perth ecstasy market. Ecstasy data and user perceptions from both the 2012 and 2013 WA EDRS showed preliminary indications that both potency and availability may have seen somewhat of a resurgence in WA. Recruitment difficulties were not experienced in the current data collection period and all 100 participants were REU. Further, data from the present sample suggests that the Perth market has recovered from the decline in ecstasy purity and availability first seen in 2011. It appears that the expanded 2012 selection criteria will likely not be required in the 2015 EDRS data collection period. However, any future changes in the Perth ecstasy market will prompt consideration of whether the 2012 selection criteria changes should be reinstated.

1. INTRODUCTION

The Ecstasy and Related Drugs Reporting System (EDRS) is an ongoing project funded by the Australian Government Department of Health (AGDH) and modelled upon the more established Illicit Drugs Reporting System (IDRS). As the focus of the IDRS was upon injecting drug users, it did not directly acknowledge the distinct population regularly using ecstasy and related drugs. Consequently, in 2000, the National Drug Law Enforcement Research Fund (NDLERF) funded a two-year, two-state trial of the feasibility of monitoring emerging trends in the markets for ecstasy and related drugs (ERD) using the extant IDRS methodology. In 2014, the EDRS Project is 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 3,4-methylenedioxymethamphetamine – MDMA (ecstasy), amphetamines, cocaine, lysergic acid diethylamide (LSD), ketamine, 3,4-methylenedioxyamphetamine (MDA) and gamma-hydroxy-butyrate (GHB). This marked the beginning of the Party Drugs Initiative (PDI), which became a national survey in 2003 and was re-named the EDRS in 2006.

The current report presents the findings of the 12th year of data collection for the PDI/EDRS in Western Australia (WA). Like the IDRS, results are based on three data sources: interviews with current illicit drug users – in this case regular ecstasy users(REU); key expert (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 2014 were to:

1. Describe the characteristics of a sample of current REU 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, financial, social and legal harms;
5. Compare key findings of this study with those reported in previous years (2005-2013); 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 REU comprised 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 that has existed for more than two decades. According to the AIHW, 2010 National Drug Strategy Household Survey (NDSHS), 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, 2.6% 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 Australian Crime Commission (ACC) (2010). This declining purity provided potential for an expanding market of new psychoactive substances (NPS), as existing ecstasy users seek 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 regular psychostimulant users (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. The expanded criteria were continued until 2013. In 2014, the WA jurisdiction did not experience challenges in recruiting adequate REU, providing evidence of a possible resurgence in the ecstasy market. With the aim of maintain maintaining standardised sampling and statistical methodology across PDI/EDRS years, the 2014 sample did not include RPU, comprising solely REU.

2.1.1. Recruitment

For the 2014 WA EDRS study, 100 REU 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), which

included advertisements in entertainment street press; flyers distributed at cafes, music stores, clothing stores and universities; dance scene related websites and online forums; and participant snowballing techniques as described by Barnard (1995). For the past three 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;
2. The study was advertised on the Facebook sites of entertainment street press, as well as in print magazines; and
3. A link was sent out through the Curtin University Health Sciences Faculty Twitter and Facebook accounts, and also advertised on Curtin University homepages.

Ethics approval was granted from the Curtin University Human Research Ethics Committee (HR36/2011) with a stipulation that interviews be conducted with participants aged 16 years or older.

2.1.2. Procedure

In 2014, 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 2014, 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 National Drug and Alcohol Research Centre (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 routes of administration (ROA); physical and psychological side effects of ecstasy; other ecstasy-related problems,

i.e. relationship, legal, risk, or responsibility problems; 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 REU 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. Relevant variables were controlled for using SPSS Weight Cases. Differences in the spread of frequencies across multiple responses were analysed using Pearson's Chi Square tests. Qualitative data collected from REU 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. Seventeen KE from areas of law enforcement, health, and chemical analysis participated in the 2014 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 the Alcohol and Drug Information Service (ADIS).

RESULTS

2.4. Overview of the REU sample

Interviews were conducted with 100 REU in the Perth metropolitan area between April and June 2014. Table 1 presents key demographic data for the current and previous 10 years of samples of REU/RPU recruited in WA.

The present sample had a mean age of 20.7 years (median 20, range 17-33), comprising 69 males and 31 females. The mean age of participants did not significantly differ from 2013. In the 2013 sample, the mean age of participants (20.8 years) was significantly lower than 2012 (23.7 years). The mean age of participants in the current sample remained at this relatively younger age, unchanged from 2013. The age of WA EDRS samples appears to have decreased in recent years. The vast majority of participants (98%) identified as coming from an English speaking background and born in Australia (81%). None of the participants identified as Aboriginal or Torres Strait Islander. The mean number of completed years of high school education was 11.9 (range 10-12), with 95% of the sample completing high school. Twenty-nine per cent of participants had a tertiary qualification; 12% held university degree and 17% had a trade or technical qualification.

The majority of the participants identified as heterosexual (93%) and almost two-thirds (62%) reported their current relationship status as single. Most participants (73%) reported residing in their parents'/family home, followed by rented house/flat (18%). The median reported income was $590 per week (range $20-$4,230).

While the overall demographic characteristics of the 2014 sample were very similar to 2013, there were two significant differences between the groups. In the first instance, 39% of the current sample reported their employment status as 'work and study', a significant increase from 22% in 2013 (CI=0.04 to 0.29). Secondly, in the 2013 sample 29% of participants reported working part time; this significantly decreased to 16% in the present sample (CI=-0.01 to -0.24).

Table 1: Demographic characteristics of WA REU/RPU samples, 2005-2014

	2005 N=100	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**
Mean age (years)	22.7	24.7	26.4	22.9	23.1	23.4	26.8	23.7	20.8	**20.7**
Male (%)	58	60	55	48	65	48	68	60	63	**69**
English speaking background (%)	99	95	95	98	97	99	96	97	96	**98**
ATSI (%)	3	2	1	0	2	4	4	2	2	**0**
Heterosexual (%)	90	86	88	97	84	86	100	96	90	**93**
Mean number school years	11.5	11.5	11.5	11.8	11.5	11.7	11.4	11.6	11.6	**11.9**
Tertiary qualifications (%)	57	51	52	59	46	48	36	67	32	**29**
Full-time students (%)	14	19	3	3	13	8	7	4	5	**4**
Employed full-time (%)	33	52	24	55	22	31	14	28	16	**23**
Employed part-time (%)	35	13	38	12	23	29	21	22	29	**16***
Both studying and employed	-	-	-	24	27	17	18	21	22	**39***
Unemployed (%)	15	14	25	5	15	13	25	21	20	**16**
Mean income per week	-	-	-	-	$425	$467	$471	$634	$524	**$590**
Current drug treatment (%)	6	5	8	3	5	3	7	3	3	**0**

Source: WA EDRS REU/RPU interviews, 2005-2014

*Indicates significant changes from the 2013 results according to 95%CI and *p*=0.05

3. CONSUMPTION PATTERN RESULTS

3.1. 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. Consistent with 2013, the median number of drug types participants had used in their lifetime was 13 (range 4-42) and the median number they had used recently (i.e. in the past six months) was 6.5 (range 4-13). In keeping with previous years, the majority of the sample reported recent use of alcohol (98%), cannabis (86%) and tobacco (77%). In 2014, the number of participants reporting that they had ever injected any drug significantly decreased to 2%, compared with 10% in 2013. While pharmaceutical stimulant use has generally remained high across years, recent use significantly increased from 64% in 2013 to 81% in 2014. A more thorough analysis of each drug class can be found in later sections of this report.

Table 2 presents rates of lifetime and recent use of a variety of drugs across years the last 10 years of data collection. 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 2013, there were some significant differences in the 2014 sample compared to the previous year's findings. These were:

- A significant increase in the proportion reporting lifetime use of ecstasy crystal;
- A significant increase in the proportion reporting recent use of ecstasy crystal;
- A significant increase in the proportion reporting lifetime use of pharmaceutical stimulants;
- A significant increase in the proportion reporting recent use of pharmaceutical stimulants;
- A significant decrease in the proportion reporting lifetime injecting behaviours;
- A significant decrease in the proportion reporting lifetime use of antidepressants; and
- A significant decrease in the proportion reporting recent use of antidepressants. However, these declines appear to be attributable to a decline in the proportion of injecting drug users in the EDRS samples from 2013 to 2014.

Table 2: Lifetime and recent polydrug use of WA REU/ RPU samples, 2005-2014

	2005 N=100	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**
Ever inject any drug (%)	22	20	27	10	11	10	36	10	10	**2***
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	100	99	**98**
Ecstasy powder										
ever used (%)	43	29	23	24	19	18	29	42	32	**27**
used last 6 months (%)	27	9	11	9	10	6	7	26	25	**20**
Ecstasy capsules										
ever used (%)	-	-	-	47	42	41	61	58	62	**61**
used last 6 months (%)	-	-	-	28	15	14	11	32	48	**51**
Ecstasy crystals										
ever used (%)	-	-	-	-	-	-	-	-	46	**67***
used last 6 months (%)	-	-	-	-	-	-	-	-	34	**58***
Alcohol										
ever used (%)	99	100	97	100	100	100	100	100	100	**100**
used last 6 months (%)	98	99	92	98	99	98	93	96	96	**98**
Cannabis										
ever used (%)	99	100	96	100	99	99	100	99	98	**98**
used last 6 months (%)	83	86	80	85	85	81	86	77	92	**86**
Tobacco										
ever used (%)	86	97	79	90	92	84	89	96	88	**91**
used last 6 months (%)	72	74	52	69	76	67	89	67	75	**77**
Methamphetamine powder (speed)										
ever used (%)	94	87	72	72	63	60	67	62	36	**36**
used last 6 months (%)	85	65	46	38	37	38	44	27	17	**19**
Methamphetamine base (base)										
ever used (%)	59	56	22	22	13	8	36	8	9	**3**
used last 6 months (%)	38	32	10	5	3	4	11	1	0	**0**
Crystal methamphetamine (crystal)										
ever used (%)	88	89	69	62	41	40	64	58	32	**24**
used last 6 months(%)	69	77	52	36	20	22	46	33	22	**17**

Source: WA EDRS REU/RPU interviews, 2003-2013

*Indicates significant changes from the 2012 results according to 95%CI and p=0.05

Table 2: Lifetime and recent polydrug use of WA REU/RPU samples, 2005-2014 (continued)

	2005 N=100	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)**
Pharmaceutical stimulants										
ever used (%)	89	92	71#	85#	82#	83#	89#	93#	77#	**91#***
used last 6 months (%)	74	60	53#	53#	60#	58#	68#	64#	64#	**81#***
Cocaine										
ever used (%)	57	55	56	66	52	51	82	71*	54	**56**
used last 6 months (%)	35	29	27	40	24	26	32	31	34	**30**
LSD										
ever used (%)	71	67	49	47	55	48	71	57	66	**67**
used last 6 months (%)	35	25	23	21	31	35	36	33	41	**45**
MDA										
ever used (%)	19	6	22	16	9	11	25	17	18	**19**
used last 6 months (%)	11	0	3	5	2	5	14	4	12	**13**
Ketamine										
ever used (%)	25	14	22	21	18	14	18	18	20	**25**
used last 6 months (%)	11	4	2	3	6	4	0	3	7	**11**
GHB										
ever used (%)	10	5	8	7	7	3	14	4	9	**4**
used last 6 months (%)	3	2	0	2	2	0	0	1	3	**3**
Amyl nitrate										
ever used (%)	46	34	27	21	20	20	29	24	14	**11**
used last 6 months (%)	17	8	7	3	6	5	7	10	7	**4**
Nitrous oxide										
ever used (%)	63	57	46	48	39	39	50	53	46	**43**
used last 6 months (%)	34	23	20	21	13	16	18	26	32	**32**
Mushrooms										
ever used (%)	53	53	46	45	50	43	79	70	44*	**57**
used last 6 months (%)	14	13	14	10	15	12	11	26	17	**25**
Benzodiazepines										
ever used (%)	49	57	48#	36#	41#	44#	61#	56#	55#	**52#**
used last 6 months (%)	39	32	37#	24#	22#	28#	39#	25#	33#	**35#**
Anti-depressants										
ever used (%)	32	29	26#	17#	21#	24#	29#	29#	31#	**14#***
used last 6 months (%)	13	14	13#	9#	6#	10#	4#	8#	18#	**6#***

Source: WA EDRS REU/RPU interviews, 2005-2014

includes licit and illicit use

*Indicates significant changes from the 2013 results according to 95%CI and p=0.05

Table 2: Lifetime and recent polydrug use of WA REU/RPU samples, 2005-2014 (continued)

	2005 N=100	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**
Heroin										
ever used (%)	15	10	16	3	6	4	25	6	6	**4**
used last 6 months (%)	6	1	10	2	2	3	11	1	2	**0**
Methadone										
ever used (%)	8	4	12	5	4[#]	3[#]	7[#]	2[#]	1	**2**
used last 6 months (%)	3	2	6	0	1[#]	2[#]	0[#]	0[#]	0	**2**
Buprenorphine										
ever used (%)	5	3	10	3	2[#]	2[#]	11[#]	3[#]	3	**2**
used last 6 months (%)	2	1	4	2	-[#]	1[#]	11[#]	0[#]	0	**0**
Other opiates										
ever used (%)	41	24	35	24	20	27	43[#]	46[#]	29[#*]	**18[#]**
used last 6 months (%)	27	13	21	12	10	10	14[#]	20[#]	15[#]	**8[#]**
OTC codeine										
Ever used (%)	-	-	-	-	20	29	57	20	23	**26**
Used last 6 months (%)	-	-	-	-	15	22	43	14	15	**17**
Over-the-counter stimulants										
ever used (%)	-	-	-	-	19	36	43	8	7	**10**
used last 6 months (%)	-	-	-	-	8	26	11	2	5	**5**
Steroids										
ever used (%)	-	-	-	-	-	1	0	2	1	**1**
used last 6 months (%)	-	-	-	-	-	0	0	1	1	**1**

Source: WA EDRS REU/RPU interviews, 2005-2014

[#] includes licit and illicit use

*Indicates significant changes from the 2013 results according to 95%CI and p=0.05

3.2. Ecstasy use

'Ecstasy' is the term used in popular street culture for the drug MDMA, or 3, 4-methylendioxymethamphetamine. This drug is classed as an hallucinogenic amphetamine and commonly associated with what was previously termed the 'party drug' scene. Tablets 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 3,4-methylenedioxyamphetamine (MDA), para-methoxyamphetamine (PMA) or 3,4-methylenedioxyethylamphetamine (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.

3.2.1. Ecstasy use among REU

Presented in Table 3 are key findings regarding ecstasy use collected from samples recruited over the last 10 years in WA. Overall, patterns of ecstasy use have remained stable since 2013, with only a few significant differences.

In 2014, the average age at which ecstasy was first used was 17 years (range 14-23), with 30% of the sample nominating ecstasy as their drug of choice. These findings are consistent with 2013.

Just under a quarter of the sample (23%) reported weekly or more ecstasy use, which did not significantly differ from 25% in 2013. The median number of days ecstasy was used in the six-month period was 14, which is the same number as 2013. The average amount of ecstasy used on a typical occasion was 2.4 tablets, not significantly different from 2.2 in 2013. The average amount of ecstasy used during a 'heavy session' was 5 tablets (range 1-26), which is the same number reported in 2013.

As in previous years, ecstasy pills were the most commonly reported form of ecstasy used. Consistent with previous years, in 2014, 100% of the sample reported lifetime use of ecstasy pills, with 98% reporting recent use.

Of the non-pill forms of ecstasy, in 2013 the most commonly reported form used was ecstasy crystals, followed by ecstasy capsules and then ecstasy powder. In 2014, consistent with the 2013 findings, just over one-quarter (27%) of the sample reported lifetime use of ecstasy powder and one-fifth (20%) reported recent use. Lifetime use of ecstasy capsules was reported by approximately two-thirds of the sample (61%), with recent use being reported by approximately half of the sample (51%). Neither of these proportions significantly differed from the 2013 results. Contrary to this, lifetime use of ecstasy crystal increased significantly from 46% in 2013 to 67% in the current sample (CI=0.07 to 0.33). Recent use of ecstasy crystal also significantly increased from 34% in 2013 to 58% in 2014 (CI=0.10 to 0.36). These results suggest an upward trend in ecstasy crystal use.

Consistent with previous years, swallowing was reported as the main ROA and was reported by 91% of the sample. This was followed snorting (9%) and then shelving/shafting (1%). No participants reported injecting ecstasy in their lifetime.

Table 3: Patterns of ecstasy use, 2005-2014

	2005 N=100	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**
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	100	99	**98**
Ecstasy powder											
ever used (%)	43	29	23	24	19	18	29	54	42	32	**27**
used last 6 months (%)	27	9	11	9	10	6	7	34	26	25	**20**
Ecstasy capsules											
ever used (%)	-	-	-	47	42	41	61	63	58	62	**61**
used last 6 months (%)	-	-	-	28	15	14	11	42	32	48	**51**
Ecstasy crystals											
ever used (%)	-	-	-	-	-	-	-	-	**-**	46	**67***
used last 6 months (%)	-	-	-	-	-	-	-	-	**-**	34	**58***
Mean age first used ecstasy (years)	18	19	20	18	18	18	18	18	18	18	**17**

Source: WA EDRS REU/RPU interviews, 2005-2014

*Indicates significant changes from the 2013 results according to 95%CI and p=0.05

Table 3: Patterns of ecstasy use, 2005-2014 (continued)

	2005 N=100	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**
Mean days used ecstasy last 6 months[#]	20	21	16	13	12	14	17	13	11	20	**18**
Ecstasy 'favourite' drug (%)	51	41	46	38	42	45	26	39	36	38	**40**
Use ecstasy weekly or more (%)	30	35	27	10	29	14	29	14	12	30	**23**
Mean ecstasy tablets in typical session	1.7	2.0	1.8	2.1	2.5	2.1	2.3	2	1.8	2.2	**2.4**
Typically use >1 tablet (%)	68	70	54	74	86	81	75	77	66*	72	**71**
Recently binged on ecstasy or related drugs (%) ~	40	45	29	22	40	27	54	29	26	38	**37**

Source: WA EDRS REU/RPU interviews, 2005-2014

*Indicates significant changes from the 2013 results according to 95%CI and p=0.05

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

[#] inclusive of ecstasy pills, powder, capsules or crystals

Table 3: Patterns of ecstasy use, 2003-2014 (continued)

	2005 N=100	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**
Ever injected ecstasy[#] (%)	10	12	14	7	4	6	21	3	4	3	**4**
Main ROA of ecstasy in the last 6 months (%)											
Swallow	95	98	95	91	99	94	93	94	93	90	**91**
Snort	3	1	5	9	1	5	7	6	7	9	**8**
Inject	2	-	-	-	-	1	-	-	-	1	_
Shelve/shaft^	-	1	-	-	-	-	-	-	-	-	**1**
Typically use other drugs in conjunction with ecstasy[#] (%)	90	94	93	97	73	84	68	89	92	93	**89**
Typically use other drugs to 'come down' from ecstasy[#] (%)	86	86	86	90	54	39	54	42	39	49	**54**

Source: WA EDRS REU/RPU interviews, 2003-2013

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

[#] inclusive of ecstasy pills, powder, capsules or crystals

3.2.2. Use of other drugs with ecstasy and during comedown

As in previous years, in 2014 the majority of participants (89%) reported using other drugs in combination with ecstasy last time they used it. The most commonly reported drugs used with ecstasy were alcohol (85% overall; 20% less than five standard drinks and 65% more than five standard drinks), tobacco (52%), cannabis (47%), pharmaceutical stimulants (18%), energy drinks (11%), and crystal methamphetamine (8%).

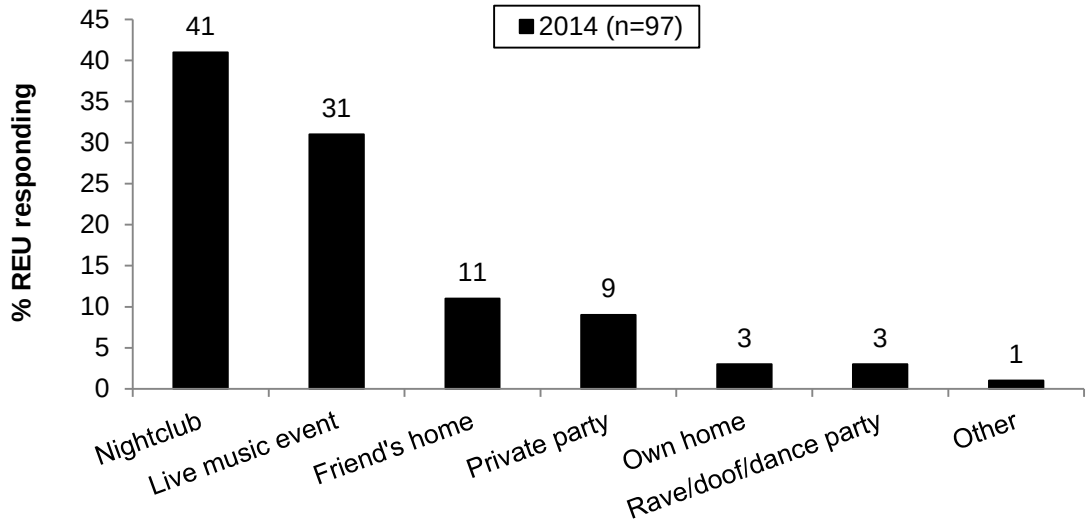
Consistent with the 2013 results, just over half (55%) of the sample reported the use of other drugs to help them come down from ecstasy the last time they used it. The most commonly reported drugs used to come down from ecstasy were cannabis (78%), alcohol (8% overall; 4% less than five standard drinks and 4% more than five standard drinks), benzodiazepines (7%), pharmaceutical stimulants, cocaine and tobacco (each 6%).

3.2.3. Locations of ecstasy use

As shown in Figure 1, aligned with the 2013 sample, the most cited location were participants spent the most time intoxicated was a nightclub (41%). While a live music event remained the second most reported public location of use, this significantly increased from 10% in 2013 to 31% in 2014 (CI=0.10 to 0.32). Consistent with the 2013 sample, a rave was the third most cited public location of use (3%).

Comparable to 2013, a friend's home was the most frequently cited private location (11%), followed by a private party (9%). Participants' own homes was the third most frequent location of private use, decreasing from 10% in 2013 to 3% in the current sample; however, this difference was not significant.

Figure 1: Location of most recent ecstasy use, 2014

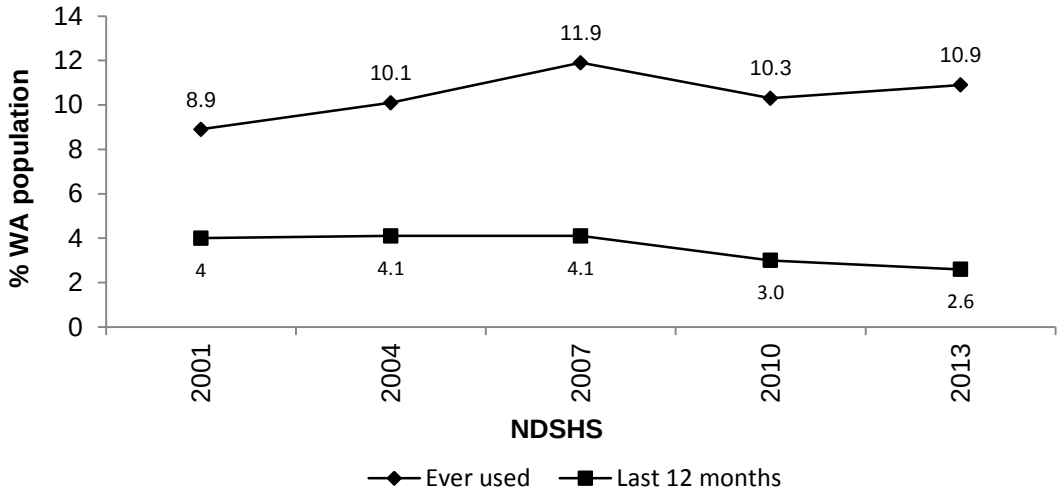


Source: WA EDRS REU interviews, 2014

3.2.4. 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 2, 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 2.6% of those aged 14 years and over. WA was the state with the fifth highest proportion of use of ecstasy in the last 12 months in those 14 years and over, behind the Northern Territory, Australian Capital Territory, Tasmania and South Australia (AIHW, 2014).

Figure 2: 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 data was not available at time of writing.

KE comments

- All KE agreed that ecstasy continued to be commonly used recreationally among young people in Perth and was associated with adverse effects.
- Most KE agreed that ecstasy was used by both genders and was most commonly used in the 18-25 year old age group.
- Most KE reported that ecstasy pills were the most common form of the drug, followed by powder, and that ecstasy was mainly swallowed. Contrary to the data collected from REU suggesting increasing use of crystal ecstasy, most KE reported that they had rarely or never heard of the use of crystal ecstasy.
- A KE, who worked in crowd control, stated that ecstasy use could because a problem when users annoy other patrons with 'random conversation' and users get a bit 'touchy feely'.

3.2.5. Summary of ecstasy consumption

- The proportion reporting ecstasy as their drug of choice was 30%, comparable to 38% in 2013.
- The mean age of first ecstasy use was approximately 17 years, which has been consistent across survey years.
- The median number of days ecstasy was used in the preceding six-month period was 14, the same number that was reported in 2013.
- On a typical occasion, the average number of pills used was 2.4, comparable to 2.2 pills in 2013.
- A quarter of the sample (23%) reported weekly or more ecstasy use, which did not significantly change from 25% in 2013.
- Consistent with previous years, swallowing was the main ROA (91%).
- The proportion reporting typically more than one tablet in a single session was 71%, unchanged from 72% in 2013.
- The use of ecstasy crystal appears to be on an upward trend with 67% of the sample reporting lifetime use, a significant increase from 46% in 2013. Recent use also significantly increased from 34% in 2013 to 58% in 2014.
- The vast majority of participants (89%) reported using other drugs in combination with ecstasy the last time they used it, most commonly alcohol, tobacco, cannabis and pharmaceutical stimulants.
- Just over half of the sample (55%) reported using other drugs to help them come down from ecstasy the last time they used it, most commonly cannabis, alcohol and benzodiazepines.
- The most commonly cited last location of ecstasy use was a nightclub (41%).
- KE commented that recreational ecstasy use was common among young people, as were associated adverse effects.
- Contrary to WA EDRS qualitative data from users, most KE were unaware of increases in the use of crystal ecstasy.

3.3. 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.

3.3.1. Methamphetamine powder

Table 4 presents patterns of use of methamphetamine powder, or speed, since 2005. Approximately one-third of the sample (36%) reported lifetime use of speed, the same proportion who reported it in 2013. Recent use was reported by 19%, which did not significantly change from 17% from 2013.

Among those who reported recent use of speed (n=19), it was used on an average of 15 days (median 1, range 1-180) over the preceding six-month period, which did not significantly change from the 2013 results. Further, consistent with 2013, the median amount of speed used on a typical occasion was 0.5 grams and the median amount used on the heaviest occasion was also 0.5 grams. In contrast to 2013 where swallowing was the most commonly reported ROA, in the present sample snorting was the most common, reported by 58% of recent users (n=11). Despite this, the number of recent users reporting snorting remained consistent with 2013. The next most common reported ROA was swallowing (37%, n=7) followed by smoking (21%, n=4) and injecting (4%, n=1).

Table 4: Patterns of methamphetamine powder (speed) use, 2005-2014

Speed	2005 N=100	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**
Ever used (%)	94	87	72	72	63	60	67	62	36	**36**
Used preceding six months (%)	85	65	46	38	37	38	44	27	17	**19**
Of those who had used										
Mean days used last 6 months	15	13	19	15	7	6	44	4	11	**15**
Median amount used (grams)										
Typical	0.5	0.35	0.1	0.4	1	0.5	0.5	0.25	1	**0.5**
(range)	(0.1-2)	(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	1	0.5	0.3	0.5	1	1.5	1	0.5	1	**0.5**
(range)	(0.1-6)	(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, 2005-2014
*Indicates significant changes from the 2014 results according to 95%CI and *p*=0.05

3.3.2. Methamphetamine base

In 2014, 3% of the sample reported lifetime use of methamphetamine base, a non-significant decrease from 9% in 2013. Given that no participants reported recent use, no further analyses were performed for methamphetamine base.

3.3.3. Crystal methamphetamine

As shown in Table 5, lifetime use of crystal methamphetamine was reported by 24% of the sample, a non-significant decrease from 32% in 2013. Recent use of crystal was reported by 17% of the sample in 2013, again a non-significant decrease from 22% in 2013. The proportion of lifetime use in the present sample (24%) significantly decreased from 58% in 2012 (CI=-0.20 to -0.46). The proportion of participants reporting recent use in 2014 (17%) also significantly decreased from the 33% reported in 2012 (CI=-0.04 to -0.04). These results suggest a possible downward trend in crystal methamphetamine use since 2012.

Of those who reported recent use of crystal (n=17), it was used on an average of 26 days in the preceding six months (median 3, range 1-180) a non-significant increase from 20 days (median 6, range 1-180) in 2013. The median amount of crystal used on a typical occasion was 0.5 points, and the median amount used on the heaviest occasion was one point. Consistent with 2013, the most commonly reported ROA remained as smoking (88%, n=15), followed by snorting (41%, n=7), swallowing (29%, n=5) and then injecting (6%, n=1).

Table 5: Patterns of crystal methamphetamine use, 2005-2014

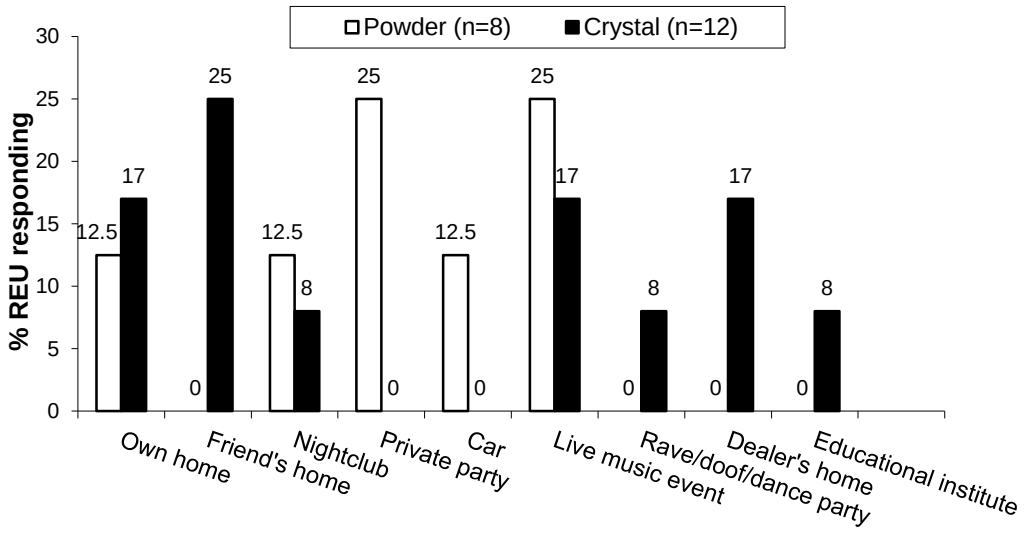
Crystal	2005 N=100	2006 N=100	2007 N=100	2008 N=58	2009 N=100	2010 N=100	2011 N=28	2012 REU n=65	2012 REU/RPU N=90	2013 N=100	**2014 N=100**
Ever used (%)	88	89	69	62	41	40	64	52	58	32	**24**
Used last six months (%)	69	77	52	36	20	22	46	29	33	22	**17**
Of those who had used											
Mean days used last 6 months	14.1	13.6	27.7	11.9	9.2	7.9	19.0	11.8	10.4	20	**26**
Median quantities used (points)											
Typical (range)	1 (0.1-40)	1 (0.5-10)	1 (0.1-5)	1 (0.1-3)	2 (0.25-5)	1 (0.1-4)	1 (0.5-2.5)	1 (0.2-7)	1 (0.2-7)	2 (0.5-6)	**1 (0.5-5)**
Heavy (range)	3 (0.25-40)	2 (0.5-40)	2 (0.2-5)	1 (0.1-8)	2 (0.25-8)	2 (0.4-8.5)	1 (0.5-2.5)	2 (0.2-14)	2 (0.2-14)	3 (0.5-10)	**1.5 (0.5-5)**

Source: WA EDRS REU/RPU interviews, 2005-2014
*Indicates significant changes from the 2013 results according to 95%CI and p=0.05

3.3.4. Locations of methamphetamine use

Participants who reported using methamphetamine in the last six months were asked the location where they spent the greatest amount of time under the influence on the last occasion of use. Figure 3 presents data for the location where the most time was spent under the influence of speed and crystal. For speed, the most commonly reported locations were a private party and live music event (each 25%, n=2). For crystal methamphetamine, the most commonly reported location was a friend's home (25%, n=3), followed by own home, dealer's home, and live music event (each 17%, n=2). Consistent with 2013, private settings tend to be more typically reported locations for methamphetamine use.

