

Queensland

C.L. Salom, F. McIlwraith and R. Alati

**QUEENSLAND TRENDS IN ECSTASY AND RELATED DRUG
MARKETS 2015**

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

Australian Drug Trend Series No. 162

QUEENSLAND TRENDS IN ECSTASY AND RELATED DRUG MARKETS 2015



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

Caroline Salom, Fairlie McIlwraith and Rosa Alati

**School of Public Health
The University of Queensland**

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ABBREVIATIONS

ACC	Australian Crime Commission
ACBPS	Australian Customs and Border Protection Service
ADIS	Alcohol and Drug Information Service
AFP	Australian Federal Police
AGDH	Australian Government Department of Health
AIHW	Australian Institute of Health and Welfare
AUDIT	Alcohol Use Disorder Identification Test
DMT	dimethyltryptamine
EDRS	Ecstasy and Related Drugs Reporting System
GHB	gamma hydroxybutyric acid ('fantasy')
GP	general practitioner
IDRS	Illicit Drug Reporting System
K10	Kessler Psychological Distress Scale
LSD	lysergic acid diethylamide
MDA	3,4-methylenedioxyamphetamine
MDMA	3,4-methylenedioxymethylamphetamine ('ecstasy')
NDARC	National Drug and Alcohol Research Centre
NDSHS	National Drug Strategy Household Survey
NNDSS	National Notifiable Diseases Surveillance System
NPS	new psychoactive substances
NSP	Needle and Syringe Program
NSW	New South Wales
PDI	Party Drugs Initiative
PMA	paramethoxyamphetamine
QLD	Queensland
QPS	Queensland Police Service
RPU	regular psychostimulant user
SDS	Severity of Dependence Scale
STI	sexually transmitted infection
WHO	World Health Organization
2CB	4-bromo-2,5-dimethoxyphenethylamine
2CC	2,5-dimethoxy-4-chlorophenethylamine
2CI	4-Iodo-2,5-dimethoxyphenethylamine

GLOSSARY OF TERMS

Binge	Use over at least 48 hours without sleep
Illicit	Describes pharmaceuticals obtained from a prescription in someone else's name, e.g. through buying them from a dealer or obtaining them from a friend or partner
Indicator data	Sources of secondary data used in the EDRS (see Method section for further details)
Key expert	A person who participated in the Key Expert Survey component of the EDRS (see Method section for further details)
Licit	Describes pharmaceuticals (e.g. benzodiazepines, antidepressants and opioids such as methadone, buprenorphine, morphine and oxycodone) obtained by a prescription in the user's name. This definition does not take account of 'doctor shopping' practices; however, it differentiates between prescriptions for self as opposed to pharmaceuticals bought on the street or those prescribed to a friend or partner.
Lifetime injection	Injection (typically intravenous) on at least one occasion in the participant's lifetime
Lifetime use	Use on at least one occasion in the participant's lifetime via one or more of the following routes of administration: injecting, smoking, snorting, shelving/shafting and/or swallowing
Opiates	Opiates are derived directly from the opium poppy by isolating/purifying the chemicals naturally present in the poppy, e.g. morphine, codeine
Opioids	Opioids include all opiates but also include chemicals that have been synthesised to have opiate-like effects, e.g. heroin (derived from opium) is an opioid but not an opiate; methadone (synthesized to have effects like morphine) is an opioid; morphine is both an opiate and opioid
Participant	A person who participated in the Queensland ecstasy use survey component of the EDRS (does not refer to key expert participants unless stated otherwise)
Point	0.1 gram; although may also be used as a term referring to an amount for one injection (i.e. a shot)
Recent injection	Injection (typically intravenous) in the six months preceding interview
Recent use	Use in the six months preceding interview via one or more of the following routes of administration: injecting, smoking, snorting, shelving/shafting and/or swallowing
Shelving/shafting	Use via insertion into vagina (shelving) or the rectum (shafting)
Use	Use via one or more of the following routes of administration: injecting, smoking, snorting, shelving/shafting and/or swallowing

Guide to days of use in preceding six months

180 days Daily

90 days Every second day

24 days Weekly

12 days Fortnightly

EXECUTIVE SUMMARY

The Ecstasy and Related Drugs Reporting System (EDRS) is conducted every year in the capital city of every state and territory in Australia. Interviews are conducted with people from the general population who regularly use ecstasy and other illicit psychostimulant drugs. The EDRS is designed to identify emerging trends among a sentinel group of drug users, and to inform the health and law enforcement sectors about patterns of drug use, drug markets, relevant health issues and other special areas of interest.

In 2015, 85 regular psychostimulant users (RPU) were recruited for the Queensland EDRS. Characteristics were largely similar to previous years (i.e. typically male, heterosexual, from an English-speaking background, and had completed secondary school). The mean age of the 2015 sample (24 years) was similar to previous years (e.g. 25 years in 2014). The proportion of single participants was significantly higher in 2015 (64% vs 49% in 2014) with increases in those combining work with study (44% vs 31% in 2014) and those living in rental accommodation (77% vs 66% in 2014; $p < 0.05$ for all three).

Consumption trends

Current drug use

Ecstasy remained the drug of choice among participants, with an increase in the proportion of participants reporting this (from 29% in 2014 to 38% in 2015; $p < 0.05$), as well as an increase in preference for cannabis (from 20% in 2014 to 31% in 2015; $p < 0.05$). Preferences for cocaine and LSD dropped. Aside from tobacco, the most common drugs used recently were ecstasy, cannabis, alcohol and cocaine. The greatest proportion of participants reported using ecstasy and related drugs fortnightly, though one third reported using weekly or more. Injecting remained rare among this sample. Binging behaviour (i.e. using drugs for 48 hours or more without sleep) was reported by 36% of participants during the previous six months.

Ecstasy use

All participants reported using a form of ecstasy/MDMA at least once in their lifetime. The mean age of first use was stable at 18.5 years. Nearly all (98%) reported using some form of ecstasy/MDMA in the previous six months. As in previous years, the most common form was ecstasy pills (86%). Recent use of MDMA crystal by 42% of participants was similar to 2014. Ecstasy was mainly swallowed, sometimes snorted but not smoked, shelved/shafted or injected. When last using ecstasy, 85% of participants also used another drug, and 65% of participants used another drug to come down from ecstasy. The drugs most commonly taken when coming down from ecstasy were cannabis and benzodiazepines. Among those who reported using drugs for 48 hours or more without sleep in the previous six months ($n=30$), 63% reported having used ecstasy on the most recent occasion. Key experts reported few changes in ecstasy use.

Methamphetamine use

Over half (55%) of participants reported lifetime use of methamphetamines and 31% reported recent use. This is significantly lower than 2014 levels (72% lifetime, 47% recent; $p < 0.05$). Lifetime and recent use of speed powder dropped to 40% and 11% respectively. Lifetime use of base was reported by 21% of participants, but only 2% reported recent use. Ice (crystalline

methamphetamine) replaced speed powder as the type of methamphetamine most used in the past six months; recent use remained stable at 20%. Lifetime use of ice dropped to 34% from 42% in 2014 ($p<0.05$). Frequency of use in the previous six months for ice decreased from 12 days (i.e. fortnightly) in 2014 to 6 days (i.e. monthly) in 2015 ($p<0.05$).

Cocaine use

Lifetime and recent cocaine use reduced slightly to 66% and 39% respectively. Cocaine use remained infrequent.

Ketamine use

Only 4% of participants had recently used ketamine and their use was infrequent. Lifetime use was reported by 16%.

GHB use

Lifetime use of GHB remained low (12%), with single occasion use reported by two participants in the previous six months.

Hallucinogen use

There was a decrease in the use of LSD to levels seen in 2013. Lifetime use significantly decreased from 83% in 2014 to 66% in 2015 ($p<0.05$). Recent use decreased to 42% in 2015 from 57% in 2014 ($p<0.05$). Frequency of use remained stable at a median of two days in the previous six months. The median number of LSD tabs used in a typical session remained at one.

Half of participants reported lifetime use of hallucinogenic mushrooms, with one-quarter using them in the previous six months. Frequency of use remained occasional.

Cannabis use

The use of cannabis remained high and stable, with almost all (93%) reporting use in the previous six months. Frequency of use was also stable at twice a week. Cannabis was predominantly smoked, though it was also reported to be eaten, and inhaling using a vapouriser rose to 36%.

Other drug use

The use of alcohol and tobacco remained high and frequent. Recent use of methylenedioxymethamphetamine (MDA) was reported by more participants (22%, $p<0.05$) but use remained occasional. The prevalence of lifetime and recent use of licit and illicit anti-depressants was lower ($p<0.05$). Use of benzodiazepines also dropped ($p<0.05$) for both licit and illicit forms. Recent use of nitrous oxide at 15% was lower than in 2014 ($p<0.05$), but recent use of amyl nitrite increased significantly to 19% ($p<0.05$).

The use of heroin, methadone, buprenorphine and prescribed other opioids (e.g. morphine and oxycodone) remained, but lifetime use of illicit other opioids was reduced. Just over one in four (28%) reported ever using opioids not prescribed to them compared with 42% in 2014 ($p<0.05$).

Recent licit use of pharmaceutical stimulants remained stable at 5%, whereas recent use of illicit pharmaceutical stimulants increased to 31% in 2015 (from 22% in 2014; $p<0.05$), and frequency of use increased to monthly.

New psychoactive substances

In 2015, only 39% reported recent use of new psychoactive substances (NPS) and/or synthetic cannabis, which was lower than in 2014. Use of synthetic cannabinoids remained low, and recent use of all NPS other than DXM dropped.

Drug markets: Price, purity, availability and supply

Ecstasy market

Pills remained the most common form of ecstasy/MDMA purchased in the previous six months. The median price per pill remained stable at \$25. Frequency of purchasing ecstasy remained at monthly or less. One in five participants who commented reported the purity (strength) of pills, powder and caps to be medium, with a significant increase in reports that purity fluctuated (32% in 2015 compared with 12% in 2014; $p < 0.05$). MDMA crystal was still considered to be of higher purity than pills, powder and caps. The most recent purchase of ecstasy remained most likely to have been from a friend at a friend's house, but significant increases were seen in reports of purchase from an acquaintance and in a public place.

Methamphetamine market

The price of speed powder dropped to approximately \$40 per point in 2015. More participants rated it to be of high purity than in 2014 and easy/very easy to obtain, although purchases were fewer than in 2014. No purchases of base were reported. A point of ice cost about \$80, or \$500 per gram – somewhat less than 2014 prices. Ice was rated to be of medium/high purity and easy/very easy to obtain. Methamphetamine was most likely to have been sourced from a friend, at a friend's house, with some increase in reported purchase from a dealer.

Cocaine market

The median price of cocaine remained stable at \$300 per gram, but prices fell into two distinct groups (low, with correspondingly low purity, and a small high price/higher purity group). Among those who commented, 41% perceived cocaine as difficult/very difficult to obtain in the previous six months. A friend was the most common source person and a friend's house was the most common source location.

Ketamine and GHB markets

No participants reported having purchased ketamine or GHB in the previous six months.

LSD market

The reported price of LSD remained stable, with one tab of LSD costing approximately \$20. Over half of participants perceived purity to be high (56%), similar to 2014. More participants reported LSD to be difficult or very difficult to obtain (38% in 2015 vs 17% in 2014), and that availability fluctuated (23%). Participants were most likely to have obtained LSD from a friend at a friend's house.

Cannabis market

The median price for an ounce of hydroponic cannabis (hydro) was \$280, and \$250 for bush, with prices perceived as largely stable in the previous six months. Purity of both hydro and bush cannabis was rated at medium to high. Hydroponic cannabis remained easy/very easy to obtain in the previous six months, but one-third of participants reported bush as difficult/very difficult to

obtain. Cannabis was most often obtained from a friend, at home or a friend's house and was most often used at home.

Health-related trends associated with ecstasy and psychostimulant use

Overdose and drug-related fatalities

In 2015, 28% reported having overdosed on a stimulant drug at least once in their lifetime, with 19% reporting a stimulant overdose in the previous year. These figures were similar to 2014. The stimulant drug most commonly attributed to an overdose in the previous year was ecstasy, followed by ice.

A lifetime experience of overdose on a depressant drug was reported by 20% of participants, with 10% experiencing a depressant overdose in the previous 12 months, again similar to 2014. The drug most commonly attributed to a depressant overdose in the previous year was alcohol.

Dependence

Dependence was not common among users of ecstasy: only 13% scored four or more on the Severity of Dependence Scale. One quarter (26%) of methamphetamine users showed indications of dependence.

Help-seeking behaviour

The majority (88%) of participants reported not having accessed a health service or professional related to their drug and/or alcohol use in the previous six months. Among those who did, the most common service accessed was a drug and alcohol counsellor, a change from 2014 where help was most often sought from a general practitioner (GP).

Drug treatment remained low in this sample with only 5% reporting they were currently in some form of treatment.

Among all participants, 69% reported moderate to very high levels of psychological distress on the K10. Nearly half (44%) self-reported a mental health problem in the previous six months. The most common mental health problems experienced were anxiety and depression, with 20% attending a health professional for mental health reasons in the previous six months.

Risk behaviour

Injecting risk behaviours

There was a significant decrease in reports of recent injecting; only 2% reported injecting any drug in the previous six months compared with 19% in 2014 ($p < 0.05$). The only drug recently injected was ice.

Casual sex

Nearly three quarters (71%) of participants reported having had penetrative sex with a casual sex partner in the previous six months. The most common drugs to have been used when having sex were alcohol and cannabis, with cannabis use significantly increasing (from 32% in 2014 to 67% in 2015%; $p < 0.05$); ecstasy and alcohol use associated with casual sex remained stable.

Less than half of participants (44%) reported having a recent sexual health check-up. Seven per cent had recently been diagnosed with a sexually transmitted infection.

Alcohol use

Four out of five participants scored eight or more on the Alcohol Use Disorder Identification Test (AUDIT), corresponding to drinking at levels which may be harmful to their health.

Driving

Of participants who drove in the last six months, one-third reported doing so under the influence of alcohol. Two thirds drove soon after using an illicit drug. Over half had been randomly tested for alcohol (54%); only 8% had undergone random drug testing. In each group, only one participant had tested positive.

Law enforcement-related trends associated with ecstasy and related drug use

Prison history remained low (2%). Eleven per cent of participants reported having been arrested in the previous six months; the most common reasons for arrest were public order offences and drink driving. Drug dealing in the previous month was reported by 21% of participants.

Special topics of interest

Online purchasing and NPS use

Nearly three-quarters of participants (72%) reported that at least a few friends had ever purchased drugs online, and 15% reporting buying drugs online themselves. Of those, purchase in the previous year was reported by 22%. Online purchases were most commonly made from international surface web stores, and the most commonly purchased drugs were ecstasy and modafinil. Of the new psychoactive substances, the most commonly used were of the 2CX family. A range of unexpected side effects was reported, with anxiety and restlessness the most common.

NPS policy

Most participants correctly perceived the possession and use of 2CB, 2CI, DMT and mephedrone to be illegal in Queensland, but sizable proportions were uncertain. Over half were uncertain about the legal status of NBOMe.

Use of cognitive enhancing substances

Nearly two-thirds (60%) of participants reported using a cognitive enhancer in the last six months; the most common of these were coffee, energy drinks and methylphenidate. Users aimed to improve concentration or motivation and to decrease fatigue. More than one-third (39%) reported negative side effects: anxiety, headache, heart palpitations and loss of appetite were most common. One-quarter had used other substances in conjunction with the cognitive enhancers: tobacco and cannabis were most frequently used.

1 INTRODUCTION

The Ecstasy and Related Drugs Reporting System (EDRS) is an annual, national study funded by the Australian Government Department of Health and co-ordinated by the National Drug and Alcohol Research Centre (NDARC), University of New South Wales. The Queensland component is undertaken at the School of Public Health (SPH), The University of Queensland (UQ).

UQ participated in the 2000 and 2001 trial of the EDRS (then called the Party Drugs Initiative or PDI). The purpose of the trial was to determine the feasibility of monitoring emerging trends in ecstasy and related drug markets using the same methodology as the Illicit Drug Reporting System (IDRS). The PDI commenced as a national study in 2003 and was re-named the EDRS in 2006. The current report presents the findings of the 14th year of data collection for the EDRS in Queensland (no data were collected in 2002).

1.1 Study aims

The EDRS monitors the use, price, purity and availability of ecstasy, amphetamines and other illicit drugs. It is designed to provide a snapshot of emerging trends across all Australian jurisdictions and changes over time.

The annual EDRS national, state and territory reports

- describe the demographic characteristics of current, regular psychostimulant users in Australian capital cities
- examine patterns of ecstasy and other drug use among these samples
- identify current trends in the price, purity and availability of a range of illicit drug classes
- indicate the nature and incidence of drug-related harms, and
- identify emerging trends in ecstasy and related drug markets that may represent areas of research need.

2 METHODS

A triangulation method was used to combine information collected from

- quantitative interviews with current, regular ecstasy and other psychostimulant users (participants), who are considered a population likely to be aware of new drug trends
- qualitative interviews with 'key experts' who have current regular contact with people who are using ecstasy or other psychostimulants and
- existing data on population trends in illicit drug use as well as health and law enforcement data.

2.1 Survey of regular psychostimulant users

In Australia, the ecstasy market has existed for over three decades. Throughout this report, 'ecstasy' refers to drugs that are alleged to contain 3, 4-methylenedioxymethylamphetamine (MDMA). Excluding the misuse of pharmaceutical drugs, ecstasy is the second most prevalent illicit drug after cannabis, with 2.5% of the Australian population aged 14 years and over having used ecstasy in the previous 12 months (AIHW, 2014).

Until 2013, EDRS participants were required to be regular ecstasy users; however, due to difficulty with recruitment in some of the smaller jurisdictions, the nationwide EDRS criteria were broadened to include regular psychostimulant users (i.e. people who had used any ecstasy or related drug on at least six separate occasions over the last six months). Participants are now termed regular psychostimulant users (RPU).

A sentinel sample of 85 current, regular users of substances sold as 'ecstasy' or other psychostimulants was recruited between April and June 2015 from the greater Brisbane, Gold Coast and Sunshine Coast regions (South-East Queensland). They were interviewed on topics relating to their illicit drug use, including prices paid for illicit drugs, perceptions of drug purity and availability, risk and help-seeking behaviours, health, law enforcement trends associated with drug use and drug-policy. Ethics approval was gained from the Human Research Ethics Committees at the University of New South Wales and The University of Queensland.