Figure 3: Location of most recent powder and crystal methamphetamine use, 2014



Source: WA EDRS REU interviews, 2014

3.3.5. Methamphetamine use in the general population

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

KE comments

- Most KE reported that methamphetamine was the main drug used by people they had encountered in their fields in the preceding six months.
- Most KE also reported that it was one of the main drugs, if not the main drug, they perceived to be most problematic at this point in time, and that it was readily available and of high purity currently.
- Most KE reported that crystal was the most common form of methamphetamine, and that it was most frequently smoked, but also snorted or injected.
- Most KE reported that crystal methamphetamine use was more prevalent in males than females and that users tended to be 35 years of age or older. Several KE reported that regular methamphetamine users are commonly unemployed and often live in public housing. One KE reported that methamphetamine users tended to be older than ecstasy users. Two additional KE reported that the gender split was becoming more even amongst users and that use was also increasing amongst people less than 35 years of age.
- Several KE reported that crystal methamphetamine users commonly experienced physical health problems, such as malnutrition. KE also reported that users commonly experience mental health and behavioural problems, including paranoia, agitation, drug-induced psychosis
- A KE who worked in crowd control reported that crystal methamphetamine users were occasionally aggressive or violent, but that more commonly they were seen bingeing and could be ejected from venues for begging for money and cigarettes. This KE added that users would commonly consume alcohol with methamphetamine, reporting that methamphetamine gave them 'superhuman drinking abilities'.
- KE from both health and law enforcement fields reported that prolonged use of crystal methamphetamine often precipitates criminal activity such as property crime and drug dealing.

3.3.6. Summary of methamphetamine consumption

Speed

- Approximately one-third (36%) had used speed in their lifetime, which is the same proportion that was reported in 2013. Recent use was reported by 19%, which did not significantly change from 17% in 2013.
- Speed was used on a median of one day over the preceding six months and snorting was the most common ROA reported (41%).
- The frequency and quantity of use was stable from 2013 to 2014.

Base

- Only 3% of the sample had used base in their lifetime and none (0%) had done so recently.
- No further analyses were performed due to the extremely small sample size.

Crystal

- Approximately one quarter (34%) had used crystal in their lifetime, a non-significant decline from 32% in 2013. Recent use was reported by 17% of the sample, a non-significant decline from 22% in 2013. There appears to be a downward trend in both lifetime and recent crystal methamphetamine use.
- Crystal was used on a median of three days over the preceding six months, and smoking was the most common ROA reported (88%), both comparable to 2013.
- The median amount used on a typical occasion was 0.5 points and on the heaviest occasion was one point.

- Speed was most commonly used at a private party and a live music event and crystal was most commonly used either at a friend's home or at participants' own homes.
- Many KE considered crystal methamphetamine use to be the most problematic drug at present.

3.4. Cocaine use

As presented in Table 6, just over half of the respondents (56%) in the present sample reported lifetime cocaine use, comparable to 54% in 2013. There was a brief increase in reported lifetime cocaine use in 2011 and 2012; however, the current data suggest that in 2014 lifetime use remains at the levels seen both before and after this peak. Recent cocaine use was reported at 30% in the current sample, unchanged from 34% in 2013.

Consistent with all samples since 2005, among recent cocaine users (n=30), cocaine was used on an average of five days (median 2, range 1-72), not significantly different from four days (median 1, range 1-48) in 2013. The median quantity reported for a typical occasion was 0.5 grams (range 0.1-4) and median quantity reported for the heaviest occasion was one gram (range 0.1-4.5). Comparable to 2013, snorting was the most commonly reported ROA (83%), followed by swallowing (27%), with no participants reported smoking, shelving/shafting or injecting.

In this sample, 4% of respondents nominated cocaine as their drug of choice, a non-significant change from 5% in 2013. Cocaine was the fourth most commonly reported drug of choice following ecstasy, cannabis and alcohol. Among participants who reported using other drugs the last time they used ecstasy, cocaine was reported in this context in only 1.1% of cases, not significantly different from 7.5% in 2013.

Table 6: Patterns of cocaine use, 2005-2014

Cocaine	2005 N=100	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**
Ever used (%)	57	55	56	66	52	49	82	71	54	**56**
Used last six months (%)	35	29	27	40	24	26	32	31	34	**30**
Of those who had used in preceding 6 months										
Mean days used last 6 months	3	2	6	3	11	11	4	4	4	**5**
Median quantities used (grams)										
Typical (range)	0.5 (0.1-1.8)	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)**
Heavy (range)	0.6 (0.1-6.5)	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)**

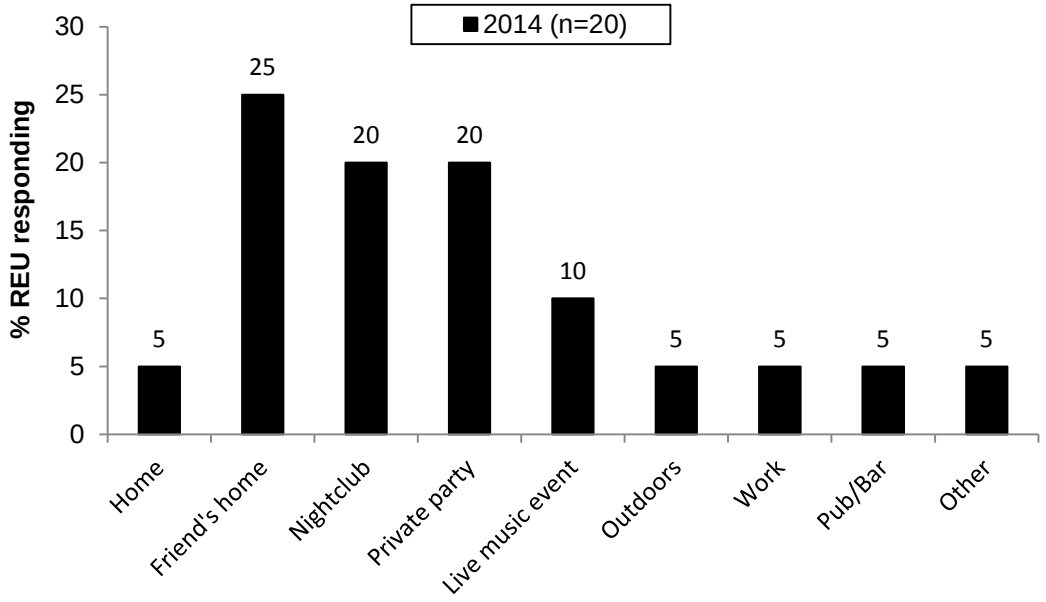
Source: WA EDRS REU/RPU interviews, 2005-2014

*Indicates significant changes from the 2013 results according to 95%CI and p=0.05

3.4.1. Locations of cocaine use

There were 20 participants who commented on the location where they spent the most time intoxicated last time they used cocaine. As presented in Figure 4, the most commonly reported location of last cocaine use was friend's home (26%, n=5), followed by a nightclub and private party (each 21%, n=4) and then live music event (11%, n=2). In 2013, private party was the most commonly reported location of last cocaine use (46%), followed by friend's home (23%) and live music event (15%).

Figure 4: Location of most recent cocaine use, 2014



Source: WA EDRS REU interviews, 2014

3.4.2. Cocaine use in the general population

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

Key expert comments

- All KE reported that they very rarely encounter cocaine use in their fields. Most KE reported that the reason for this was because cocaine was expensive and relatively difficult to obtain in Perth. One KE who worked in a referral service added that methamphetamines provide a longer lasting effect than cocaine and it was cheaper, so methamphetamine is preferred over cocaine.
- Two KE, who worked in law enforcement and drug analysis, reported that the current purity of cocaine was high.

3.4.3. Summary of cocaine consumption

- Approximately half (56%) reported lifetime use of cocaine, comparable to 54% in 2013. Approximately one-third (30%) reported recent use, which did not significantly change from 34% in 2013.
- Cocaine was used on a median of two days over the preceding six months.
- Snorting remained the most commonly reported ROA (83%).
- The frequency and quantities of cocaine use remained stable from 2013 to 2014.
- Consistent with previous years, KE reported that they believed cocaine use was generally rare due to the expensive market price and low availability in WA.

3.5. 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).

3.5.1. Ketamine use among REU

Presented in Table 7 are patterns of ketamine use for the period 2005-2014. In 2014, lifetime use of ketamine was reported by a quarter of the sample (25%), not significantly different from the 20% proportion reported in 2013. Recent use of ketamine has remained relatively low and stable across data collection years. In 2014, 11% reported recent use, comparable to 7% in 2013.

Other data pertaining to ketamine use needs to be considered in the light of the small number of participants able to provide information. Of those who reported recent use of ketamine in 2014 (n=11), it was used on an average of two days (median 1, range 1-6), comparable to three days (median 2, range 1-10) in 2013.

The median amount of ketamine used in a typical occasion in the preceding six months was four bumps (range 2-15), and on the heaviest occasion was 5.5 bumps (range 4-20). While quantities of ketamine were most commonly reported in 'bumps' by participants in 2014, several different quantities were reported across 2013 and 2014 (e.g., grams, lines, milligrams, points), making comparison between years difficult. Among recent users, swallowing was reported as a ROA for all users (100%, n=11), followed by snorting (8%, n=1) and injecting (8%, n=1). In 2014, the spread of responses across ROA and the proportions of responses within each route were not significantly different from 2013.

Table 7: Patterns of ketamine use, 2005-2014

	2005 N=100	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**
Ever used (%)	25	14	22	21	18	14	**0**	18	20	**25**
Used last six months (%)	11	4	2	3	6	4	**0**	3	7	**11**
Of those who had used in the preceding 6 months Mean days used last 6 months	3.0	2.5	2.5	2.5#	1.2	2.8	**-**	3.7	3	**2**
Median quantities used (bumps*)										
Typical (range)	2 (1-6)	4#	1#	0.5#	3 (1-5)	1.5 (1-2)	**-**	-	-	**4 (2-15)**
Heavy (range)	2 (1-12)	4#	1#	0.5#	3 (1-5)	2 (1-3)	**-**	-	-	**5.5 (4-20)**

Source: WA EDRS REU/RPU interviews 2003-2013

*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

KE comments

- Most KE reported that ketamine use was very rarely encountered in their fields.
- One KE, an alcohol and drug field researcher, reported that there had been reports within their field that ketamine was currently being cut with methamphetamine.

3.5.2. Summary of ketamine consumption

- Consistent with recent years, only a small proportion reported lifetime use of ketamine (25%) and an even smaller proportion reported recent use (11%).
- Ketamine was used on a median of one day over the preceding six months.
- Among recent users, the amount of ketamine used on a typical occasion was four bumps and on the heaviest occasion was 5.5 bumps.
- For those who had used recently, swallowing was the most commonly reported ROA.
- Consistent with previous years, most KE reported that ketamine use was very rarely encountered in their fields and that they did not believe its use was currently widespread in Perth.

3.6. 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).

3.6.1. GHB use among REU

Rates of lifetime and recent GHB use have remained consistently low since 2003. In 2014, only 4% of the sample reported lifetime use of GHB, a non-significant decrease from 9% in 2013. Recent use was reported at 3% in the current sample, which is the same proportion reported in 2013. Consistent with the 2013 findings, among participants reporting recent use, GHB was used on a median of two days (range 1-3), and swallowing was the only ROA reported. Given the very small samples of both lifetime and recent users in 2013 and 2014, 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.
- One KE, a clinical nurse specialist, reported that their patients were stating that they had bought GHB online.
- A KE who worked in outreach reported that there had been an increase in GHB use in the period. This was supported by reports from another KE, an alcohol and drug field researcher, that GHB was currently easy to obtain in Perth.

3.7. 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.

3.7.1. LSD use among REU

As presented in Table 8, lifetime use of LSD was reported by approximately two-thirds of the current sample (67%), comparable to 66% in 2013. Recent use of LSD similarly did not significantly change from 2013, with 45% reporting use compared with 41% in 2013. Notably, however, the current sample reported the highest proportion of self-reported recent LSD use since the beginning of the EDRS in 2003.

Patterns of LSD use in the current sample were not significantly different from 2013. LSD was used on an average of four days (median 2, range 1-24) over the preceding six-month period. The median amount of LSD ‘tabs’ used on a typical occasion was two and on the heaviest occasion was five. As in previous years swallowing or ‘sublingual’ use were the only reported ROA.

In 2014, LSD was the fifth most commonly reported drug of choice, following ecstasy, cannabis, alcohol, and cocaine. It was nominated by 5% of the sample, a non-significant decrease from 9% in 2013. Of those who reported using other drugs in combination with ecstasy on the last occasion of use (n=93), LSD was reported in this context by 7% of (n=6) of the sampl e, a non-significant decrease from 7.5% in 2013.

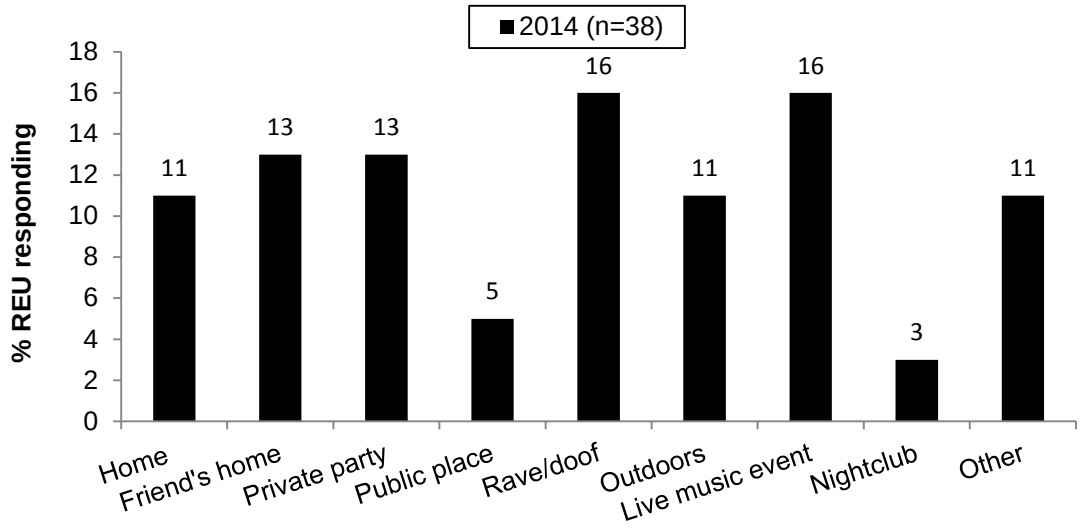
Table 8: Patterns of LSD use, 2005-2014

LSD	2005 N=100	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**
Ever used (%)	71	67	49	47	69	48	71	57	66	**67**
Used last six months (%)	35	25	23	21	31	35	36	33	41	**45**
Of those who had used in the preceding 6 months										
Mean days used last 6 months	5	3	5	8	6	5	6	5	6	**4**
Median quantities used (tabs)										
Typical (range)	1.3 (0.5-3)	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)	**2** **(-)**
Heavy (range	2.1 (0.5-9)	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)	**5** **(-)**

Source: WA EDRS REU/RPU interviews, 2005-2014

In 2014, 38 participants commented on the location where they spent the most time under the influence of LSD on the last occasion of use. A wide variety of locations were reported. As shown in Figure 5, a rave/doof/dance party and a live music event were the most commonly reported locations of last use (each 16%, n=6), followed by a private party and a friend's home (each 13%, n= 5). Other locations reported were a holiday house (8%, n=3) and camping (3%, n=1). Contrary to previous years of data collection, public settings were commonly reported than private settings in 2014.

Figure 5: Location of most recent LSD use, 2014



Source: WA EDRS REU interviews, 2014

KE comments

- Most KE reported that LSD use was not commonly encountered in their fields.
- Three KE from law enforcement and health fields reported that LSD was commonly being purchased online, via both the dark web marketplace and social media.
- Two KE, one who worked in drug analysis and another who worked in outreach, reported that substances that users were purchasing as LSD were in fact NBOMe. Another KE, a specialist clinical nurse, reported that she had seen patients in this period who had purchased and used what they believed to be LSD online, but that it was in fact synthetic cannabis.

3.7.2. Summary of LSD consumption

- Approximately two-thirds (67%) of the current sample reported LSD use in their lifetime and under half (45%) reported recent use. While there were no significant increases observed for LSD, the rate for recent use represents the highest recorded since WA data collection commenced in 2003.
- LSD was used on a median of two days over the preceding six months.
- LSD was taken orally by all participants, either sublingually or by swallowing.
- The most commonly reported locations of last LSD use were a rave/doof/dance party and a live music event.

3.8. Cannabis use

As shown in Table 9, consistent with previous years, nearly the entire sample (98%) reported lifetime use of cannabis. Recent use of cannabis was also reported by the majority of the sample (86%), a non-significant decrease from 92% in 2013. The 2013 sample produced the highest rate of recent cannabis use since the WA EDRS commenced in 2003. Both of these results were robust after controlling for sample differences in the proportion of participants who had ever injected any drug between 2013 and 2014. The decrease in recent cannabis use in the present sample suggests a possible return to the lower proportions of recent cannabis use seen prior to 2013.

Of those reporting recent use (n=86), cannabis was used on an average of 63 days (median 27.5, range 1-180) in the preceding six-month period (i.e. approximately twice per week), which did not significantly change from 65 days (median 27, range 1-180) in 2013. The proportion reporting daily use of cannabis was 18%, comparable to 17% in 2013. The most commonly reported ROA was smoking (93%, n=80), followed by inhaling (27%, n=23) and swallowing (21%, n=18).

Participants were asked how much cannabis they consumed during their last session. Of those who reported their use in ‘cones’ (n=47), a median of four cones (range 0.5-30) were consumed during a session. Of those who reported their use in ‘joints’ (n=34), a median of one joint (mean 1.8, range 0.25-5) was consumed during the session. There were no significant differences in the median amount participants reported using between 2013 and 2014.

Table 9: Patterns of cannabis use, 2005-2014

Cannabis	2005 N=100	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**
Ever used %	99	100	96	100	99	99	100	99	98	**98**
Used last six months %	83	86	80	85	85	81	86	77	92	**86**
Of those who had used in preceding 6 months										
Mean days used last 6 months	85	77	75	49	81	60	113	71	65	**63**

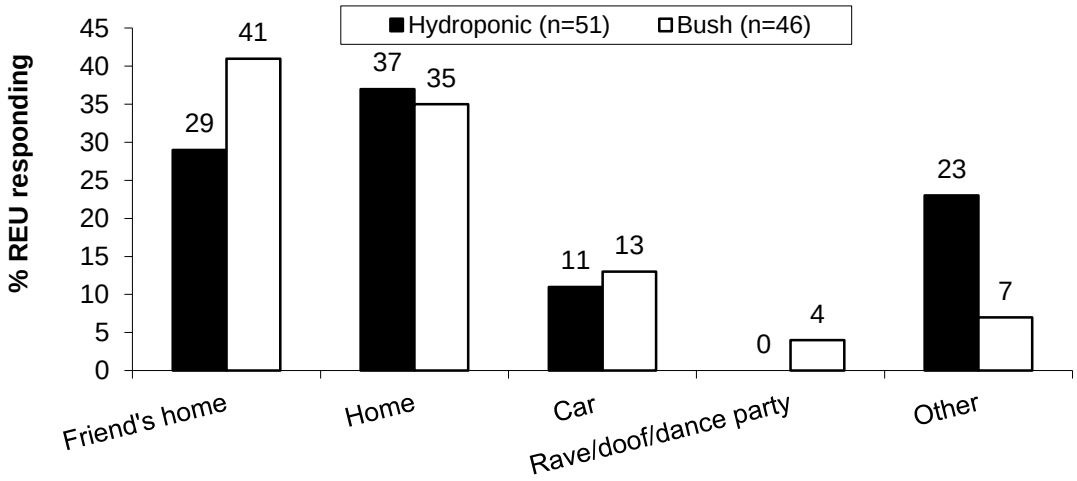
Source: WA EDRS REU/RPU interviews, 2005-2014

*Indicates significant changes from the 2013 results according to 95%CI and p=0.05

The median age of first cannabis use in the current sample was 15.5 years (range 10-20), not significantly different from 15 in 2013. Cannabis was the second most commonly reported drug of choice behind ecstasy, and was nominated by just over one-fifth of the sample (22%). Again comparable with 2013, of those participants who reported using other drugs with ecstasy (n=89), cannabis was reported in this context by 47% (n=42). Among those reporting the use of other drugs to come down from ecstasy (n=54), 79% (n=42) reported using cannabis in this context.

Participants were asked to report on the location where they spent the most time intoxicated last time they used cannabis. Consistent with the 2013 findings, the greatest proportion reported that the most time was spent at own home for hydroponic cannabis (37%,), comparable to 46% in 2013. For bush cannabis, the greatest proportion reported that the most time intoxicated was spent at a friend's home (41%), compared to 28% in 2013. There were no significant differences in either the spread of scores across locations, or the proportion of scores within each location between 2013 and 2014. Consistent with previous years, it is evident that cannabis is most typically used in private settings. A full breakdown of locations of cannabis use is presented in Figure 6.

Figure 6: Location of most recent cannabis use, 2014



Source: WA EDRS REU interviews, 2014

3.8.1. 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 with Queensland, behind the Northern Territory and Tasmania (AIHW, 2014).

KE comments

- KE reported that cannabis was very widely used across WA.
- Several KE reported that cannabis was one of the most problematic drugs in their fields at this time.
- KE reported that both hydro and bush forms of cannabis continue to be used, but that hydro was more commonly available and more commonly used.
- KE reported that cannabis was mainly smoked.
- Several KE reported that cannabis use commonly induced or exacerbated mental health problems.
- 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.

3.8.2. Summary of cannabis consumption

- Consistent with previous years, almost the entire sample (98%) reported lifetime use of cannabis.
- Also consistent with previous years, 86% reported recent use of cannabis .
- Cannabis was used on a median of 27.5 days (i.e. approximately once per week) over the preceding six-month period.
- The use of cannabis has remained relatively stable across survey years.
- KE reported that cannabis use continued to be one of the most problematic drug issues in their field, particularly in relation to mental health.

3.9. Other drugs used

3.9.1. Alcohol

Both lifetime (100%) and recent (98%) use of alcohol were reported by almost the entire sample, with similar proportions to all previous years (see Table 2). Consistent with previous years, the median age of first alcohol use was 14 years (range 11-26). Alcohol was used on a median of 24 days (range 1-180) in the preceding six months, which equates to approximately once a week. Just less than half of the sample (48%) reported drinking alcohol on more than 24 days (i.e. more than once a week) in the previous six months; this was consistent with previous years' data. Four participants reported drinking alcohol daily, not significantly different from three participants in 2013.

KE comments

- Most KE reported that alcohol use was by far the most widespread and problematic drug in WA. Several KE reported that they believed this was due to the drinking culture in WA and across Australia where alcohol is normalised.
- KE reported that alcohol was commonly used in combination with other drugs.
- A KE who worked clinical management of substance abuse reported that patients related to alcohol comprised 70% of the patient load and consumed the majority of time and resources at the service. This view was supported by another KE, a specialist clinical nurse who worked at in a hospital setting. This KE reported that most alcohol and drug cases were related to alcohol, and that these patients were commonly readmitted to hospital several times. She added that patients are commonly intoxicated with alcohol and are aggressive when they arrive at the service, and that suicidal ideation among these patients while they were intoxicated was common.
- One KE, a specialist clinical nurse, reported that chronic use of alcohol amongst patients at the service meant they often found it difficult to find or keep employment due to the cognitive and/or physical harms caused by alcohol use.
- A KE who worked in telephone counselling and referral reported that there was a high prevalence of fly-in-fly-out (FIFO) workers using alcohol excessively when they returned to Perth from work, and that this caused many relationship and/or family problems.
- A KE who worked in law enforcement reported that groups of teenagers commonly conceal spirits in soft drink bottles and consume this alcohol while wandering around the Perth city and Northbridge areas.

3.9.2. Tobacco

Rates of tobacco use among EDRS samples have been consistently high across survey years. In 2014, the majority (91%) reported tobacco use at some point in their lifetime; this did not significantly change from 88% in 2013. More than three-quarters of the current sample (77%) also reported recent use of tobacco; this also did not significantly change from 75% in 2013.

Consistent with previous years, the median age of first tobacco use was 16 (range 5-30). Among those that had used tobacco in the preceding six months, the median number of days used during this period was 72 (range 1-180) which did not significantly change from 96 days in 2013. Again comparable with the 2013 sample, just under two-fifths of those that had used tobacco in the last six months (36%, n=28) were daily smokers; almost one-third (28%) of the entire sample were daily smokers, aligned with the 29% reported in 2013.

3.9.3. MDA

MDA is part of the phenethylamine family and, like ecstasy, is classed as a stimulant hallucinogen. In 2014, lifetime use of MDA was reported by 19% of the sample, which was not significantly different to 2013 findings (18%). Recent use was reported by 13% of the current sample, which was again not significantly different to 2013 findings (12%).

Of those who had used recently (n=13), MDA was used on a median of one day (range 1-6) during this period, consistent with the 2013 findings. The median amount of capsules used on a typical occasion was one (range 1-2) and on the heaviest occasion was two capsules (range 1-3), again consistent with the 2013 results. The majority of participants (85%, n=11) reported swallowing as a ROA in the preceding six months. A further 15% (n=2) reported snorting and one participant (8%) reported shelving/shafting.

3.9.4. Pharmaceutical stimulants

Pharmaceutical stimulants have been included as a separate drug class since the 2005 EDRS survey. 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 vast majority of the sample (91%) reported pharmaceutical stimulant use at some point in their lifetime, a significant increase from 77% in 2013 (CI=0.03 to 0.24). Recent use of licit and illicit pharmaceutical stimulants also significantly increased to 81% in 2014 from 64% in 2013 (CI=0.05-0.29). The reported proportions of both lifetime and recent pharmaceutical stimulant use in the present sample are the highest proportions recorded since the commencement of the EDRS in 2003.

Table 10 presents a comparison of those reporting recent illicit (n=77) versus recent licit use (n=6) 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 2014, 9% of the sample reported lifetime use of pharmaceutical stimulants that were prescribed to them (i.e. licitly obtained) and 6% reported recent use. These results were not significantly different to the 2013 sample, in which 8% reported lifetime use and 2% reported recent use.

Licitly obtained pharmaceutical stimulants were first used at a median age of 16 years (mean=18.4, range 13-31). This was significantly higher than 2013, where the median age was 10 years (mean=10.5, range 5-18). Over the preceding six months, the median number of days participants reported using was 180 (every day) (range 1-180). Comparable to 2013, the median number of tabs used on a typical occasion was three (range 2-8), and on the heaviest occasion was five5 (mean=10.28, range 2-30). In 2013, swallowing was the only reported ROA. In the current sample, swallowing remained the most commonly reported ROA (n=5, 46%); however, a further four participants reported snorting (36%), one reported smoking (9%) and a further one participant reported shelving/shafting (9%).

Illicit pharmaceutical stimulants

In the current sample, the majority of participants (88%) reported having ever used pharmaceutical stimulants when they were not prescribed to them (i.e. illicitly obtained), a significant increase from 74% in 2013 (CI=0.03 to 0.25).Recent use was reported at 77%, again representing a significant increase from 62% in 2013 (CI=0.02 to 0.27). The proportions of both recent and lifetime illicit pharmaceutical stimulant use are the highest seen since the beginning of the EDRS in 2003.

This pattern of results suggests that illicit, rather than licit, use of pharmaceutical stimulants accounts for the significant increase in overall use seen in 2014 compared to 2013.

Comparable to 2013, median age of first use was 18 years (range 14-28). Of those who had used recently (n=77), the median number of days of use over the preceding six months was six (range 1-97). Again consistent with 2013, on a typical occasion, the median amount of tabs used was three (range 1-10) and on the heaviest occasion the median was five tabs (range 1-20).The ROAs reported in the current sample were

swallowing (65%) and snorting (35%). While these proportions were not significantly different from 2013, the use of prescribed pharmaceutical stimulants via ROAs other than swallowing suggests these drugs were likely to have been used in a non-prescribed manner.

Table 10: Recent illicit versus licit use of pharmaceutical stimulants, 2014

Use of pharmaceutical stimulant	Illicit (n=77)	Licit (n=6)
Median age first used	18	16
Days used last six months (median)	6	180
Amount typically used (median tabs)	3	3
Most amount used (median tabs)	5	5
Route of administration:		
Swallowed	65%	46%
Snorted	35%	36%
Smoked	0%	9%
Injected	0%	9%

Source: WA EDRS REU interviews, 2014

3.9.5. Benzodiazepines

Use of benzodiazepines was also divided into licit and illicit use in 2009. Taken together (licit or illicit use), lifetime use of a benzodiazepine was reported by more than half (52%) of the current sample, which did not significantly change from 55% in 2013. Just over one-third (35%) of the sample reported using a benzodiazepine in the preceding six months, which again did not significantly differ from 2013 (33%).

Licit benzodiazepines

In the current sample, 9% of participants reported having ever used a benzodiazepine when they were prescribed to them (i.e. licitly obtained), which did not significantly differ from 2013. Recent licit benzodiazepine use has remained low and stable since 2008, reported by 6% in the current sample.

Participants who had recently used licit benzodiazepines were asked the main type they had used over the preceding six months; the most commonly reported was diazepam (33%, n=3), followed by clonazepam, oxazepam and nitrazepam (each 17%, n =1).

Mirroring the 2013 results, licitly obtained benzodiazepines were first used at a median age of 20 years (range 14-23). Of those who reported recent use (n=9), benzodiazepines were used on a median of eight days (range 5-30) in the preceding six-month period. Swallowing was the only ROA reported.

Participants who had recently used licit benzodiazepines were asked the main type they had used over the preceding six months. Consistent with 2013, the most commonly reported was diazepam (50%, n=3). This was followed by alprazolam (33%, n =2) and lorazepam (17%, n =1). Given the very small number of participants reporting licit use (n=9), all findings regarding this type of use should be interpreted with caution.

Illicit benzodiazepines

Just under half of the current sample (47%) reported having ever used a benzodiazepine when they were not prescribed to them (i.e. illicitly obtained), a non-significant decrease from 51% in 2013. Approximately one-third (31%) reported recent use, again which is comparable to 2013 (32%).

Aligned with the 2013 results, the median age of first use was 18 years range 15-28). Of those who reported recent use (n=31), benzodiazepines had been used on a median of five days (range 1-30) over the preceding six months. Reported ROAs were swallowing (97%, n=30) and snorting (6%, n=2).