2.1.1 Recruitment of participants

As in previous years, purposive sampling was used to recruit participants using advertisements in local street press, websites (e.g. pillreports.ru) and posters in public places (e.g. shops and universities). Snow-balling techniques (i.e. word-of-mouth) were also used.

Recruitment advertisements explained that current regular users of ecstasy and other psychostimulants were being recruited to undertake a face-to-face survey lasting approximately one hour. They were made aware that if eligible, they would be reimbursed \$40 for their time and expenses in participating. Upon completion of the interview, participants were asked to mention the study to friends who might be willing and able to participate. This is a method often used to access illicit drug user populations (Dalgarno, 1996; Ovendon & Loxley, 1996).

Selection criteria for participation in the EDRS were:

- aged 17 years or over
- resident in South-East Queensland continuously for the past 12 months
- used ecstasy or other psychostimulants at least once a month for the past six months (six times or more).

The 2015 Queensland EDRS recruited a total of 85 participants. The majority of participants had used ecstasy at least once a month in the past six months, while 14 participants had used any illicit psychostimulant at least six times in the previous six months (compared with 26 in 2014).

2.1.2 Procedure

Interested individuals inquired about participating in the survey via telephone, SMS or email. If the individual met selection criteria, an interview was scheduled at a coffee shop in one of five strategic localities. It was explained that participation was voluntary and anonymous, and that responses would be de-identified to protect confidentiality. The nature and purpose of the study was explained to participants before written consent was obtained.

2.1.3 Measures

Questions in the interview covered a range of topics including demographics, drug use history and characteristics of recent use—particularly ecstasy; price, purity and availability of various illicit drugs and associated risk behaviours. A dummy drug ('babazine') was included in the drug use section as a method of identifying over-reporting of drug use by participants. No participants identified themselves as having used babazine.

2.1.4 Data analysis

Data were entered into IBM® SPSS® Statistics, version 21.0 for Windows and analysed in STATA, version 13.0. Data analyses were mostly descriptive and concerned with lifetime and recent patterns of use (in the previous six months) and participant reports of the price, purity and availability of a range of illicit drugs. Significance testing was undertaken to compare differences in proportions between 2014 and 2015; significance at the $p < 0.05$ level using t-tests is reported within the text. Other proportional differences observed between 2014 and 2015 may represent sampling variability only.

2.2 Survey of key experts

During August, September and October, 19 key experts who had knowledge of ecstasy users and/or the ecstasy market were recruited throughout South-East Queensland.

2.2.1 Recruitment

Key experts were recruited from appropriate organisations within the health, law enforcement, forensic and entertainment sectors using the professional networks of project staff, and recommendations and referrals from colleagues and other key experts. .

2.2.2 Procedure

Interviews with key experts occurred over the telephone, face-to-face in their work environment or at a convenient location. The duration of the interviews ranged from 30 minutes to one hour.

2.2.3 Measures

Key experts were interviewed on topics related to patterns of illicit drug use among people using ecstasy with whom they had contact in the past six months. These topics included perceptions of price, purity and availability of ecstasy and other related drugs, emerging features of drug use, issues related to health and wellbeing, and perceptions of crime and police activity.

2.3 Other indicators

Secondary data from external health, research and law enforcement sources were collected and included to complement the information collected from participants and key experts. In 2015, the following data were obtained for the EDRS:

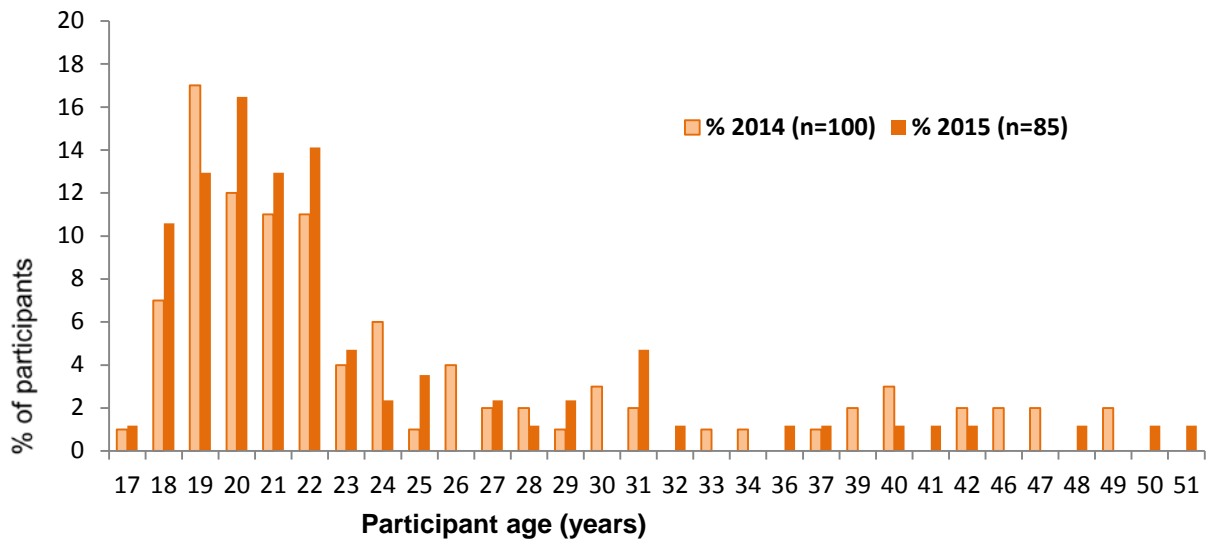
- Australian Crime Commission (ACC) — number and purity of drug seizures by the Queensland Police Service (QPS) and the Australian Federal Police (AFP); Queensland clandestine laboratory seizures and drug-related arrests
- Australian Customs and Border Protection Service (ACBPS) — number and weight of drug seizures
- Australian Institute of Health and Welfare (AIHW) — National Drug Strategy Household Surveys (NDSHS)
- Australian Institute of Health and Welfare (AIHW) — National Minimum Data Set for Treatment Services
- Kirby Institute — Australian Needle and Syringe Program (NSP) Survey National Data Report 1995-2014
- National Notifiable Diseases Surveillance System
- National Hospital Morbidity Data

3 DEMOGRAPHICS

3.1 Overview of the EDRS sample

The 2015 EDRS sample in Queensland was of similar age to that of previous years (Figure 1). The mean age of 24 years was slightly lower than the 25 years in 2014 and similar to earlier years (22 years in 2013 and 26 years in 2012).

Figure 1: Distribution of participant ages, 2014 and 2015



Source: QLD EDRS participant interviews

Table 1 shows demographic characteristics of the 2015 sample. Compared with 2014, in 2015 there were more single participants ($p < 0.05$), with a significant increase in the proportion of participants who reported combining work and study ($p < 0.05$) and a decrease in those employed full-time ($p < 0.05$). Other characteristics remained similar to previous years. Over half of participants were male, and the majority were of English-speaking background, living in rental accommodation, and had completed year 12.

The mean weekly income was estimated at \$420 ($n = 85$, range \$50–1500). The income profile was very similar to previous years. In 2015, 54% of all participants reported their main source of income in the previous month was from a wage or salary, with 27% reporting it was from a government pension, allowance or benefit (i.e. Centrelink), and 12% reported it was from a parental allowance. Two participants reported they received no income in the previous month and three participants reported criminal activity was their main source of income.

Table 1: Demographic characteristics, 2014 and 2015

	2014 (n=100)	2015 (n=85)
Mean age (range)	25 (17-49)	24 (17-51)
% Male	67	58
% English speaking background	96	94
% Aboriginal and/or Torres Strait Islander	-	1
% Sexual identity		
Heterosexual	82	79
Gay male	3	4
Lesbian female	2	5
Bisexual	11	12
Other	2	1
% Relationship status		
Married/de facto	10	2
Regular partner	41	34
Single	49	64 ↑
Divorced/separated/widowed	-	-
% Accommodation		
Own house/flat	5	9
Rented house/flat	66	77 ↑
Parents'/family home	27	9 ↓
Boarding house/hostel	-	2
No fixed address	1	2
Education		
Mean years of school education	12	12
% Completed Year 12 or equivalent	84	88
% University/college qualifications	17	23
% Trade/technical qualifications	32	23
% Employment status		
Not employed	21	14
Full time	17	7 ↓
Part time/casual	14	15
Full time student	17	18
Part time student	-	1
Work and study	31	44 ↑
Other	-	1
Income		
Mean weekly income	\$451	\$420

Note: Arrow symbol signifies a significant difference between 2014 and 2015 ($p < 0.05$). Percentages may not total 100% due to rounding.

Source: QLD EDRS participant interviews

4 CONSUMPTION PATTERNS

Key points

- Ecstasy remained the drug of choice among participants, more so than 2014. There were increases in preferences for cannabis and alcohol.
- Cannabis, alcohol and ecstasy respectively had the highest prevalence of recent use.
- Fewer participants reported ice as the drug most used during the past six months.
- Most reported using ecstasy and related drugs fortnightly, though one-third reported using weekly or more.
- Injecting remained rare among this sample.

4.1 Drug use history and current drug use

4.1.1 Drug use history

Participants were asked about lifetime and recent use of drugs, as well as age of first use, frequency of use during the previous six months, and route of administration (ROA: Table 2).

While shelving/shafting was included as a route of administration on the questionnaire, it has not been reported in Table 2 due to the rarity of this method. In 2015:

- One participant reported shelving/shafting ecstasy pills, and one MDMA crystal, during the last six months
- One participant reported shelving/shafting alcohol in the last six months.

Table 2: Drug use history, 2015

Form of drug	Use				Route of administration ^d %			
	Ever %	Mean age first used ^a	Recent ^b %	Days used ^c	Injected ^d Recent ^b %	Smoked ^d Recent ^b %	Snorted ^d Recent ^b %	Swallowed ^d Recent ^b %
Ecstasy pills	97	18	86	8	0	0	41	82
Ecstasy powder	41	21	22	5	0	0	19	14
Ecstasy capsules	85	20	62	6	0	0	18	52
MDMA crystals	56	21	42	7	0	1	16	35
Amphetamine powder (speed)	40	20	11	2	0	1	6	6
Methamphetamine base	21	26	2	1	0	1	0	1
Crystalline methamphetamine (ice)	34	23	20	6	2	16	4	6
Pharmaceutical stimulants (licit)	9	15	5	114	0	0	0	5
Pharmaceutical stimulants (illicit)	62	19	31	5.5	0	1	12	28
Cocaine	66	21	39	3	1	0	38	2
LSD	66	20	41	3	0	0	0	41
MDA	37	20	22	2	0	0	2	21
Ketamine	17	22	4	2	0	0	1	2
GHB ^d	12	23	2	1	0	-	-	2
Amyl nitrate	42	20	19	3	-	-	19	-
Nitrous oxide	38	21	15	6	-	-	15	-

^a Calculated for those who reported lifetime use

^b In the preceding six months

^c Median days in the preceding six months (180 days) among those who did use

^d % of the total sample

Note: Responses are for the name given to the drug when it was obtained (i.e. regardless of actual content)

Source: QLD EDRS participant interviews

Table 2: Drug use history, 2015 (continued)

Form of drug	Use				Route of administration ^d %			
	Ever %	Mean age first used ^a	Recent ^b %	Days used ^c	Injected ^d Recent ^b %	Smoked ^d Recent ^b %	Snorted ^d Recent ^b %	Swallowed ^d Recent ^b %
Cannabis	98	16	93	48	-	93	36	35
Alcohol	100	14	95	48	0	-	-	95
Heroin	9	20	2	2	0	1	1	0
Methadone	4	18	0	0	-	-	-	-
Buprenorphine	1	19	0	0	-	-	-	-
Other opioids (licit)	24	18	7	4	2	0	0	5
Other opioids (illicit)	28	25	11	4	0	0	1	11
Over-the-counter codeine ^e	28	18	15	4	0	0	0	15
Tobacco	87	15	77	150	-	77	-	-
Antidepressants (licit)	21	18	7	135	0	0	0	7
Anti-depressants (illicit)	7	19	1	1	0	0	0	1
Benzodiazepines (licit)	18	20	5	5	0	0	0	5
Benzodiazepines (illicit)	53	20	33	4	0	0	0	33
Mushrooms	55	20	24	2	0	0	0	22
Over-the-counter stimulants (illicit)	19	19	7	2	0	0	1	7
Steroids	4	25	0	0	-	-	-	-

^a Calculated for those who reported lifetime use

^c Median days in the preceding six months (180 days) among those who did use

^b In the preceding six months

^d % of the total sample

^e for non-pain use

Note: Responses are for the name given to the drug when it was obtained (i.e. regardless of actual content)

Source: QLD EDRS participant interviews

4.1.2 Drug of choice and drug most used

Compared with 2014, there was a significant increase in participants nominating ecstasy as their drug of choice in 2015, as well as increases in participants who selected cannabis and alcohol ($p < 0.05$, Table 3).

Table 3: Drug of choice, 2014 and 2015

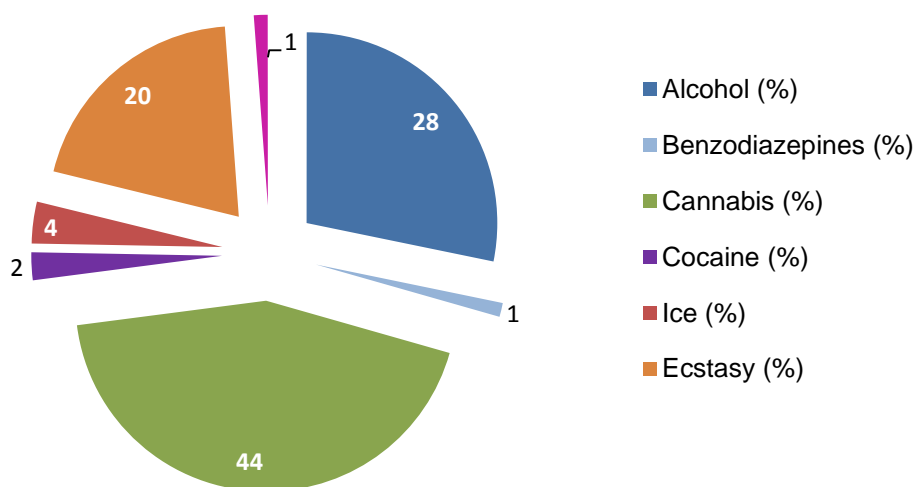
Drug of choice	2014 (n=100) %	2015 (n=85) %
Ecstasy	29	38 ↑
Cannabis	20	31 ↑
Cocaine	16	8
Alcohol	3	11 ↑
LSD	16	5
Speed	2	-
Heroin	4	-
Crystalline methamphetamine (ice)	3	5
2CB	2	-
Other*	5	4

Note: 'Other' includes methamphetamine base and mushrooms. Arrow signifies a statistical difference between 2014 and 2015 ($p < 0.05$).

Source: QLD EDRS participant interviews

Figure 2 shows that cannabis and alcohol were the drugs used most often in the previous six months, followed by ecstasy and crystalline methamphetamine (ice). Compared to 2014, there was a significant increase in alcohol being reported as the drug most used (from 9% to 28%; $p < 0.05$) and a decrease in ecstasy as the drug most used (from 33% to 20%; $p < 0.05$).

Figure 2: Drug used most often in previous six months, 2015



Source: QLD EDRS participant interviews

4.1.3 Frequency of ecstasy and related drug use

Frequency of use of ecstasy and related drugs was very similar to 2014 (Table 4). In 2015, 33% reported using weekly or more often.

Table 4: Frequency of ecstasy and related drug use during previous month, 2014 and 2015

	2014 (n=100) %	2015 (n=85) %
Not in the last month	8	5
Monthly	21	22
Fortnightly	37	40
Weekly	20	18
More than once per week	11	12
Once a day	1	2
More than once a day	2	1

Source: QLD EDRS participant interviews

4.2 Ecstasy use

Key points

- Mean age of first ecstasy use remained stable at 18.5 years.
- Ecstasy as drug of choice increased ($p < 0.05$).
- Recent use of ecstasy in pill form increased slightly over 2014 ($p < 0.05$).
- MDMA crystal use was steady, with 42% using it in the previous six months, but use of the capsule form increased to 62% ($p < 0.05$).
- Ecstasy was mainly swallowed, sometimes snorted, and rarely smoked or injected.
- The most recent time participants used ecstasy, 85% also used another drug.
- 65% reported using other drugs when coming down from ecstasy (e.g. cannabis and benzodiazepines).
- 35% reported using drugs for 48 hours or more without sleep in the previous six months.
- Key experts reported a shift from pill to crystalline or capsule forms of ecstasy, with an increase in snorting as a result.

4.2.1 Patterns of ecstasy use among regular psychostimulant users

Table 5 presents reported patterns of ecstasy use among the 2015 sample.

All participants reported using some form of ecstasy at least once in their lifetime. The mean age of first use of ecstasy was stable at 18.5 years in 2015. Pills were the most common form of ecstasy ever used, with lifetime use reported by 97% of all participants. Lifetime use was reported as: ecstasy caps 85%, MDMA crystal 56% and ecstasy powder 41%.

Most participants (98%) reported using some form of ecstasy in the previous six months. Compared with 2014, more participants nominated ecstasy as their drug of choice in 2015 ($p < 0.05$). The most commonly used form was ecstasy pills, used by 86% of all participants.

The median number of ecstasy pills used in a 'typical' session remained at two. Among those who reported using ecstasy pills in the previous six months ($n=81$), 32% reported using more than two pills in a usual session.

The frequency of using ecstasy pills was a median of eight times in the previous six months ($n=73$, range 1–72). This was not significantly different to the frequency of use in 2014. Among those who reported using ecstasy pills in the previous six months ($n=73$), 25% reported using them at least weekly. The median frequency of use of other forms of ecstasy in the previous six months was less than monthly.

Table 5: Patterns of ecstasy use, 2011-2015

	2011 (n=103)	2012 (n=62)	2013 (n=88)	2014 (n=100)	2015 (n=85)
% Ecstasy (any form) in last six months ^a	100	100	100	94 ^a	98^a
Mean age first used ecstasy (any form)	18.0	18.6	17.3	18.5	18.5
Median days used any form in last six months ^b	12	18	14	10	12
% Use weekly or more in last six months ^b	24	37	33	30	33
Median pills in 'typical' session ^b	2	2	2	2	2
% Typically use >1 pill ^b	84	86	83	78	74
% Favourite drug	28	21	46	29	38 ↑
% Ever injected ecstasy	11	9	3	12	-
% Mainly swallowed ecstasy recently ^b	90	89	75	84	73 ↓
% Mainly snorted ecstasy recently ^b	7	8	25	13	20 ↑
% Mainly injected ecstasy recently ^b	1	3	0	2	0
% Recently binged on ecstasy ^{b,c}	33	34	36	23	36 ↑
% Used other drugs with ecstasy ^b	91	87	92	82	85
% Used other drugs to 'come down' from ecstasy ^b	65	57	48	63	65

^a Criteria for recruitment changed in 2013 from people who had used ecstasy six or more times in the previous six months (2005–2012) to include people who had used any psychostimulant six or more times in the previous six months.

^b Among those who reported using ecstasy in the previous six months ($n=83$).

^c Used for >48 hours without sleep

Note: Arrow symbol signifies a significant difference between 2014 and 2015 ($p < 0.05$).

Source: QLD EDRS participant interviews

4.2.2 Forms of ecstasy used and route of administration

Nearly all participants (98%) reported recent use of a form of ecstasy. Pills remained the most common form used, with recent use at 86% in 2015 being similar to 81% in 2014 ($p < 0.05$). Use of MDMA crystal was also similar to 2014, with 42% of all participants reporting use in the previous six months, remaining higher than the 23% reported in 2013.

Swallowing remained the main route of administration for all forms of ecstasy, followed by snorting (Table 2). Injecting ecstasy remained rare among this sample; there were no reports of recently injecting any form of ecstasy. Similarly, smoking was only reported by one person as the main route of administration.

4.2.3 Poly-drug use of regular ecstasy and other psychostimulant users

As in previous years, the majority of participants reported engaging in poly-drug use (Table 6). All of those who used ecstasy recently reported that, on the most recent occasion they used ecstasy, they also used a least one other drug, most commonly alcohol, tobacco and cannabis.

Among those who reported using other drugs to come down from ecstasy the most recent time they used ecstasy (n=55), cannabis was the most common other drug (87%), followed by tobacco (25%) and benzodiazepines (11%).

About a third of all participants (35%) reported 'bingeing', i.e. using drugs for more than 48 hours or more without sleep. Substances most often used during a 'binge' included alcohol (more than five standard drinks), ecstasy, tobacco and cannabis.

Table 6: Drugs used with or coming down from ecstasy, and when bingeing, 2015

	With ecstasy last time (n=72) %	Coming down from ecstasy last time (n=55) %	While bingeing (n=30) %
Ecstasy	n/a	n/a	63
Alcohol >5 standard drinks	68	7	70
Tobacco	63	25	73
Cannabis	40	87	73
Cocaine	6	-	17
LSD	8	-	10
Alcohol <5 standard drinks	21	7	13
Ice	6	-	27
Nitrous oxide	3	2	3
Energy drinks	10	-	7
Speed	1	-	7
Base	-	-	3
Benzodiazepines	1	11	7
Pharmaceutical stimulants	4	-	13
Amyl nitrite	6	2	-
MDA	1	-	3
Over-the-counter codeine	1	-	3
Other	6 ^a	2 ^b	10 ^c

^a Mushrooms, 25l, Restavit; ^b Restavit; ^c Mushrooms, caffeine, prescription codeine, Restavit

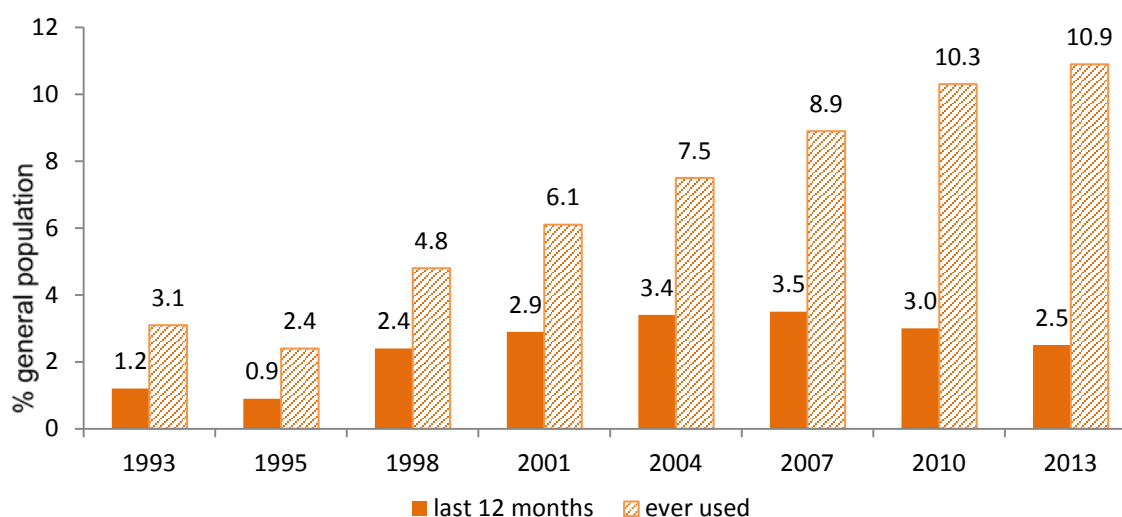
Note: Multiple responses permitted

Source: QLD EDRS participant interviews

4.2.4 Ecstasy use in the general population

The most recent (2013) National Drug Strategy Household Survey (NDSHS) reported a decrease since 2007 in recent (last 12 months) use of ecstasy among the general Australian population aged 14 years and older (Figure 3), although lifetime use continued its gradual increase. Reported use of ecstasy in the previous 12 months was estimated at 2.5% of the general population, which was significantly less than the 3% reported in 2010 (AIHW, 2014, Online Tables 5.2, 5.3, 5.7). Use in the 20-29 year age group (that most similar to the EDRS participants) for the last year was 8.6%. Average age of initiation for ecstasy use in the general population was 21.7 years; this is slightly older than the EDRS cohort (mean initiation age 18.5 years).

Figure 3: Prevalence of ecstasy use among the Australian population aged 14 years and over, 1993-2013



Source: National Drug Strategy Household Survey (NDSHS) 1988–2013 (AIHW, 2014)

4.2.5 Comments from key experts on ecstasy use

Key experts reported that ecstasy is usually used in combination with alcohol and/or other drugs. Use continues to be primarily recreational, generally within a group in a social setting. It was considered to be most common among young people in their twenties, with regular use tapering off as people approach their thirties.

Patterns of ecstasy use continue to be weekly or fortnightly, focusing on weekend socialising or specific events such as music festivals. Pricing was stable for South East Queensland, but increased in northern and more regional areas. Wastewater analyses indicated increased use in some regional centres including Toowoomba and the Gold Coast.

Key experts noted that most forms of ecstasy were very easily available, but saw a preference among users for caps and crystalline ecstasy rather than pills, generally due to the perception of low purity for tablet forms. For similar reasons, the use of multiple pills per session was seen as common. The use of powder and crystalline forms was associated with increased snorting of MDMA. Forensic analyses confirm the presence of higher purity in

crystalline and capsule-form seizures, but noted frequent inclusion of other substances such as MDA, caffeine, NBOMe in pill forms.

Health key experts noted few incidents of overdose on ecstasy, and few adverse mental or physical health symptoms associated with ecstasy use. Reports of adverse symptoms were generally attributed to contaminants.

4.3 Methamphetamine use

Key Points

- In our sample, recent use of all forms of methamphetamines decreased in 2015.
- There was a decrease in reports of both lifetime and recent use of ice ($p < 0.05$).
- Frequency of ice use in the previous six months decreased to monthly ($p < 0.05$).

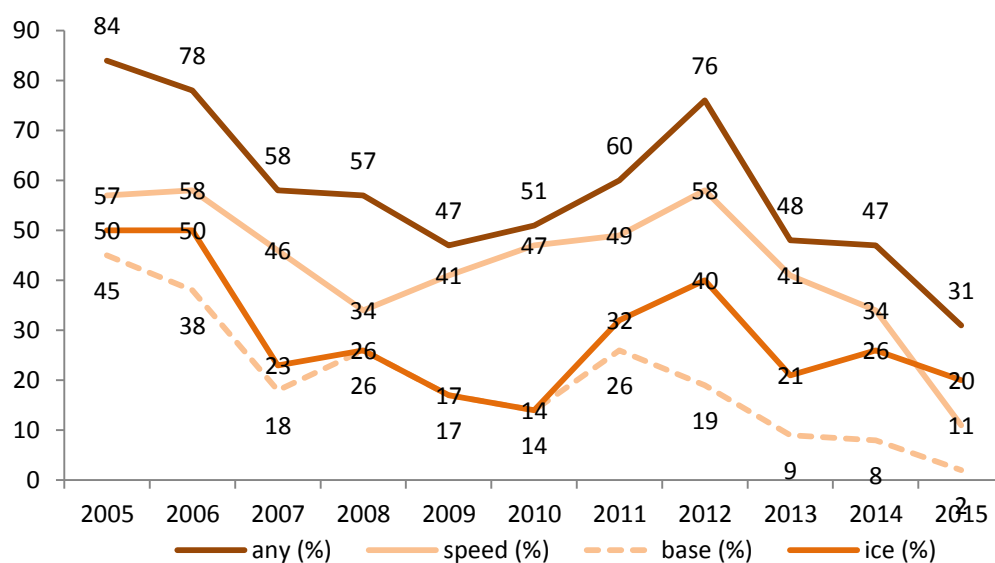
4.3.1 Patterns of methamphetamine use among regular psychostimulant users

Participants were asked about their consumption of methamphetamine in three different forms:

- Amphetamine powder (speed)
- Methamphetamine base
- Crystalline methamphetamine (ice).

Figure 4 presents trends of recent methamphetamine use among participants over the last decade. In 2015, 55% of participants reported lifetime use of any form of methamphetamine, with 31% reporting recent use. This is lower than 2014 reports (72% lifetime, 47% last six months). In 2015, crystal methamphetamine, or ice, overtook speed powder as the type of methamphetamine most used in the previous six months.

Figure 4: Patterns of recent methamphetamine use according to type, 2005-2015

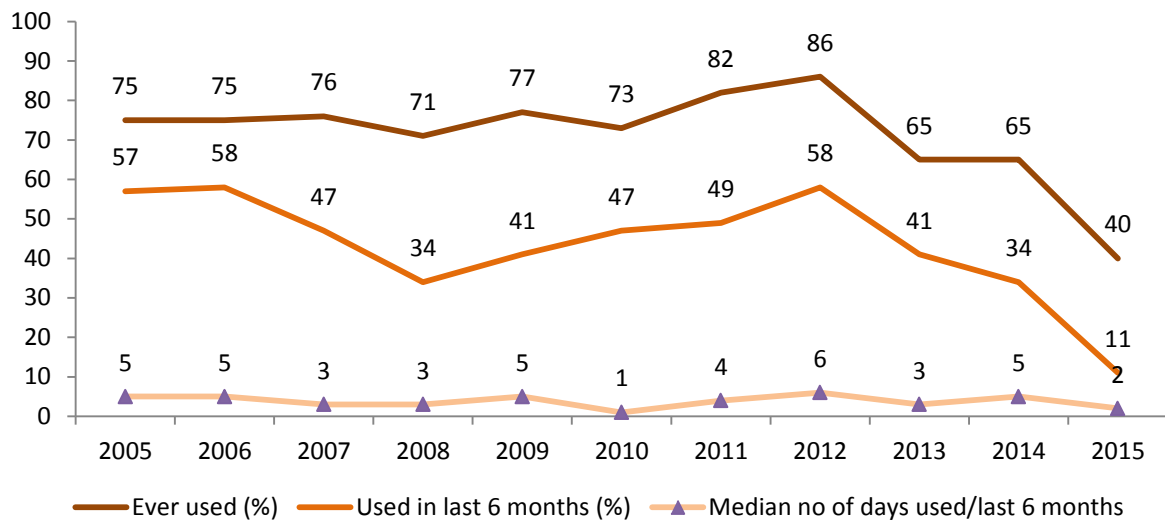


Source: QLD EDRS participant interviews

4.3.2 Speed use

Figure 5 shows that in 2015, the proportion of participants reporting lifetime and recent use of speed dropped from the previous year. There appears to be a downward trend in recent use since 2012. Frequency of speed use was estimated at two days (n=9, range 1–10 days) over the previous six months.

Figure 5: Patterns of amphetamine powder (speed) use, 2005-2015



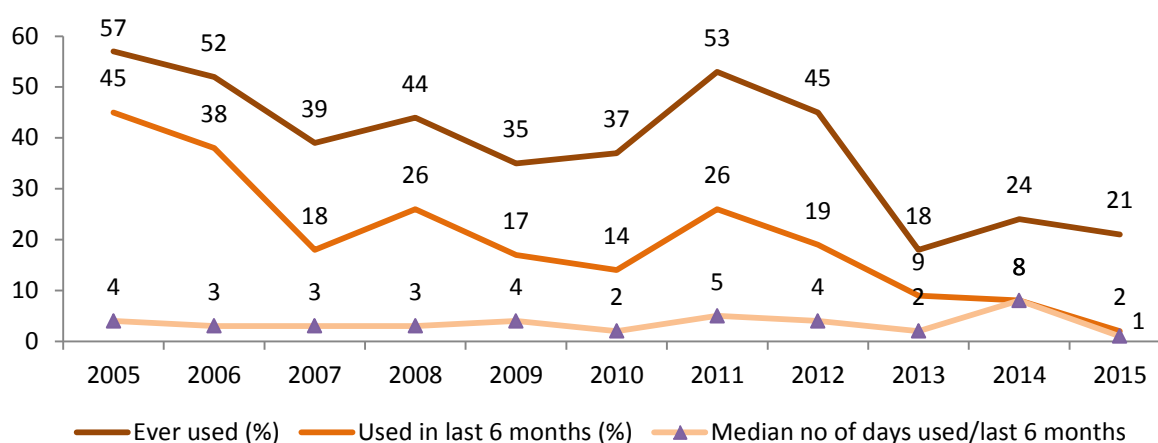
Source: QLD EDRS participant interviews

Among those who reported in points (0.1g) and grams, the median number of points used in a typical session was two (n=6, range 1–20pts). One participant responded in caps, reporting four caps as the amount used in typical session, and one in bumps, reporting 15 bumps as the average amount in a typical session. These figures were identical for the largest amount used in one session.

4.3.3 Methamphetamine base use

Lifetime use of methamphetamine base was similar to reports in 2014 (Figure 6). Recent use was low in 2015, reported by only two participants. One participant used once in the previous six months and the other used twice. Both participants reported using less than one point per session.

Figure 6: Patterns of methamphetamine base use, 2005-2015

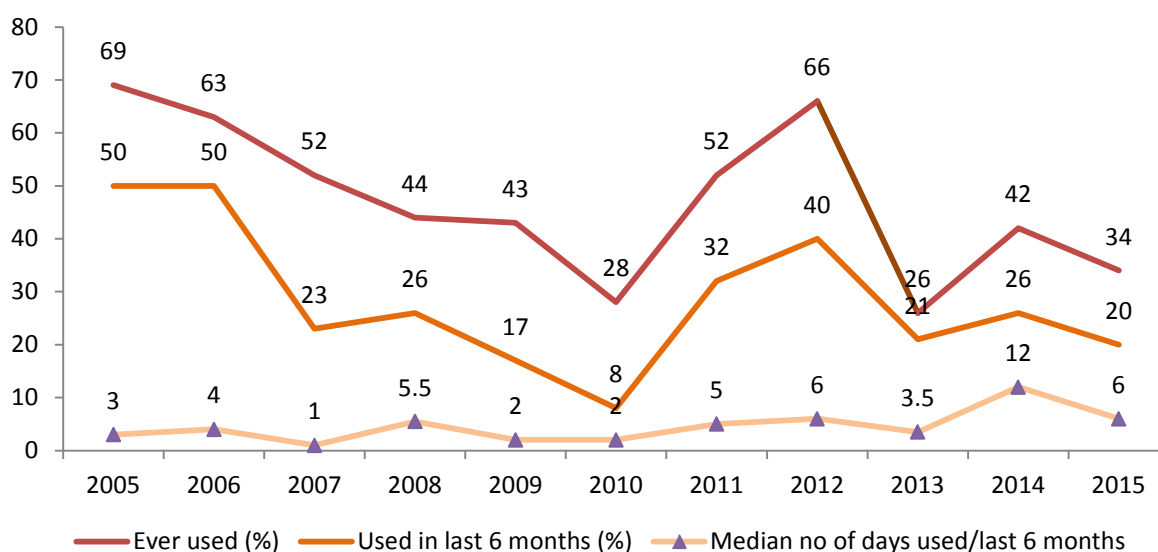


Source: QLD EDRS participant interviews

4.3.4 Ice use

The proportion of participants who reported lifetime use of ice decreased to 34% from 42% in 2014 ($p < 0.05$; Figure 7). Similarly, the proportion of participants reporting recent use was lower, and the frequency of ice use decreased from a median of 12 days in 2014 to 6 days in 2015, corresponding to monthly use ($p < 0.05$).

Figure 7: Patterns of crystalline methamphetamine (ice) use, 2005-2015



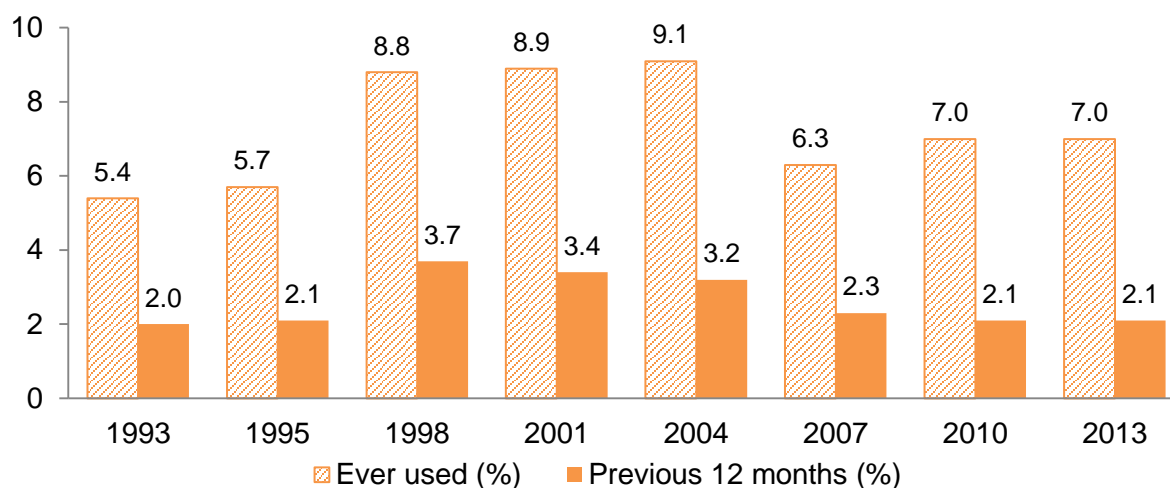
Source: QLD EDRS participant interviews

In a typical session, among those who responded in points (0.1g) and grams, the median number of points of ice used was one ($n = 15$, range 0.25–5pts). Two participants responded in grams (0.2g and 0.5g). In a heavy session, among those who responded in points (0.1g) and grams, the median number of points used was two ($n = 14$, range 0.25–16pts). Two other participants reported using 0.5g and 1g in a heavy session.