Participants who had recently used illicit benzodiazepines were asked the main type they had used over the preceding six months. Consistent with the 2013 results, the most commonly reported was diazepam (58%, n=15), followed by alprazolam (38%, n=13) and temazepam (4%, n=1).

3.9.6. Anti-depressants

Use of anti-depressants was also divided into licit and illicit use. Taken together (licit or illicit use), lifetime use of an anti-depressants was reported by 14% of the sample. This is a significant decline from 31% in 2013. After controlling for the proportion of participants who had ever injected any drug across the 2013 and 2014 samples, there was no difference in antidepressant use between the 2013 and 2014 samples. Recent was reported at 6%, which was again significantly lower than the 18% reported in 2013. However, this result failed to reach significance after controlling for injecting drug use across the two samples. This pattern of results suggests that changes in antidepressant use in the present sample compared to 2013 can likely be attributed to differences in the proportion of injecting drug users between 2013 and 2014.

Licit anti-depressants

In the current sample, 12% of participants reported having ever used an anti-depressant when they were prescribed to them (i.e. licitly obtained), a significant decline from 25% in 2013 (CI=0.02 to 0.23). Five per cent of the sample reported recent licit antidepressant use, a non-significant change from 14% in 2013. However, both of these results failed to reach significance once the proportion of participants who had ever injected any drug was controlled for. This suggests that changes in licit antidepressant use between 2013 and 2014 can likely be attributed to sample differences in the proportion of injecting drug users, rather than decreased licit antidepressant use.

Comparable to 2013, licitly obtained anti-depressants were first used at a median age of 19 years (mean 21.2 range 10-52). Again not significantly different from the 2013 results, of those who reported recent use (n=5), anti-depressants were used on a median of 90 days (range 12-180). As in previous years, swallowing was the only ROA reported.

Illicit anti-depressants

Comparable to 2013, only 3% of the current sample reported having ever used anti-depressant when they were not prescribed to them (i.e. illicitly obtained), a non-significant decrease from 8% in 2013. In the present sample only one participant reported recent use, which did not significantly differ from 4% 2013. This pattern of results was unchanged after controlling for the proportion of injecting drug users in the 2013 and 2014 samples.

The participant reporting recent illicit anti-depressant use did not report an age of first use, but reported them on six days in the preceding six months, and swallowing was the only ROA reported. Given that only one participant reported recent illicit antidepressant use, these results should be interpreted with caution.

3.9.7. Inhalants

Participants were asked about their use of the inhalants amyl nitrate and nitrous oxide (see Table 2).

Amyl nitrate

In 2014, lifetime use of amyl nitrate was reported by 11%, which did not significantly change from 14% in 2013. Recent use of amyl nitrite was reported by 4% of the sample, which again did not significantly change from 10% in 2013.

The median age of first use of amyl nitrate was 18 years (range 15-29). Comparable to 2013, amyl nitrate was used on a median of one day (range 1-6) during the preceding six-month period. The amounts used on a typical occasion have not been recorded since the 2009 EDRS.

Nitrous oxide

Throughout survey years, nitrous oxide has consistently been the more popular inhalant of use, and it remained so in the current sample. In 2014, lifetime use of nitrous oxide was reported by approximately two-fifths of the sample (43%), which did not significantly change from 2013 (46%). Recent nitrous oxide use was reported at 32%, which is the same figure at 2013.

The median age of first use of nitrous oxide was 18 years (range 18-25), again consistent with 2013. Nitrous oxide was used on a median of five days (range 1-100) during this period (i.e. monthly use). The median amount used on a typical occasion was 10 bulbs (range 1-100) and the median amount for the most used was 12 bulbs (range 1-300). Both of these findings are comparable to 2013.

3.9.8. Heroin and other opiates

Given extremely small sample sizes for recent heroin and other opiate use, these findings should be interpreted with caution.

Heroin

Rates of heroin use among EDRS samples have been consistently low across survey years. In the current sample, 4% reported lifetime use of heroin, which did not significantly differ from 6% in 2013. No participants reported recent use, comparable to 2% in 2013. Again not significantly different to 2013, the median age of first heroin use was 16 years (range 12-19).

Of the participants who reported lifetime use of heroin, 67% (n=2) reported having ever injecting and 33% (n=1) reported ever smoking heroin. None of the participants in the current sample reported recent heroin use; no further analyses are reported regarding heroin.

Methadone and buprenorphine

As with heroin, rates of methadone and buprenorphine use have been consistently low across years (see Table 2). Not significantly different from 2013, only two participants in the current sample reported both lifetime and recent use of methadone. Both participants were 21 years of age at first use reported and swallowing as the only ROA.

Lifetime use of buprenorphine was reported by 2% in the current sample, which did not significantly differ from 3% in 2013. Again consistent with 2013, no participants reported recent use of buprenorphine. The median age of first use of buprenorphine was 18 years (range 16-20). Reported ROAs were injecting (50%, n=1) and swallowing (50%, n=1).

Other opiates

This drug class includes morphine, pethidine, oxycodone and various 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), 18% reported lifetime use of other opiates, which was a non-significant change from 29% in 2013. Recent use was reported by 8%, which again did not significantly differ from 15% in 2013.

Licit other opiates

Comparable to 2013, in the present sample, 5% of participants reported having ever used another opiate when it was prescribed to them (i.e. licitly obtained) and 4% reported recent use.

Again comparable to 2013, licitly obtained other opiates were first used at a median age of 16 years old (range 14-19). Of those who reported recent use (n=4), other opiates were used on a median of six days (range 3-12) in the preceding six-month period. Reported ROAs were swallowing (50%, n=2), snorting (33%, n=1) and injecting (33%, n=1).

Illicit other opiates

In the current sample, 15% of participants reported having ever used another opiate when it was not prescribed to them (i.e. illicitly obtained), and 6% reported recent use. These proportions were not significantly different from those reported in 2013 (23% and 12%, respectively).

As in 2013, illicitly obtained other opiates were first used at a median age of 18 years (range 15-26). Of those who reported recent use (n=6), other opiates had been used on a median of two days (range 1-4) in the preceding six-month period. Of these participants, 83% (n=5) reported swallowing, and 17% (n=1) reported injecting as ROAs.

Over-the-counter codeine

For the first time in 2009, participants were asked about their use of over-the-counter (OTC) codeine for non-pain use (i.e. recreational purposes). Both lifetime recent rates of use have remained relatively stable over this time period. In 2014, lifetime use of OTC codeine was reported by approximately one-quarter of the sample (26%), which is comparable to 23% in 2013. Recent use was reported by 17% of the current sample, which is comparable to 15% in 2013.

Consistent with 2013, in the present sample the median age of first use was 17.5 years (range 14-23). Of those who reported recent use (n=17), OTC codeine was used on a median of six days over the preceding six-month period (range 1-48) (i.e. once a month). All participants reported swallowing (100%), three participants (14%) additionally reported snorting and one participant additionally reported smoking as the ROA.

3.9.9. Hallucinogenic mushrooms

In 2014, the proportion of participants reporting lifetime use of 'magic' mushrooms was 57%, a non-significant increase from 44% in 2013. Recent use was reported by 25%, which again did not significantly change from 17% in 2013.

Comparable to 2013, the median age of first mushroom use was 18 years old (range 15-30). Again similar to 2013, those who reported recent use (n=25) used mushrooms on a median of one day (range 1-6) in the preceding six-month period. Swallowing was the only ROA reported.

3.9.10. OTC stimulants

For the first time in 2009, REU were 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 low since 2012. In the present sample, 10% of participants reported lifetime use and 5% reported recent use, unchanged from 7% and 5%, respectively in 2013.

Again not significantly different from 2013, the median age for first use of OTC stimulants was 18 years in the current sample (range 16-22). Of those who had used OTC stimulants recently (n=5), they were used on a median of one day (range 1-6) in the preceding six-month period. All participants reported swallowing as the ROA. Given the small sample size, findings for OTC stimulants should be interpreted with caution.

3.9.11. Steroids

For the first time in 2010, participants were asked to report on steroid use. Consistent with all previous years, the proportion reporting steroid use in 2014 remained extremely low and findings should therefore be interpreted with caution. In the current sample, only one participant (1%) reported using a steroid at some point in their lifetime and they also reported using steroids recently. The age of first steroid use was 28 years old. Steroids were reported to have been used 12 days in the preceding six-month period, which equates to approximately twice a month.

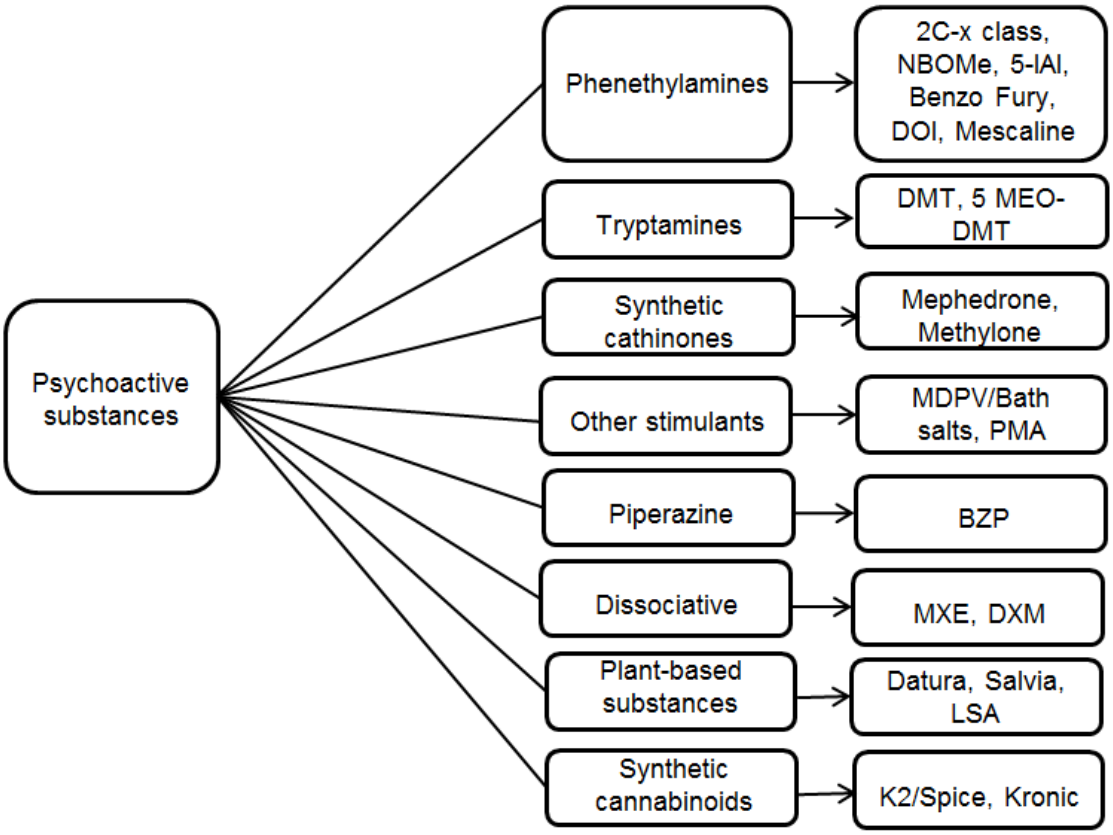
KE comments

- 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 purity had increased in this period, with a brown paste 'peanut butter' type heroin being used.
- Two KE, one who was a specialist clinical nurse and another who worked in telephone counselling and referral, reported that there had been an increase in the use of diverted prescription opiates, including MS-Contin and Oxycontin in this period.
- Several additional KE reported that recent changes in the formulation of Oxycontin to make it 'non-injectable' meant that users were switching to Fentanyl or heroin. In contrast to this, one KE, an outreach worker, reported that some users were continuing to inject reformulated Oxycontin, having circumvented its 'non-injectability'.
- A KE who worked as a specialist clinical nurse reported that she had seen an increase in the number of heroin overdoses in this period, and that during overdose patients were losing consciousness for considerably longer times than seen in the past.
- Of KEs who had contact with heroin users, several reported that users continued to have poor hygiene practices around injecting, leading to sepsis, abscesses and endocarditis.

3.10. New psychoactive substance (NPS) use

From 2010 onward, the EDRS 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 7.

Figure 7: 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

[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
			psychedelic which 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

[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
			side 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	The plant's effects make the user feel drowsy, drunk-like and detached from things around

[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
		CNS depressant and has antimuscarinic properties	them. They can also bring on hallucinations. Doses are 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

3.10.1. NPS classes

The EDRS began to systematically investigate NPS (formerly known as emerging psychoactive substances or EPS) in 2010. With the exception of a few NPS, reported use across years has been low. In 2014, consistent with the 2013 findings, the most

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

commonly reported NPS ever used was synthetic cannabis (46%). This was followed by DMT (33%), 2C-I (19%), 2C-B and NBOMe (each 18%). The most commonly reported NPS recently used were DMT (19%), synthetic cannabis (13%), 2C-B (11%) and NBOMe (8%). A complete breakdown of new psychoactive substances used among Perth REU/RPU is presented by class below.

Phenethylamines

There were no significant differences in the proportion of use reported for any phenethylamine drug (Table 12). For the first time in 2014, participants were asked about their use of NBOMe. Lifetime use was reported at 18%, with recent use being reported at 8%. While no data from previous years are available to analyse any recent changes in lifetime or recent NBOMe use, it was the second most commonly recently used phenethylamine drug, following 2C-B.

Table 12: Patterns of phenethylamine class of NPS, 2010-2014

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

Source: WA EDRS REU/RPU interviews, 2010-2014

*Indicates significant changes from the 2013 results according to 95%CI and p=0.05

Other classes

Compared to 2013, in 2014 there were no significant changes in proportion of use reported for any of the synthetic cathinones, tryptamies, dissociative or plant-based drugs included in survey. A complete breakdown of these drug classes is presented in Table 13.

Table 13: Patterns of other classes of NPS, 2010-2014

NPS	2010 N=100	2011 N=28	2012 N=90	2013 N=100	**2014 N=100**
Synthetic cathinones					
Mephedrone					
ever used (%)	19	18	16	6	**9**
used last 6 months (%)	16	14	3	3	**2**
Methylone					
ever used (%)	-	11	3	6	**8**
used last 6 months (%)	-	4	2	5	**4**
Other stimulants					
MDPV/ Ivory Wave					
ever used (%)	0	0	2	3	**2**
used last 6 months (%)	0	0	1	1	**0**
Tryptamines					
5MEO-DMT					
ever used (%)	4	4	0	0	**1**
used last 6 months (%)	1	0	0	0	**1**
DMT					
ever used (%)	13	40	32	33	**33**
used last 6 months (%)	8	25	22	22	**19**
Dissociatives					
DXM/ Cough syrup					
ever used (%)	7	21	11	7	**11**
used last 6 months (%)	3	4	2	5	**6**
Methoxetamine/ MXE					
ever used (%)	-	-	0	3	**1**
used last 6 months (%)	-	-	0	0	**0**
Plant-based substances					
Salvia divinorum					
ever used (%)	-	18	11	6	**9**
used last 6 months (%)	-	11	3	2	**0**
LSA/ Hawaiian Baby Woodrose					
ever used (%)	-	4	7	6	**3**
used last 6 months (%)	-	0	1	2	**1**
Piperazines					
BZP					
ever used (%)	37	7	14	2	**3**
used last 6 months (%)	25	7	1	0	**3**

Source: WA EDRS REU/RPU interviews, 2010-2014
*Indicates significant changes from the 2013 results according to 95%CI and p=0.05

KE comments

- Several KE reported that use of NPS, particularly the 2C-series drugs, was common, with some KE reporting that this use had increased in this period. Several KE reported that the use of NPS was more common in younger than older cohorts.
- A KE who worked in clinical withdrawal reported that patients were increasingly using synthetic drugs that they could not identify.
- A KE who worked at a referral service reported that it was common for users to buy NPS online. This KE added that the use of these drugs was commonly associated with mental health problems, including paranoia and psychosis. This KE further stated that these drugs were commonly used amongst FIFO workers, who often do not consider themselves to be drug users.
- Two KE, one who worked in outreach and another who worked in drug analysis, reported that NBOMe was being sold on the Perth market as LSD.

Synthetic cannabis

In 2014, rates of reported synthetic cannabis use did not significantly change from 2013. Almost half of the current sample (46%) reported having ever used synthetic cannabis and 13% reported having used it recently. The reported use of Kronic and K2/Spice again did not significantly change from 2013. A breakdown of findings related to synthetic cannabis use is presented in Table 14.

Table 14: Patterns of synthetic cannabis use, 2010-2014

	2010 N=100	2011 N=28	2012 N=90	2013 N=100	**2014** **N=100**
Synthetic cannabis					
Any synthetic cannabis					
ever used (%)	-	32	44	45	**46**
used last 6 months (%)	-	32	18	20	**13**
Kronic					
ever used (%)	-	-	-	24	**26**
used last 6 months (%)	-	-	-	9	**4**
K2/Spice					
ever used (%)	-	-	-	3	**7**
used last 6 months (%)	-	-	-	1	**3**
Other synthetic cannabinoids					
ever used (%)	**-**	**-**	**-**	18	**13**
used last 6 months (%)	**-**	**-**	**-**	10	**6**

Source: WA EDRS REU/RPU interviews, 2010-2014

KE comments

- Several KE reported that synthetic cannabis was commonly used in Perth and one of the most problematic drugs for them to manage currently.
- Several KE reported that use of synthetic cannabis in Perth is increasing, particularly amongst young people, and that it is easily available.
- A KE who worked in law enforcement reported that synthetic cannabis is commonly sold in sex shops in Perth.
- Several KE reported that synthetic cannabis was commonly purchased online. One KE, specialist clinical nurse, stated that some patients had reported purchasing LSD online but that it was in fact synthetic cannabis.
- A KE who worked in at a telephone counselling and referral service stated that users were describing a very potent effect produced by synthetic cannabis. This KE added that FIFO workers were increasingly using synthetic cannabis because it was difficult for authorities to detect.
- A KE who worked in drug analysis reported that there was currently a 'constant emergence' of new synthetic cannabinoid compounds, and that combined with the limited existing literature on synthetic cannabinoids, this made identification of synthetic cannabis difficult.
- One KE, a clinical nurse specialist, reported that there had been an increasing number of patients presenting with health problems related to synthetic cannabis use in the last 12 months. She reported that these patients commonly presented with chest pain, palpitations, seizures and disordered thoughts. The most frequent brand of synthetic cannabis that these patients reported using was Kronic. This KE stated that one recent patient reported using Amsterdam Gold.
- One KE who worked in law enforcement reported that a recent death had occurred related to the use of synthetic cannabis.
- Several KE also reported that dependence on synthetic cannabis was common. Two KE, one who worked in clinical management of substance abuse and another who worked in withdrawal services, noted that withdrawal from synthetic cannabis can be severe and appears clinically similar to opiate withdrawal.
- Several KE noted that synthetic cannabis could cause agitation, either during intoxication or withdrawal. A number of KE also added that synthetic cannabis use may precipitate mental health problems, including paranoia and psychosis.

Herbal highs

As presented in Table 15, 14% of participants reported having ever used a herbal high, not significantly different from 12% in 2014. Similarly, the proportion of participants reporting recent use of herbal highs (8%) was not significantly different from 5% in 2013. The proportion who reported having ever consumed a capsule where the contents were unknown was also unchanged from the 2013 results, reported by 8% of the sample. Similarly, the proportion reporting recent use of a capsule with unknown contents was 6%, which was also not significantly different from 2% in 2013. The results suggest that the significant decline seen in the use of herbal highs and capsules with unknown contents in 2013 has been maintained into 2014.

Table 15: Patterns of herbal high use, 2010-2014

NPS	2010 N=100	2011 N=28	2012 N=90	2013 N=100	**2014 N=100**
Herbal highs					
ever used (%)	-	-	39	12	**14**
used last 6 months (%)	-	-	11	5	**3**
Capsule (contents unknown)					
ever used (%)	**-**	**-**	17	5*	**8**
used last 6 months (%)	**-**	**-**	7	2	**6**

Source: WA EDRS REU/RPU interviews, 2010-2014

3.10.2. Summary of other drug use

- The entire sample (100%) reported lifetime use of alcohol and the majority also reported recent use (98%), consistent with previous years.
- KE reported that alcohol continued to be one of the most problematic drugs among REU
- The majority of the sample (91%) reported lifetime tobacco use and approximately three-quarters (77%) reported recent use.
- Consistent with low rates in previous years, lifetime use of MDA was reported by 19% and recent use was reported by 13%.
- Approximately three-quarters of the sample (91%) reported the use of pharmaceutical stimulants in their lifetime, increasing from 77% in 2013. Recent use was reported by 81%, which also significantly increased from 64% in 2013. The vast majority of this use was illicit.
- More than half the sample (52%) reported lifetime use of a benzodiazepine and about one-third (35%) reported recent use. The majority of lifetime and recent use was illicit.
- Lifetime use of any anti-depressant was reported by approximately 14% of the sample, a significant decrease from 31% in 2013. Recent use was reported by 6%, again a significant decrease from 18% in 2013. The majority of this use was licit.
- Lifetime use of amyl nitrate was reported by 11% and recent use was reported by 4%.
- Nitrous oxide appeared to be the more popular inhalant with almost half the sample (43%) reporting lifetime use and almost one-third (32%) reporting recent use.
- Consistent with previous years, the use of heroin was uncommon, with 4% reporting lifetime use and no participants reporting recent use.
- Consistent with low rates across previous years, only 2% of the current sample reported both lifetime and recent use of methadone
- Again consistent with previous years, use of buprenorphine remained very low; 2% reported lifetime use and no participants reported recent use.
- Lifetime use of other opiates was reported by 18% of the sample and recent use was reported by 8%, not significantly different from the 2013 findings. The majority of this use was illicit.
- Lifetime use of OTC codeine was reported by roughly one-quarter of the sample (26%), with recent use being reported by 17%.
- Consistent with the 2013 findings, lifetime use of psilocybin/hallucinogenic mushrooms was 57% and recent use was 25%.
- Consistent with 2013, the use of OTC stimulant products remained low with only 10% reporting lifetime use and 5% reporting recent use.
- Steroid use also remained low with only one participant reporting lifetime and recent use.
- The most common NPS ever used were synthetic cannabis (46%), DMT (33%), 2C-I (19%) and 2C-B (18%) and NBOMe (18%).
- The most commonly reported NPS recently used were DMT (29%), 2C-B (11%), NBOMe (8%) and 2C-I (7%).
- The proportion of lifetime and recent use for all NPS remained stable from 2013 to 2014.
- Of the NPS, synthetic cannabis was most commonly reported as problematic by KE.

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

4.1. Ecstasy

4.1.1. Price

In 2014, 99 participants reported on the price of ecstasy pills in Perth, 56 participants reported on the price of ecstasy capsules, 21 reported on the price of powder per gram, 16 reported on the price of powder per point, 21 reported the price of crystal per gram and 16 reported the price of crystal per point. Participants were also asked whether the price of ecstasy had changed over the last six months. The median price per ecstasy tablet and perceived price changes across data collections in WA are presented in Table 16.

Ecstasy pills

Of those who commented on the price of ecstasy pills (n=99), the median price per pill was $35 (range $10-$60). The median price was consistent with recent years.

Participants were also asked to report on the price of ecstasy pills when purchasing in varying quantities. Bulk purchases tended to be cheaper, with 10 (n=58) and 20 (n=35) tablets costing a median of $30 per tablet, 50 tablets costing a median of $25 (n=28), and 100 tablets costing a median of $22 (n=33). These prices are all consistent with 2013.

Ecstasy capsules

Of those who commented on the price of ecstasy capsules (n=56), the median price was $40 (range $30-$50), compared with $37.50 ($25-$50) in 2013. This indicates that the market price of capsules is slightly more than that of pills and appears to be on an upward trend.

Ecstasy powder

Of those who were able to comment on the price of ecstasy powder per point (n=16), the median price was $40 (range $30-$100), the same price reported in 2013. Of those who were able to comment on the price of powder per gram (n=21) the median price was $280 (range $40-$350), compared to $250 in 2013. This may indicate an increase in the price of powder per gram. However, given the small sample size in 2013 (n=6), this comparison should be interpreted with caution.

Ecstasy crystals

Of those who were able to comment on the price of ecstasy crystals per gram (n=22), the median price was $265 ($35-$400) compared to $300 (range $250-$400) in 2013. While this may indicate an increase in price, this comparison should again be interpreted with caution given the small number of participants reporting the price of ecstasy crystals per gram in 2013 (n=5). The median price of ecstasy crystals per point (n=16) was $37.50 (range $30-$100).

ACC statistics

Data obtained from the ACC indicates that, in WA during 2012/13, a single tablet or capsule of MDMA cost $15; less than half of the price reported by WA EDRS REU participants during that period. The price per tablet of purchasing other quantities of tablets was not available in this period (ACC, 2014).

Table 16: Price of ecstasy tablets purchased and price variations, 2005-2014

	2005	2006	2007	2008	2009	2010	2011	2012	2013	**2014**
Median price per tablet (range)	$40 ($30-$50)	$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)**
Price change:										
Increased (%)	5	6	11	17	9	18	4	10	16	**18**
Stable (%)	66	61	59	48	52	56	57	57	59	**65**
Decreased (%)	22	19	16	19	25	18	14	8	11	**5**
Fluctuated (%)	7	12	9	10	9	5	11	8	10	**9**
Don't know (%)	-	2	5	5	5	3	14	18	4	**3**

Source: WA EDRS REU/RPU interviews, 2005-2014

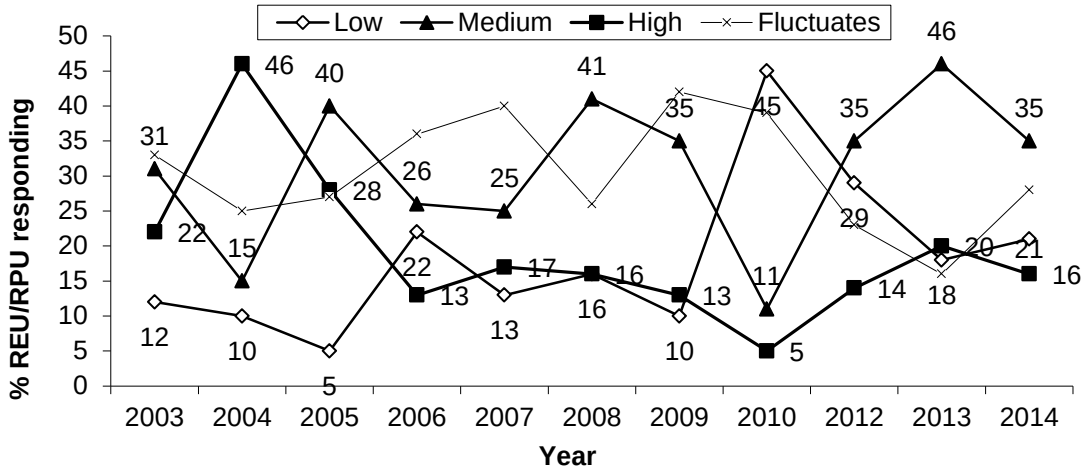
KE comments

- A KE from law enforcement reported that ecstasy was $30-$35 per pill.

4.1.2. Potency

In 2014, the greatest proportion of participants (35%) rated the current potency of ecstasy as medium, which is consistent with 2013 (46%). Following medium, ecstasy purity was rated as fluctuates (28%), followed by low (21%) and then high (16%). Overall, as is evident in Figure 8, user reports of ecstasy potency appear to have been on an upward trend in 2012 and 2013, which appears to have been maintained in 2014.

Figure 8: User reports of current ecstasy potency, 2003-2014



Source: WA EDRS REU/RPU interviews, 2003-2014

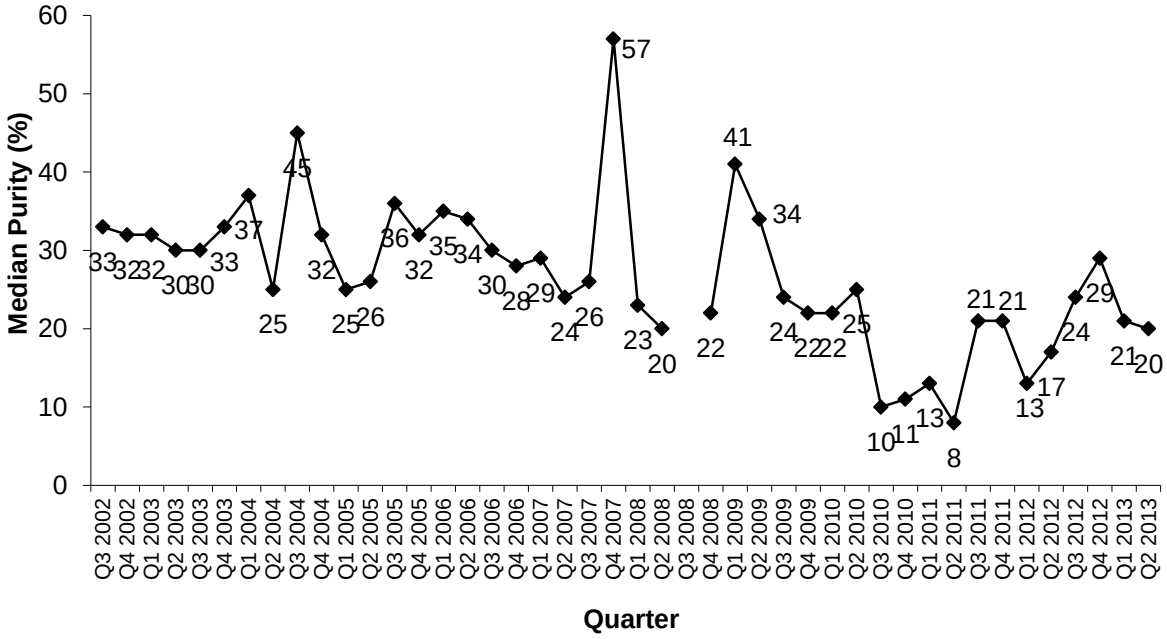
In addition to rating the potency of ecstasy, participants were asked about any perceived changes in the potency of ecstasy in the preceding six-month period. Consistent with 2013, perceptions during this period were mixed. Approximately one-quarter reported that purity was decreasing (26%) and increasing (25%). This was followed by fluctuating (22%), stable (21%) and then 'don't know' (6%).

ACC statistics

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 seizures analysed do not represent a random or comprehensive sample of all seizures made. Figure 9 presents the median purity of phenethylamine seizures in WA according to data provided by the WA State Police and the ACC since July 2002 (figures from July to September 2008 were not available) (ACC, 2014).

Purity levels during the 2012/13 period varied significantly between 0.8% and 88%. 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 9. As evident in Figure 9, this period represents a slight increase on the last reporting period. The total median phenethylamine purity for the 2012/13 was 21%, compared to 17% in 2011/12 (ACC, 2014). These results are consistent with the increasing user perceptions of ecstasy purity seen in the 2013 EDRS.

Figure 9: Median purity of phenethylamines seizures in WA by quarter, July 2002 to June 2013



Source: ACC, 2003-2014

KE comments

- A KE who analyses samples of seized ecstasy reported that the purity of samples received had increased from approximately to approximately 30% in this period compared to 25%-28% in 2013.
- Two KEs, one who worked in law enforcement and another who worked in substance abuse clinical management, expressed concern that ecstasy pills were being 'cut' with PMA, and that this can increase the likelihood of adverse effects of the drug. One KE added that this may increase the risk of overdose because users consequently end up taking increasing numbers of pills in order to experience the effects of the MDMA.