4.3.5 Prevalence of methamphetamine use in the general population

Lifetime methamphetamine use in the general population is estimated at approximately 7%, with use in the previous year at 2.1% (Figure 8). This is similar to previous years (AIHW, 2014, Online Tables 5.2 and 5.3).

Figure 8: Prevalence of methamphetamine use among the Australian population aged 14 years and over, 1993 to 2013



Source: NDSHS 1993–2013 (AIHW, 2014)

4.3.6 Comments from key experts on methamphetamine use

Key experts noted the change among users from speed and base to crystalline methamphetamine (ice). However, they found it difficult to estimate changes in prevalence in the face of heightened media attention. Those in the treatment field commented on the increase in clients citing ice as the principle drug of concern, overtaking alcohol and cannabis in some areas. Concern was expressed over a younger age of initiation, with young users trying ice first up rather than progressing from alcohol and cannabis.

Smoking of methamphetamines was seen as common, with a stigma being attached to injection. Use in general was shunned socially by some groups, generally in higher socio-economic sectors. Binge use was seen as frequent, involving several days of constant use (rather than very high doses), followed by a 'crash' with accompanying mental health disturbances; depression, paranoia, psychosis which persisted. Poly-substance use was also frequent, with alcohol use during binges, then benzodiazepines and cannabis commonly used in the come down period.

4.4 Cocaine use

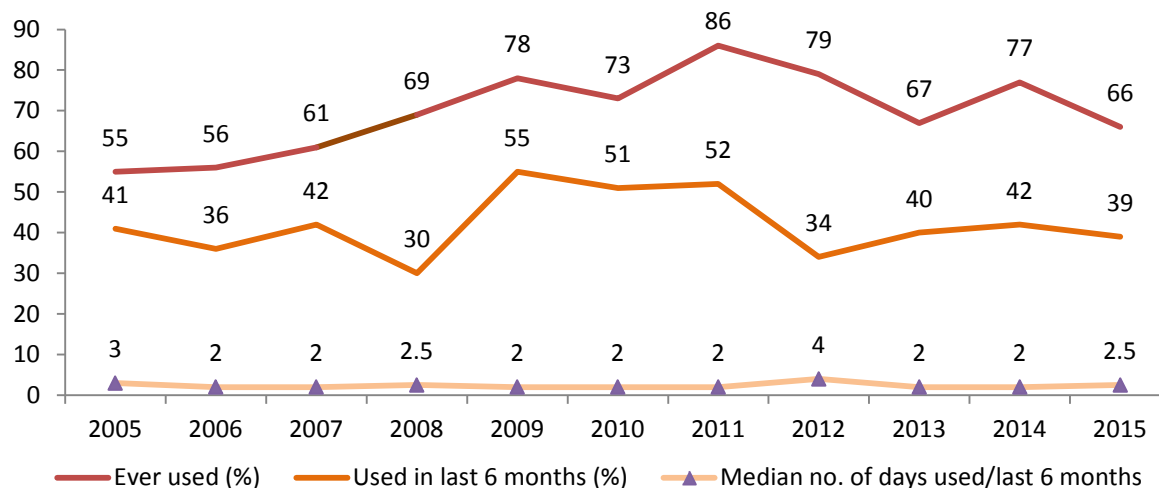
Key points

- Lifetime cocaine use dropped slightly (66%) while recent use remained stable (39%).
- Frequency of use remained low and occasional.

4.4.1 Patterns of cocaine use among regular psychostimulant users

Reports of lifetime and recent use of cocaine dropped slightly, with two-thirds reporting having ever used, and 39% using in the previous six months (Figure 9). Frequency of use increased very slightly to 2.5 days in the previous six months, corresponding to occasional use.

Figure 9: Patterns of cocaine use, 2005 to 2015



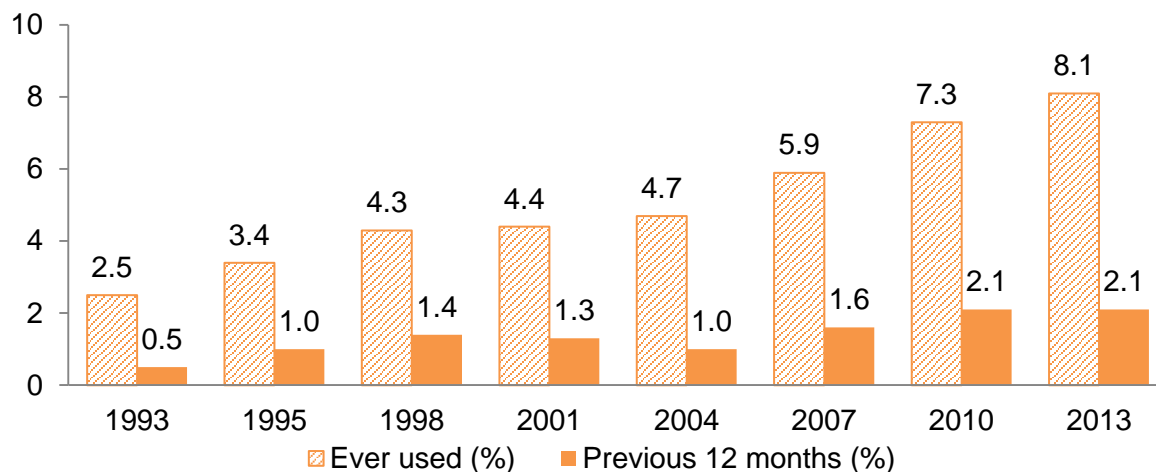
Source: QLD EDRS participant interviews

Among those who responded in grams, the median average amount used in a typical session was 0.5g (range 0.1–1g), and 0.75g for a heavy session (range 0.1–2g).

4.4.2 Prevalence of cocaine use in the general population

Figure 10 shows the upward trend of lifetime cocaine use estimated for the general population aged 14 years and older based on reports in the NDSHS. Cocaine use in the previous 12 months has remained stable at 2.1% (AIHW 2014, Online Tables 5.2 and 5.3).

Figure 10: Prevalence of cocaine use among the Australian population aged 14 years and over, 1993-2013



Source: NDSHS 1993–2013 (AIHW, 2014)

4.4.3 Comments from key experts about cocaine use

Key experts reported little change regarding cocaine use. It was no longer regarded as a 'movie star drug', but was generally used by those with more available cash, and was sometimes given away as favours. There was agreement among key experts that use was most evident among older patrons (mid 20's upwards) in higher-end clubs.

4.5 Ketamine use

Key points

- Only a small proportion (4%) had recently used ketamine and frequency of use remained low.

4.5.1 Patterns of ketamine use among regular psychostimulant users

Only 16% of participants had used ketamine in their lifetime, and only 4% reported recent use (Figure 11). As in previous years, the frequency of use has remained very low. One participant reported using two bumps in a typical session, the other reported using three.

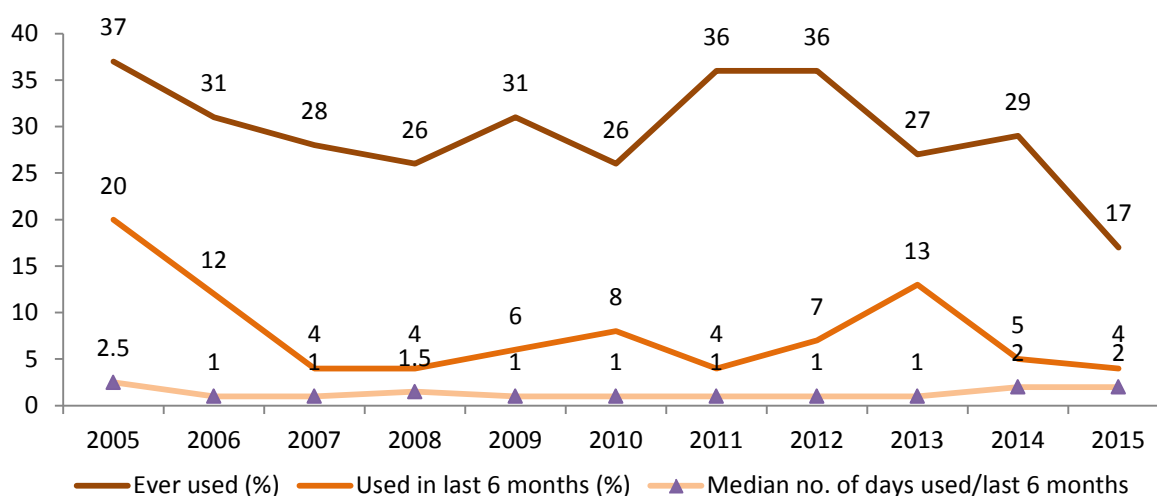
4.5.2 Ketamine use in the general population

The 2013 NDSHS (AIHW, 2014, Online Table 5.3) estimated the lifetime use of ketamine among the general population 14 years and older to be at 1.7% (which was significantly higher than 1.4% in 2010), with 0.3% reporting use in the previous 12 months. Use of ketamine has remained low over the past decade.

4.5.3 Comments from key experts about ketamine use

Key experts reported that use of ketamine appeared to be rare, although it was still available. There was some evidence that it may be an ingredient/contaminant in some illicit drug seizures.

Figure 11: Patterns of ketamine use, 2005-2015



Source: QLD EDRS participant interviews

4.6 GHB use

Key points

- Lifetime use of GHB remained low, with only one-off use reported by two participants in the previous six months.

4.6.1 Patterns of GHB use among regular psychostimulant users

In 2015, 12% of participants reported ever using GHB, with only 2% reporting recent use, and this was only on one occasion for both users. This is similar to reports in 2014. The amount of GHB used in a typical session was 1-5ml, and 5ml for a heavy session.

4.6.2 GHB use in the general population

Among the general population aged 14 years and over, the NDSHS estimated that the lifetime use of GHB has remained low at less than 1% in the past decade (0.9% in 2013). Use in the previous 12 months was reported to be less than 0.1%, which was significantly lower than reports in 2010 (AIHW 2014, Online Tables 5.2 and 5.3).

4.6.3 Comments from key experts about GHB use

Key experts reported that GHB use tends to remain constant but low, and that in recent times there was very little indication of use. GHB use is associated with entertainment precincts, and is not conspicuous as it is easily camouflaged as a legal liquid and its depressive effect tends to go undetected among alcohol use.

4.7 Hallucinogen use

Key Points

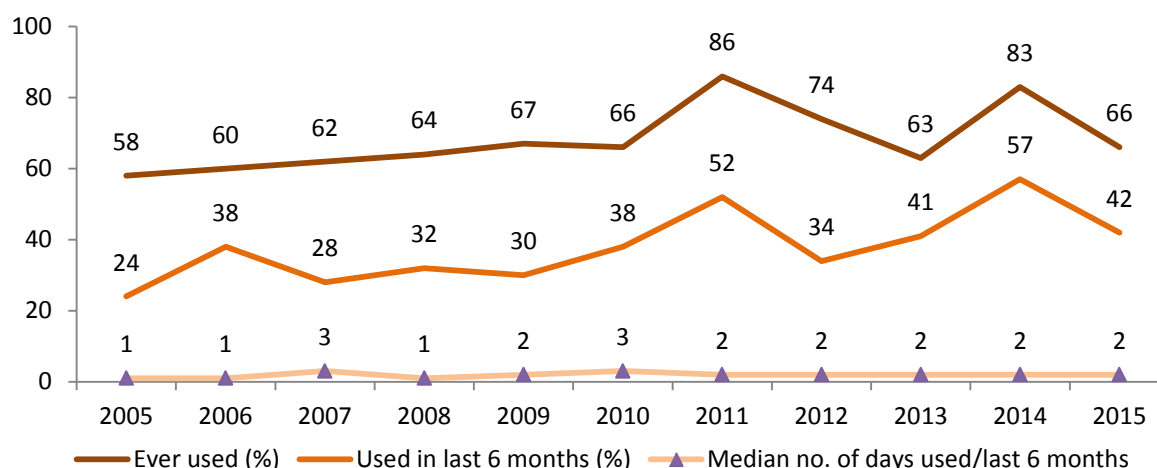
- Lifetime and recent use of LSD decreased from 2014, with 66% reporting having ever used and 42% reporting use in the previous six months.
- Frequency of LSD use remained stable, with median use being twice in the previous six months.
- One LSD tab was the median amount used in a typical session.
- Over half reported lifetime use of hallucinogenic mushrooms, with one-quarter having used them in the previous six months. Frequency of use was occasional.

In this section, participants were asked about their use of 'traditional' hallucinogens, LSD and mushrooms. Other drugs with hallucinogenic effects are reported in the NPS section.

4.7.1 Patterns of LSD use among regular psychostimulant users

Figure 12 shows that reported lifetime use of LSD significantly decreased from 83% in 2013 to 66% in 2015 ($p < 0.05$). Recent use also decreased to 42% ($p < 0.05$). Frequency of use remained stable at a median of two days in the previous six months.

Figure 12: Patterns of LSD use, 2005-2015



Source: QLD EDRS participant interviews

Table 7 shows the quantity of LSD tabs reported to have been used. In 2015, one tab was the median amount used in a typical session, with two tabs used in a heavy session.

Table 7: Median tabs of LSD used in a session in the last six months, 2005 to 2015

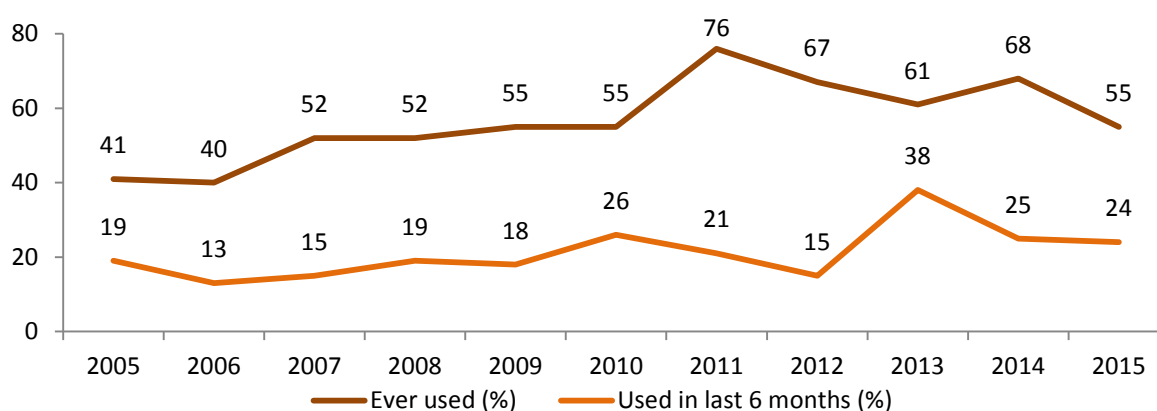
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Typical (range)	1.0 (.3-3)	1.3 (1-1.5)	1.0 (.5-5)	1.0 (.5-3.5)	1.0 (.5-4)	1.0 (1-5)	1.0 (.5-3)	2.0 (1-4)	1.0 (.5-6)	1.0 (.3-5)	1.0 (.25-3)
Heavy (range)	1.0 (.5-4)	1.3 (1-1.5)	1.0 (.5-6)	1.0 (.5-4)	1.0 (1-4)	2.0 (1-11)	1.0 (.5-5)	2.0 (1-4)	1.3 (.5-12)	2.0 (.5-8)	1.0 (1-3)

Source: QLD EDRS participant interviews

4.7.2 Mushroom use

The lifetime and recent use of hallucinogenic mushrooms dropped slightly, with over half reporting lifetime use and one-quarter reporting use in the previous six months (Figure 13). Frequency of use was estimated at one-two days in the previous six months (n=20, range 1-5 days).

Figure 13: Patterns of mushroom use, 2005-2015



Source: QLD EDRS participant interviews

4.7.3 Hallucinogen use in the general population

The 2013 NDSHS estimated the lifetime use of hallucinogens among the general population aged 14 years and older to be at 9.4%, with use in the previous 12 months to be at 1.3% (AIHW, 2014, Online Table 5.4). This was similar to previous years.

4.7.4 Comments from key experts about hallucinogen use

Key experts were of the opinion that use of LSD was quite low – that it had been ‘flavour of the month’ in the year before (2014) with considerable ‘home-made’ product being available, but that it appeared no longer fashionable. Comments suggested that use was generally among “a small group of regular users, rather than those naïve to drug use”, and tended to be occasional, not presenting to services as a drug of concern.

Forensic experts noted that NPS such as the 25X-NBOMe drugs have been distributed as LSD, finding both substances on the sheets of cardboard tabs common for LSD in Australia.

4.8 Cannabis use

Key points

- Use of cannabis has remained high and stable with 93% reporting use in the previous six months.
- Frequency of use was estimated at twice a week.
- Cannabis was predominantly smoked, though it was also eaten and inhaled.

4.8.1 Patterns of cannabis use among regular psychostimulant users

In 2015, use of cannabis remained high and stable, with almost all (98%) reporting lifetime use and 93% reporting use in the previous six months (Figure 14). As in previous years, the median number of days used in the previous six months was 48, corresponding to twice a week (n=79, range 1–180). The mean age of first use of cannabis was 16.1 years (n=83, range 10–23).

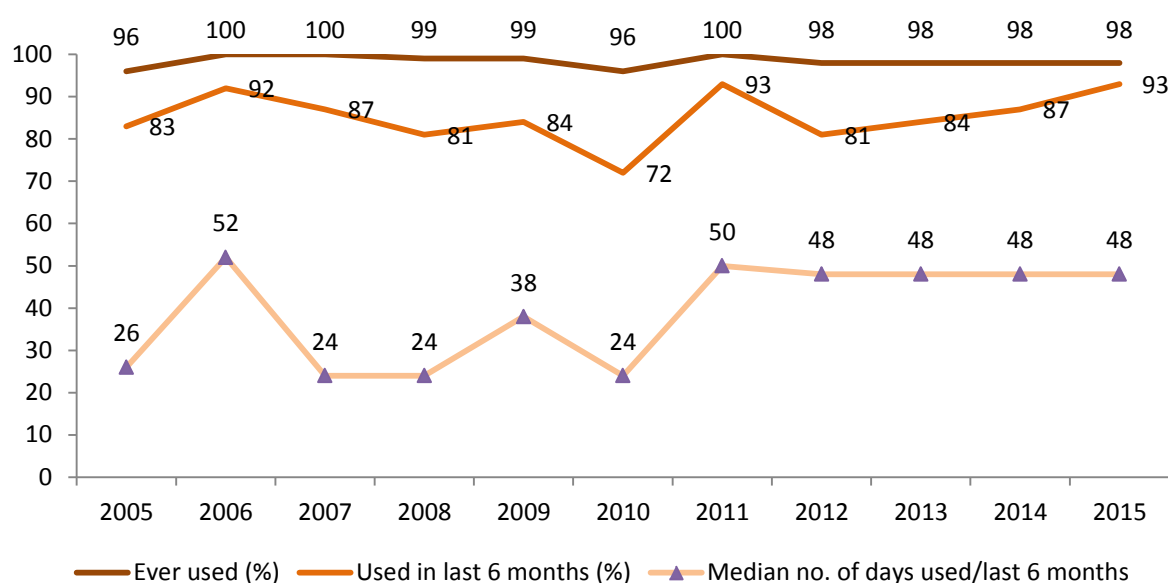
Among those who reported recent cannabis use (n=79), smoking remained the main route of administration (93%), followed by inhaling (36%) and eating (35%). This is a significant increase in the proportion of participants inhaling (vaping) cannabis over 2014 (21%).

Participants were asked the amount of cannabis used on the most recent occasion in the previous six months. The median amount varied depending on the unit used:

- Joints: one (n=25, range 0.25–6 joints)
- Cones: three (n=40, range 1–11 cones)
- Grams: one (n=8, range 0.25–1.5g)

Among those who reported using another drug when coming down from ecstasy on the most recent occasion (n=55), cannabis was the drug most used (56%).

Figure 14: Patterns of cannabis use, 2005-2015



Source: QLD EDRS participant interviews

Among participants who reported recent use of cannabis (n=79), 25% reported using every day in the previous six months (Table 8). This has remained stable in recent years.

Table 8: Frequency of cannabis use in the last six months, 2005 to 2014

	2005 (n=84) %	2006 (n=92) %	2007 (n=88) %	2008 (n=87) %	2009 (n=74) %	2010 (n=73) %	2011 (n=101) %	2012 (n=50) %	2013 (n=74) %	2014 (n=87) %	2015 (n=79) %
Daily	13	23	21	22	24	14	20	26	23	18	25
> Weekly	39	35	26	23	28	29	33	32	41	40	37
Weekly	0	1	7	12	8	14	6	8	10	7	2
< Weekly	48	42	46	44	39	44	41	34	23	34	28

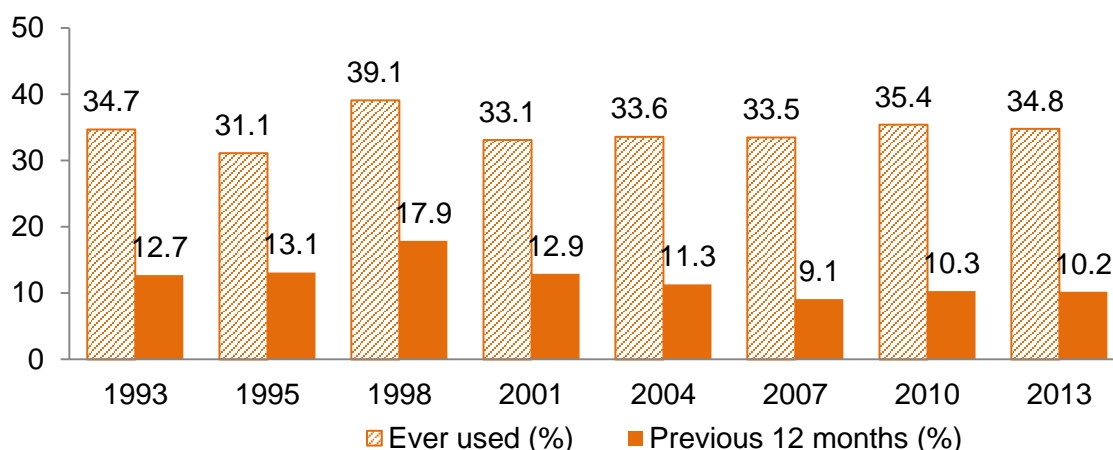
Note: Based on participants who used cannabis in the previous six months. Daily = 180 days; more than weekly = 25–179 days; weekly = 24 days; and less than weekly = 1–23 days.

Source: QLD EDRS participant interviews

4.8.2 Cannabis use in the general population

The NDSHS report shows that lifetime and recent use of cannabis among the general population has remained stable over the past decade (Figure 15; AIHW, 2014, Online Tables 5.2 and 5.3).

Figure 15: Prevalence of cannabis use among the Australian population aged 14 years and over, 1993-2013



Source: NDSHS 1993–2013 (AIHW, 2014)

4.8.3 Comments from key experts about cannabis use

Key experts reported that cannabis use was very common among people who used psychostimulants. Treatment providers noted high levels of use among clients, although most did not report it as a drug of concern. The use of cannabis to come down from stimulants was commented on by a number of key experts. Several also commented on use concurrent with ice, which created problems, potentially due to the ‘doubling up of hallucinogenic effects’. Some noted reports amongst non-novice users of “cannabis syndrome” involving gastric disturbances, vomiting, and diarrhoea (cannabinoid hyperemesis).

The use of synthetic cannabis was seen as particularly problematic because of panic and psychotic-type symptoms. However, key experts reported that people tended to try synthetic cannabis but that it has not replaced the regular use of hydro and bush. The novelty of synthetic cannabis was regarded as having passed, with regular cannabis users “looking down on synthetic cannabis users”.

4.9 Other drugs used

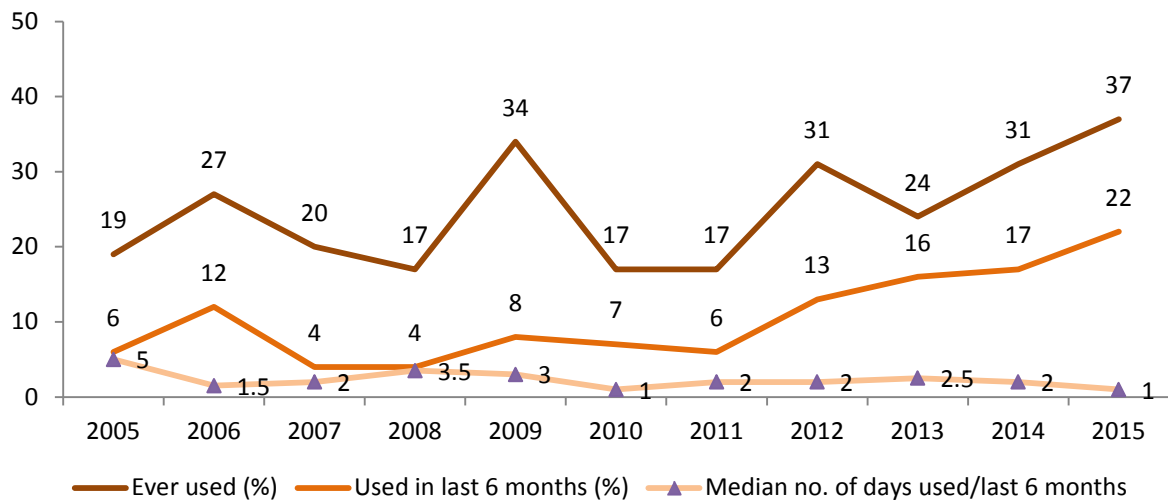
Key Points

- The use of alcohol and tobacco remained high, frequent and stable.
- Use of MDA was low and occasional.
- There was a decrease in recent use of licit benzodiazepines.
- There was a decrease in illicit lifetime use of other opioids, with 28% reporting ever using other opioids not prescribed to them (illicit use), and 11% reporting doing so in the previous six months
- Licit use of pharmaceutical stimulants was stable (lifetime and recent); recent illicit use increased.

4.9.1 MDA use

In 2015, MDA use was low and occasional, similar to recent years (Figure 16). Lifetime use was reported by 37%, with 22% reporting use in the previous six months. The average amount used in a session was two caps (n=14, range 0.5–3 caps), with the most used in a single session in the previous six months estimated at two caps (n=13, range 1–5 caps).

Figure 16: Patterns of MDA use, 2005 to 2015

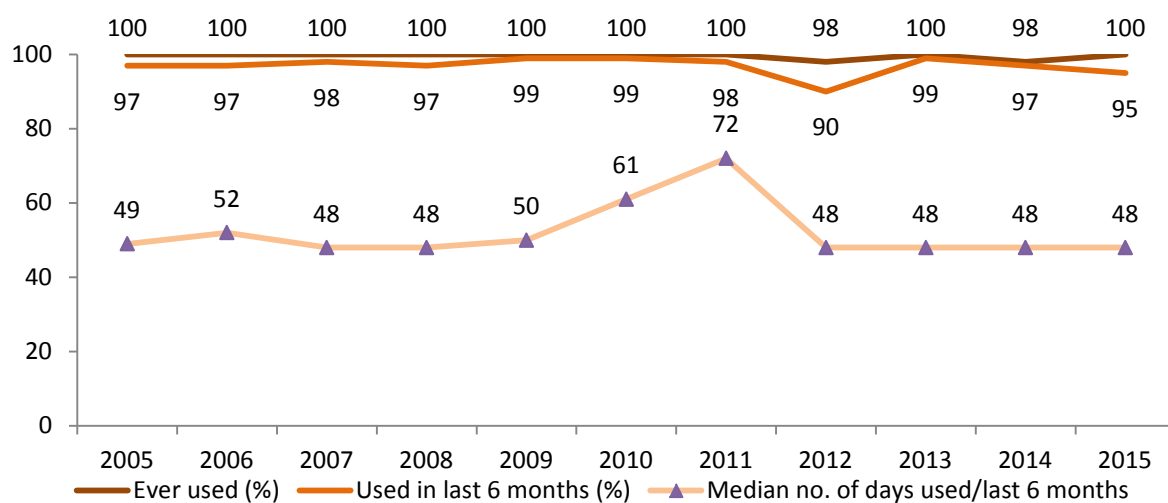


Source: QLD EDRS participant interviews

4.9.2 Alcohol

Similar to previous years, lifetime and recent use of alcohol remained high and frequent (Figure 17). All participants had used alcohol in their lifetime, and only four had not used it in the previous six months. Over the past decade, the mean age of first use has been stable at 14 years.

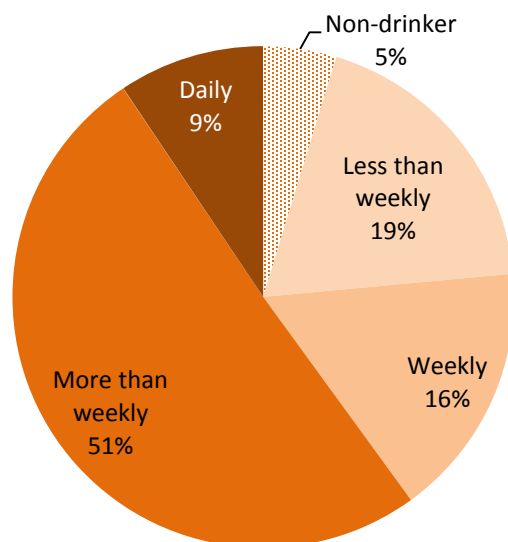
Figure 17: Patterns of alcohol use, 2005 to 2015



Source: QLD EDRS participant interviews

Figure 18 shows frequency of alcohol use reported in the previous six months. The median number of days used was 48, corresponding to twice a week (n=81, range 1–180 days).

Figure 18: Frequency of alcohol use, 2015



Note: Based on participants who used alcohol in the previous six months (n=97). Daily=180 days; more than weekly=25–179 days; weekly=24 days; and less than weekly=1–23 days.

Source: QLD EDRS participant interviews

Among those who reported using other substances on the most recent occasion they used ecstasy (n=72), 18% reported they had consumed between one and five standard drinks, while 58% reported they had consumed more than five standard drinks.

Alcohol use in the general population

Results from the recent NDSHS show the continued, significant decrease in frequency of alcohol consumption among the general population aged 14 years and older (Table 9).

Table 9: Alcohol drinking status of the Australian population 14 years and older (%), 1993 to 2013

	1993	1995	1998	2001	2004	2007	2010	2013
Daily	8.5	8.8	8.5	8.3	8.9	8.1	7.2	6.5*
Weekly	39.9	35.2	40.1	39.5	41.2	41.3	39.5	37.3*
Less than weekly	29.5	34.3	31.9	34.6	33.5	33.5	33.8	34.5
Ex-drinker	9.0	9.5	10.0	8.0	7.1	7.0	7.4	8.0*
Never a full serve	13.0	12.2	9.4	9.6	9.3	10.1	12.1	13.8*

* Statistically significant change between 2010 and 2013

Source: NDSHS 1993–2013 (AIHW, 2014, Online Table 4.1)

Comments from key experts about alcohol use

As in past years, many key experts regarded alcohol as the most problematic drug. Bingeing on alcohol was reported as common prevalent, as was using alcohol in combination with illicit drugs, primarily psychostimulants. Treatment services observed that alcohol misuse was very high among clients, but not generally identified as the drug of concern. No gender differences were noted. Heavy alcohol use was reported across age groups, with experts associated with entertainment precincts noting that younger naïve drinkers were more likely to need immediate assistance. One expert noted that the bottle service in higher-end night clubs “means that people are drinking more because they’re pouring their own”, whereas another noted it had been “a long time since we called the ambulance for an alcohol overdose – the cost of drinks is too high”.

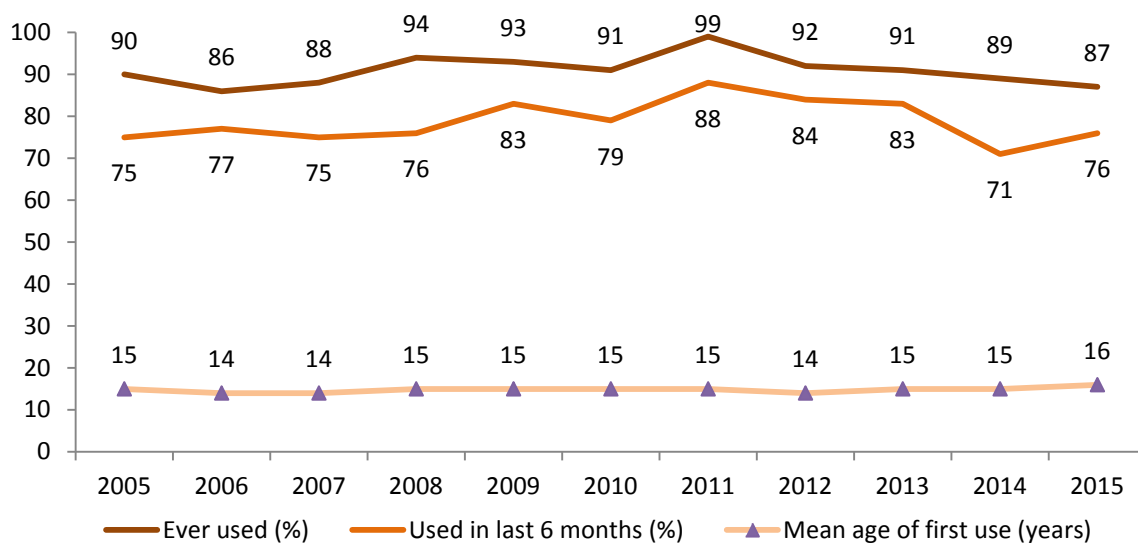
4.9.3 Tobacco

In 2015, tobacco use remained high among participants (Figure 19), similar to 2014.

Among those who reported using tobacco in the previous six months (n=65), 44% reported daily use. The median number of days of use has consistently been reported as 180 days, corresponding to daily use.

The mean age of initiation for tobacco was 16 years (n=74, range 10–23 years). This was similar to previous years.

Figure 19: Patterns of tobacco use, 2005-2015



Source: QLD EDRS participant interviews

Tobacco use in the general Australian population

The 2013 NDSHS report noted a decrease in daily smokers and an increase in lifetime abstinence of tobacco use among the general population aged 14 years and older since the previous survey in 2010 (AIHW, 2014, Online Table 3.1). This follows the continued decline in tobacco use over the past decade (Table 10).

Table 10: Smoking status of the Australian population 14 years and over, 1993- 2013

Frequency	1993 %	1995 %	1998 %	2001 %	2004 %	2007 %	2010 %	2013 %
Daily	25.0	23.8	21.8	19.5	17.4	16.6	15.1	12.8*
Weekly	2.3	1.6	1.8	1.6	1.6	1.3	1.5	1.4
Less than weekly	1.8	1.8	1.3	2.0	1.6	1.5	1.4	1.6
Ex-smoker ^a	21.7	20.2	25.9	26.2	26.4	25.1	24.1	24.0
Never smoked ^b	49.1	52.6	49.2	50.6	52.9	55.4	57.8	60.1*

* Statistically significantly different between 2010 and 2013

^a Smoked at least 100 cigarettes in lifetime and no longer smoke

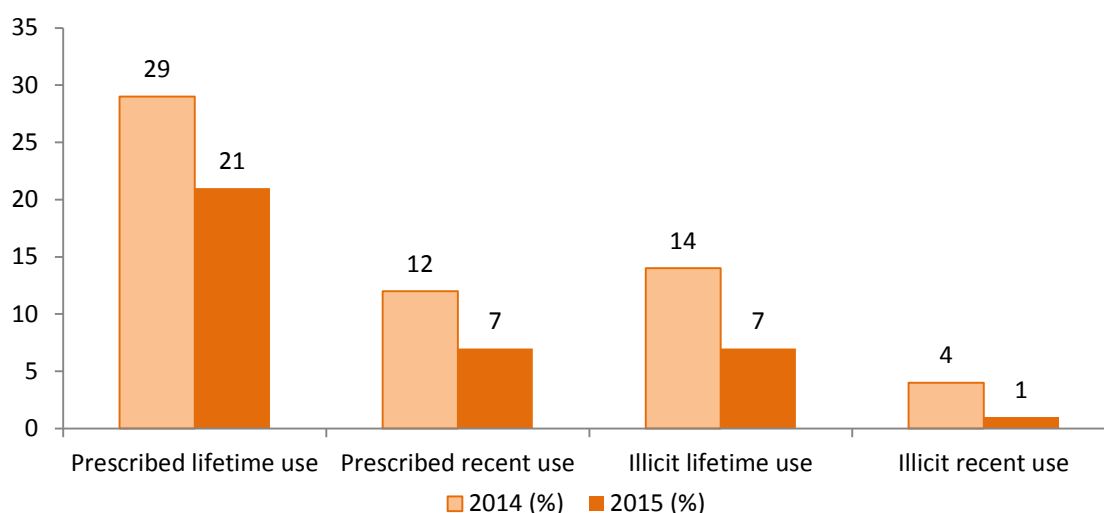
^b Never smoked more than 100 cigarettes in lifetime

Source: NDSHS 1993–2013 (AIHW, 2014)

4.9.4 Antidepressants

The prevalence of lifetime and recent use of licit and illicit anti-depressants reduced somewhat from 2014 to 2015 (Figure 20).