4.1.3. Availability

Participants were asked how easy ecstasy was to obtain in the preceding six-month period. The vast majority of the current sample (94%) rated the current availability of ecstasy as easy or very easy, a non-significant difference from 96 in 2013. As in 2013, the majority (61%) also perceived availability to be stable. Just under one-third (27%) perceived availability to be easier over the preceding six months. This was consistent with 2013 findings. Availability reports across survey years are presented in Table 17.

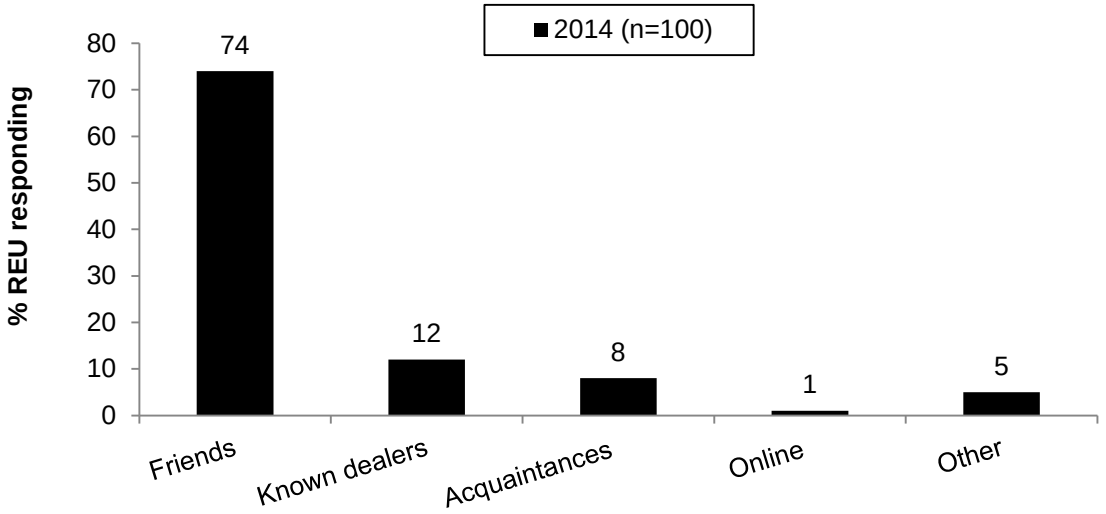
Table 17: Reports of ecstasy availability, 2005-2014

	2005 N=100	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**
Current availability										
Very easy (%)	62	47	30	52	61	22	14	18	48	**53**
Easy (%)	35	42	59	41	35	58	50	65	48	**41**
Availability										
Stable (%)	72	55	65	59	62	54	64	44	51	**61**
Easier (%)	16	17	10	24	20	7	4	32	33	**27**

Source: WA EDRS REU/RPU interviews, 2005-2014

As demonstrated in Figure 10, friends was the most commonly reported person from whom ecstasy was last obtained, nominated by three-quarters of the current sample (74%). This was followed by known dealers (12%) and then acquaintances (8%). These findings were consistent with the 2013 sample.

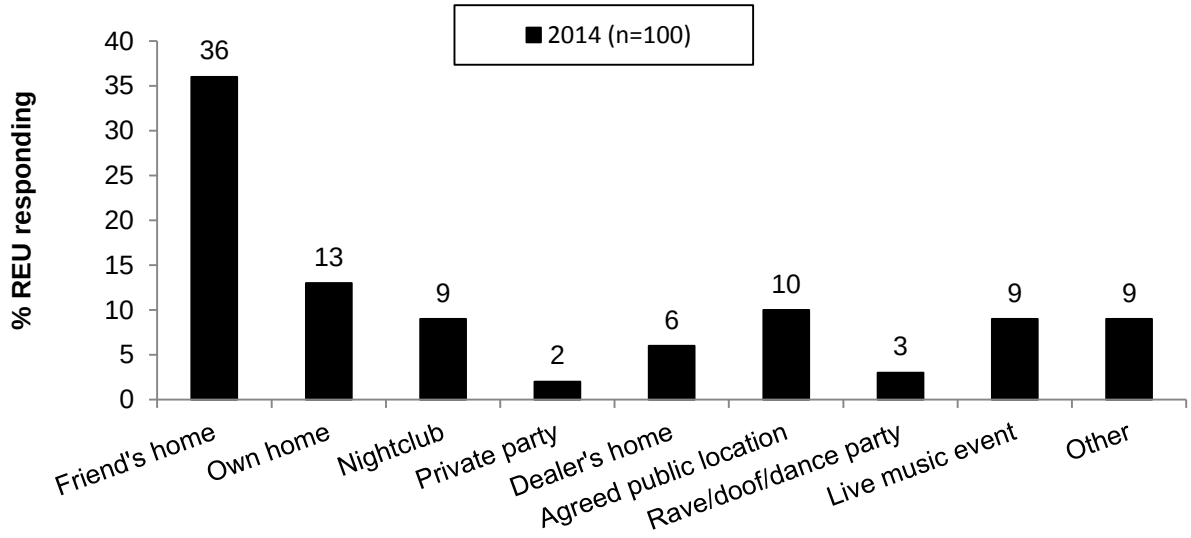
Figure 10: People from whom ecstasy was last obtained, WA 2014



Source: WA REU interviews, 2014

As presented in Figure 11, consistent with 2013, a friend's home was the most commonly reported location from which ecstasy was last obtained (36%). This was followed by own home and then nightclub. None of the proportions within any location significantly differed from 2013.

Figure 11: Locations at which ecstasy was last purchased, WA 2014



Source: WA EDRS REU interviews, 2014

As presented in Table 18, the median number of people ecstasy was purchased from in the preceding six-month period was four. A median of four ecstasy pills were purchased at a time. The majority reported that last time they purchased ecstasy it was purchased for 'self and others' (63%). In the six-month period, the most typical amount of ecstasy purchased was one to six pills, reported by over half of the sample (51%). Only 1% reported making over 25 ecstasy purchases in the preceding six months. None of these results differed significantly from 2013.

Table 18: Patterns of purchasing ecstasy, 2005-2014

	2005 N=100	2006 N=100	2007 n=98	2008 N=58	2009 N=100	2010 N=100	2011 N=28	2012 N=90	2013 N=100	**2014 N=100**
Median no. of people purchased from	4 (0-20)	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)**
Median no. of ecstasy tablets purchased	4 (1-100)	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)**
Purchased for (%)										
Self only	26	22	25	22	22	30	46	43	33	**34**
Self and others	71	77	70	78	75	69	50	54	66	**63**
Others only	1	-	-	-	3	1	-	-	1	**1**
Didn't buy ecstasy	-	1	5	-	-	-	4	2	-	**2**
No. of times purchased in the last 6 months (%)										
1-6	35	37	53	60	31	61	48	77	48	**51**
7-12	42	32	25	35	46	31	26	8	32	**30**
13-24	17	28	16	5	21	8	22	11	17	**16**
25 +	3	1	1	-	2	-	-	2	2	**1**
None	-	-	5	-	-	-	4	2	1	**2**

Source: WA EDRS REU/RPU interviews, 2005-2014

KE comments

- Most KE reported that the availability of ecstasy had increased in this period.
- A KE who worked in drug analysis reported that although some crystal and powder ecstasy had been seized by WA police and subsequently analysed in this period, most seizures comprised ecstasy pills.

4.1.4. Summary of ecstasy trends

- The median price of ecstasy was $35 per pill.
- Approximately two-thirds of the sample (55%) rated ecstasy prices as stable in the preceding six months.
- The potency of ecstasy was most commonly rated as medium (55%), followed by fluctuates (28%).
- Police analyses of phenthylamine seizures during 2012/13 suggested a small increase in the overall purity of ecstasy compared to 2011/12.
- Availability of ecstasy was rated as easy or very easy by the majority of participants (94%).
- The majority reported that availability was stable (61%); however, 27% reported that ecstasy was easier to obtain.
- User perceptions of availability and potency suggested that ecstasy potency and availability have recovered from suspected declines in 2011.
- friends remained the most commonly reported person from whom ecstasy was last obtained (74%).
- Ecstasy was purchased from a median of two people in the preceding six months, and a median of four tablets were obtained at a time. Ecstasy was most commonly purchased for ‘self and others’ (63%).
- The most typical number of occasions ecstasy was purchased in the six-month period was one to six times (63%).
- A friend’s home was the most commonly reported location from where ecstasy was last obtained (36%).

4.2. Methamphetamine

4.2.1. Price

Participants were asked about the price of the various forms of methamphetamine on the last occasion of purchase (Table 19).

Speed

In 2014, only one participant reported price of a gram of methamphetamine powder or speed; the price was reported at $200 compared to a median of $700 in 2013. Of those able to comment on the price of speed powder per point (n=4), the median price was $100 (range $80-$100). This price is consistent with 2013 findings and represents the fourth year running that the price per point had doubled from $50 in 2010. These results should be interpreted with caution due to the small number of participants reporting.

Base

As in 2013, no participants from the current EDRS sample were able to report on the price of methamphetamine base per gram or per point.

Crystal

Of those who were able to comment on the price of crystal methamphetamine per gram (n=2) each reported a price of $800; this is the same figure reported in 2013. Of those who were able to comment on the price of crystal per point (n=10), the median price was $100 (range $70-$100), consistent with recent years. As with speed, this price marked a 100% increase on previous years where a point cost $50. This trend is evident in Table 19.

Table 19: Price of various methamphetamine forms purchased, 2005-2014

Median price ($)	2005	2006	2007	2008	2009	2010	2011	2012	2013	**2014**
Speed										
Point	50	50	50	50	50^	50^	100^	100^	100^	**100^**
Gram	300	300	350	100	275	300^	800^	400^	700^	**200^**
Base										
Point	50	50	50	50	50^	-	100^	-	-	**-**
Gram	325	350	380	-	400^	300^	1000^	-	-	**-**
Crystal										
Point	50	50	50	50	50^	50^	100	100	100	**100**
Gram	350	400	400	425	400^	400^	400^	525^	800^	**800^**

Source: WA EDRS REU/RPU interviews, 2005-2014

^ Price reported by < 10 participants

KE comments

- Two KE who both worked in law enforcement reported that crystal methamphetamine cost $80-$100 per point and $400-700 per gram.

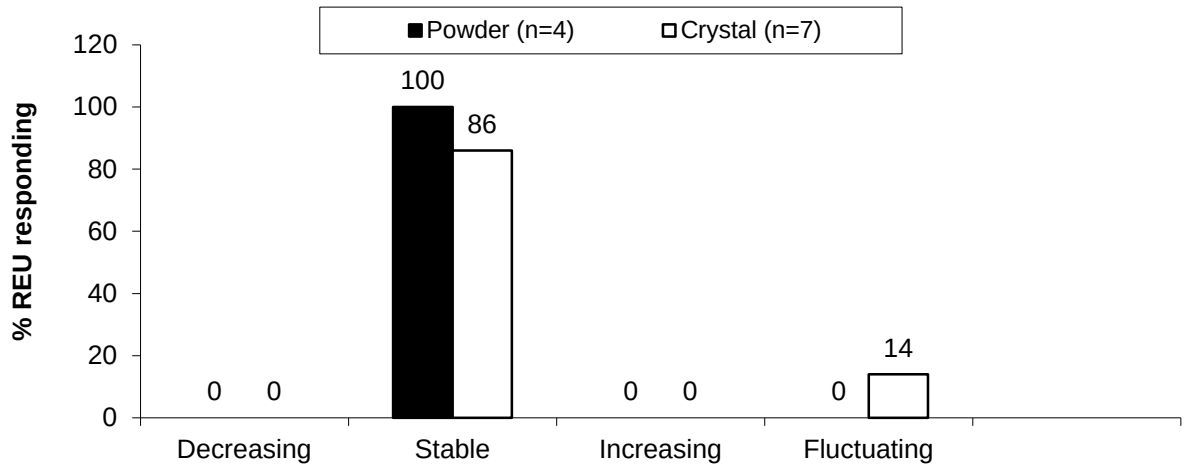
In addition to reporting on prices paid for methamphetamine, participants were also asked to comment on perceived price changes in the preceding six-month period (see Figure 12).

Speed
Of those able to comment on the price of speed (n=4), all participants (100%) reported the price as being stable across the previous six months (see Figure 12). Given the small sample size, this result should be interpreted with caution.

Base
In 2014, no participants were able to comment on recent price changes for methamphetamine base.

Crystal
Of those participants who comment on the price of crystal (n=7), the majority (n=6, 86%) perceived the price as stable over the last six months, and the remaining one participant (14%) perceived the price as fluctuating (see Figure 12). However, again given the small sample size, this result must be interpreted with caution.

Figure 12: Recent changes in the price of powder and crystal forms of methamphetamine, 2014



Source: WA EDRS REU interviews, 2014

ACC statistics
Data obtained from the ACC indicates that, in WA during 2012/13, a point (0.1 gram) of crystal methamphetamine cost $100; the price per weight of crystal (1 gram) was $600; the price per 8-ball (3.5 grams or 1/8 ounce) was between $2200 and $3000; the price per vial (1/8 ounce) was $8000; the price per ounce (street deal) was between $12 500. All other quantities of crystal were unavailable during this reporting period (ACC, 2014).

4.2.2. Potency
Participants were asked to comment on the perceived potency of methamphetamine over the preceding six-month period (Figure 13).

Speed
Of those able to comment on the potency of speed (n=7), less than half (n=3, 43%) rated it as high, two (29%) rated it as medium and another two (29%) rated it as low. In 2013, potency of speed was rated as medium by 70% of respondents, followed by low and high (15% each). The very small number of participants in the present sample and in 2013 (n=7) precludes drawing any meaningful comparisons or conclusions from these data.

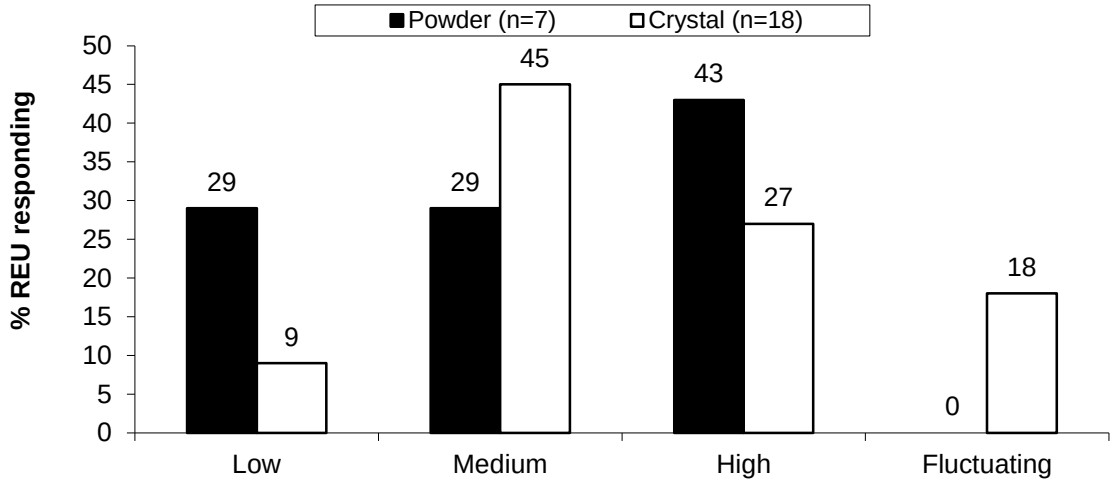
Base

In 2014, no participants were able to comment on the current potency of methamphetamine base.

Crystal
Of those who were able to comment on the potency of crystal methamphetamine (n=11), perceptions were mixed. The greatest proportions rated crystal as medium (n=5, 45%), followed by high (27%), fluctuating (n=2, 18%) and low (n=1, 9%). These mixed results are consistent with 2013 and appear to confirm the 2013 finding that the trends towards increasing perceptions of methamphetamine purity seen in 2011 and 2012 have ended.

Mirroring the 2013 results, the current results suggest that, overall, user perceptions of crystal methamphetamine in 2013 suggest potency is generally perceived as medium, but that potency can be variable. However, given the relatively small sample size, these results should again be interpreted with some caution.

Figure 13: User reports of current methamphetamine potency, 2014



Source: WA EDRS REU interviews, 2014

Participants were asked to comment on perceived changes in the potency of methamphetamine over the preceding six-month period. A complete breakdown of these findings is presented in Figure 14.

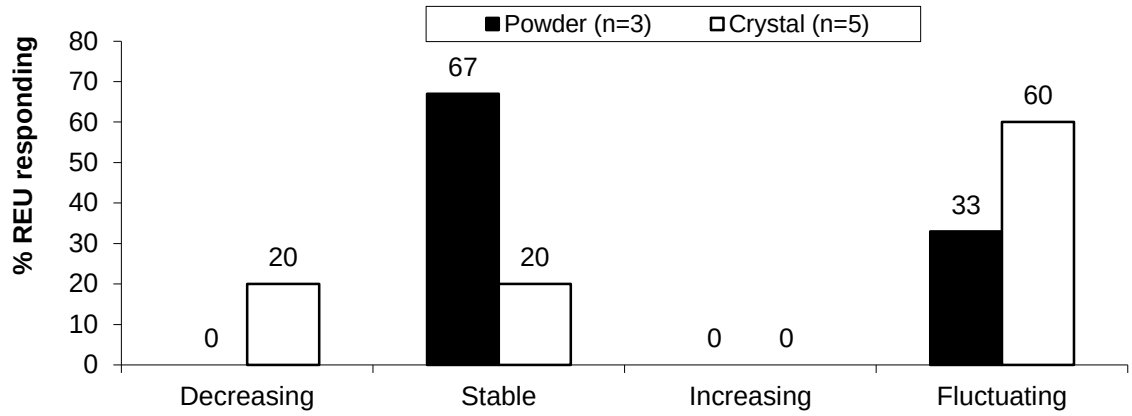
Speed
Of those able to comment on recent changes in speed potency (n=3), two participants (67%) reported that potency was stable, and one participant reported that the potency was fluctuating (33%). Again, because of the very small number of respondents in the present sample, it is unlikely that meaningful conclusions can be gauged from this data and they should be interpreted with extreme caution.

Base
Once again, data on trends in potency of base cannot be reported as no participants commented on this form of methamphetamine.

Crystal
Of those able to comment on recent changes to crystal potency (n=5), perceptions were mixed. The majority (n=3, 60%), reported that potency was fluctuating, followed by stable and decreasing (each n=1, 20%). These results are consistent with 2013, where the greatest

proportion of respondents reported that potency was fluctuating. These results may suggest that the perception that methamphetamine potency is unstable has increased in recent years. However, given the very small number of respondents in the current sample, it is again difficult to draw any meaningful conclusions from these data and they should be interpreted with extreme caution.

Figure 14: User reports of changes in methamphetamine potency in the past six months, 2014



Source: WA EDRS REU interviews, 2014

KE comments

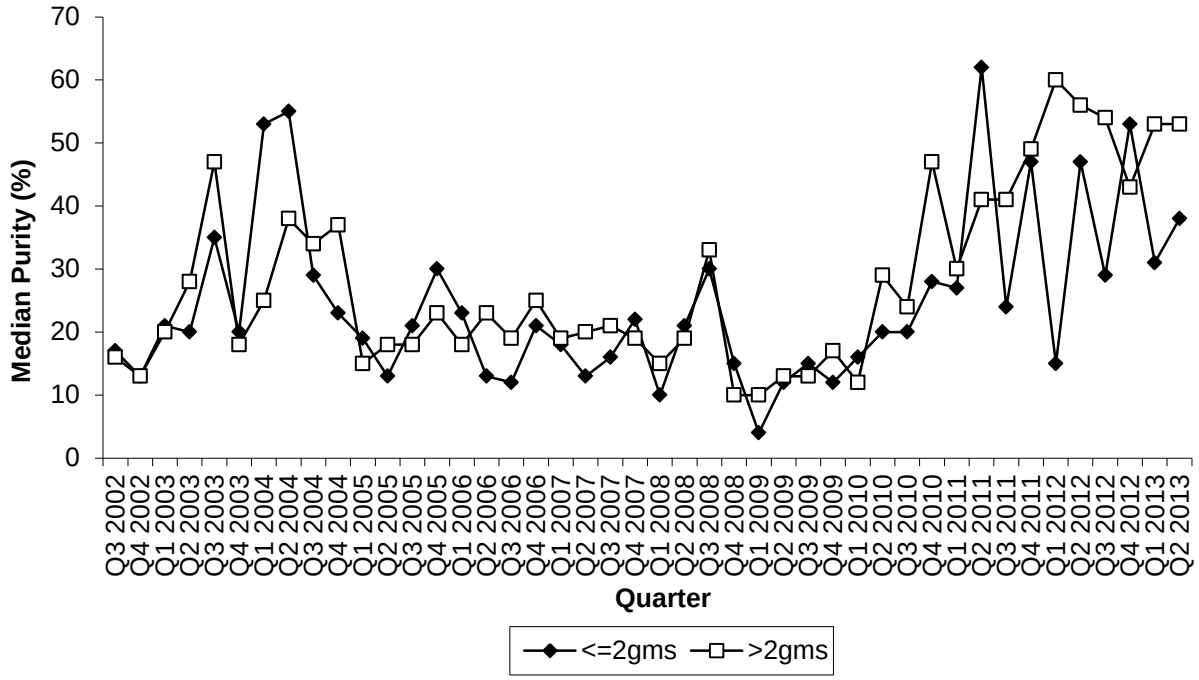
- A KE who worked in drug analysis reported that the purity of methamphetamine samples had been increasing during this period and that current samples in WA were generally were approximately 61% pure.

ACC statistics

Figure 15 presents data provided by the ACC regarding the median purity of methylamphetamine in WA during 2012/13. As evident in Figure 15, in this period, the purity of seized samples that were two grams or less has varied greatly (29%-53%); however, similarly to the 2011, the fourth period of 2012 recorded one of the highest rates on record. It is also clear from Figure 15 that the purity for samples seized over two grams continue to be on a steady increase since 2010.

During this period the total median purity for seizures of two grams or less was 48% (33% in 2011/12) and seizures in excess of two grams was 51% (54% in 2011/12) (ACC*, 2014).*

Figure 15: Median purity of methylamphetamine seizures analysed in WA by quarter, July 2002 to June 2013



Source: ACC, 2003-2013

4.2.3. Availability

Participants were asked to comment on the perceived availability of methamphetamine forms in the preceding six-month period. A breakdown of responses concerning current availability of methamphetamine is presented in Figure 16.

Speed

Of those who were able to comment on the availability of speed (n=6), all participants reported that it was either easy (n =2, 33%) or very easy (n=4, 67%) to obtain. These results are comparable to 2013, where again 100% of the sample reported that it was either easy or very easy.

Base

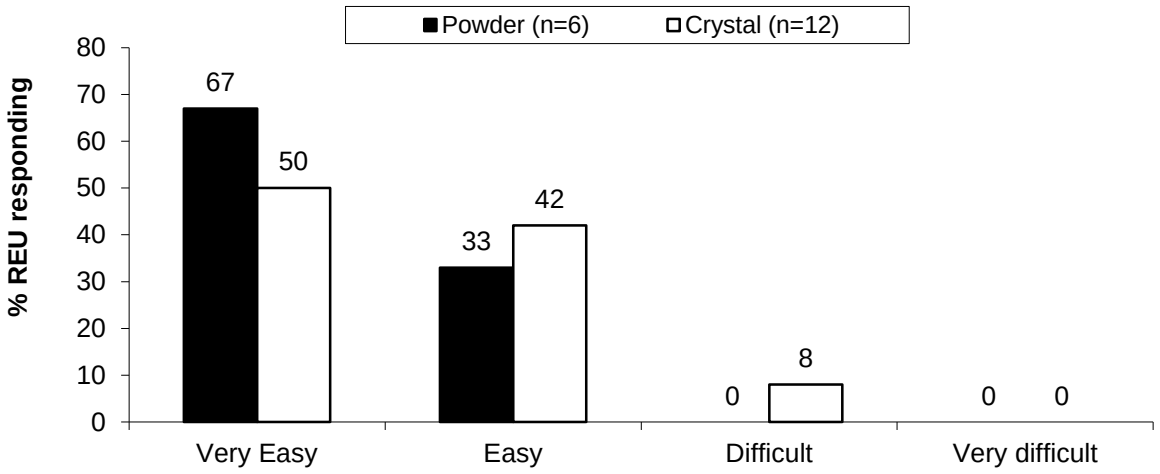
No participants commented on current availability of methamphetamine base.

Crystal

Similar to speed, of those who were able to comment on the availability of crystal (n=12), the majority reported that it was easy (n=5, 42%) or very easy (n=6, 50%) to obtain. Only one participant reported the current availability of crystal methamphetamine as difficult (8%). These results are consistent with 2013, where 92% of the sample reported availability as being easy or very easy,

See Figure 16 for a complete breakdown of current availability perceptions for methamphetamine powder and crystal.

Figure 16: User reports of current availability of methamphetamine forms, 2014



Source: WA EDRS REU interviews, 2014

KE comments

- Consistent with WA EDRS user perceptions, most KE reported that methamphetamine was currently readily available and that this had remained stable in this period.

Participants were also asked to comment on the perceived changes to availability of methamphetamine forms in the preceding six months. A breakdown of responses concerning changes to availability is presented in Figure 17.

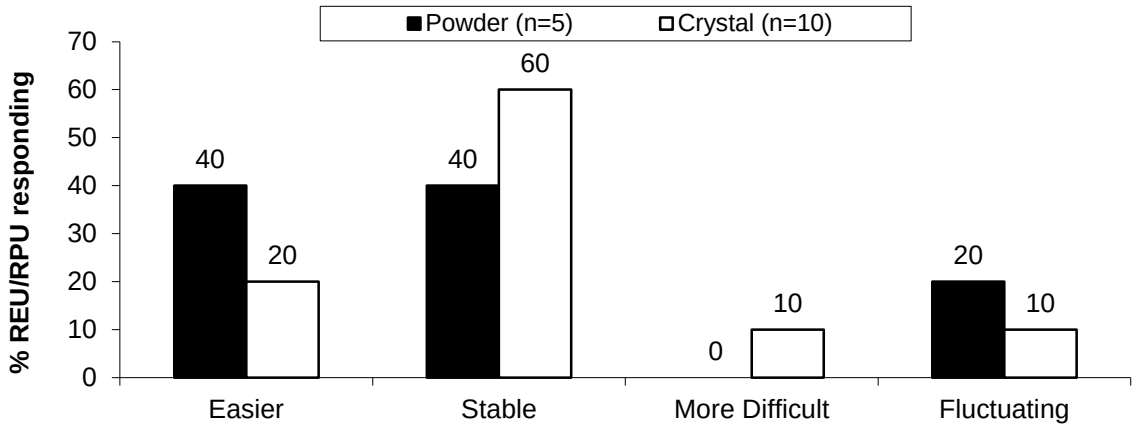
Speed
Of those commenting on speed availability (n=5), the majority reported that availability of speed had remained stable or was easier over the previous six months (each 40%, n=2). One participant reported that availability had fluctuated (20%).

Crystal
Similar to speed, of those commenting on crystal availability (n=10), more than half (60%, n=6) reported that they perceived availability to be stable, and a further two participants (20%) reported that availability was easier. The remaining perceptions were mixed, with one participant reporting availability as fluctuating and another stating it had become more difficult to obtain (each 10%).

Given the small number of participants reporting on both speed and crystal methamphetamine, these results should be interpreted with caution.

Base
Once again, data on availability of base cannot be reported as no participants commented on this form of methamphetamine.

Figure 17: Change in the availability of methamphetamine in the preceding six months, 2014

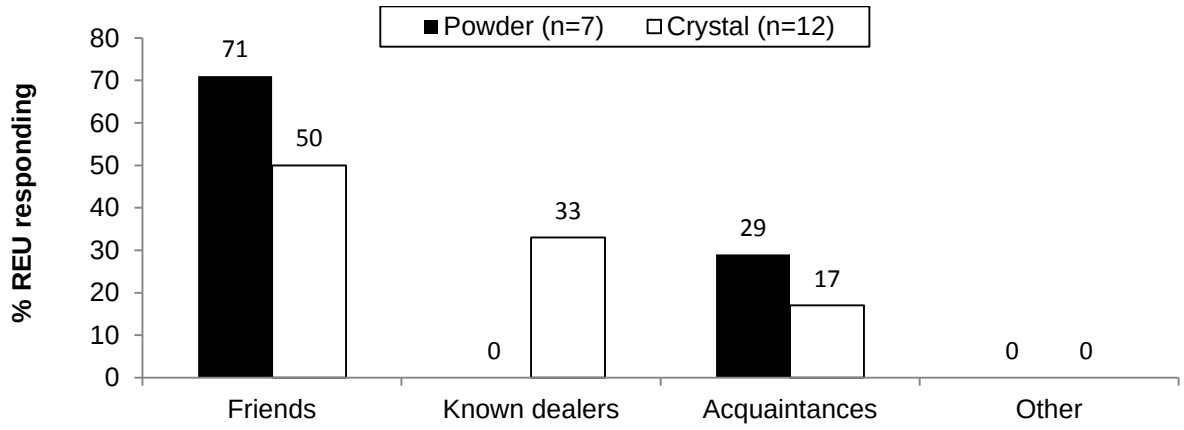


Source: WA EDRS REU interviews, 2014

Source person and source location

Consistent with previous years, friends, acquaintances and known dealers were the most commonly reported people from whom methamphetamine was last obtained. For powder, the majority (n=5, 71 %%) reported obtaining from a friend, followed by acquaintances (n=2, 29%). For crystal, half (n=6, 50%) reported obtaining from friends, followed by known dealers (n=4, 33%) and acquaintances (n=2, 17%).

Figure 18: Person from whom methamphetamine was last obtained in the preceding six months, 2014

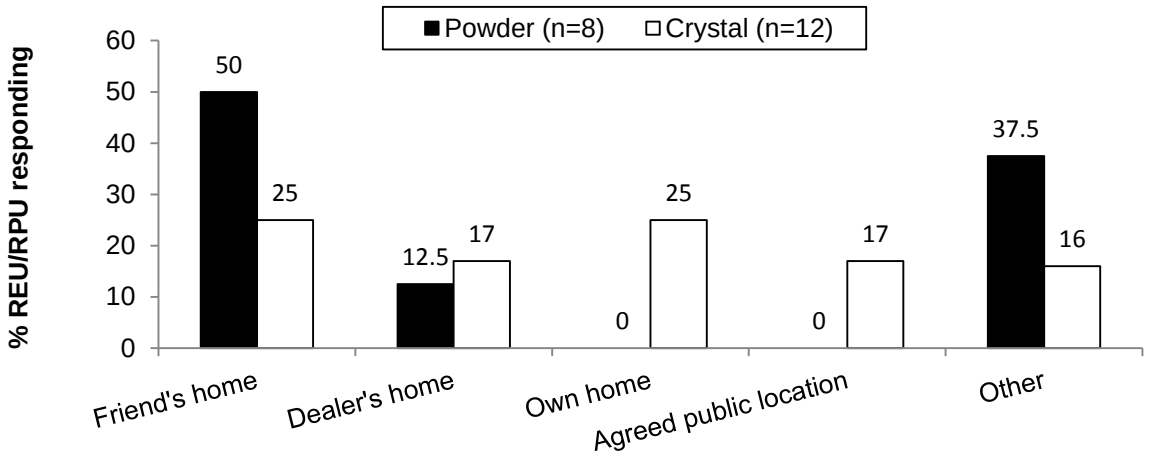


Source: WA EDRS REU interviews, 2014

Locations for purchasing methamphetamine were largely consistent with sources of purchase reported above. For those commenting on speed (n=8), friend's home was the most commonly reported location (50%, n=4); this was followed by a dealer's home, a pub/bar, private party, or live music event (each 12.5%, n=1). For those commenting on crystal (n=12), own home and friend's home were the most commonly reported locations

(each 25%, n=3). This was followed by a dealer's home and an agreed public location (each 17%, n=2), and then a rave/doof/dance party and an educational institute (each 8%, n=1). A breakdown of locations where methamphetamine was purchased is presented in Figure 19.