Figure 20: Lifetime and recent use of anti-depressants, 2014 and 2015



Source: QLD EDRS participant interviews

In 2015, 7% of participants reported using their own prescribed antidepressants in the previous six months. The median number of days used was 135 (n=6, range 15–180 days), corresponding to daily use. The most common brand used licitly was Zoloft (sertraline). Other brands also used included Lexapro (escitalopram), Avanza (mirtazapine) and Valdoxan (agomelatine). Only one participant reported illicit use of anti-depressants in the previous six months.

4.9.5 Benzodiazepines

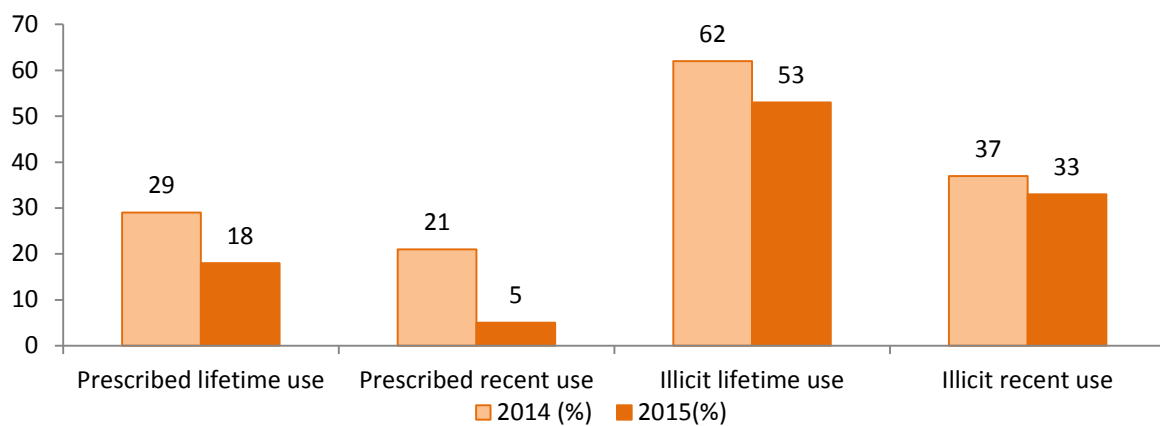
Lifetime and recent use of prescribed benzodiazepines dropped in 2015 (Figure 21; p<0.05). The median number of days using prescribed benzodiazepines was five (n=4, range 1–96

days), corresponding to less than monthly use. Two participants reported being prescribed Valium (diazepam) and one, Xanax (alprazolam).

Reductions in lifetime and recent use of illicit benzodiazepines (i.e. not prescribed) were smaller but still significant ($p < 0.05$), with 33% of participants reporting illicit use in the last six months. The median number of days using illicit benzodiazepines was four ($n = 28$, range 1–90 days), corresponding to less than monthly use. Among those who reported illicit use of benzodiazepines in the previous six months ($n = 28$), the brands most commonly used without a prescription were Valium (diazepam; 50%), Xanax (alprazolam; 10%) and temazepam (4%), with 39% of respondents not reporting the brand most commonly used.

Among those who reported taking drugs when coming down from ecstasy in the previous six months ($n = 55$), only 7% reported using benzodiazepines on the most recent occasion. This is lower than in 2014, when 19% reported using benzodiazepines to come down.

Figure 21: Lifetime and recent use of benzodiazepines, 2014 and 2015

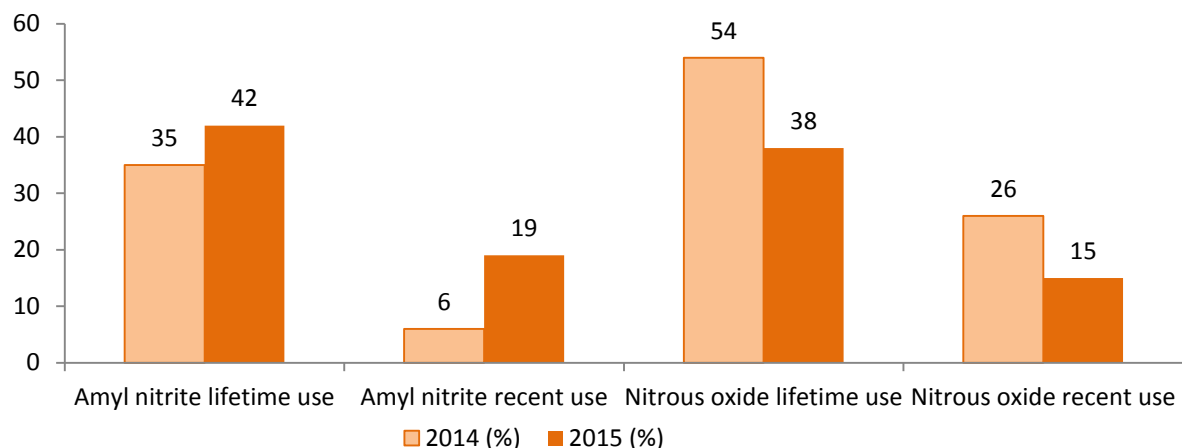


Source: QLD EDRS participant interviews

4.9.6 Inhalant use

Recent use of amyl nitrite increased in 2015, while lifetime and recent use of nitrous oxide declined in 2015 (Figure 22; $p < 0.05$ for all three).

Figure 22: Lifetime and recent use of inhalants, 2014 and 2015



Source: QLD EDRS participant interviews

4.9.7 Heroin and other opioids

Heroin

Similar to previous years, the use of heroin remained low among participants. In 2015, 9% participants reported lifetime use of heroin (compared with 17% in 2014), with 2% reporting use in the previous six months (consistent with 2014). The mean age of first use of heroin was 19.5 years (n=8, range 17–28). The median number of days used in the previous six months was two, corresponding to occasional use (less than monthly). Among those who used heroin in the previous six months, it was either snorted or smoked.

Methadone

Lifetime use of methadone was reported among 4% of participants, compared with 10% in 2014. No recent use was reported. The mean age of first use of methadone was reported to be 19 years (n=3, range 15–19).

Buprenorphine

In 2015, 1% of participants reported having ever used buprenorphine (compared with 8% in 2014), with no participants reporting recent use.

Other licit opioids

Lifetime use of other opioids (e.g. morphine, oxycodone) obtained under participants' own prescriptions was reported by 24%, with 7% reporting recent use. The median number of days used in the previous six months was four, corresponding to less than monthly use. The brands used were Endone (n=2) and Panadeine Forte (n=1). Two participants reported injecting their own prescribed opioids.

Other illicit opioids

In 2015, 28% of participants reported using other opioids not prescribed to them (illicit use), a significant decrease from the 42% reported in 2014 ($p < .05$). Recent illicit use of opioids was reported by 11%. The median number of days used in the previous six months was four, corresponding to less than monthly use. No participants reported injecting opioids in the previous six months. The main brands used were Endone (n=5) and OxyContin (n=3).

4.9.8 Pharmaceutical stimulants

The lifetime use of prescribed (licit) pharmaceutical stimulants (e.g. dexamphetamine) was reported by 9% of participants, which is similar to 12% in 2014. In 2015, recent use was reported by four participants (similar to 2014).

In 2015, the reported lifetime illicit use of pharmaceutical stimulants was 62%, similar to 57% in 2014. Recent illicit use rose to 31% in 2015 from 22% in 2014 ($p < 0.05$). Frequency of use in the previous six months also increased, corresponding to monthly use (5.5 days).

Lifetime use of over-the-counter stimulants (e.g. cold and flu drugs) for non-medical/recreational use was similar to previous years (19% in 2015 and 17% in 2014). Seven participants reported using it in the previous six months.

4.9.9 Over-the-counter codeine

In 2015, 28% of participants reported ever using over-the-counter codeine for non-medical use, with 15% reporting recent use. This is similar to previous years (31% ever used and 13% recently used in 2014).

4.10 New psychoactive substance (NPS) use

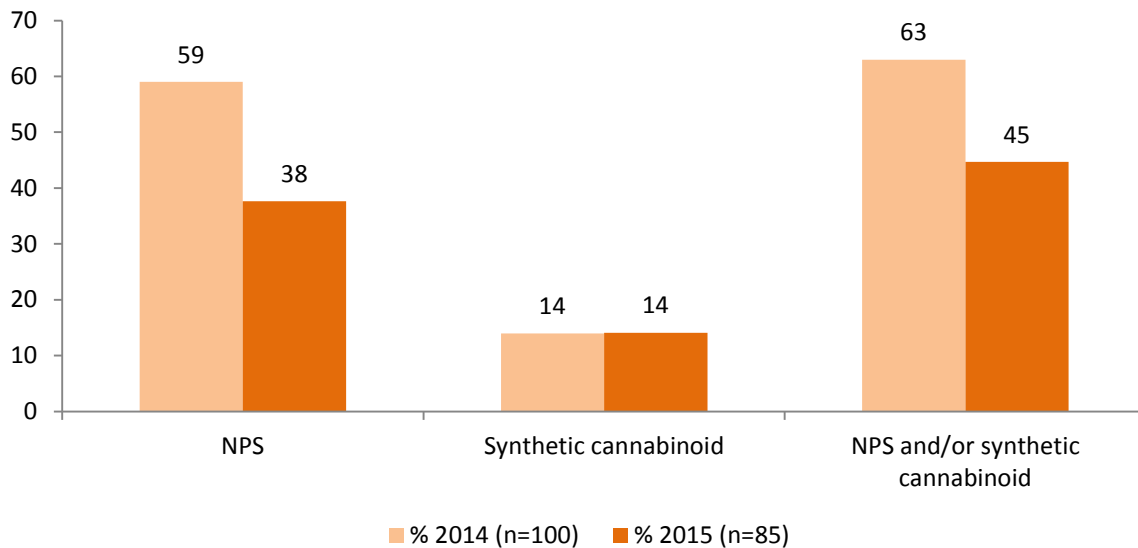
Key points

- 39% reported using NPS and/or synthetic cannabis in the previous six months.
- Lifetime and recent use of most NPS has decreased, apart from use of DXM.

4.10.1 Patterns of use among regular psychostimulant users

In 2015, 33 participants reported using NPS and/or synthetic cannabinoids in the previous six months (Figure 23). There appears to have been an overall decrease since 2014 in the use of NPS ($p < 0.05$), with use of synthetic cannabinoids remaining low.

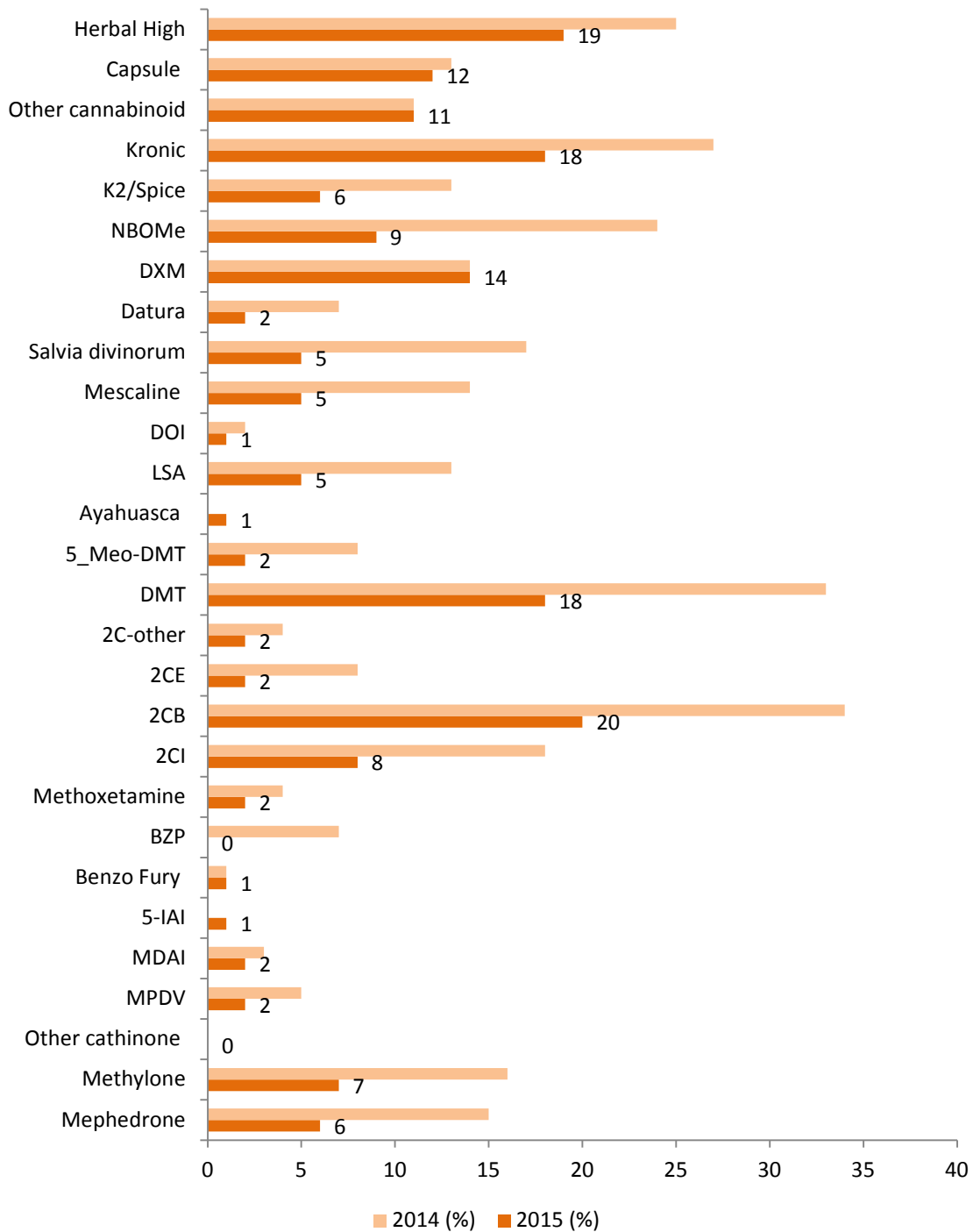
Figure 23: Recent use of any NPS and synthetic cannabinoid, 2014 and 2015



Source: QLD EDRS participant interviews

Figure 24 presents the proportion of participants reporting lifetime use of NPS and synthetic cannabinoids across the last two years. Reports in this sample of lifetime use of most NPS appeared lower in 2015, except for dextromethorphan (DXM).

Figure 24: Lifetime use of NPS and synthetic cannabinoids, 2014 and 2015



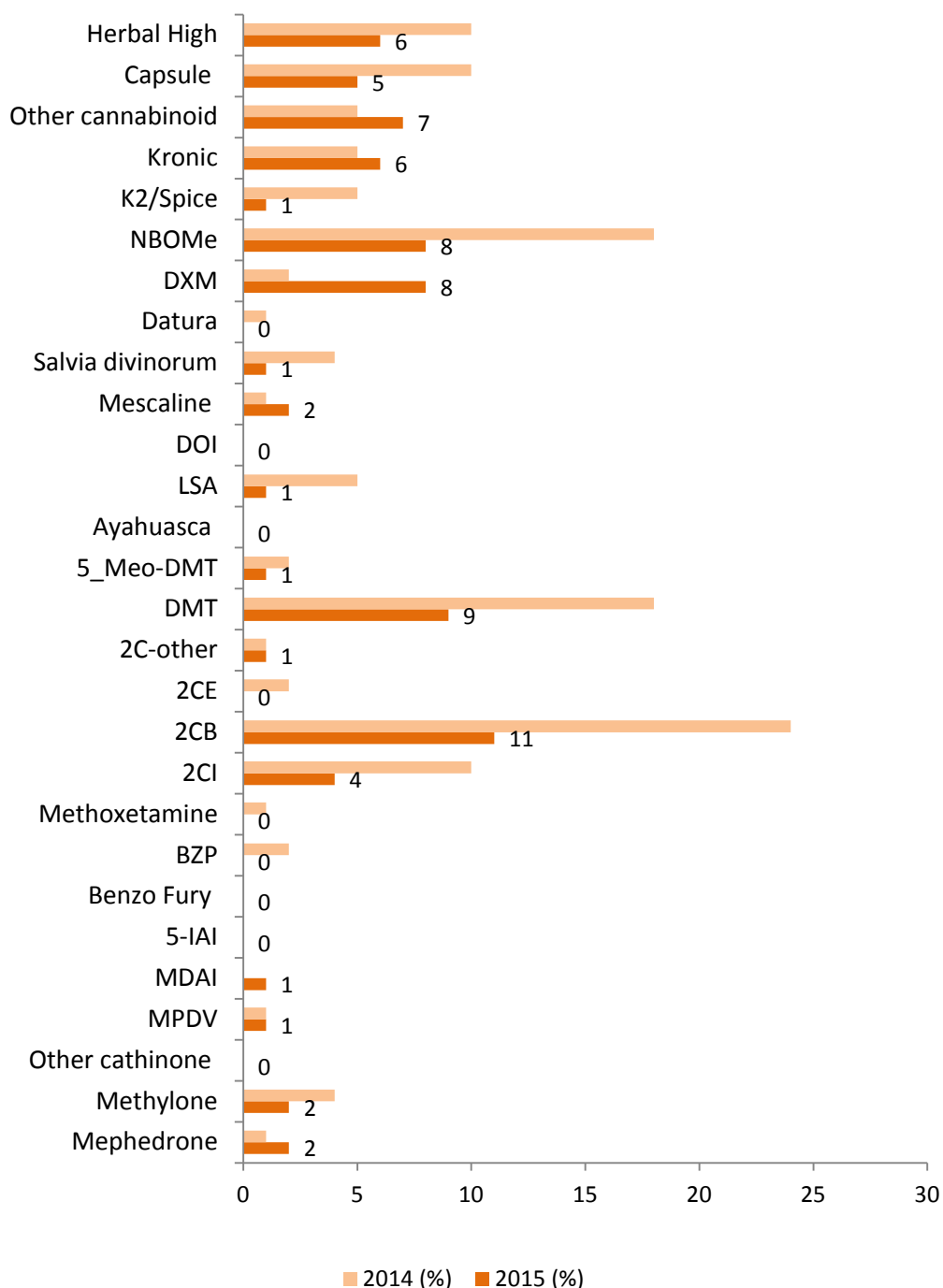
Note: Multiple responses permitted

Note: MPDV = Ivory Wave/bath salts; MDAI = 5,6-methylenedioxy-2-aminoindane; 5-IAI = 5-iodo-2-aminoindane; BZP = benzylpiperazine; DMT = dimethyltryptamine; LSA = d-lysergic acid amide; DOI = death on impact; DXM = dextromethorphan

Source: QLD EDRS participant interviews

Figure 25 details recent use of all NPS (including synthetic cannabinoids). Except for DXM and “other cannabinoids”, recent use of most substances appeared to be on the decline in 2015. Small numbers precluded statistical comparisons with 2014 data.

Figure 25: Recent use of NPS and synthetic cannabinoids, 2014 and 2015



Note: Multiple responses permitted

Note: MPDV = Ivory Wave/bath salts; MDAI = 5,6-methylenedioxy-2-aminoindane; 5-IAI = 5-iodo-2-aminoindane; BZP = benzylpiperazine; DMT = dimethyltryptamine; LSA = d-lysergic acid amide; DOI = death on impact; DXM = dextromethorphan

Source: QLD EDRS participant interviews

4.10.2 NPS use in the general population

For the first time, in 2013 the NDSHS asked about the use of new and emerging psychoactive substances and synthetic cannabinoids. Both lifetime use and use in the previous 12 months of NPS was estimated at 0.4% among the general population aged 14 years and older (AIHW, 2014, Online Table 5.4). Lifetime use of synthetic cannabinoids was estimated at 1.3%, and use in the previous 12 months at 1.2%.

4.10.3 Comments from key experts about NPS use

NPS use was reported by key experts as sporadic. Some NPS (e.g. MDPV) seem to be used only when available in settings such as musical festivals. One key expert reported awareness of some MDA use. Several key experts said that, although people were trying 2CB and NBOMe, they had heard no positive reviews; users did not find the sensations positive and experienced negative or unexpected side effects. Key experts reported that NPS may be sampled but that there was a preference for more traditional drugs. Some use of synthetic cannabinoids was reported in populations attempting to avoid compulsory testing, but most preferred traditional cannabis.

5 DRUG MARKET: PRICE, PURITY, AVAILABILITY AND SUPPLY

5.1 Ecstasy

Key points

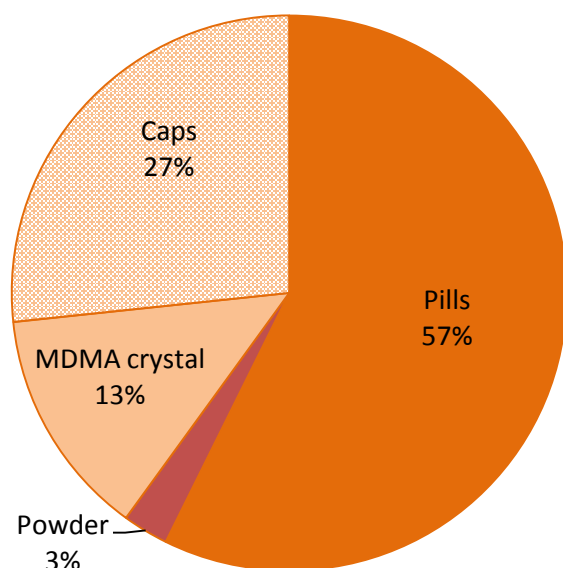
- Pills remained the most common form of ecstasy purchased.
- Price per ecstasy pill remained stable at \$25.
- Frequency of purchasing ecstasy remained at mostly monthly or less.
- One in five reported purity of pills, powder and caps to be medium, with an increase in reports that purity fluctuated.
- MDMA crystal was considered to be of much higher purity than pills, powder and caps, with few reports of fluctuation in purity.
- Ecstasy was most likely to have been bought from a friend, at a friend's house.

New questions were added in 2014 about the market trends for MDMA crystal. Since MDMA crystal has been reported to have different price, purity and availability than ecstasy pills, powder and caps, this section has been split into two parts:

- Ecstasy pills, powder and caps
- MDMA crystal.

In 2015, 98% of participants reported using some form of ecstasy/MDMA in the previous six months. Ecstasy pills remained the most popular form of ecstasy purchased (Figure 26), although purchase of capsule and crystal forms was more common than in 2014.

Figure 26: Form of ecstasy obtained at most recent purchase (n=77), 2015



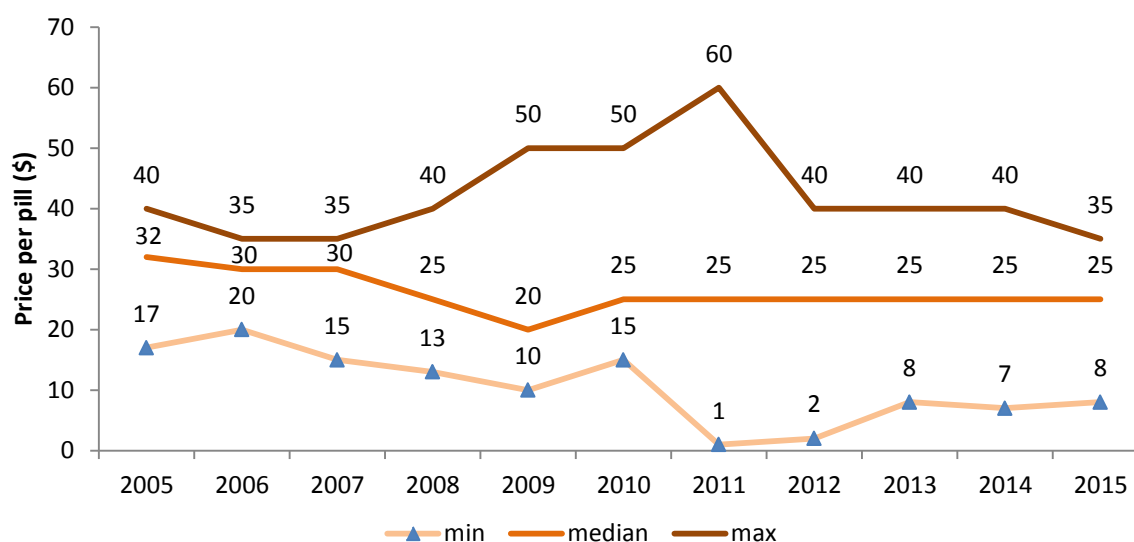
Source: QLD EDRS participant interviews

5.1.1 Price

Ecstasy pills, powder and caps

The price of ecstasy pills remained unchanged at \$25 per pill (n=63, range \$8–35; see Figure 27).

Figure 27: Price of ecstasy per tablet, 2005 to 2015



Source: QLD EDRS participant interviews

As in previous years, the median price per ecstasy pill tended to decrease if purchased in larger quantities. While an individual pill had a median price of \$25 (n=14; range \$10–35), the median price when purchasing 10 pills decreased to \$20 per pill (n=3), and decreased further to \$8 when purchasing 100 pills (n=1).

Prices were comparable to those reported by the Australian Crime Commission (ACC; 2014) for 2013–14. One tablet/capsule was reported by the ACC to be between \$15–50.

Table 11 shows that, similar to 2014, most participants who commented (91%) reported that the price of ecstasy had remained stable over the previous six months. There was an increase in those reporting fluctuation of prices ($p < 0.05$).

Table 11: Changes in recent price of ecstasy pills, powder and caps, 2014 and 2015

Price Change	2014 (n=81) %	2015 (n=77) %
Increasing	15	8
Stable	73	66
Decreasing	3	5
Fluctuating	10	21

Note: Those choosing 'don't know' were excluded from analyses. Percentages may not total 100 due to rounding.
Source: QLD EDRS participant interviews

MDMA crystal

In 2014, questions were introduced about the price, purity and availability of MDMA crystal, and in 2015, 32 reported purchasing MDMA crystal during the previous six months.

The median price per gram of MDMA crystal was \$300 (range \$200–450). The price of MDMA was perceived to have remained stable in the previous six months by 79% of participants who commented (Table 12).

Table 12: Perceptions in recent change of price of MDMA crystal, 2014 and 2015

	2014 (n=36) %	2015 (n=28) %
Increasing	19	11
Stable	69	77
Decreasing	6	7
Fluctuating	6	4

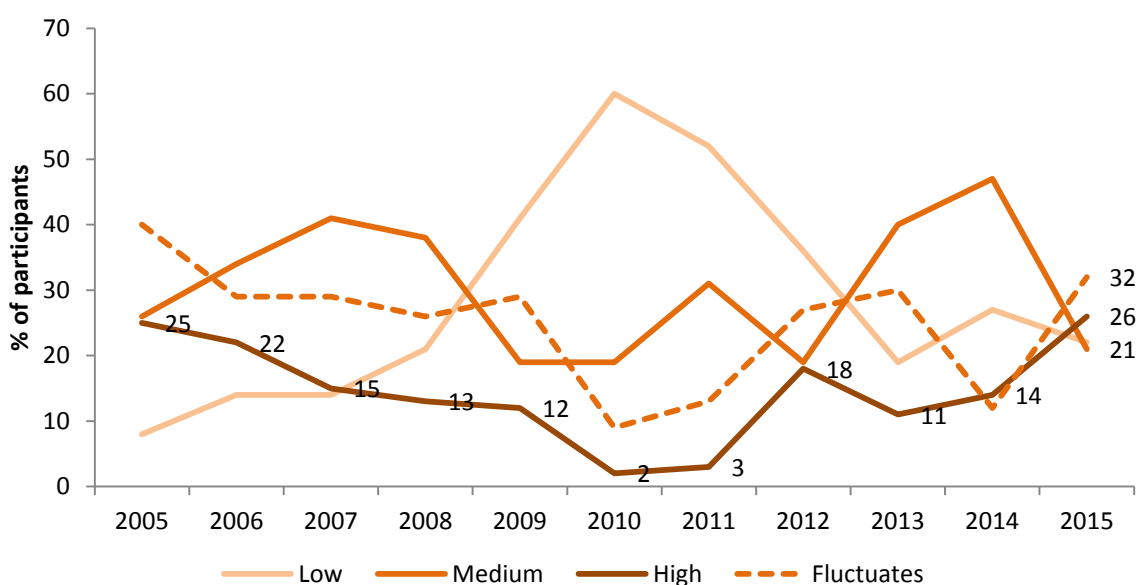
Source: QLD EDRS participant interviews

5.1.2 Purity

Ecstasy pills, powder and caps

Perceived purity of ecstasy pills, powder and caps was not uniform in this sample, with similar proportions regarding purity as low, high, medium and fluctuating (Figure 28). A higher proportion of respondents believed that the purity of ecstasy had been high in the previous six months (up to 26% in 2015 from 14% in 2014; $p < 0.05$); 32% of participants believed that ecstasy purity fluctuated (up from 12% in 2014; $p < 0.05$).

Figure 28: Perception of purity for ecstasy pills, powder and caps, 2005 to 2015



Source: QLD EDRS participant interviews

There was little overall consensus on the perceived purity of ecstasy pills, powder and caps (Table 13). Reports of changes in purity were not significantly different to 2014.

Table 13: Perceived changes in recent purity of ecstasy pills, powder and caps, 2005-2015

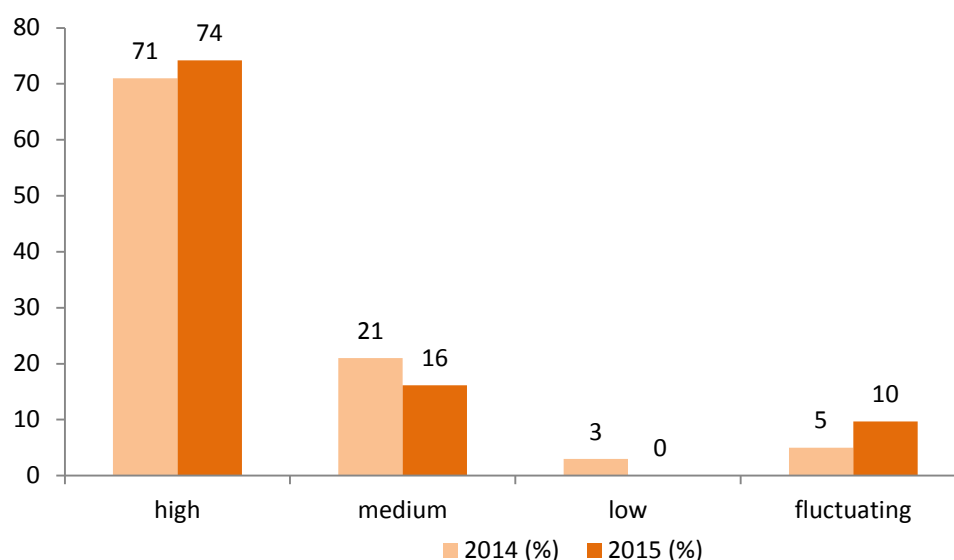
	2005 %	2006 %	2007 %	2008 %	2009 %	2010 %	2011 %	2012 %	2013 %	2014 %	2015 %
Decreasing	13	23	16	22	42	60	43	29	29	26	11
Stable	31	36	33	30	27	15	20	25	24	35	35
Increasing	14	11	4	6	6	3	9	15	13	11	14
Fluctuating	38	28	41	35	25	22	25	31	34	28	40

Note: Those choosing 'don't know' were excluded from analyses. Percentages may not total 100 due to rounding.
Source: QLD EDRS participant interviews

MDMA crystal

Figure 29 shows that 74% of participants who commented on the purity of MDMA crystal (n=32) reported it to be high (compared with 26% for ecstasy pills, powder, and caps).

Figure 29: Perceptions of recent purity of MDMA crystal, 2014-2015



Source: QLD EDRS participant interviews

Participants were asked whether they believed there had been a change in the purity of MDMA crystal in the previous six months. Among those who commented (n=32), 78% reported it had remained stable.

5.1.3 Availability

Ecstasy pills, powder and caps

Of those who commented on the previous six months availability of ecstasy pills, powder and caps, 91% reported them to be easy or very easy to obtain (Table 14). When asked whether they believed ease of access had changed in the previous six months, about half (53%) reported it to have remained stable, with about a quarter (24%) reporting it to have become easier.

Table 14: Ease of access and reported change in availability of ecstasy pills, powder and caps in the previous six months, 2014 and 2015

	2014 %	2015 %
Ease of access to ecstasy	(n=85)	(n=78)
Very easy	29	49 ↑
Easy	52	42 ↓
Difficult	15	9
Very difficult	4	0
Change in availability	(n=82)	(n=76)
Stable	55	53
Easier	7	24 ↑
More difficult	22	7 ↓
Fluctuating	26	17 ↓

Note: Those choosing 'don't know' were excluded from analyses. Percentages may not total 100 due to rounding.
Source: QLD EDRS participant interviews

MDMA crystal

Among those who commented (n=31), the current ease of access and availability of MDMA crystal was reported to be easy (42%) or very easy (19%), though 39% disagreed and reported it to be difficult to obtain. When asked whether availability of MDMA crystal had changed (n=29), most (62%) reported it had remained stable, while 10% reported it was becoming more difficult to obtain, 17% reported it was easy, and 10% reported that it fluctuated.

5.1.4 Purchasing patterns and locations of use

Ecstasy pills, powder and caps

Three pills was the median number of ecstasy pills bought on the most recent occasion (n=43, range 1–100 pills). For those who had bought caps, the median number was two (n=20, range 1–30 caps).

Among those who reported purchasing these forms of ecstasy in the previous six months (n=80), nearly half (44%) reported buying it for themselves only, whereas the other half reported they bought it for themselves and others. In 2014, nearly two thirds bought for

themselves and others. Recent purchases in 2015 were made from a median of three people (range 1–25 people). This was the same in 2014.

The frequency of purchasing ecstasy appears to have increased in 2015. There was an increase in reports of purchasing ecstasy fortnightly or less ($p < 0.05$). Accordingly, half of participants reported purchasing ecstasy monthly or less, a smaller proportion than in 2014 but a larger proportion than in 2013 ($p < 0.05$) (Table 15).

Table 15: Frequency of ecstasy purchase in the previous six months, 2013-2015

Frequency	2013 (n=88) %	2014 (n=81) %	2015 (n=80) %
Monthly or less (1–6 times)	37	67	53 ↓
Fortnightly or less (7–12 times)	51	17	34 ↑
Weekly or less (13–24 times)	13	15	11
More than weekly (25+ times)	-	1	1

Note: Arrow symbol signifies a significant difference between 2014 and 2015 ($p < 0.05$).

Source: QLD EDRS participant interviews

The most common source location was a private home, primarily a friend's home (Table 16). The increase in purchases in agreed public locations ($p < 0.05$) may be linked to the increase in purchasing from acquaintances (see continuation of Table 16; $p < 0.05$). Friends remained the most common source from which ecstasy pills, powder and caps, were purchased the last time, although this was lower than in 2014 ($p < 0.05$).