Figure 19: Last locations where methamphetamine was purchased in the preceding six months, 2014



Source: WA EDRS REU interviews, 2014

ACC statistics

The most recent Illicit Drug Data Report (IDDR) (ACC, 2014) reported on seizures of amphetamine-type stimulants (ATS) in the period 2012/13. ATS incorporate MDMA, amphetamine and methamphetamine. In WA, state police and Australian Federal Police were responsible for 4232 seizures totalling 8985 grams, compared with 3401 seizures totalling 29 578 grams in the 2011/12 period.

4.2.4. Summary of methamphetamine trends

Speed

- The median price per point was $100 and the median price per gram was $200.
- All reported that the price of speed was stable (100%).
- Speed potency was most commonly rated as high (43%).
- Potency was most commonly perceived as stable or increasing (each 40%).
- All commenting rated availability as either very easy or easy.
- Availability was most commonly perceived as stable (67%).

Base

- There were no participants who commented on the price, potency or availability of base methamphetamine.

Crystal

- The median price per point was $100 and the median price per gram was $800.
- The majority commenting reported that the price of crystal was stable (86%).
- Crystal potency was most commonly rated as fluctuating (60%).
- The majority commenting rated availability as either very easy or easy (92%).
- The majority perceived availability as stable (60%).
- A friend was the most commonly reported person from whom both speed and crystal methamphetamine were last sourced from. Accordingly, a friend's home was the most commonly reported last location where speed was obtained. For crystal methamphetamine, the most commonly reported locations were a friend's home and own home.

- KE reported that methamphetamine purity and availability was high.

4.3. Cocaine

4.3.1. Price

Consistent with previous years, in 2013, only a small sub-sample of participants (n=15) commented on the price of cocaine in the preceding six-month period. Therefore, findings for cocaine should be interpreted with caution. As presented in Table 20, the median cost for a gram of cocaine was $400, the same amount that was reported in 2013.

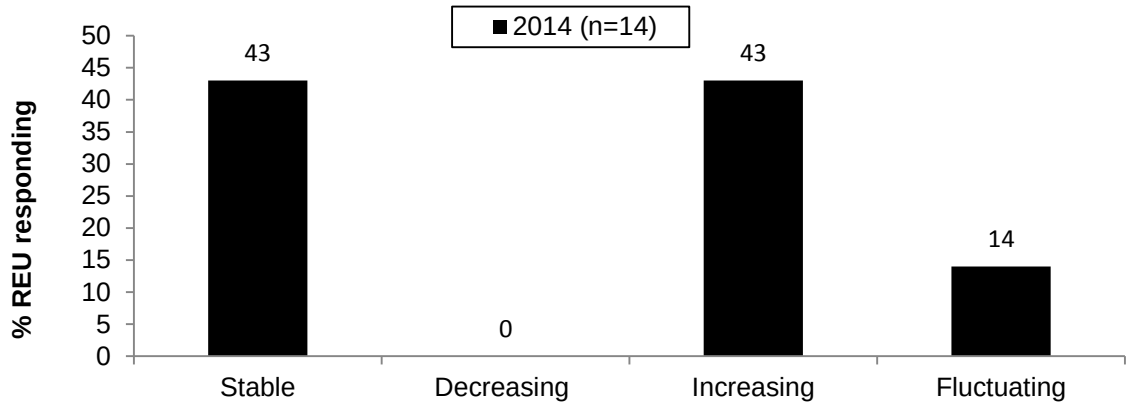
Table 20: Price of cocaine purchased, 2005-2014

	2005 (n=14)	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)**
Median price per gram	$350	$350	$390	$325	$375	$365	$375	$325	$400	**$400**
Price range	($300-$450)	($210-$600)	($200-$500)	($300-$400)	($200-$300)	($300-$500)	($350-$500)	($100-$700)	($300-500)	**($150-$600)**

Source: WA EDRS REU/RPU interviews, 2005-2014

As evident in Figure 20, of those commenting (n=14), the majority reported that the price was stable or increasing (each 43%, n=6). The remaining two participants (14%) reported the price as fluctuating.

Figure 20: User reports of recent changes in the price of cocaine, 2014



Source: WA EDRS REU interviews, 2014

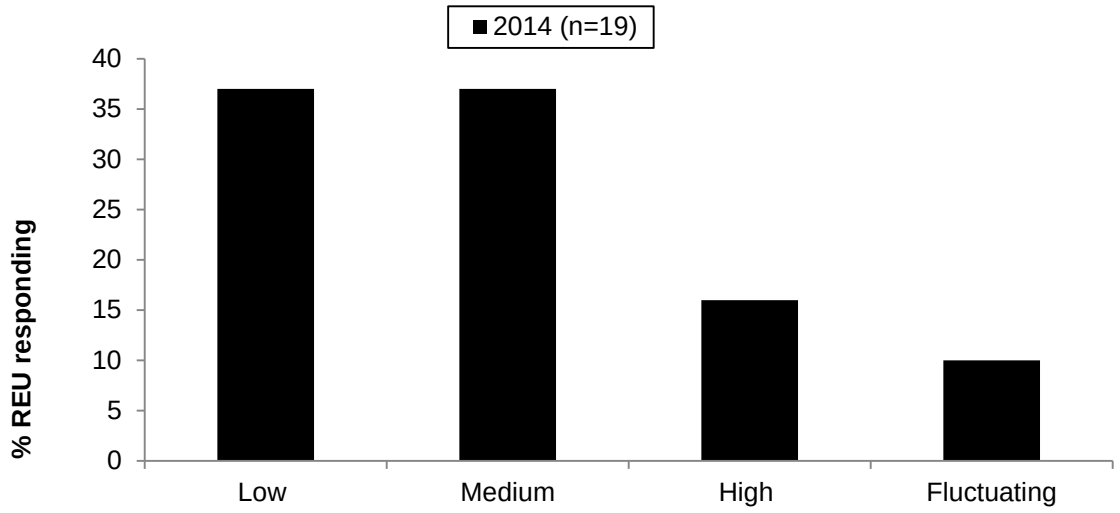
ACC statistics

Data obtained from the ACC indicates that, in WA during 2012/13, the price per ounce (28 grams) of cocaine was $10,000 ($11,000 in 2011/12). In the 2012/13 period, a gram of cocaine cost $750; the price for a quarter of an ounce (seven grams) was $5,000 and the price for one kilogram was $320,000 to $360,000. Prices for these amounts were not available for 2011/12.

4.3.2. Potency

In 2014, 19 participants commented on the potency of cocaine. Of these, the greatest proportions rated cocaine as low and medium (each 37%, n=7); followed by high (16%, n=3), and then fluctuates (10%, n=1). This data is displayed in Figure 21. None of these proportions significantly differed from 2013, where 54% reported purity as low, 39% reported it as medium and 8% reported it as high.

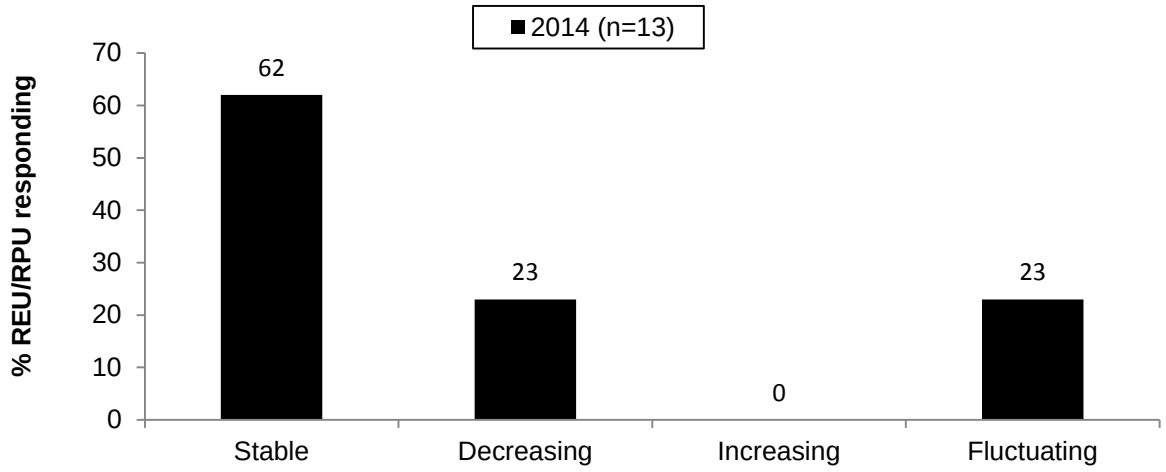
Figure 21: User reports of current potency of cocaine, 2014



Source: WA EDRS REU interviews, 2014

Of the 19 participants who commented on cocaine potency, 13 were able to comment on perceived changes to potency in the preceding six-month period. As presented in Figure 22, the greatest proportion reported that potency was stable (62%, n=8), followed by decreasing (23%, n=3), and then fluctuating (15%, n=2). There were no significant differences in the spread of the proportion of these responses in the present sample compared to 2013.

Figure 22: User reports of changes in cocaine potency in the preceding six months, 2014.



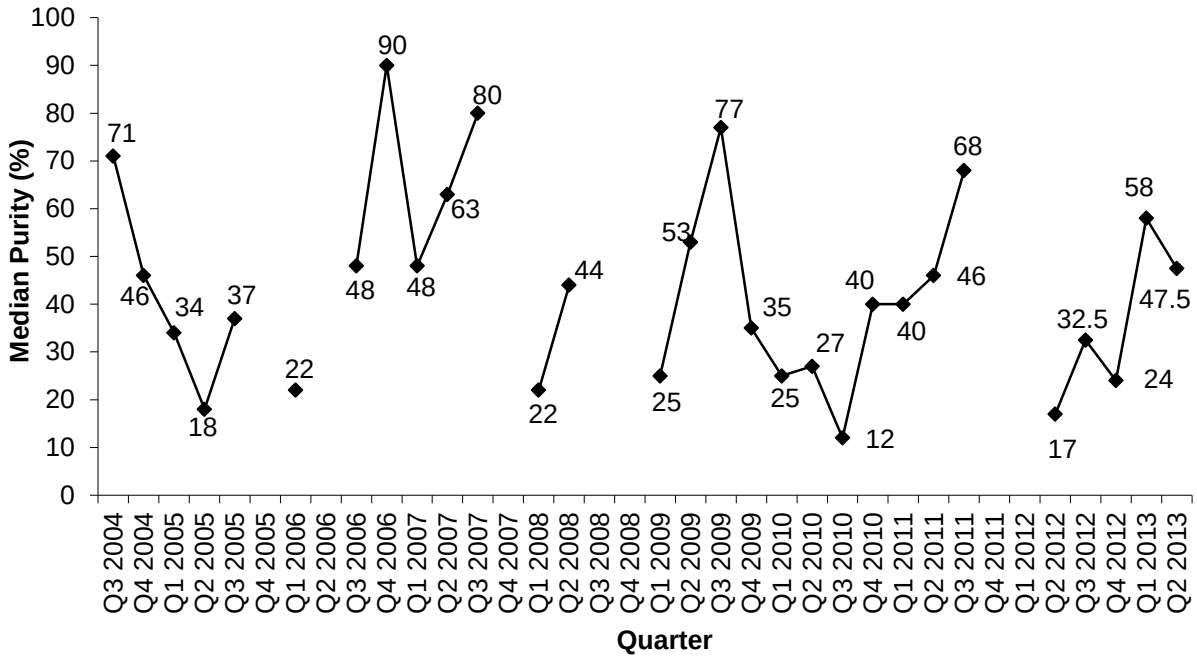
Source: WA EDRS REU interviews, 2014

ACC statistics

Figure 23 presents ACC data for the median purity of cocaine seizures in WA per quarter. It is difficult to interpret meaningful findings from these data due to the number of seizures historically being extremely low, or unreported, in WA. From the latest ACC data, it would

appear that the potency of cocaine seizures analysed in WA increased in purity in 2012/13 from the previous period, but continued to fluctuate, ranging from 36% to 80%, compared to 17% to 68% in 2011/12 (ACC, 2014).

Figure 23: Median purity of cocaine seizures analysed in WA by quarter, July 2004 to June 2013



Source: ACC, 2004-2013

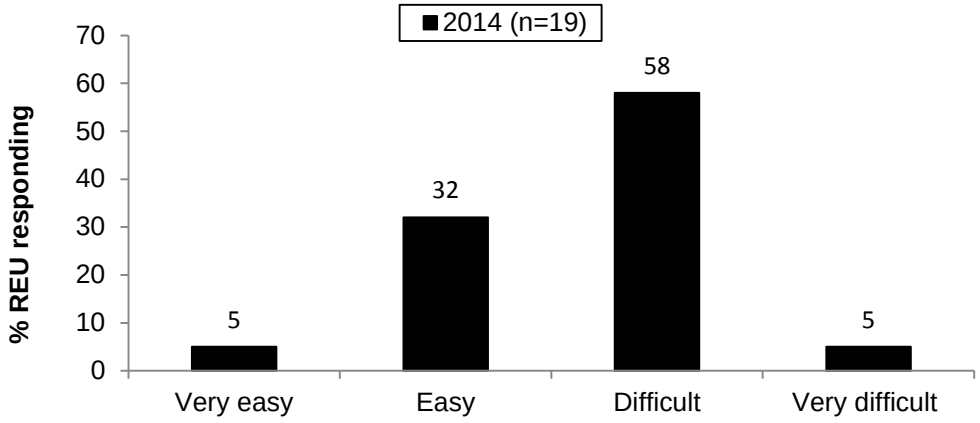
KE comments

- A KE who worked in drug analysis reported that the potency of cocaine currently being analysed in WA was high, at approximately 58%, which she reported was an increase compared to the previous period.

4.3.3. Availability

There were 19 participants who commented on perceived availability of cocaine in Perth. As presented Figure 24 and, consistent with 2013, most participants (58%, n=11) rated current availability as difficult. This was followed by easy (32%), and then very easy and very difficult (each 5%, n=1).

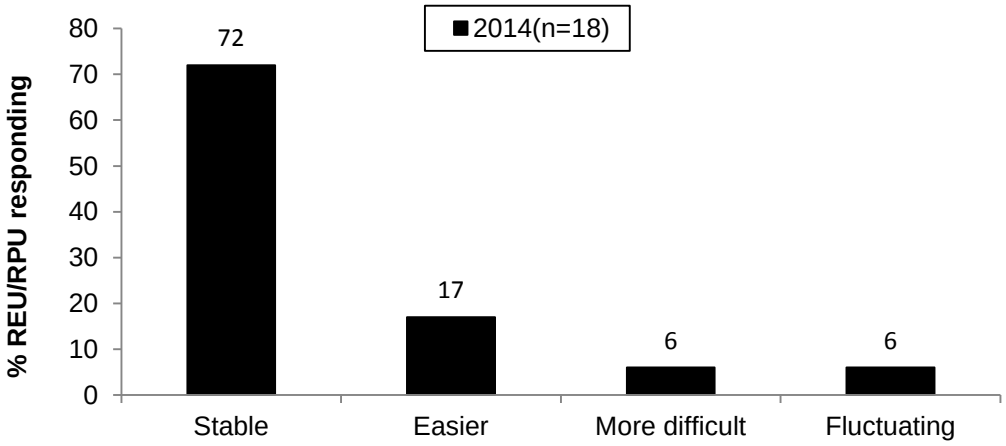
Figure 24: Current availability of cocaine, 2014



Source: WA EDRS REU interviews, 2014

There were 18 participants who commented on perceived changes in the availability of cocaine over the preceding six-month period. As presented in Figure 25, the majority (72%, n=14) reported that cocaine availability was stable, in line with the 2013 results. A further three participants (17%) reported that it was easier to obtain, followed by fluctuates and more difficult (each 6%, n=1). None of these proportions differed significantly from 2013.

Figure 25: Changes in cocaine availability in the preceding six months, 2014



Source: WA EDRS REU/RPU interviews, 2014

KE comments

- Supporting user perceptions of availability in this period, most KE reported that cocaine was currently difficult to obtain.

Source person and source location

Of those who commented on who they obtained cocaine over the preceding six months (n=19), the majority reported obtaining from a friend (58%, n=11), mirroring the 2013 results. This was followed by a known dealer (26%, n=5), workmates (11%, n=2) and then a street dealer (9%, n=1). Reported locations of last purchase were mixed. The most commonly reported locations were a friend's home, a dealer's home, a nightclub and a private party (each 16%, n=3); this was followed by own home, and an agreed public location (each 11%, n=2), and then a pub/bar, at work and at a live music event (each 5%, n=1).

4.3.4. Summary of cocaine trends

- The median price per gram of cocaine was $400.
- That majority reported that the price of cocaine was stable or increasing (each 43%).
- The majority rated potency as low or medium (each 37%).
- The greatest proportion of REU perceived cocaine potency as stable (62%).
- Findings related to cocaine should be interpreted with caution given the small number of participants who commented (n=15).
- Analysis of cocaine seizures in WA revealed that cocaine potency in the 2012/13 period was between 36% to 80%, indicating a slight increase in purity from 2011/12.
- The majority reported that cocaine was difficult to obtain (58%) and that availability was stable in the preceding six-month period (72%).
  A friend was most commonly reported as the last person from whom cocaine was obtained (58%). Accordingly, a friend's home was the most commonly reported location of last purchase.

4.4. Ketamine

In 2014, only five participants were able to comment on the price, potency and availability of ketamine. Given the extremely small sample size and inconsistency in responses, findings for ketamine may be unreliable and have therefore been excluded from analysis.

4.5. GHB

Only two participants were able to comment on the price or potency of GHB in 2014. Again, given the extremely small sample size and inconsistency in responses, findings for GHB are likely unreliable and have also been excluded from analysis.

4.6. LSD

4.6.2 Price

As presented in Table 21, in 2014 the median price per tab of LSD in Perth was $25, which is the same median price as 2013. Of those who commented on recent changes in the price of LSD (n=35), the majority (71%, n=25) reported that the price was stable over the preceding six months. Of the remainder, perceptions were mixed, with 17% (n=6) reporting price to be increasing, 6% (n=2) reporting fluctuating and a further 6% (n=2) reporting decreasing.

Table 21: Price of LSD purchased, 2005-2014

LSD	2005 (n=35)	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)**
Median price ($)	25	20	25	25	25	25	25	20	25	**25**
tab (range)	(15-40)	(10-50)	(10-30)	(20-45)	(5-40)	(10-40)	(15-50)	(10-50)	(1-35)	**(12-40)**
Price change:	(n=29)	(n=13)	(n=10)	(n=7)	(n=19)	(n=27)	(n=11)	(n=19)	(n=37)	**(n=35)**
Increased (%)	38	15	0	29	21	11	9	0	11	**17**
Stable (%)	34	69	90	57	74	78	64	68	60	**71**
Decreased (%)	17	8	10	14	5	7	0	26	16	**6**
Fluctuated (%)	10	8	0	0	0	4	27	5	14	**6**

Source: WA EDRS REU/RPU interviews, 2005-2014

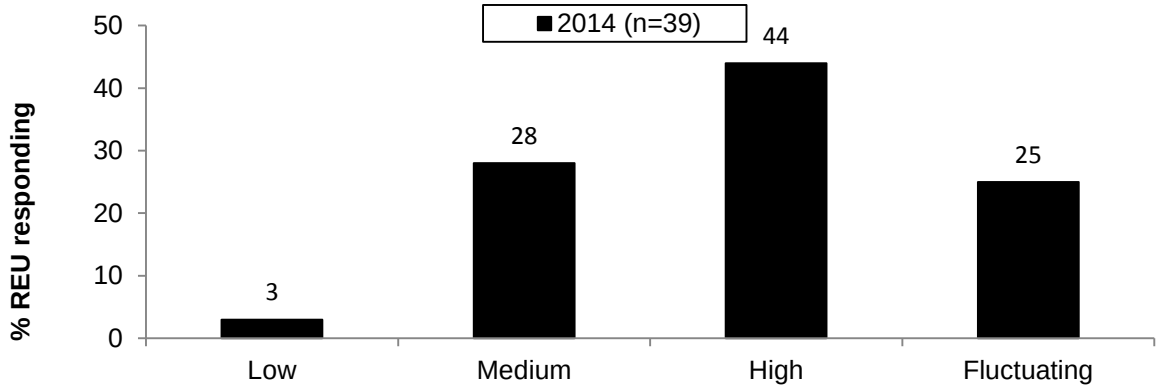
ACC statistics

Data obtained from the ACC in 2012/13 indicated that in WA in this period LSD cost between $30 and $50 dollars for per tab for one to nine tabs (ACC, 2014). No data regarding the price of LSD was available for the 2011/12 time period, but data from the 2010/11 period indicates that the price of LSD was $25 to $30 per tab (ACC, 2012).

4.6.1. Potency

There were 36 participants who commented on the potency of LSD in Perth in 2014. As presented in Figure 26, almost half (44%, n=16) of those commenting rated the potency of LSD in the preceding six-month period as high. This was followed by medium (28%, n=10), fluctuates (25%, n=9), and low (3%, n=1). These results are consistent with 2013, where again most participants rated the current potency as high or medium.

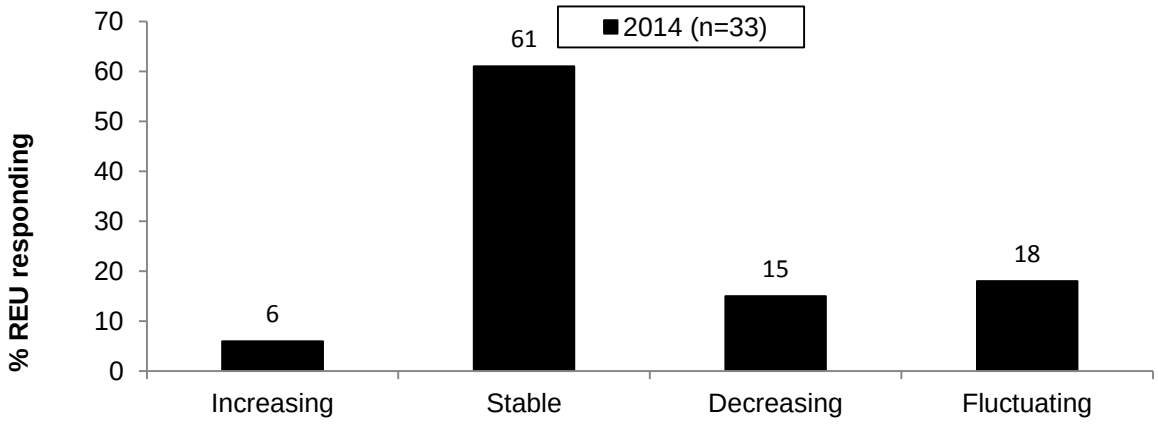
Figure 26: User reports of current LSD potency, 2014



Source: WA EDRS REU interviews, 2014

Participants were also asked whether there were any changes in the perceived potency of LSD in the preceding six months (see Figure 27). Of those who commented (n=33), the majority (61%, n=20) reported that LSD potency was stable, not significantly different from 50% reported in 2013. In 2014, perceptions were mixed with 18% (n=6) reporting potency as fluctuating, 15% (n=5) reporting decreasing and 6% (n=2) reporting increasing.

Figure 27: User reports of changes in LSD potency in the past six months, 2014



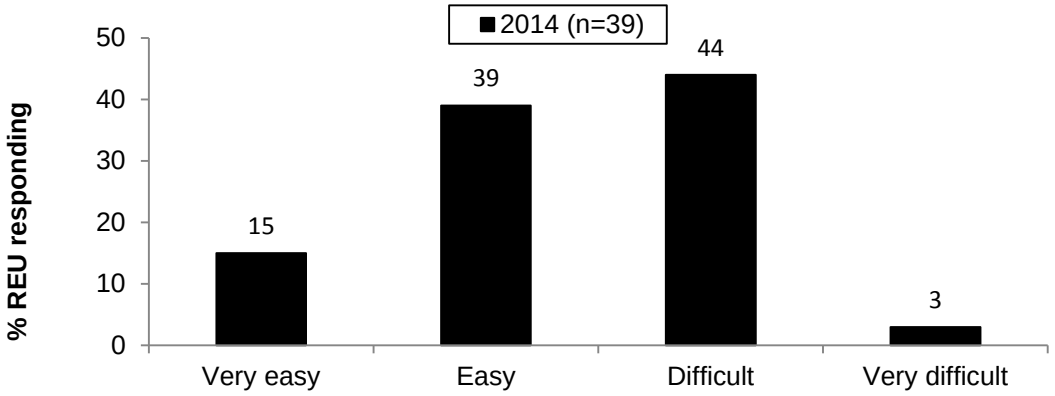
Source: WA EDRS REU interviews, 2014

KE comments

4.6.2. Availability

Figure 28 presents the perceived current availability of LSD in WA in 2014. Perceptions of availability were mixed. Of those who commented (n=39), 44% (n=17) reported that it was difficult to obtain. This was followed by easy (39%, n=15), very easy (15%, n=6) and then very difficult (3%, n=1).

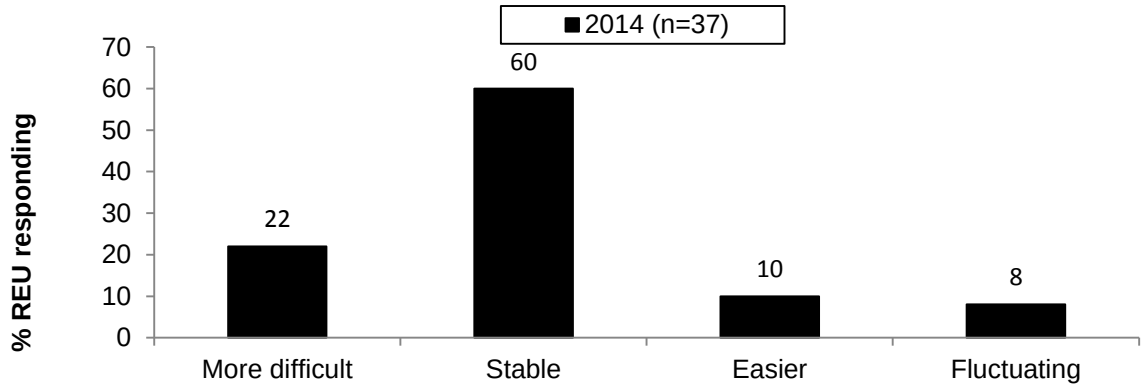
Figure 28: Current availability of LSD, 2014



Source: WA EDRS REU interviews, 2014

Of those who commented on perceived changes in the availability of LSD over the preceding six months (n=37), the majority (60%, n=22) reported that availability was stable, consistent with the 2013 results. Again consistent with 2013, the next most common response was more difficult (22%, n=8). This was followed by easier (10%, n=4) and then fluctuating (8%, n=3).

Figure 29: Changes in availability of LSD during the preceding six months, 2014

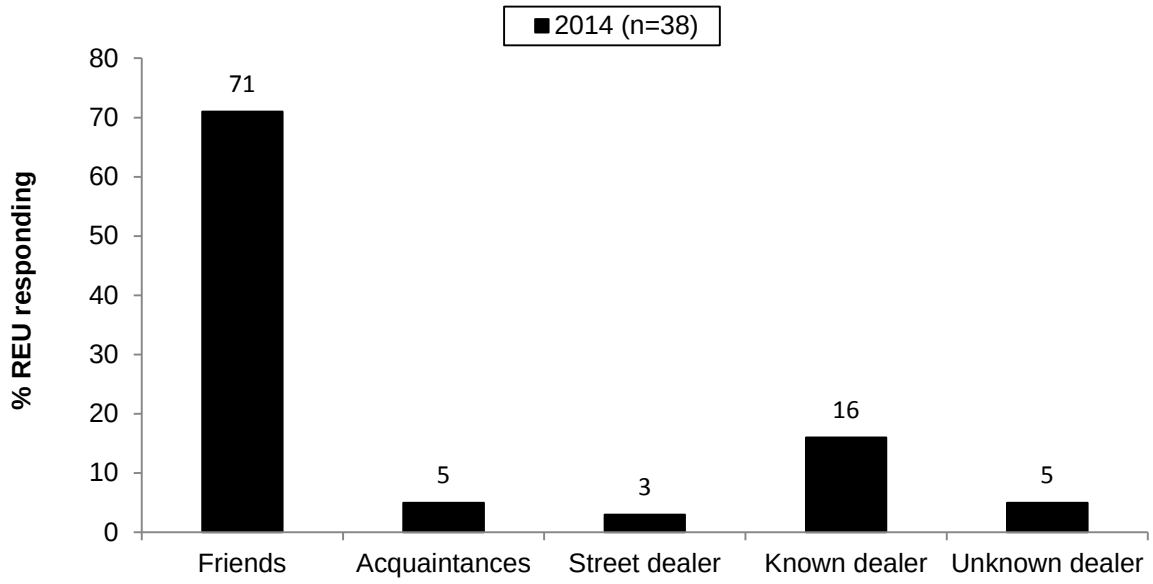


Source: WA EDRS REU interviews, 2014

Source person and source location

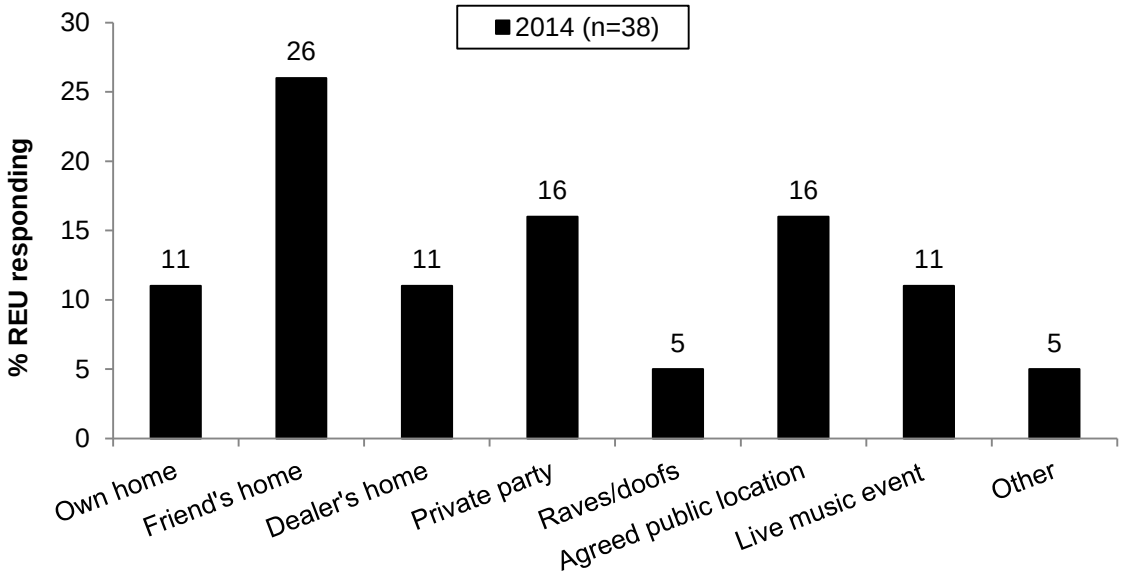
Participants were asked about the person and location from where LSD was last obtained. Of those who commented (n=38), as in 2013, a friend was the most commonly reported source for obtaining LSD (71%, n=27). This was followed by followed by a known dealer (16%, n=2), acquaintances and an unknown dealer (each 5%, n=2) and then a street dealer (3%, n=1). Accordingly, the most commonly reported location from where LSD was last obtained was friend's home (26%, n=10), followed by a range of different public and private locations. A complete breakdown is presented in Figure 30 and Figure 31.

Figure 30: Person from whom LSD was last obtained, 2014



Source: WA EDRS REU interviews, 2014

Figure 31: Locations from where LSD was last obtained, 2014



Source: WA EDRS REU interviews, 2014

4.6.3. Summary of LSD trends

- The median price per tab of LSD was $25, the same price reported in 2013.
- That majority (71%) reported that the price of LSD was stable.
- The majority rated potency as medium (44%) and was most commonly perceived as stable in the six-month period preceding interview (61%).
- Perceptions of availability were mixed, but the majority (44%) rated LSD as difficult to obtain.
- The majority reported that availability was stable (60%).
- Mirroring the 2013 findings, a friend was the most commonly reported person from whom LSD was last obtained (71%). Accordingly, a friend's home was the most commonly reported location of last purchase (26%).

4.7. Cannabis

4.7.1. 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 22 presents the median price for an ounce of hydro and bush cannabis according to participant price reports. In 2014, one ounce of hydro cannabis (n=33) cost a median of $350 (range $105-$380), which has been the consistent market price since 2009. While bush cannabis has consistently cost slightly less than hydro in previous years, in 2014 (n=30) it was reported to cost a median of $350 (range $200-$400), an increase of $50 dollars from 2013. This may suggest a slight increase in the price of bush cannabis in Perth.

Participants also commented on the price of cannabis per gram. The median price per gram of both hydro (n=14) and bush (n=16) was $25 (range $15-$30), which remains unchanged since 2010. A 'stick' (typically ranging from 0.8-1.8 grams) also cost a median of $25 (range $20-$50) for both hydro (n=41) and bush (n=33). This is the same price as 2013.

Three participants were able to comment on the price of hash. The median price for a gram of hash was $35 (range $25-$100). The median price for a 'cap' of hash oil was $40 (range $20-$100). However, the small sample size (n=3) precludes drawing any reliable conclusions from these data.

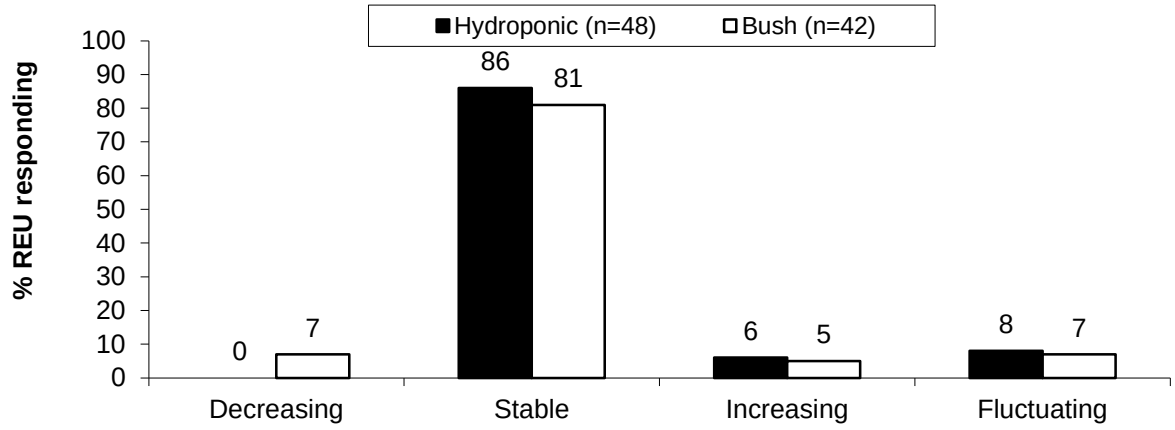
Table 22: Median price of cannabis ounce, 2006-2014

Form of cannabis	2006	2007	2008	2009	2010	2011	2012	2013	**2014**
Hydroponic	(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**
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**

Source: WA EDRS REU/RPU interviews, 2006-2014

Participants were also asked to report on perceived changes in the price of cannabis in the preceding six-month period (Figure 42). Of those who commented (n=48), the majority reported the price of hydro as stable (86%, n=41), followed by fluctuating (8%, n=4) and then increasing (6%, n=3). For bush cannabis, of those who commented (n=42), again the majority reported the price as stable (81%, n=34). This was followed by decreasing and fluctuating (each 7%, n=3), and then increasing (5%, n=2). These results were not significantly different to the 2013 findings.

Figure 32: Recent changes in price of cannabis purchased by REU 2014



Source: WA EDRS REU interviews, 2014

KE comments

- KE from clinical and referral services, as well as law enforcement and drug and alcohol research, agreed that the price of an ounce of cannabis currently was $300 to $400 per ounce
- Two KEs, one who worked as a specialist clinical nurse and another who worked in law enforcement, reported that the price for a stick of cannabis was currently $25.
- Most KEs reported that the price of cannabis was stable in this period, but one KE, an alcohol and drug field researcher, reported that the price had increased.

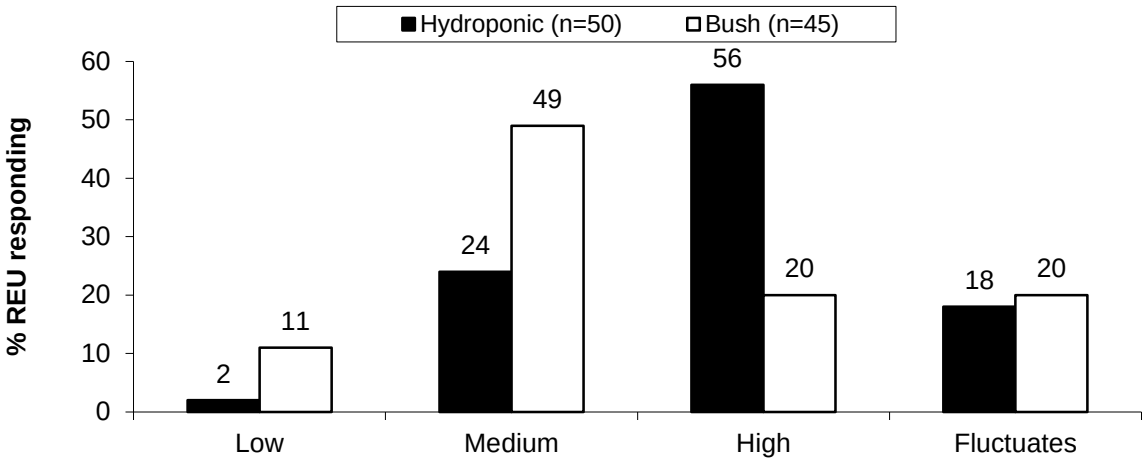
ACC statistics

There was no ACC data available concerning the price of hashish in WA in the 2012/13 reporting period. Data from ACC (2014) indicates that in WA, during 2012/13, bush cannabis cost $25 for one gram, $350 for one ounce (28 grams) and $4,200) for one pound. No data was available on the price of bush cannabis for 2011/12, but data from 2010/11 indicated that bush cannabis cost $50 for one gram, cost $360-$700 for one ounce (28 grams), and cost $4,000-$5,000 for one pound (ACC, 2012). Data from the ACC (2014) indicated that for the 2012/13 period, one ounce of hydro cost $4,200. There was no data available concerning the prices of any other amounts of hydro for this period. In WA during the 2011/12 period, the price of hydro was $30 per gram, $300-$700 per ounce and $4,400 per pound (ACC, 2013).

4.7.2. Potency

Participants also commented on the current potency of cannabis and perceived changes in potency over the preceding six months. Of those who commented on hydro (n=50), more than half (56%, n=28) rated the current potency as high, comparable to 55% in 2013. This was followed by medium (24%, n=12), fluctuates (18%, n=9) and then low (2%, n=1). None of these proportions differed significantly from the 2013 findings. Unlike hydro, of those who commented (n=45), bush cannabis was most commonly rated as medium (49%, n=22), comparable to 70% in 2013. This was followed by fluctuates and low (each 20%, n=9) and then high (11%, n=5). None of these proportions differed significantly from 2013. A full breakdown of cannabis potency reports are presented in Figure 33.

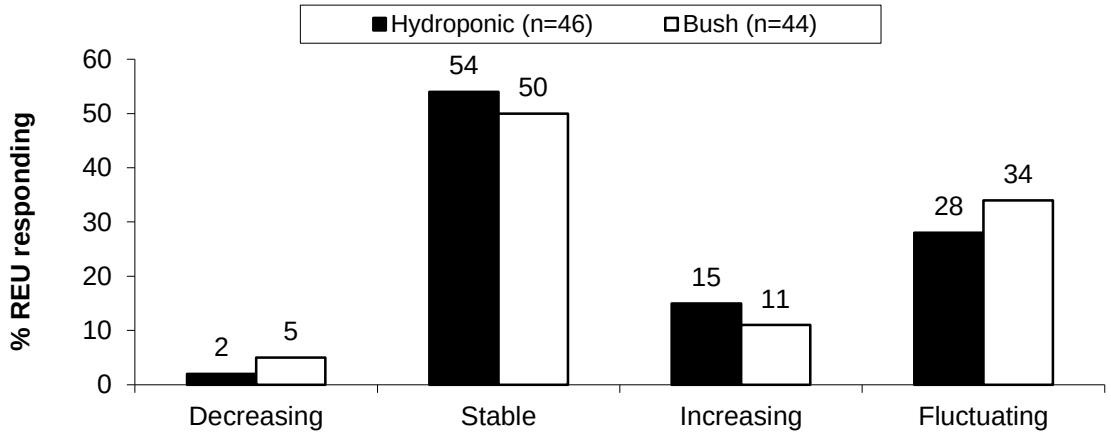
Figure 33: User reports of current potency of cannabis, 2014



Source: WA EDRS REU interviews, 2014

Figure 34 presents user perceptions of changes to cannabis potency in the preceding six months. Of those who commented on hydro (n=46), the majority (54%, n=25) reported that potency was stable, consistent with the 2013 findings. Potency was rated as stable by half (50%, n=22) of those commenting on bush (n=44). This was also consistent with the 2013 findings.

Figure 34: User reports of changes in cannabis potency in the past six months, 2014

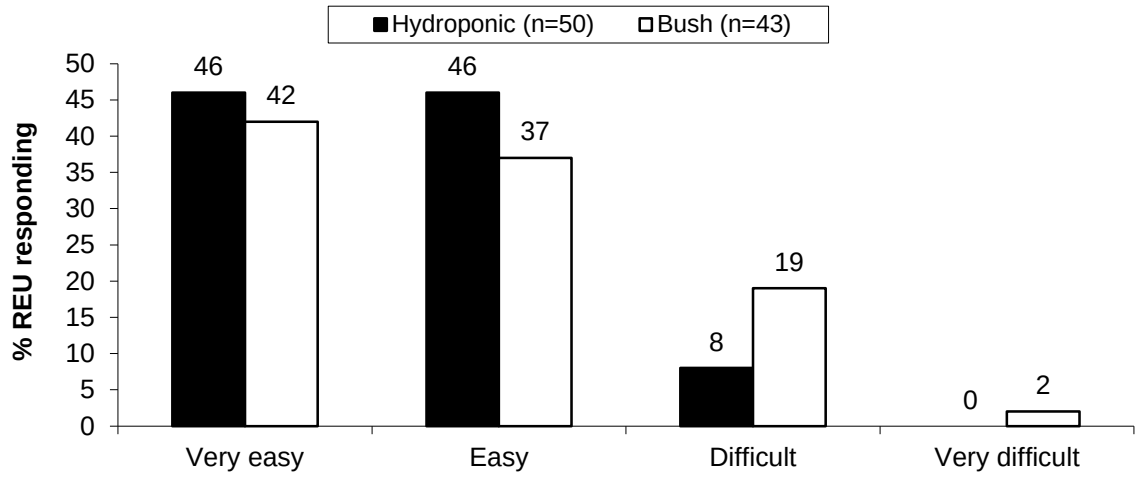


Source: WA EDRS REU interviews, 2014

4.7.3. Availability

Consistent with recent years, in 2014 the vast majority of those commenting reported that hydro was either very easy or easy to obtain (92%, the same proportion as 2013). As in 2013, no participants reported that hydro was very difficult to obtain. Similarly, the majority also reported that bush was either very easy or easy to obtain (79% in 2014, comparable to 75% in 2013); however, just under one-fifth (19%, n=8) also reported that bush was difficult to obtain, and one participant (2%) reported that it was very difficult to obtain. Overall, as evident in Figure 35, user perceptions continue to suggest that hydro is the more available form of cannabis in Perth.

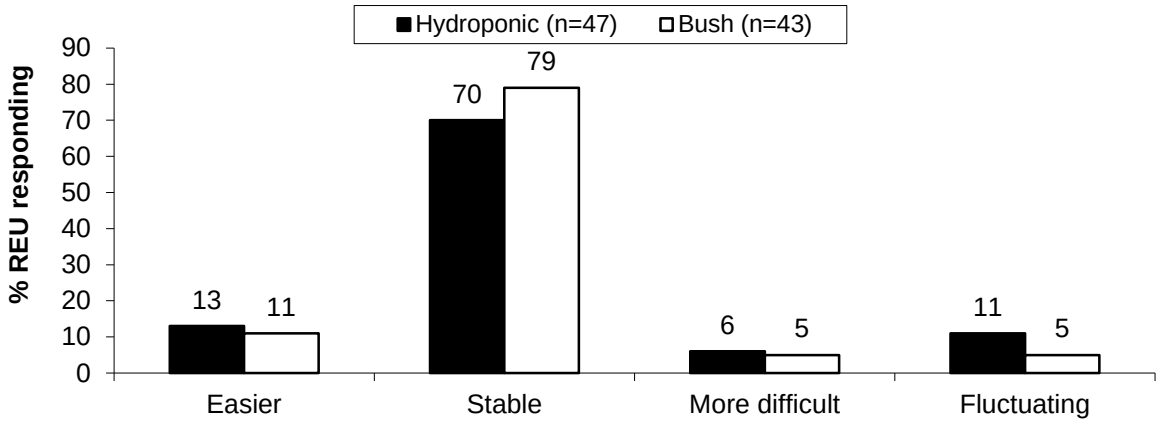
Figure 35: Current availability of cannabis, 2014



Source: WA EDRS REU interviews, 2014

Participants were also asked to comment on perceived changes in the availability of cannabis over the preceding six months. Of those who commented (n=47), the majority (70%, n=33) reported that hydro was stable. This is consistent with the 2013 findings. Likewise, of participants who commented on bush cannabis (n=43), the majority (79%, n=34) reported that availability was stable. A complete breakdown of perceptions in changes in cannabis availability is shown in Figure 36.

Figure 36: Changes in cannabis availability in the preceding six months, 2014



Source: WA EDRS REU interviews, 2014

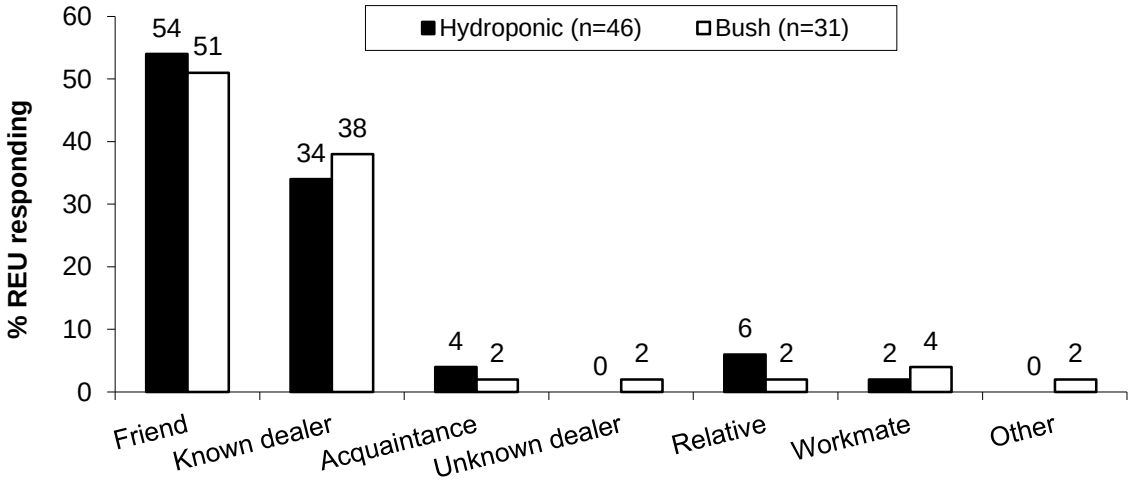
KE comments

- Most KE agreed that the availability of cannabis remained high in the current period. However, two KE, one who worked a clinical nurse and another who worked in referral to services, reported that the availability of cannabis had decreased in the period.

Source person and source location

Consistent with the 2013 results, as presented in
Figure 37, a friend was the most commonly reported person from whom cannabis was last obtained, for both hydro (54%, n=27) and bush (51%, n=23). Again consistent with the 2013 results, the second most commonly reported person was known dealer again for both hydro (34%, n=17) and bush (38%, n=17).

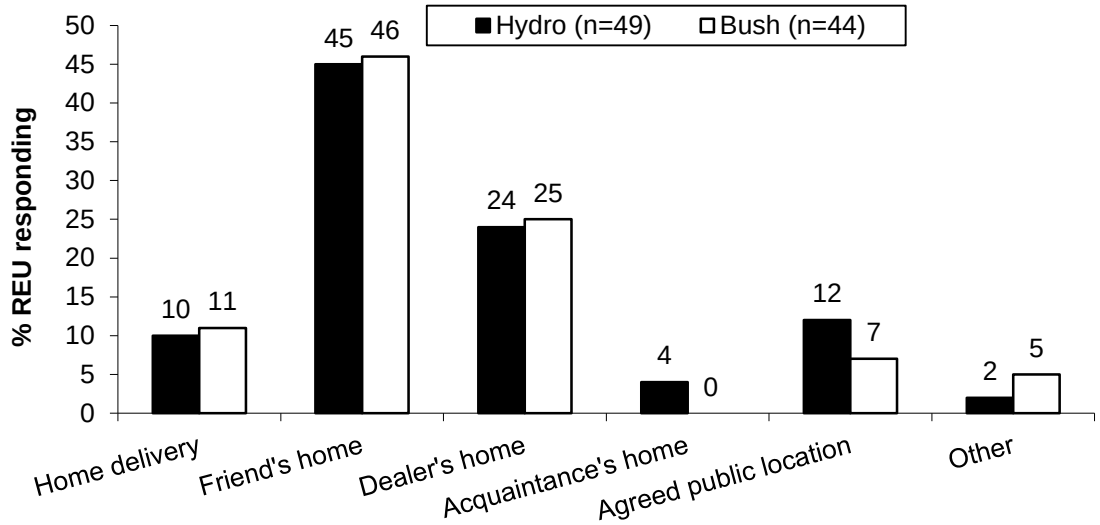
Figure 37: Person from whom cannabis was last obtained in the preceding six months, 2014



Source: WA EDRS REU interviews, 2014

Consistent with Figure 37, friend's home was the most commonly reported location from where cannabis was last obtained, for both hydro (45%, n=22) and bush (46%, n=20). This was followed by a dealer's home. A full breakdown is presented in
Figure 38.

Figure 38: Last location where cannabis was obtained in the preceding six months, 2014



Source: WA EDRS REU interviews, 2014

ACC statistics

The ACC reported that in 2012/13 there were 9,480 seizures of cannabis in WA, compared to 8,526 seizures in the 2011/12 reporting period. In the 2012/3 period, the total weight for WA cannabis seizures was 276,466 grams, a decrease from 295,008 grams in 2011/12. These data indicate that while the number of cannabis seizures in WA increased in 2012/13, the total weight of seizures was lower compared to the 2011/12 reporting period.

4.7.4. Summary of cannabis trends

Hydro

- The median price per ounce was $350, which has been consistent since 2009.
- The median price per gram was $25, which is also consistent with recent years.
- The majority of participants reported that the price of hydro was stable (85%).
- The majority of participants rated current potency of hydro as high (56%).
- The majority of participants rated current availability of hydro as easy or very easy (92%) and stable (70%).

Bush

- The median price per ounce was $350, suggesting a possible recent increase in the price of bush cannabis in Perth. However, the median price per gram was $25, consistent with recent years.
- The majority reported that the price of bush was stable (86%).
- Perceptions of the current potency of bush were mixed. However, the most commonly cited potency was medium (49%).
- The majority of those commenting rated current availability of bush as easy or very easy (79%), and the majority reported availability as stable (79%).

Hash

- The medium price for a gram of hash was $35.
- The medium price for a 'cap' of hash oil was $40.
- These findings should be interpreted with caution due to the small number of participants able to comment on the price of hash.

- A friend was by far the most commonly reported last source of both hydroponic (54%) and bush cannabis (51%). Accordingly, a friend's home was the most commonly reported location from where cannabis was last obtained.

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

5.1. Overdose and drug-related fatalities

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

5.1.1. Stimulant overdose

In 2013, approximately one-third (34%) of respondents reported overdosing on a stimulant drug at some point in their lifetime, which did not represent a significant change from 2013 (39%). Of those who had ever overdosed on a stimulant drug (n=39), the median number of times they had done so in their lifetime was one (range 1-100), comparable to two in 2013. Additionally, the most recent overdose occurred on a median of five months ago (range 1-36), a non-significant change from two months in 2013.

Table 23: Ever overdosed on a stimulant drug, 2014

	Stimulant
Ever overdosed (%)	34
Median number of times (range)*	1 (1-100)
Months since most recent overdose*	5 (1-36)
Overdosed in last 12 months (%) *	88

Source: WA EDRS REU interviews, 2014
* Of those who had ever overdosed

Of those participants who had experienced a stimulant overdose in their lifetime (n=34), the majority (88%, n=30) had experienced one in the past 12 months. This equates to 30% of the overall sample experiencing a recent stimulant overdose, comparable to 29% in 2013.

Twenty-seven participants who had overdosed in the preceding 12 months commented on the main drug to which they attributed the stimulant overdose. Mirroring the 2013 results, in 2014, ecstasy was the most commonly reported drug, cited by almost two-thirds of the sample (63%, n=17); this was not significantly different from 62% in 2013. Following ecstasy, pharmaceutical stimulants (11%, n=3) and cocaine (7%, n=2) were the most commonly reported drugs attributed to stimulant overdose. The majority (80%, n=24) of those who had experienced a stimulant overdose recently reported taking at least one other drug in combination to the main drug when the overdose occurred. These drugs included alcohol (65%, n=17), pharmaceutical stimulants (23%, n=6), cannabis (23%, n=6), LSD (15%, n=4), cocaine (8%, n=2), speed, and ecstasy (5%, n=1 each).

The most common reported location of stimulant overdoses in the last 12 months was live music event (37%, n=10). Stimulant overdoses were reported to have occurred mainly during a heavy session (70%), opposed to a normal night out (30%). The median amount of time spent partying prior to overdose was five hours (range 1-96). Over half of the participants (59%, n=16) reported that there was a sober person present at the time of overdose who was able to assist to them. When asked about any immediate treatment received for these overdoses, less than one half (47%, n=14) reported being monitored/watched by friends, two

participants reported receiving medical personnel, a further one participant reported being attended to by an ambulance, one participant reported receiving treatment at an emergency department, and one additional participant reported receiving treatment from a general practitioner (GP). More than one-third of participants (37%, n=11) reported receiving no immediate treatment. A breakdown the data regarding stimulant overdose is presented in Table 24.

Table 24: Recently overdosed on a stimulant drug – reported causes, 2014

(%)	Stimulant
Main drug*	(n=27)
Ecstasy	63
Cocaine	7
Crystal methamphetamine	4
Pharmaceutical stimulants	11
Other	15
Location of most recent overdose*	(n=27)
Home	15
Friend's home	19
Private party	4
Nightclub	15
Car	4
Live music event	37
Other	2
Median time spent partying prior to overdose**	5 hrs
Sober person available to assist**	(n=27)
Yes	59
No	41

Source: WA EDRS REU interviews, 2014
* Of those who had overdosed in past 12 months

A variety of different symptoms were reported by participants as the main symptom that was experienced during stimulant overdose. The most commonly reported main symptoms were nausea and vomiting (each 15%, n=4), followed by increased heart rate (11%, n=3), headache and extreme anxiety (each 8%, n=2). The most common other symptoms reported included increased body temperature (52%, n=13) and increased heart rate (44%, n=11). Other symptoms reported by participants that were not listed options included inability to urinate, inability to move, involuntary body movements, sweating, loss of balance and visual flashes. A breakdown of symptoms is presented in Table 25.

Table 25: Recently overdosed on a stimulant drug – reported symptoms, 2014

(%)	
Overdose main symptom*	(n=26)
Nausea	15
Vomiting	15
Chest pain	4
Rapid breathing	4
Increased body temperature	4
Increased heart rate	12
Headache	8
Extreme anxiety	8
Paranoia	4
Hallucination-visual	4
Panic	4
Extreme agitation	4
Other	15
Overdose other symptoms*	
Nausea	24
Vomiting	20
Chest pain	16
Tremors	16
Increased body temperature	52
Increased heart rate	44
Irregular breathing- rapid	16
Irregular breathing-shallow	16
Seizure	8
Headache	24
Extreme anxiety	32
Panic	20
Extreme agitation	16
Paranoia	24
Hallucination-auditory	8
Hallucination-visual	16
Hallucination-tactile	8
Agitation	12
Delirium/confusion	20
Passed out	8
Dizziness	20
Muscle twitches	24
Other	24

Source: WA EDRS REU interviews, 2014
* Of those who had overdosed in past 12 months

5.1.2. Depressant overdose

In 2014, 11% of the sample reported experiencing an overdose on a depressant drug at some point in their lifetime, a significant decrease from 30% in 2013 (CI=-0.08 to -0.30). Of

those who had ever overdosed on a depressant drug, the median number of times they had done so was one time (range 1-5), not significantly different from 2013. The most recent depressant overdose occurred on a median of six months ago (range 1-120). These data are presented in Table 26.

Table 26: Ever overdosed on a depressant drug, 2014

(%)	2014
Ever overdosed	11
Median number of times (range)*	1 (1-5)
Median months since last overdose	6
Overdosed in last 12 months*	55

Source: WA EDRS REU interviews, 2014
* Of those who had overdosed in past 12 months

Of those participants who reported experiencing a depressant overdose (n=11), approximately two-thirds (55%, n=6) had experienced one in the past 12 months. This equates to 6% of the overall sample experiencing a recent depressant overdose, significantly lower than 19% in 2013 (CI=-0.04 to -0.22). As in 2014, the main drug that depressant overdoses that had occurred in the preceding 12 months were attributed to was alcohol (67%, n=4), followed by other opiates and dihydrocodeine (each 17%, n=1). The use of other drugs, including stimulants, in combination with a main depressant drug at the time of overdose has Only one participant reported taking another drug in combination with the main drug when the overdose occurred; this was codeine (17%, n=1).

Various locations of last depressant overdose (within the last 12 months) were reported. The median time spent partying prior to overdose on a depressant drug was four hours (range 0-7 hours), which did not significantly differ from the 2013 sample. All participants who had experienced a recent depressant overdose (n=6) reported that it had occurred during a heavy session rather than a normal night out. All participants further reported that there was a sober person present at the time of overdose that was able to assist them. The majority (83%, n=5) of participants reported receiving some form of immediate medical treatment. Most of these participants (n=4, 67%) reported being watched/monitored by friends. A range of other immediate treatments were reported, including ‘hospital emergency department’, ‘got oxygen’ ‘stomach pump’ and ‘took some medication’ (each 17%, n=1). One-third of participants (33%, n=2) reported having sought further advice or treatment later. This was sought from a GP, a counsellor, a user group organisation and drug court (each 17%, n=1).

A complete breakdown of this data is presented in Table 27.

Table 27: Recently overdosed on a depressant drug, 2014

(%)	2014
Main drug*	(n=6)
Alcohol	67
Other opiates	17
Other	17
Location of most recent overdose*	(n=6)
Home	17
Friend's home	17
Nightclub	17
Private party	17
Outdoors	17
Other	17
Median time spent partying prior to overdose*	4 hrs
Sober person available to assist*	
Yes	33
No	67

Source: WA EDRS REU interviews, 2014
* Of those who had overdosed in past 12 months

The most common main symptoms reported to have been experienced during a depressant overdose were collapsing and vomiting (each 33%, n=2).

It must be emphasised that only a small number of participants are represented in these overdose samples and 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.

A breakdown of reported depressant overdose symptoms is presented in Table 28.

Table 28: Recently overdosed on a depressant drug – symptoms, 2014

(%)	2014
Overdose main symptom*	(n=6)
Supressed breathing	0
Collapsing	33
Losing consciousness	17
Vomiting	33
Other	17
Overdose other symptoms*	(n=6)
Supressed breathing	0
Collapsing	0
Losing consciousness	29
Vomiting	57
Agitation	0
Blackout/memory loss	0
Paranoia	0

Source: WA EDRS REU interviews, 2014
* Of those who had overdosed in past 12 months

5.2. 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 29). Consistent with 2013, in the current sample, only 9% reported accessing a service. Participants were also asked if they had thought about accessing a health service or professional in relation to their drug use the preceding six months. Again consistent with the 2013 results, in the current sample a further, 9% had thought about it, but had not acted. Various reasons were reported for not accessing help; the most common being 'I worked it out on my own' (56%), followed by 'no time', 'not a priority', 'don't know', 'financial reasons', and 'lack of information' (each 11%).

Table 29: Percent who accessed health services in relation to drug use, 2014

Service (%)	2014 N=100
Accessed medical/health service (%)	9
Thought about accessing a medical/health service, but did not act	9

Source: WA EDRS REU interviews, 2014

In 2014, all participants were asked which of the following health services and professionals they had accessed over the past six months and how many visits with each health professional they had experienced and of those visits how many were related to alcohol and other drugs. Doctors (GPs) were seen, as expected, by the majority of the sample (72%). Smaller proportions of the sample reported seeing a dentist (36%), emergency department (14%), and another health professional (21%). For the full list of services see Table 30.

Table 30: Percent who accessed a health service for any issue, 2014

Service (%)	2014 N=100
Doctor (GP)	72
Dentist	36
Emergency Department	14
Psychologist	5
Psychiatrist	4
Drug and alcohol counsellor	4
Specialist doctors (not psychiatrists)	6
Hospital (admissions)	8
Hospital (outpatient)	2
Medical tent	5
Social welfare workers	3
Ambulance	1
Other health professional	21

Source: WA EDRS REU interviews, 2014

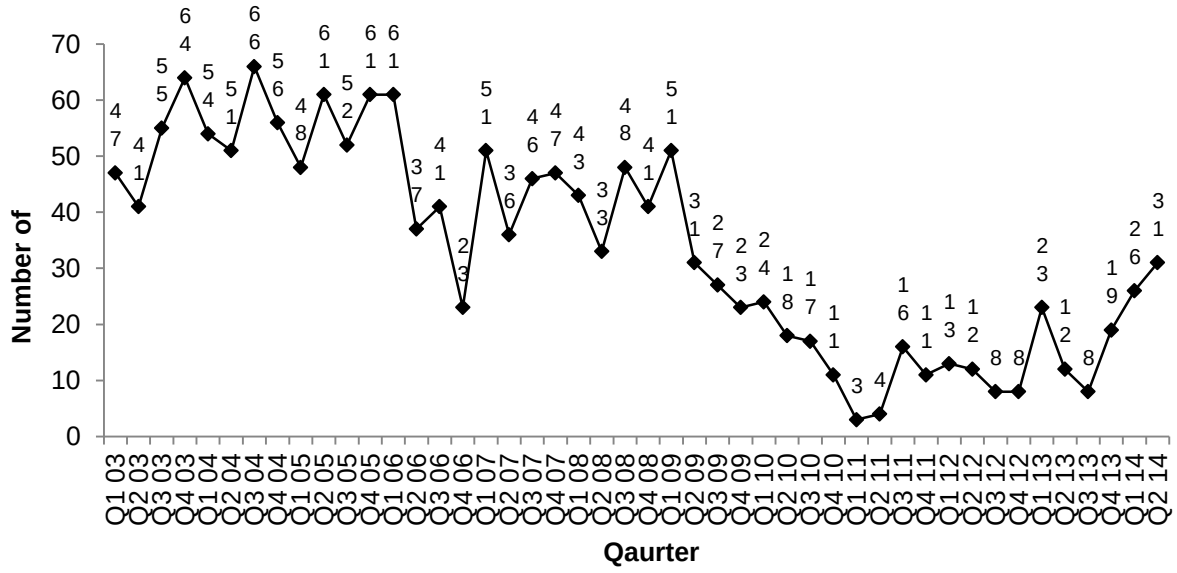
Of those that had seen a physician (GP), the median number of times a physician was seen for any reason was twice (range 1-25), consistent with the 2013 sample. When asked of those times, how many visits were alcohol or other drug related, again mirroring 2013 the median was zero (range 0-3). The main drugs reported for visits to the physician, of those

that reported having seen the physician for alcohol or other drug-related issues, included alcohol, cannabis, methamphetamine and dihydrocodeine.

The WA ADIS provides a free anonymous and confidential telephone information and referral 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 2013/14 period, ADIS received 25,757 calls, in comparison to 24,239 calls during the 2012/13 reporting period.

Calls to ADIS involving ecstasy as the primary drug of concern are presented by quarter in Figure 39. In the 2013/14 period, there were 84 calls to ADIS involving ecstasy as the primary drug of concern, an increase from 51 calls in the 2012/13 period. These calls comprised 0.33% of all calls received by ADIS during the 2013/14 period. As evident in Figure 39, the proportion of calls were ecstasy was the main drug of concern has remained relatively low across data collection years but appear to be on an upward trend.

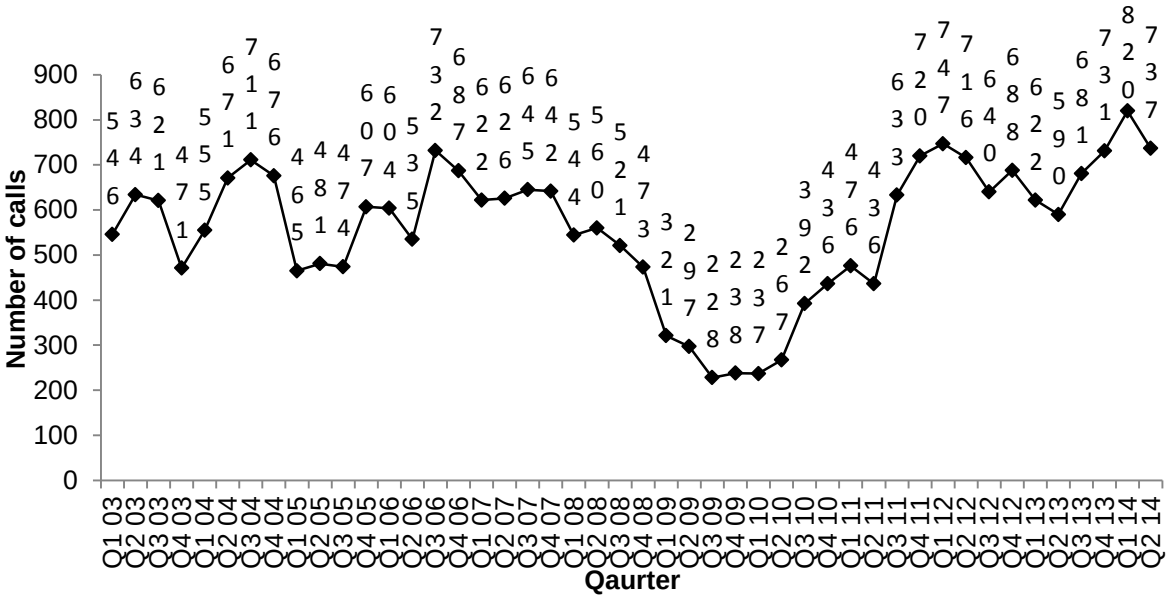
Figure 39: Number of ADIS inquiries concerning ecstasy as primary drug of concern, WA January 2003 to June 2013



Source: WA ADIS

In the 2012/13 period, there were a total of 2,969 calls to ADIS involving (meth)amphetamines as the primary drug of concern, in comparison to 2,540 in 2012/13 and 2,816 in 2011/12. These calls comprised 11.53% of all calls received by ADIS during the 2012/13 period, a slight increase from 10.5% during the 2012/13 period. Calls to ADIS involving (meth)amphetamine as the primary drug of concern are presented by quarter in Figure 40. There appears to be an upward trend in the number of calls compared to the 2012/13 period.

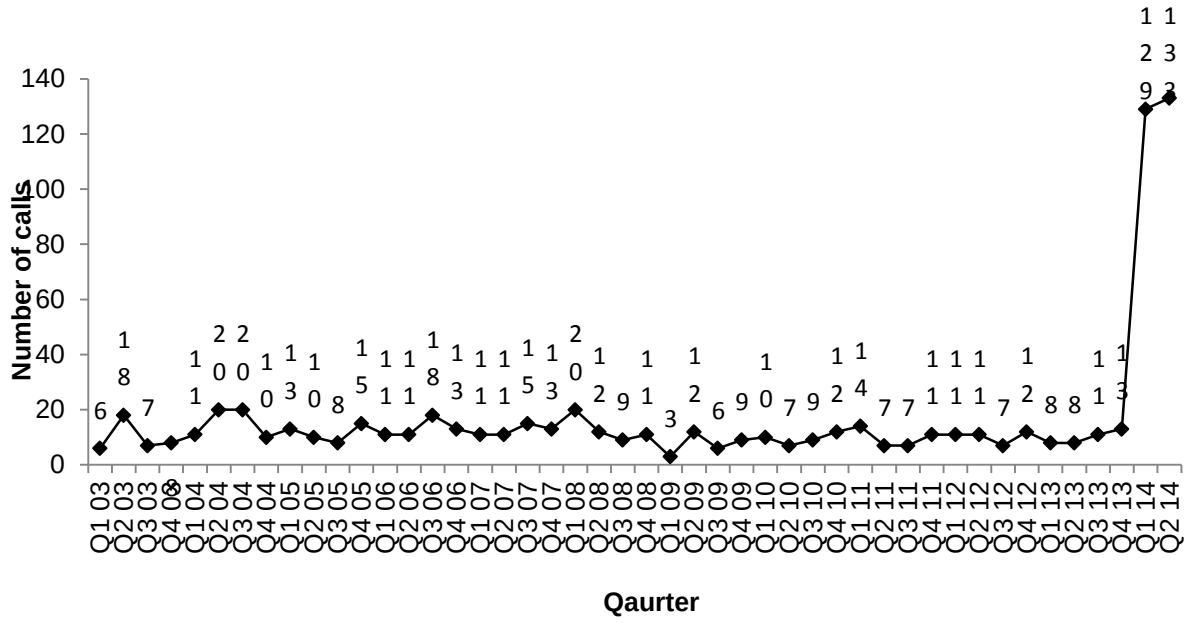
Figure 40: Number of ADIS inquiries concerning (meth)amphetamines as primary drug of concern, WA January 2000 to June 2013



Source: WA ADIS

In the 2012/13 period, there were 286 calls involving cocaine as the primary drug of concern, compared with 35 calls the previous year. These calls comprised 1.11% of all calls received by ADIS during 2013/14, compared to 0.14% in the 2012/13 period. Calls to ADIS involving cocaine as the primary drug of concern are presented by quarter in Figure 41. While the data appear to indicate that there was a large increase in calls in the first and second quarters of 2014 compared to previous periods, this increase was accounted for by multiple calls from a single caller, rather than an overall increase in calls.

Figure 41: Number of ADIS inquiries concerning cocaine as primary drug of concern, WA January 2000 to June 2013



Source: WA ADIS

5.3. Other self-reported problems

In previous years, EDRS participants were asked if they perceived their use of ERD to cause any relationship/social, financial, legal/police and/or work/study problems in the last six months. Since 2007, this has been changed to problems in the domains of social, legal, risk (of injury) and/or responsibility (see Table 31).

Consistent with the 2013 findings, in 2014, the most common problem reported by the current sample was in the area of risk (47%), followed by responsibility (27%), social (21%) and then legal (7%).

Of those who reported a risk problem (n=47) (e.g. driving while intoxicated), the greatest proportion mainly attributed the risk to alcohol (57%, n=27), followed by cannabis (23%, n=11), ecstasy (17%, n=8), and LSD (2%, n=1).

Of those reporting a responsibility (at school or work) problem (n=27) (e.g. absences from work), the greatest proportion mainly attributed the problem cannabis (41%, n=11), followed by alcohol (37%, n=10), ecstasy (19%, n=5), and then pharmaceutical stimulants (4%, n=1).

Of those who reported a social problem (n=21) (e.g. arguing with friends), the greatest proportion principally attributed the problem to ecstasy (43%, n=9), followed by cannabis (24%, n=5), alcohol (19%, n=4), and then speed methamphetamine and any drug use (each 5%, n=1).

Of those who reported a recurrent legal problem (n=7) (e.g. loss of licence), the greatest proportion again mainly attributed it to cannabis (57%, n=4), followed by ecstasy (29%, n=2).

A complete breakdown of this data is presented in Table 31.

Table 31: Self-reported drug-related problems and main drug implicated, 2014

	Any drug (N=100)[#]	Ecstasy (%)[*]	Speed (%)[*]	Crystal (%)[*]	LSD (%)[*]	Cannabis (%)[*]	Alcohol (%)[*]	Misc. (%)[*]
Social (%)	21	43	5	5	0	24	19	5
Legal (%)	7	29	0	0	0	57	0	0
Risk (%)	47	17	0	0	2	23	57	0
Responsibility (%)	27	19	0	0	0	41	37	4

Source: WA EDRS REU interviews, 2014

[*]Of those who nominated the problem

[#]Participants could select multiple categories of problems allowing percentage totals to exceed 100

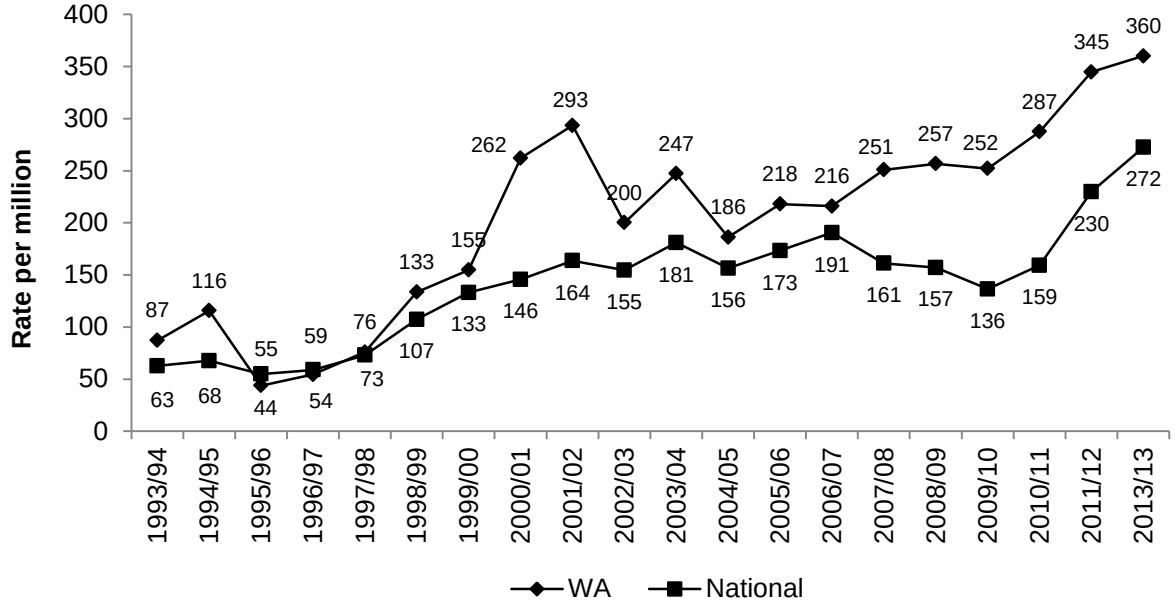
5.4. Hospital admissions

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 42 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 42, rates of methamphetamine hospital admissions appear to have continued to increase on both state and national levels in the 2012/13 reporting period.

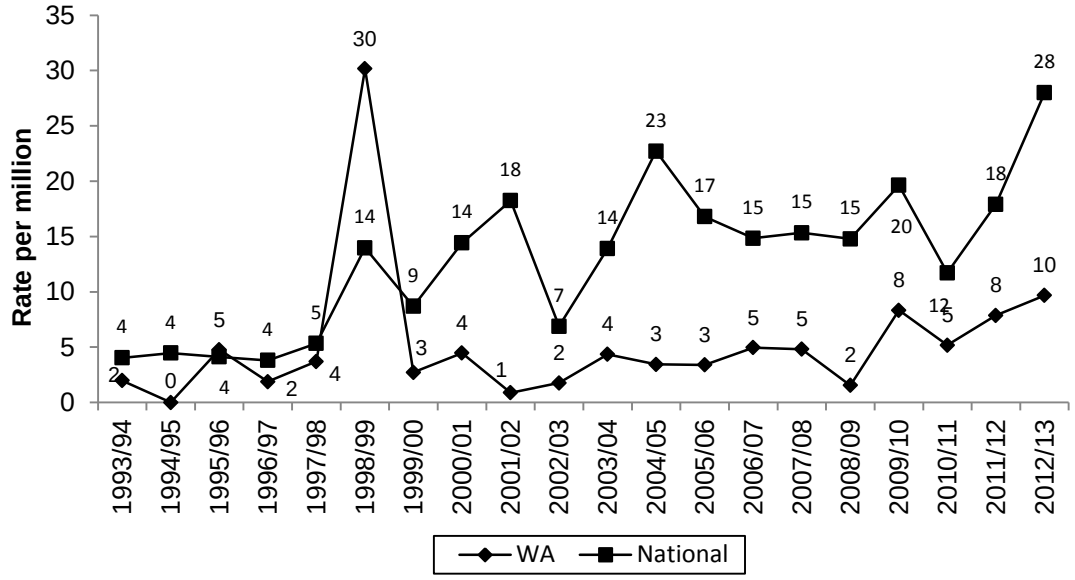
Figure 42: Rate of in-patient hospital admissions where (meth)amphetamines were the primary diagnosis in persons aged 15-54 in WA and nationally, July 1993-June 2013



Source: AIHW

As evident in Figure 43, 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 2012/13, rates of cocaine-related hospital admissions increased at the national level compared to 2011/12, with a very slight increase seen at the state level.

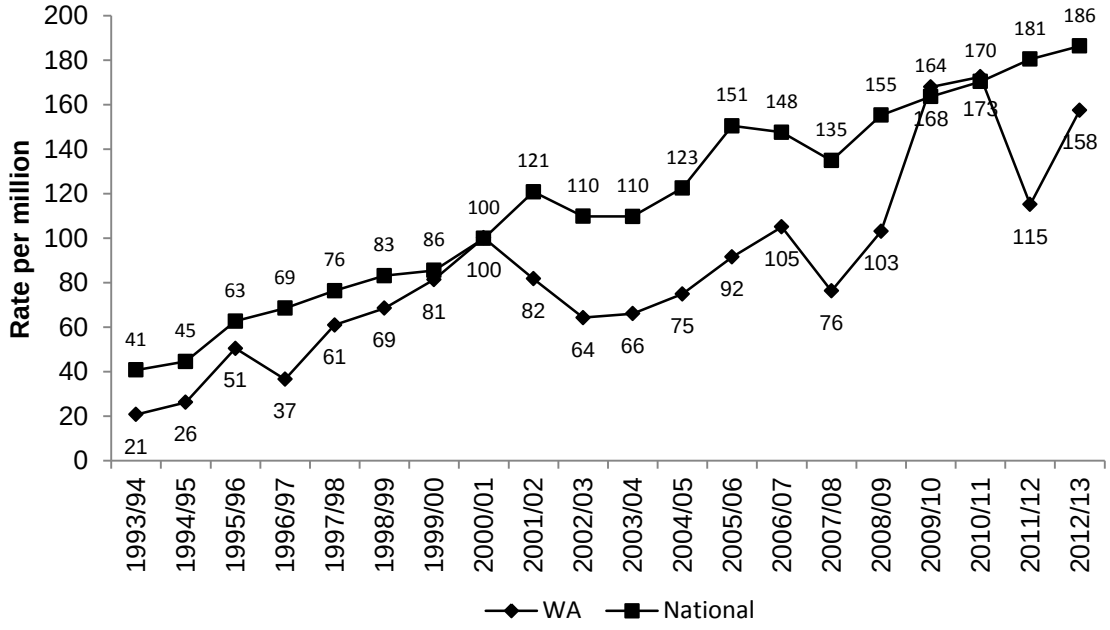
Figure 43: Rate of hospital admissions where cocaine was the primary diagnosis in persons aged 15-54 years, WA and nationally, July 1993-June 2013



Source: AIHW

Figure 44 presents rates per million of hospital admissions where cannabis was the primary diagnosis. Rates appear to have increased slightly nationally and more substantially at the state level.

Figure 44: Rate of hospital admissions where cannabis was the primary diagnosis in persons aged 15-54 years, WA and nationally, July 1993-June 2013



Source: AIHW

Secondary indicator data regarding drug-related hospital admissions in the 2013/14 period was not available at the time of writing. Data used to report on rates of hospital admissions can be located in Roxburgh and Burns (in press).

5.5. Mental health problems

5.5.1. Mental health problems and psychological distress (K10)

The Kessler 10 (K10) was administered to obtain a measure of psychological distress. It is a 10-item standardised measure that has been found to have sound psychometric properties , identifying clinical levels of psychological distress as measured by the Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV)/the Structured Clinical Interview for DSM disorders (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 psychological 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. The spread of scores across the K10 were very similar between 2013 and 2014. As in 2013, the most common level of psychological distress in 2014 was moderate distress (score of 16-21) with 35 participants falling within this category. This was followed by low to no distress (score of 10-15) (n=33), high distress (score of 22-29, n=24), and then very high distress (score of 30-50, n=4). Table 32 shows K10 scores from 2012-2014. There were no significant differences between the 2013 and 2014 samples within any of the K10 categories.

Table 32: K10 Scores, 2012-2014

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

Source: WA EDRS REU/RPU interviews, 2012-2014.

KE comments

- The main drugs KE expressed mental health concerns over were alcohol, cannabis, crystal methamphetamine and NPS, particularly synthetic cannabis.
- The main mental health concern related to alcohol use was in the context of long-term chronic users experiencing depression, anxiety and cognitive impairment. Concerns in relation to cannabis were in relation to paranoia, anxiety and depression. Concerns regarding methamphetamine were in the context of both short and long-term use, including paranoia, agitation and aggression, anxiety, depression and drug-induced psychosis. Concerns related to NPS were focused around paranoia, agitation and psychosis, as well as the uncertainty and unpredictability of short- and long-term effects of use.

5.5.2. 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-month period, including those issues that they had and had not spoken to a health professional about.

In the current sample, just under one-third (29%) reported experiencing a mental health problem in the preceding six months, a non-significant difference from 36% in 2013. Of these participants, the main mental health problem specified was anxiety (72%, n=21), followed by depression (62% n=18). Comparable with 2013, just over one-third of participants who reported a recent mental health problem (34%, n=10) reported attending a mental health professional in the preceding six months for treatment of a mental health problem. A complete breakdown of reported mental health problems for 2013 and 2014 is presented in Table 33. There was a significant decrease in the proportion of participants reporting depression in 2014 compared to 2013. There were no other significant differences between 2013 and 2014.

Table 33: Percent who reported recent mental health problems, 2013 and 2014

(%)	2013 N=100	**2014 N=100**
Recent mental health problem	36	29
Of those who reported a mental health problem (n=29)		
Types of problems reported[#]		
Depression	78	62**
Anxiety	61	72
Mania	6	0
Bipolar	6	3
Panic	8	7
OCD	6	3
Paranoia	11	21
Personality disorder	3	3
PTSD	14	7
Other	19	16
Attended a professional for the treatment of a mental health problem**	36	34
Prescribed psych med*	77	70

Source: WA EDRS REU/RPU interviews, 2013 and 2014
[#]Participants could select multiple categories of problems allowing percentage totals to exceed 100
* Of those who attended a health professional
**Indicates significant changes from the 2013 results according to 95%CI and p=0.05

Of those participants who reported attending a mental health professional (n=10), the majority (70%, n=7) reported being prescribed a medication in the last six months. Medications prescribed included anti-depressants (60%, n=6), benzodiazepines (30%, n=3), and mood stabilisers (10%, n=1).

Prescribed anti-depressants included, Avanza® (n=4) and Valdoxan® (n=2), Escitalopram (n=2), Efexor® (n=1) and Zoloft® (n=1). Prescribed benzodiazepines included Valium® (n=1), Xanax® (n=1) and Lorazepam (n=1). The participant who was prescribed a mood stabiliser reported Epilim.

5.6. Summary of health-related trends

Overdose, deaths and hospital admissions

- More than one-third of participants (34%) reported having overdosed on a stimulant drug at some point in their lifetime, which did not significantly change from 2013 (39%).
- just over one-tenth of participants (11%) reported having overdosed on a depressant drug at some point in their lifetime, significant decrease from 30% in 2013. Six per cent of the sample reported experiencing a depressant overdose within the last 12 months, a significant decline from 19% in 2013.
- Ecstasy was the most commonly implicated drug attributed to stimulant overdoses (63%), while alcohol was the most commonly implicated drug in depressant overdoses (67%).
- Hospital admissions in which amphetamine was the principal diagnosis appear to have increased on both state and national levels; rates for cocaine appear to have increased on a national level and very slightly at the state level, and rates for cannabis appear to have increased slightly on a national level and more substantially on a state level.

Service usage

- Access to medical or health services in relation to their drug use in the past six months was reported by only 9%, consistent with 8% in 2013.
- The number of calls to ADIS concerning ecstasy remained low, with 84 calls made in the 2013/2014 period. Calls to ADIS concerning ecstasy appear to be on a slight upward trend.
- There were 969 calls to ADIS involving methamphetamines as the primary drug of concern, in comparison to 2,540 in 2012/13; calls regarding methamphetamines appear to be on an upward trend.

Mental health

- The most commonly reported problem related to participant drug use was in the area of risk of injury (50%), followed by responsibility interferences (27%) and then social problems (21%). Recurrent drug-related legal problems were uncommon (7%).
- While risk of injury problems were most commonly attributed to alcohol, responsibility interferences, social and legal problems were most commonly attributed to either cannabis or ecstasy.
- In 2014, 29% of the participants reported experiencing a mental health problem in the preceding six-months. Among these, participants, anxiety (72%) and depression (62%) were those most commonly reported issues, aligned with the 2013 findings. However, there were significantly less participants who reported experiencing depression in the preceding six months compared to 2013.
- Participants completed the K10. The most common category participants fell in was moderate distress (37%), followed by low distress (34%), high distress (25%) and then very high distress (4%).

RISK BEHAVIOURS

5.7. Injecting risk behaviours

As presented in Table 34, only two participants reported injecting a drug in their lifetime, a significant decrease from 2013. Only participant reported that they had recently injected, a non-significant decrease from five in 2013. Comparable to 2013, the mean age participants reported first injecting a drug was 16.5 years (median=16.5, range 14-19).

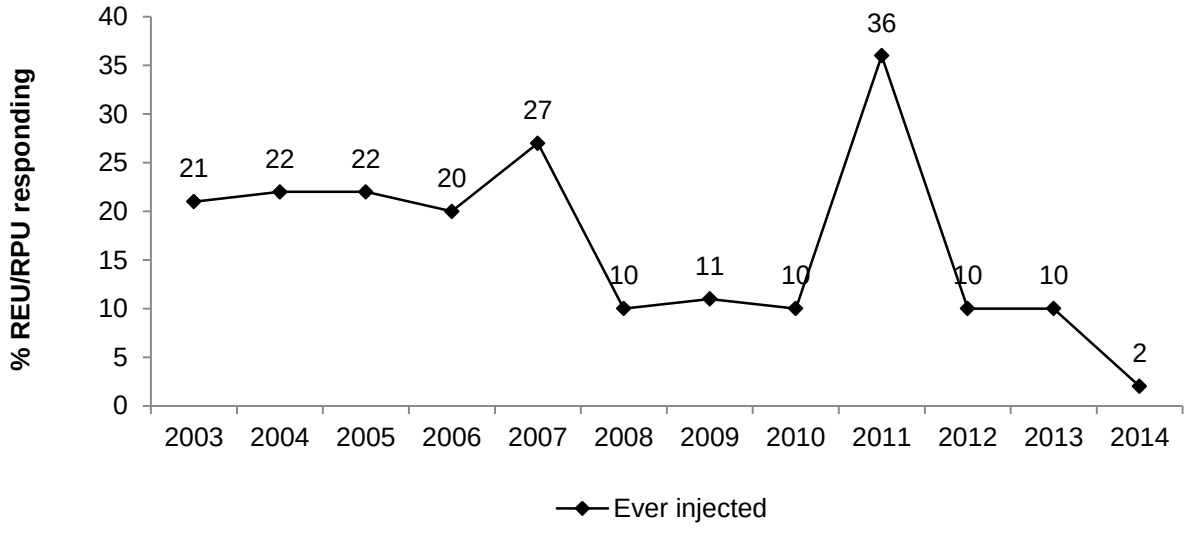
Table 34: Injecting risk behaviours, 2013 and 2014.

(%)	2013 N=100	**2014 N=100**
Ever injected	10	2**
Mean age first injected any drug*	15	16.5
Injected in the last six months	5	1

Source: WA EDRS interviews, 2013 and 2014
*Among those who had injected
**Indicates significant changes from the 2013 results according to 95%CI and p=0.05

As presented in Figure 45, with the exception of 2011 (which had a disproportionate representation, attributed to substantial difficulties during the recruitment process), rates of lifetime injecting use declined in 2008 and remained stable until 2013. Data from the present sample suggests a downward trend in lifetime injecting rates in WA EDRS samples.

Figure 45: History of reporting having ever injected drugs amongst WA REU/RPU samples, 2003-2014



Source: WA EDRS REU/RPU interviews, 2003-2014

5.7.1. Recent injectors

The participant who reported recent injecting was a 24-year-old male who reported injecting every day in the preceding six months. Table 35 details the recent injecting behaviour for this participant compared with the 2013 sample. Given that only a single participant had injected recently it is impossible to draw meaningful conclusions from this data.

Table 35: Recent injecting drug use patterns, 2013 and 2014

(%)	2013 (n=5)	2014 (n=1)
Median age	18	**24**
Median number of times injected in last 6 months	72 (12-180)	**180** **-**
Last drug injected		
Speed	100	**0**
Steroids	0	**100**
Injected while under the influence/coming down*		
Neither	40	**0**
Under the influence	40	**0**
Coming down	0	**0**
both	20	**100**
Median number of times injected while under the influence/coming down	12 (3-89)	**3** **-**

Source: WA EDRS REU/RPU interviews, 2013 and 2014

* Of those who had injected

Contexts of injecting and sharing of injecting equipment

The single participant that reported injecting recently had obtained needles from a needle and syringe program (NSP), and no other locations, in the last six months. He reported injecting with close friends the last time he injected, the location of which was his own home. The participant reported using a needle after someone else had already used it between three and five times in the preceding six months. Only one person had used a needle before him in the last six months; this person was identified as a regular sex partner. Again, due to only a single participant reporting recent injecting behaviour in 2014, it is impossible to draw meaningful conclusions from this data.

Table 36: Context and patterns of recent injection, 2013 and 2014

(%)	2013 (n=5)	**2014 (n=1)**
Needle source*		
NSP	60	100
Chemist	20	0
Friend	20	0
Dealer	40	0
People usually inject with*		
Close friends	60	100
No one	0	0
Locations injected in past six months		
Own home	20	100
Friend's home	60	0
Dealer's home	20	0

Source: WA EDRS REU/RPU interviews, 2013 and 2014
***Multiple responses allowed**

5.8. 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.

5.8.1. Recent sexual activity

Participants were asked about the number of casual partners they had engaged in penetrative sex with in the preceding six months. Of the current sample, two-thirds of participants (n=66, 66%) reported engaging in casual penetrative sex with at least one person in the past six months, comparable to 59% in 2013. Of those who had engaged in casual sex in the preceding six months, the most common number of casual partners in was two (n=23, 35%). This was followed by one person (n=19. 29%), and then three to five people (n=14, 20%). None of these proportions were significantly different from 2013.

5.8.2. Protective barriers during sex while sober

Of those who had recently engaged in penetrative sex with a casual partner while sober (n=57), more than one-third (42%, n=24) reported using no protective barrier last time and over half 58% (n=33) reported using a barrier; none of these results differed significantly from 2013. Participants reported various reasons as to why no barrier was used. Of those who commented (n=23), mirroring the 2013 results, the greatest proportion reported they were using the contraceptive pill (43%, n=10), followed by 'it wasn't mentioned' (17%, n=4). The

next most common responses were ‘we agreed not to use’ (13%, n=3), and ‘lack of availability’ (9%, n=2).

A breakdown of this data is presented in Table 37.

Table 37: Recent sexual activity, 2013 and 2014

(%)	2013	2014
Number of casual sexual partners	(N=100)	(N=100)
No casual partner	41	34
1 person	12	19
2 people	22	23
3-5 people	15	14
6-10 people	9	8
10 or more	1	2
Use of protection during sex with casual partner while sober*	(n=51)	(n=57)
Yes	49	58
No	51	42

Source: WA EDRS REU/RPU interviews, 2013 and 2014
***Of those who had penetrative sex in the last 6 months

5.8.3. Casual sex while under the influence

Of those participants who had engaged in casual sex in the preceding six months (n=66), the majority (89%, n=58) reported having done so while under the influence of alcohol or other drugs; this is the same proportion reported for 2013 and equates to 58% of the overall sample, comparable to 51% in 2013. Participants were asked how many times they had engaged in sex while under the influence in the preceding six-month period. As in 2013, the most commonly reported number of occasions was three to five times (n=17, 33%). Again mirroring 2013, the most commonly reported drugs used on these occasions were alcohol (86%, n=50), ecstasy (43%, n=25), cannabis (36%, n=21), and pharmaceutical stimulants (10%, n=6).

5.8.4. Protective barriers during casual sex while under the influence

Participants were also asked whether a protective barrier (i.e. condoms or dams) had been used with the last casual sex partner while under the influence of alcohol and/or other drugs in the preceding six months. Of those who commented (n=57), just less than half reported that they had not used a barrier (47%, n=27). Participants reported various reasons as to why no barrier was used. The greatest proportion reported that their partner was using the contraceptive pill (32%, n=8), this was followed by ‘it wasn’t mentioned’ (28%, n=7) and ‘we agreed not to use’ (16%, n=4).

A complete breakdown of this data is presented in Table 38.

Table 38: Casual sex while under the influence, 2014

	2014 (N=100)
Penetrative casual sex (%)	66
Penetrative casual sex while on drugs* (%)	89
Of those who had penetrative casual sex under the influence of drugs	(n=58)
Number of times (%)	
Once	19
Twice	21
3-5 times	33
6-10 times	19
Ten +	7
Drug used (%)	
Ecstasy	43
Cannabis	36
Alcohol	86
Speed	2
Crystal	7
Cocaine	5
Pharmaceutical stimulants	10
LSD	7
Mushrooms	3
Nitrous oxide	3
Amyl Nitrate	2
Benzodiazepines	3
Other opiates	0
Use of protection (%)	
Yes	53
No	47

Source: WA EDRS REU/RPU interviews, 2013 and 2014

6.3.5 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 a sexually transmitted infection (STI). More than half of the sample reported ever having a sexual health check-up (55%); 43% reported that they had received a check-up in the last year, and a further 12% reported that they had received a check-up more than one year ago. Less than half of the participants (43%) reported that they had never had a sexual health check-up in their lifetime. The majority of the sample (88%) reported that they had never been diagnosed with an STI. One-tenth of participants (10%) reported being diagnosed with an STI more than one year ago. Just one participant (1%) reported being diagnosed with an STI in the past year; this was reported as chlamydia.

5.9. Bingeing behaviour

Bingeing is defined as the use of any stimulants or related drugs for 48 hours or more continuously without sleep. In the current sample, more than one-third (37%) reported bingeing on ERD in the past six months, comparable to 38% in 2013. Bingeing occurred on a

median of two occasions (range 1-48) during the six-month period, not significantly different to three occasions in 2013. The median length of participants' longest binge was 50 hours (i.e. approximately two days) (range 48-288 hours), again a non-significant difference from three days (72 hours) in 2013.

The most common drugs implicated in bingeing were ecstasy and alcohol (>5 standard drinks) (each 73%, n=27), tobacco (62%, n=23), cannabis and pharmaceutical stimulants (each 35%, n=13). In 2013, a range of NPS were implicated in binges, including 2C-I, 2C-B, bk-MDMA (Methylone) and Methoxetamine (MXE) and DMT. However, in the present sample only 3% (n=1) reported the use of an NPS during a binge (DMT).

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

Table 39: Bingeing behaviour, 2014

(%)	2014
Recent binge	**37**
Median amount of times*	**2**
Median length of binge* (hours)	**50**
Drugs implicated in binge*	(n=37)
Ecstasy	73
Alcohol (>5 standard drinks)	73
Alcohol (<5 standard drinks)	5
Cannabis	35
Pharmaceutical stimulants	35
Speed	16
Crystal meth	27
Cocaine	8
LSD	14
Ketamine	3
Nitrous oxide	14
Tobacco	62
Energy drinks	22
Benzodiazepines	5
Mushrooms	3
DMT	3
Other	3

Source: WA EDRS REU interviews, 2014
***Of those who had binged on EDR in the last 6 months

5.10. The Alcohol Use Disorders Identification Test (AUDIT)

The AUDIT was designed by the World Health Organization (WHO) as a brief screening scale to identify individuals with alcohol problems, including those in 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).

The AUDIT was completed by all participants in 2014. The mean AUDIT score was 13 (range 0-27), not significantly different from the 2013 sample. The majority (87%) scored equal or greater than the cut-off of eight, indicating likelihood of hazardous or harmful alcohol use; this figure again was not significantly different from 85% in 2013.

The total AUDIT scores place participants into one of four 'zones' or risk levels. From the current sample, 13% scored in Zone 1 (low-risk drinking or abstinence), 55% scored in Zone 2 (alcohol use in excess of low risk guidelines), 19% scored in Zone 3 (harmful or hazardous drinking) and 13% 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 2013 sample.

In 2013, males had significantly higher AUDIT scores than females, implicating males as being more likely to exhibit hazardous drinking behaviour. Contrarily, analyses of the current sample revealed no difference in total AUDIT scores between males and females. Examination of previous EDRS samples further revealed that the 2013 sample is the only one since 2007 to show significant differences in AUDIT scores between males and females.

5.11. Ecstasy dependence

The question as to whether it is possible to be dependent on ecstasy is a controversial one. Currently, in the DSM-IV-TR, it is possible to be diagnosed with ecstasy dependence (coded as either amphetamine dependence or hallucinogen dependence), and there are clear case studies in the literature of people who are dependent on ecstasy. 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 Severity of Dependence Scale (SDS) to investigate ecstasy dependence. The SDS is a five-item questionnaire designed to measure the degree of dependence on a variety of drugs. The SDS focuses on the psychological aspects of dependence, including impaired control of drug use, and preoccupation with and anxiety about use. The SDS appears to be a reliable measure of the dependence construct. It has demonstrated good psychometric properties with heroin, cocaine, amphetamine, and methadone maintenance patients across five samples in Sydney and London (Dawe et al., 2002). A total score 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).

In 2014, 69 participants answered the SDS questions in regard to their ecstasy use. Presented in Table 40, 20% (n=14) of the 69 participants reached the SDS cut off score of four or more, suggesting ecstasy dependence. Among these participants, there was no difference in the proportion of males (57%) versus females (43%). These results are comparable to 2013, where 13% of participants reached the cut-off score for ecstasy dependence. However, the number of participants reaching the SDS dependence cut off significantly increased between 2012 and 2014 (CI=0.06 to 0.27) suggesting a possible upward trend in ecstasy dependence. However, given that ecstasy dependence data is only available for the last three years of the EDRS, these results should be interpreted with caution.

Table 40: Ecstasy dependence, 2012-2014

(%)	2012 (N=90)	2013 (N=100)	2014 (N=69)
Ecstasy SDS score			
Zero to three (below dependency cut off)	96	87	80
Four or more (dependency cut off)	4	13	20
Gender*	(n=4)	(n=13)	(n=14)
Male	0	6	8
Female	4	7	6

Source: WA EDRS REU/RPU interviews, 2012-2014
***Of those with score of four or more (dependency cut-off)

Of the participants who answered the SDS questions regarding their ecstasy use (n=69), 67% (n=46) reported that they never/almost never thought their use of ecstasy was out of control in the past six months, 70% (n=48) reported they never/almost never wished they could stop, and another 70% (n= reported that they would not find it difficult to stop or go without ecstasy. These results are not significantly different from 2013.

5.12. Summary of risk behaviour

- Only 2% of the sample had injected a drug at some point in their lifetime and 1% had done so recently.
- Steroids were the only recent drugs injected.
- More than half of the participants (55%) reported ever having had a sexual health check-up, with 43% reporting having one within the last year.
- Only one participant (1%) reported being diagnosed with an STI within the last year; this was reported as chlamydia.
- Penetrative sex with a casual partner in preceding six months was reported by two-thirds of the sample (66%), and this occurred most commonly with two partners during the six-month period.
- Of those who had engaged in recent casual sex, most (89%) had done so while under the influence of alcohol and/or other drugs. The most commonly implicated drugs used were alcohol (86%), ecstasy (43%), cannabis (36%) and pharmaceutical stimulants (10%). Of these participants, less than half (48%) reported that they did not use a protective barrier with their last casual partner. The main reason was they were using contraceptive pill (32%).
- Bingeing on ERD was reported by more than one-third of the sample (37%). The most commonly reported drugs implicated in bingeing were ecstasy and alcohol (>5 standard drinks) (each 73%), and cannabis and pharmaceutical stimulants (each 35%).
- Participants completed the AUDIT. The majority of the group (87%) fell in the hazardous or harmful drinking range. There was no difference in AUDIT scores for males versus females.
- In 2014, 14% of the sample scored high enough on the SDS scale to be considered dependent on ecstasy.

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

6.1. Reports of criminal activity among REU/RPU

Table 41 presents the proportion of participants reporting criminal activity in the month preceding the interview across survey years. In 2014, approximately two-fifths of the sample (40%) reported criminal activity in the past month, a non-significant difference from 42% in 2013. The most commonly reported crime in this period was drug dealing (33%), a non-significant difference from 2013. Property crime was reported by 11% of those who reporting engaging in criminal activity in the past month, a significant decrease from 25% in 2013. This result was robust after controlling for the proportion of participants reporting that they had ever injected any drug across the 2013 and 2014 samples. At the time of collection, the 2013 data prompted speculation of a possible upward trend in property crime amongst REU across years, with the 25% figure being the highest ever reported since the beginning of the EDRS in 2003. However, data from the current sample suggest property crime levels have returned to those seen prior to 2013. Consistent with previous years, only a very small number of participants reported engaging in fraud or violent crime (each 5%).

Of those who reported drug dealing (n=33), most (54%, n=18) reported doing so less than once a week; over a quarter (27%, n=9) reported doing so once a week. The next most common response was more than once a week (18%, n=6). No participants reported daily drug dealing. Similar to drug dealing, most of those reporting property crime did so less than once a week (73%, n=8). The remaining 27% (n=3) reported committing property crime once a week. As with drug dealing, no participants reported daily property crime. Most participants reporting fraud or violent crime reported doing so less than once a week. There were no significantly differences in the reported frequencies of any crime between 2013 and 2014.

In 2014, 12% reported being arrested in the preceding 12 months, again a non-significant change from 13% in 2013. Reasons for arrest varied; the most common reason reported was alcohol and driving (39%, n=5), followed by property crime (31%, n=4), drunk and disorderly (23%, n=3), violent crime (15%, n=2) and then drugs and driving and other driving offence (each 7%, n=1). Only three participants reported having ever been to prison and reasons for incarceration were not asked about.

Table 41: Criminal activity in the past month, 2005-2014

Criminal activity in the last month	2005 N=100	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**
Any crime (%)	32	26	39	31	38	35	39	29	42	**40**
Drug dealing (%)	24	23	31	24	32	24	21	18	25	**33**
Property crime (%)	9	9	16	7	6	13	11	16	25	**11***
Fraud (%)	6	2	4	2	0	2	7	2	2	**5**
Violent crime (%)	2	1	5	3	3	3	7	1	3	**5**
Arrested last 12 months (%)	14	14	12	5	19	13	18	11	13	**12**

Source: WA PDI/EDRS REU/RPU interviews, 2005-2014

*Indicates significant changes from the 2013 results according to 95%CI and p=0.05

Table 42 presents the number of consumer and provider arrests for ATS, cannabis, cocaine and hallucinogens in WA from 2004 to 2013 (most recent data available). ATS include amphetamine, methylamphetamine, crystalline methylamphetamine, and phenethylamines such as MDMA, MDEA, MDA, DMA and PMA.

Data obtained from the ACC (2013) indicate that, in WA in 2012/13, there were a total of 11,125 drug-related consumer and provider arrests, compared to 10,250 in 2011/12. Broken down, there were a total 8,349 drug related consumer arrests and 2,776 provider arrests. As in 2011/12, the most commonly implicated drug for both types of arrest in 2012/13 was cannabis, followed by ATS. With the exception of hallucinogens, provider and consumer arrests for this period increased for each drug class listed below, as well as for all drug types. As was also the case in 2011/12, the most notable increase for drug classes during the most current period was ATS.

When looking at arrest totals on a national level, in 2012/13, WA had the second highest number of consumer arrests per 100,000 population (total 8,349; approximately 337 per 100,000) following Queensland (total 24,805; approximately 538 per 100,000. In this period, WA also had the third highest number of provider arrests per 100,000 population (2,776; approximately 108 per 100,000), following the Northern Territory (323 total; approximately 136 per 100,000), and South Australia (2203 total; approximately 132 per 100,000).

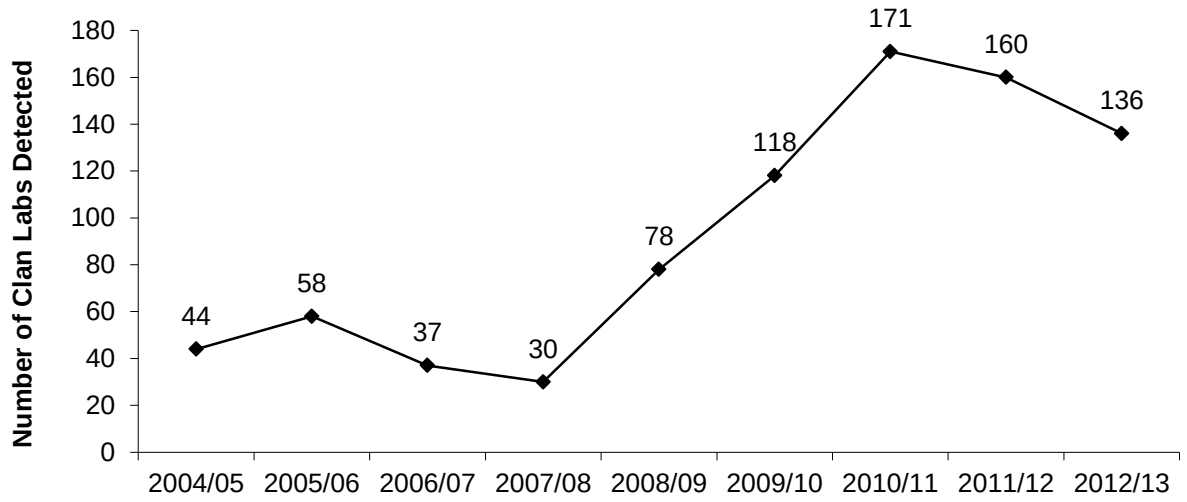
Table 42: Consumer and provider arrests by drug type, 2011/12 and 2012/13

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%)

Source: ACC, 2013 and 2014

As presented in Figure 46, clandestine laboratory or clan lab detections have been steadily increased in WA between 2007/08 and 2010/11. In 2011/12, this trend did not continue, with detections instead decreasing to 160. This decreasing trend has continued in the current reporting period, with 136 amphetamine clandestine laboratory detections occurring in 2012/13. Nationally, the current WA figure is exceeded only by Queensland, with 330 detections. Of the 136 labs detected in WA in 2012/13, almost all (n=135, 99%) were manufacturing ATS other than MDMA. The vast majority of labs detected in this period (n=130, 96%) were using the Nazi/Birch method of production (involving red phosphorous and liquid ammonia) (ACC, 2014).

Figure 46: Number of clandestine (meth)amphetamine laboratories detected by WA police 2004/05 to 2012/13



Source: ACC, 2006-2014

KE comments

- Two KE, both law enforcement officers, reported that that most of the 'clan labs' being detected currently are 'lower class labs' rather than 'super labs'. The KE reported that 'super labs' are large scale-labs that are run by manufacturers who are not using methamphetamine, while 'lower class labs' are run by methamphetamine users, who are often living in poor conditions.
- One KE, a law enforcement officer working in the organised crime squad, added that there has been a distinctive downturn in the number of these 'lower class labs' being detected in this period. He added that this was due to the fact that these manufacturers are becoming increasingly aware of police forensic techniques are therefore better able to avoid detection. He noted that there was a trend towards such 'clan labs' being set up in bushland, where the risk of police detection is lower, rather than in private homes.
- One KE, a law enforcement officer who worked in illicit drug distribution, reported that in the current period there had been seizures of liquid containing methamphetamine. This KE added that this would require an unusual extraction method by manufacturers and that liquid containing methamphetamine had never been seized in WA before.

6.2. Summary of law enforcement-related issues

- Involvement in any criminal activity was reported by two-fifths (40%) of the current sample.
- The most commonly reported crimes were drug dealing (33%) and property crime (11%).
- Twelve participants had been arrested in the preceding 12 months. Alcohol and driving was the most commonly reported cause of arrest.
- During 2012/13, there were 8,349 drug-related consumer arrests and 2,776 provider arrests. The most commonly implicated drug for both arrest types was cannabis.
- There were 136 clandestine laboratories detected during 2011/12, compared with 160 the previous year. The vast majority were producing ATS.
- KE from law enforcement reported a downtown in the number of methamphetamine clan labs detected in this period, which was attributed to greater awareness of police detection methods among manufacturers.

7. SPECIAL TOPICS OF INTEREST

7.1. Use of Dark Web Marketplaces Module

The rise of the Internet as an integral part of daily life has globalised retail marketing. This extends to web stores offering a range of substances that mimic the effects of traditional illicit substances such as ecstasy, amphetamines and cannabis (NPS). This market is also highly dynamic, with websites closing or altering available stock as legislation changes (Bruno, Poesiat, & Matthews, 2013; Van Buskirk et al., 2014).

In addition to the surface web, readily accessible by search engines such as Google, new marketplaces have emerged located on the 'dark web', that offer a range of illicit and pharmaceutical drugs for sale (Van Buskirk et al., 2013). The 'dark web' refers to a collection of domains accessible only through an anonymised routed connection and specially configured browser. As such, these dark web marketplaces are not overt and are susceptible to closure due to changes in legislation (Barratt, 2012). The marketplaces on the dark web have proliferated in the past three years, retailing not only NPS, but also traditional illicit substances including marijuana and pharmaceuticals such as benzodiazepines prescription opioids (Van Buskirk et al., 2013). The Silk Road is one such marketplace operating on the dark web that has received a large amount of attention from law enforcement, media and researchers. Until its closure on October 2 2013, the Silk Road Marketplace served to greatly expand the availability of both illicit and NPS online.

On both the dark web and the surface web, there exist both webstores and online marketplaces from which to purchase substances. Webstores refer to websites that sell products or services and typically have an online shopping cart associated with it. Online marketplaces, however, refer to a type of online community where products are traded by users of the website instead of being sold by the owner or moderator of the website. Products on online marketplaces are sold by retailers either based in Australia, or internationally. Prices from international retailers are typically lower but carry with them a greater risk of detection by law enforcement during importation (Van Buskirk et al., 2013).

While it is apparent that availability of illicit drugs and NPS has increased since the arrival of dark web marketplaces, it is not clear to what extent consumers utilise these marketplaces for the purchase of drugs. The aim of this module is therefore to ascertain how often EDRS participants utilise online marketplaces and webstores for the purchase of drugs, as well as what substances are commonly bought and the positives and negatives of using these marketplaces and stores over traditional street markets.

Participants were asked what proportion of their friends had ever purchased a drug online. Seventy-five per cent responded that a few of their friends had purchased online before, while 2% said that about half had purchased online, and 6% said they didn't know. Fourteen per cent of participants responded that they themselves had ever purchased online, most commonly from the Silk Road (77%, n=13), followed by other dark web marketplaces (18%, n=3), and internationally based webstores (6%, n=1). Among those purchasing from dark web marketplaces (n=13), 38% (n=5) bought from only Australian retailers, another 38% (n=5) bought from both international and Australian retailers, and 23% (n=3) bought from only retailers outside of Australia.

Nine participants (9% of the total sample) had purchased a substance online in the past year, with an equal proportion (each 33%, n=3) purchasing once in the last year and between three and five times in the last year, 22% (n=2) purchasing more than five times and 11% (n=1) purchasing twice in the last year. Two-thirds of these participants (67%) purchased from the Silk Road and 33% purchased from another dark web marketplace.

Those using dark web marketplace, 57% (n=4) bought from only Australian retailers. 29% (n=2) bought from only international retailers and 14% (n=1) bought from both international and Australian retailers. Table 43 below details the specific substances purchased by EDRS participants in the past year.

Table 43: Substances purchased online in the past year by EDRS participants, 2014

Illicit Drugs	n=9 (%)	New Psychoactive Substances	n=9 (%)
Ecstasy (any form)	78	Mephedrone	0
Methamphetamine (any form)	0	Methylone/bk-MDMA	0
Pharmaceutical stimulants	0	MDPV/ Ivory Wave	0
Cocaine	22	MDAI	0
LSD (acid)	44	5-IAI	0
Mushrooms	20	Benzo Fury (6-APB)	0
MDA	0	BZP	0
Ketamine (special K)	11	PMA	0
GHB/GBL, 1, 4B (liquid E)	0	Methoxetamine (MXE)	11
Amyl nitrate (rush)		2C-x (2C-B, 2C-I, 2C-E)	11
Nitrous oxide		DMT	11
Cannabis	22	5-MeO-DMT	0
Tobacco		LSA (Hawaiian Baby Woodrose)	10
Opioids (e.g. heroin, opium)	0	DOI (Death on impact)	0
Pharmaceutical opioids	0	Mescaline	0
(e.g. oxycodone, morphine)		Salvia divinorum	0
Antidepressants	0	Datura (Angel's trumpet)	0
Benzodiazepines	0	DXM (cough syrup)	0
(e.g. valium/serepax/xanax)		NBOMe (25I, 25B, 25C)	22
Steroids or PIEDs	0	Synthetic Cannabinoids	0
Antipsychotics (e.g. Seroquel)	0	Other	11

Source: WA EDRS REU interviews, 2014

Eight respondents (89%) indicated that their online purchases were for themselves and others with 1one participant (11%) purchasing solely for themselves. Eight respondents indicated (89%) that their last ordered package arrived as expected, with the remaining participant indicating that nothing arrived. Table 44 below illustrates the motivating factors respondents gave for purchasing online, as well as nominated positives and negatives of purchasing online.

Table 44: Motivating factors, as well as positive and negatives for purchasing online, 2014

	(n=9)	%
Main motivation for purchasing online		
Curiosity	1	12
Drugs I wanted weren't available on the street	0	0
Drugs were cheaper online	3	37
Avoided contact with dealers	1	12
Convenience	3	37
Drugs are better quality online	1	12
Less legal risk buying online	0	0
Other	0	0
Positives of purchasing online		
No positives	0	0
Accessed drugs I couldn't get on the street	6	33
Drugs were cheaper online	6	67
Avoided contact with dealers	3	33
Convenience	6	67
Drugs were better quality online	6	67
Less legal risk buying online	4	44
Other	0	0
Negatives of purchasing online		
No negatives	1	11
Difficult process	3	33
Slow process	0	0
More legal risk purchasing online	3	33
Poorer quality of drugs	0	0
More expensive	0	0
Packages didn't arrive	2	22
Other*	3	33

Source: WA EDRS REU interviews, 2014
*Other responses were: 'easier to get hooked', 'lost money' and 'some was seized'

Two of the nine participants indicated that they would definitely purchase online again in the future. One participant indicated that they were not at all likely to purchase online again. Four additional participants indicated a likelihood of four or less out of 10, and two additional participants indicated a likelihood of seven or more out of then.

7.2. NPS Health Harm Module

The past 10 years has seen the emergence of a range of NPS; these drugs mimic illicit stimulants and hallucinogens such as amphetamines, ecstasy and LSD. As they are designed to be structurally similar to their banned counterparts, without containing controlled substances, they do not fall readily under legislative control and some have been marketed as 'legal highs'. The promotion of these substances as legal highs, together with the fact that they can be bought over the Internet, over the counter, and in shop fronts in Australia has

made them accessible to people who may not have used illicit drugs previously, and also gives the illusion of safety. However, the safety or otherwise of these substances is unclear, and there is little evidence on which to base public policies relating to these substances. Indeed, the health and social consequences of these drugs remain poorly understood in Australia, and internationally. This module has therefore been included to improve our knowledge and understanding of the use and effects of the most commonly used NPS. Participants were asked if they had experienced a particular effect while using NPS, and were then asked to rate the severity (mild, moderate or severe) of that experience. However, due to small numbers (n<10), jurisdictional findings will not be presented; for national findings please refer to Sindicich & Burns (2015).

7.3. NPS Health Policy Module

When the WA EDRS interviews were conducted in 2014, mephedrone and DMT were illegal in WA, being listed as Schedule 9 substances under the *Poisons Act 1963.* 2CB and 2CI were legal at this time. After the WA EDRS interviews were completed, the *Poisons Act 1963* in July 2014 was amended in July 2014 to include both 2CI and 2CB as illegal Schedule 9 substances.

Participants were asked to state their understanding of whether particular drugs were legal. Participants were asked about 2CB, 2CI, DMT and mephedrone. These substances were selected as they were the most commonly reported in the 2012 EDRS. A breakdown of this data can be seen in Table 45.

Table 45: Participant knowledge of the legality of NPS in WA, 2014

Drug type		N=100 (%)
2CB		
	Legal	0
	Illegal	48
	Unsure	52
2CI		
	Legal	1
	Illegal	45
	Unsure	54
DMT		
	Legal	0
	Illegal	73
	Unsure	26
Mephedrone		
	Legal	5
	Illegal	48
	Unsure	47

Source: WA EDRS REU interviews, 2014

Participants were also asked if whether a change to the legality of all NPS in the future, making them all illegal, would impact on their use of those substances. Ninety-eight per cent reported that making NPS illegal would not make them stop taking them and the remaining 2% reported that it would make it them stop or not start using NPS.

Participants who had ever used an NPS (n=55) were asked which NPS they used on the most recent occasion of use. DMT was the most commonly used NPS on the last occasion (n=15, 27%), followed by 2C-series drugs (n=12, 22%), NBOMe (n=8, 14%) and synthetic cannabis (n=7, 13%). A breakdown of these results is shown in Table 46.

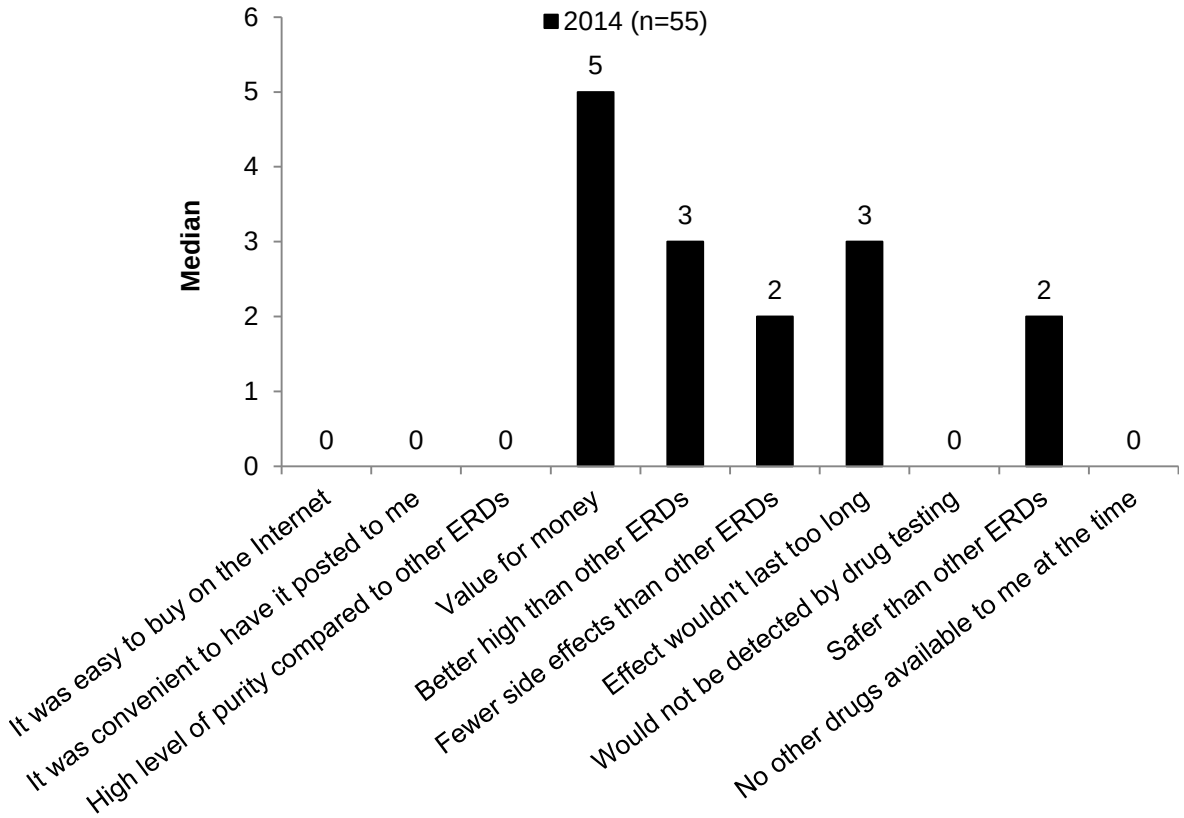
Table 46: Last occasion NPS use and motivating factors for using NPS, 2014

Last NPS used	n=55 (%)
Mephedrone	5
Methylone	2
PMA	2
2C-x	22
DMT	27
Mescaline	2
DXM	7
NBOMe	14
Synthetic cannabis	13
Capsule with unknown contents	5
Days ago (median; range)	n=1 3
Weeks ago (median; range)	n=10 2 (1-3)
Months ago (median; range)	n=44 4.5 (1-36)

Source: WA EDRS REU interviews, 2014

For those that had ever used an NPS, they were asked to rate, from 0-10, how motivating the various factors were in the using their last NPS (whereby 0 is no influence and 10 is maximum influence). The factor with the highest median was 'value for money'. A full breakdown of median ratings for each factor is shown in Figure 47.

Figure 47: Median ratings of motivating factors for using NPS, 2014



Source: WA EDRS REU interviews, 2014

7.4. Summary of special interest topics

- Fourteen per cent of the current sample reporting having ever purchased a drug online. Nine per cent of participants reported purchasing a drug online in the past year.
- The majority of participants purchased from Silk Road both in regard to lifetime purchasing (77%), and purchases in the last year (67%).
- Ecstasy was the most frequently reported illicit drug purchased online in the past year (78%), followed by LSD (44%), cannabis and cocaine (each 22%).
- NBOMe was the most commonly reported NPS purchased online (11%).
- Most participants reported purchasing drugs online for themselves and others.
- Fifty-five per cent of the current sample reported having used an NPS in their lifetime.
- The vast majority of participants (98%) reported that making NPS illegal would not stop them using them in the future.
- DMT was the most commonly reported NPS used on the last occasion of use (27%), followed by 2C-series drugs (22%) and NBOMe (14%).
- Value for money was the highest rated motivating factor influencing participants' last NPS use.

8. GENERAL TRENDS

Participants were asked what proportion of their friends had used ecstasy in the past six months. Aligned with the 2013 findings, the most common response was that most of their friends had used ecstasy in the past six months (50%); this was followed by about half (31%), all (12%) and then a few (7%).

Participants were also asked if there was anything new happening in drug use among them or their friends in the past six months; just over half (55%) reported that there was. Of the 55 participants who reported that something new was happening, 33% (n=18) reported that there was an increase in drug use by some types of users, 26% (n=14) reported that there were new drug types, and 16% (n=9) indicated that there were different types of users.

Additional comments made in relation to ecstasy were that there had been a general increase in use (n=17), that use of crystal ecstasy had increased and/or that it was easier to obtain (n=5) and that there had been an increase in purity of ecstasy (n=5). A further two participants reported that there was an increase in ecstasy pills that were cut with NPS such as 2C-I and NBOMe, leading to an increase in adverse side effects. Two participants noted that ecstasy use was becoming normalised. One participant reported that there was an increase in ecstasy pills with psychedelic bases. A further participant reported that logos were no longer being pressed onto many ecstasy pills making it difficult to differentiate between pill batches.

There were some reports of increasing cannabis use in Perth (n=4), as well as reports of increases in the use of crystal methamphetamine (n=3). There were a number of comments about the influence of the Internet on drug use. Two participants reported that there were increases in the number of people buying drugs online, with one participant noting that it was becoming harder to distinguish between different types of drugs being sold online. There were some comments regarding the way in which drug use was becoming glamorised and/or normalised online, as people were sharing their drug use experiences on social media sites (n=3). Finally, there were comments reported that in general, drug use was becoming more prevalent in younger cohorts (n=8).

A breakdown of participant comments by category is presented in Table 47. Small numbers here necessitate caution in interpretation of these results.

Table 47: New issues reported, 2014

(%)	2014 N=55
General themes	
Increase in drug use by some types of users	33
New drug types	26
Different types of users	13
Other	47
Ecstasy	
Increase in ecstasy use	31
Increase in availability and/or use of crystal ecstasy	9
Increase in ecstasy purity	9
Increase in ecstasy pills cut with 2CI, NBOMe and other NPS	4
Increase in pills sold as ecstasy with psychedelic bases	2
Normalisation of ecstasy use	4
Reduced number of logos on ecstasy pills	2
Crystal methamphetamine	
Increase in crystal methamphetamine use	5
Cannabis	
Increase in cannabis use	7
Online purchasing/Social media	
Increases in online purchasing	4
Harder to distinguish between drugs online	2
Normalisation/glamorisation of drug use via social media	5
Other issues	
Drug use becoming more prevalent in younger cohorts	15

Source: WA EDRS REU interviews, 2014

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