Table 16: Source person and location of most recent purchase of ecstasy pills, powder and caps, 2014 and 2015 (continues over page)

	2014 (n=85) %	2015 (n=78) %
Venue scored from		
Friend's home	37	24 ↓
Own home	20	21
Dealer's home	12	12
Nightclub	12	8
Agreed public location	8	21 ↑
Private party	4	5
Pubs/bar	2	3
Acquaintance's home	2	3
Educational institution	-	1
Rave/doof/dance party	1	-
Street	1	3
Live music event	-	1

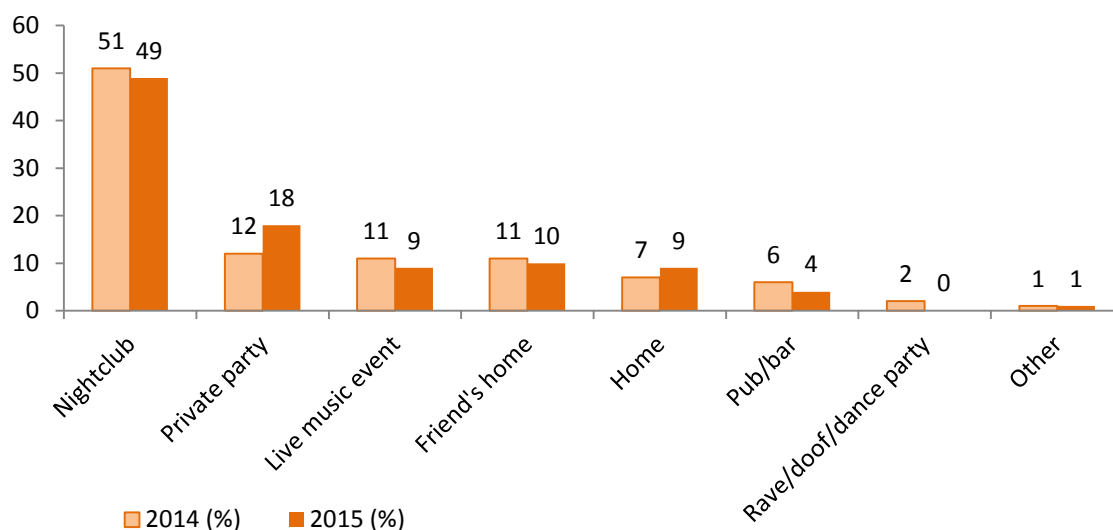
	2014 (n=85) %	2015 (n=78) %
Source person		
Friends	61	54
Known dealers	17	21
Acquaintances	9	21 ↑
Unknown dealers	9	5
Work colleagues	1	0

Note: Those responding 'used not scored' were excluded from analyses. Percentages may not total 100% due to rounding.

Source: QLD EDRS participant interviews

Nightclubs remained the most popular venue for use of ecstasy pills, powder and caps (Figure 30).

Figure 30: Venue of most recent use of ecstasy pills, powder or caps, 2014 and 2015



Source: QLD EDRS participant interviews

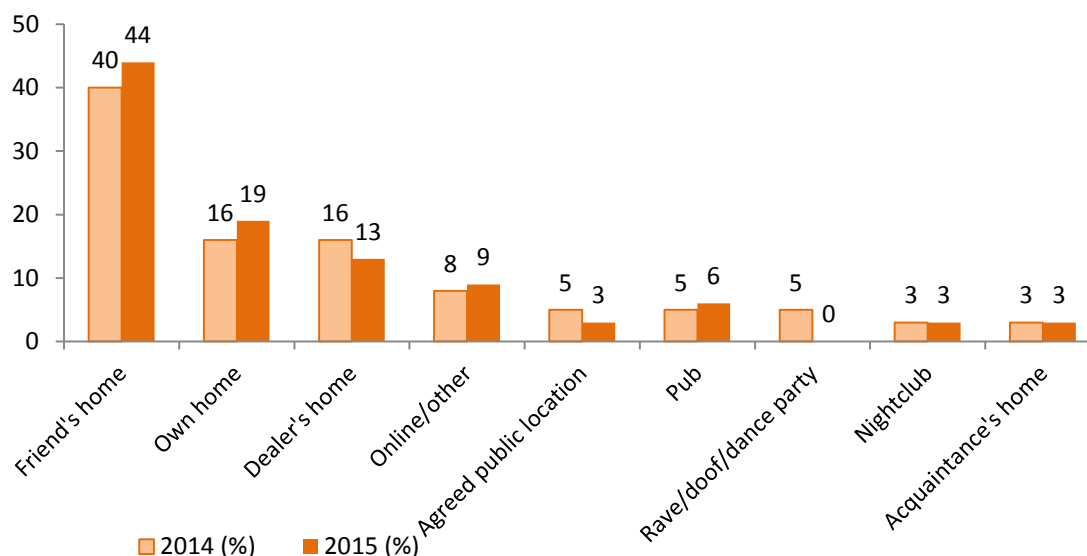
MDMA crystal

Among those who reported purchasing MDMA crystal in the previous six months (n=32), participants reported they made their most recent purchase from the following people (2014 figures are shown in brackets):

- Friend 53% (46% in 2014)
- Known dealer 19% (30%)
- Unknown dealer 6% (8%)
- Acquaintance 19% (3%)
- Work mates 3%

Figure 31 shows that, as for 2014, a private home was the most common location for purchasing MDMA crystal, with 44% reporting buying it at a friend's home.

Figure 31: Location of most recent purchase of MDMA crystal, 2014 and 2015



Source: QLD EDRS participant interviews

Among those who commented in 2015 (n=32), the location where most time was spent under the influence of MDMA crystal on the last occasion was predominantly a nightclub (as per 2014). Other locations included the following (2014 figures in brackets):

- Nightclub 47% (45%)
- At home 3% (16%)
- Friend's home 22% (13%)
- Private party 3% (11%)
- Live music event 16% (8%)
- Pub/bar 3% (3%)
- Outdoors/public place 6%

5.1.5 Comments from key experts about the ecstasy market

Ecstasy pills were reported by key experts as being readily available, particularly at special events. There was less information about the availability of MDMA crystal. Quality was reported as variable and dependent on regularity of use and context of use. Forensic experts reported an increase since 2012 of high purity materials submitted for analysis, particularly capsules and MDMA crystal. The majority of pills typically contained 10-30% MDMA, frequently including contaminants. Price was considered to be stable at \$25 per pill and powder at \$300–400 per gram, but was more expensive in regional areas.

5.2 Methamphetamine

Key points

- The price of speed was somewhat lower at a median of \$40 per point. Purity was generally rated as high, and most reported that it was easy/very easy to obtain.
- There were no reports of recently purchasing methamphetamine base.
- A point of ice cost a median of \$80 per point, and \$500 per gram. Purity was generally rated as high, and accessibility as easy/very easy.
- Ice was most likely to have been sourced from a dealer at a dealer's home

In 2015, participants commented on the market trends for three forms of methamphetamine:

- Amphetamine powder (speed); n=7
- Methamphetamine base; n=1
- Crystalline methamphetamine (ice); n=13

Because numbers are low, findings should be treated with caution.

5.2.1 Price

Amphetamine powder (speed)

When asked how much speed cost the most recent time they purchased a point (0.1g), the median response was \$40 (n=6, range \$25–80). This is lower than the median report of \$55 per point in 2014 (n=8, range \$30–100); however, the change was not significantly different, possibly due to low numbers. Of the seven participants who were able to comment on the price of speed, four reported that the price had remained stable in the previous six months, while one reported it was fluctuating. This is similar to 2014, though numbers are too low for meaningful comparison.

Methamphetamine base

There were no reports of purchasing methamphetamine base in the last six months.

Crystalline methamphetamine (ice)

The median reported price per point of ice was \$80 (n=7, range \$50–100), slightly lower than 2014 (\$100). One gram was a median of \$500 (n=5, range \$100–650) –slightly down from 2014 (\$650), although small numbers prevented meaningful comparison. Eleven participants commented on the change in price of ice in the previous six months: six reported it to be stable, three as decreasing, and two as fluctuating. Table 17 shows that the price ranges reported by the ACC (2015) for ice in 2012–13 and 2013–2014 encompass the narrower range reported by our study participants in 2015.

Table 17: ACC reported methylamphetamine (crystal form) prices in Queensland, 2012–2013 and 2013-2014

Weight	Price per unit	
	2012-2013	2013-2014
1 point (0.1 gram)	\$50–150	\$50–150
1 gram / 'weight'	\$500–1 000	\$300 - 500
1/8 ounce (3.5 grams) / 'eight ball'	\$750–1 700	\$750 – 1 750
¼ ounce	\$5 800–8 000	\$1 200 - 3 400
1 kilogram	n/r	\$200 000 - 250 000

Source: ACC, 2014, 2015

The prices reported by the ACC cannot be compared with those reported by EDRS participants, as the ACC reports focus on larger purchases. Additionally, the Commission reports the price of speed and base combined, so a direct comparison with the EDRS data is difficult (Table 18). However it appears that the price of the crystalline form has decreased at bulk purchase level.

Table 18: ACC reported methylamphetamine (non-crystal form) prices in Australia, 2012–14

Weight	Price per unit	
	2012-2013	2013-2014
1 point	\$50 – 150	\$50 – 150
1 gram 'weight'	\$180 – 500	\$70 - 700
1/8 ounce (3.5 grams)/'eight ball'	\$600 – 1 100	\$600 – 1 100
1 kilogram	n/r	n/r

Source: ACC, 2014, 2015

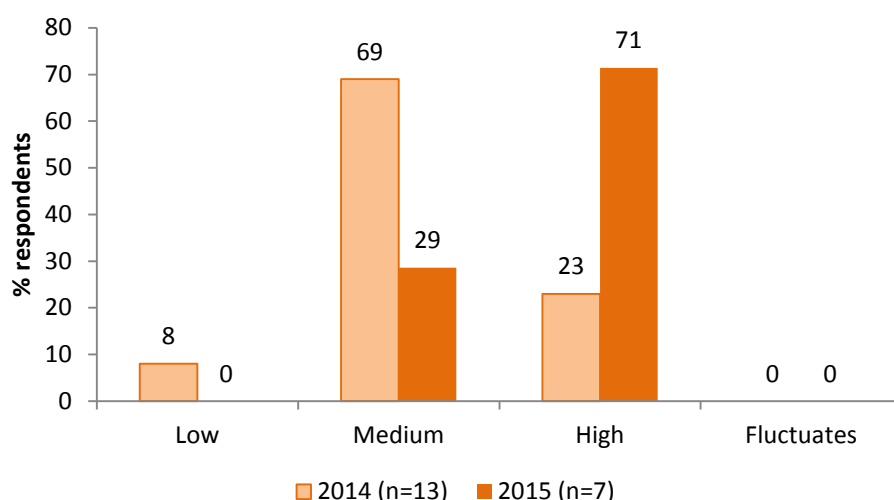
5.2.2 Purity

Amphetamine powder (speed)

In 2015, seven participants reported on their perception of purity of speed (Figure 32). Purity was perceived as medium or high, but these figures are based on very low numbers, so it is not possible to make meaningful comparisons with 2014 reports.

In 2015, only six participants commented on perceived changes in purity of speed in the previous six months: one considered it to be decreasing, one as increasing, and four as stable. Low numbers prevent comparison with 2014.

Figure 32: Perception of speed purity in previous six months, 2014-2015



Note: Those choosing 'don't know' were excluded from analyses. Small number of reports: treat with caution. Percentages may not total 100% due to rounding.
Source: QLD EDRS participant interviews

Methamphetamine base

One participant reported on perceived purity of methamphetamine base, rating it as high.

Crystalline methamphetamine (ice)

In 2015, 10 participants were able to comment on the purity of ice. The responses were:

- high 50% (47% in 2014)
- medium 10% (24%)
- low 10% (12%)
- fluctuating 30% (18%)

Responses in 2014 (given in brackets) were similar. Among those who reported on perceived changes in purity of ice in the previous six months (n=9), four reported it to have remained stable, three to have fluctuated and two to have decreased.

Table 19 shows that in the financial year 2013–14 the QPS made 115 seizures of often low purity speed and base (range 0.3–55.6%); this is a significant increase in the number of seizures, if not the purity. The AFP did not record any seizures of amphetamine in Queensland for this period (ACC, 2015).

Table 19: Median purity of amphetamine seizures analysed in Queensland by police, 2008–09 to 2013–14

	2008–09		2009–10		2010–11		2011–12		2012–13		2013-2014	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
QPS	38	2.0	20	1.2	56	0.8	14	1.5	46	3.2	115	2.0
AFP	6	7.8	2	18.6	5	14.3	9	69.1	1	13.7	n/r	n/r

Source: ACC, 2015

Table 20 shows the purity of the numerous methylamphetamine seizures by QPS was 58.8% (range 0.1–78.6%) in the financial year 2013–14. The 16 AFP seizures ranged in purity from 1.3% to 80.3% (median 79.4%; ACC, 2015).

Table 20: Median purity of methylamphetamine seizures analysed in Queensland by police, 2008–09 to 2013–14

	2008–09		2009–10		2010–11		2011–12		2012–13		2013-2014	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
QPS	2,002	11.9	1,568	6.8	1,884	13.9	1,694	34.2	1,763	52.6	1,931	58.8
AFP	0	0	1	18.8	3	31.7	7	76.2	16	71.1	13	79.4

Source: ACC, 2015

5.2.3 Availability

In 2015, most participants who commented reported speed to be easy to very easy to obtain, and that this had not changed in the previous six months (Table 21). Only one participant commented on the availability of base (as difficult to obtain). Ice was reported as easy or very easy to obtain, and availability was generally reported to have remained stable.

Table 21: Perceived availability by methamphetamine type, 2015

	Speed %	Base %	Ice %
Current availability	(n=7[^])	(n=1[^])	(n=13)
Very easy	29	-	54
Easy	43	-	38
Difficult	29	100	-
Very difficult	-	-	8
Change in availability	(n=13)	(n=1[^])	(n=13)
More difficult	-	100	-
Stable	71	-	58
Easier	15	-	33
Fluctuates	15	-	8

Note: [^] denotes small numbers reported; interpret with caution (n<10). Those choosing 'don't know' were excluded from analyses. Percentages may not total 100% due to rounding.

Source: QLD EDRS participant interviews

5.2.4 Source and locations of use

Amphetamine powder (speed)

Only six participants reported having obtained speed in the previous six months. Of these, three sourced it from a dealer the most recent time it was obtained, two from a friend and one from an acquaintance. Locations were a friend's home (n=2), their own home (n=1), at a nightclub (n=1) and an agreed public location (n=2). Statistical comparisons with 2014 were not possible due to low numbers.

When asked where they had spent most of their time the most recent time they used speed (n=7), the most common location was at nightclubs (three participants) followed by at home, a friend's home or a live music event (one at each).

Methamphetamine base

Only one person comment on recent acquisition of base; it was scored at a nightclub, from a known dealer who delivered it to the person's home.

Crystalline methamphetamine (ice)

Among those who commented on the most recent time they purchased ice in the previous six months (n=13), 38% reported they had obtained it from a friend, 31% from a known dealer, 23% from an unknown dealer and 8% from an acquaintance.

A dealer's home was the most common source location for the most recent purchase of ice (38%). Other source locations included at own home (8%), at a friend's home (31%) and at an agreed public location (3%).

When asked where participants spend the majority of the time the most recent occasion they had used ice, most participants reported using it at their own home (46%). Other locations included nightclubs/pubs/bars (23%), a friend's home (8%), a dealer's home (8%) or at work (8%).

5.2.5 Comments from key experts about the methamphetamine market

Key experts reported the market as stable with both speed and ice selling for between \$50–100 per point and \$300-500 per gram.

5.3 Cocaine

Key points

- The median price of a gram of cocaine remained stable at \$300.
- 59% of participants who commented perceived cocaine as easy to obtain in the previous six months. Purity was perceived as low.
- A friend was the most common source person and a friend's home was the most common source location the most recent time cocaine was obtained in the previous six months.

In 2015, 18 participants answered questions about the cocaine market. Caution is needed when interpreting these data due to low numbers.

5.3.1 Price

The median price of a gram of cocaine was \$300 the most recent time it was purchased in the previous six months (n=11, range \$250–4500). This was the same as in previous years. Most reported the price to have remained stable in the previous six months (Table 22).

Table 22: Changes in prices of cocaine in previous six months, 2014 and 2015

	2014 (n=16) %	2015 (n=11) %
Increasing	31	-
Stable	63	82
Decreasing	-	9
Fluctuating	6	9

Note: Those choosing 'don't know' were excluded from analyses. Percentages may not total 100% due to rounding.

Source: QLD EDRS participant interviews

Reports on price were in keeping with prices reported by the ACC (2015) for 2013–14. The ACC (2015) reported that one gram of cocaine was \$350–\$400.

5.3.2 Purity

The purity of cocaine was perceived to be low (47% of respondents). Differences to reports of purity in 2014 are likely to be due to small sample size (Table 23).

Table 23: Perception of cocaine purity in previous six months, 2014 and 2015

	2014 % (n=17)	2015 % (n=17)
Current purity		
Low	39	47
Medium	29	24
High	29	12
Fluctuates	5	18
Change in purity		
Increasing	6	-
Stable	53	63
Decreasing	35	6
Fluctuating	6	31

Note: ^ denotes small numbers reported; interpret with caution (n<10). Those choosing 'don't know' were excluded from analyses. Percentages may not total 100% due to rounding.

Source: QLD EDRS participant interviews

The purity of cocaine seized by the police forces and analysed in Queensland is presented in Table 24. In 2013–14, QPS seizures ranged in purity from 0.7–79.1% (median 33.8%), and AFP seizures ranged from 3.9–86.5% (median 57.5%; ACC, 2015).

Table 24: Median purity of cocaine seizures analysed in Queensland, 2009–10 to 2013–14

	2009–10		2010–11		2011–12		2012–13		2013-2014	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
QPS	257	30.1	126	19.8	125	18.7	178	27.8	176	33.8
AFP	3	53.7	21	76.2	9	66.0	11	65.5	18	57.5

Note: Figures do not represent purity of all cocaine seizures, but only of those submitted for analysis
Source: ACC, 2015

5.3.3 Availability

In 2015, 59% of participants who commented perceived cocaine as easy to obtain in the previous six months (Table 25), and that this had remained stable (69%).

Table 25: Availability of cocaine in previous six months, 2014 and 2015

	2014 %	2015 %
Current availability	(n=20)	(n=17)
Very easy	5	-
Easy	50	59
Difficult	35	35
Very difficult	10	6
Change of ease of access	(n=19)	(n=16)
More difficult	32	13
Stable	63	69
Easier	-	6
Fluctuates	5	13

Note: Small numbers reported; interpret with caution. Those choosing 'don't know' were excluded from analyses. Percentages may not total 100% due to rounding.
Source: QLD EDRS participant interviews

5.3.4 Source and location of use

Similar to previous years, friends remained the most common source person for cocaine when last obtained, and a friend's home was the most common source (Table 26).

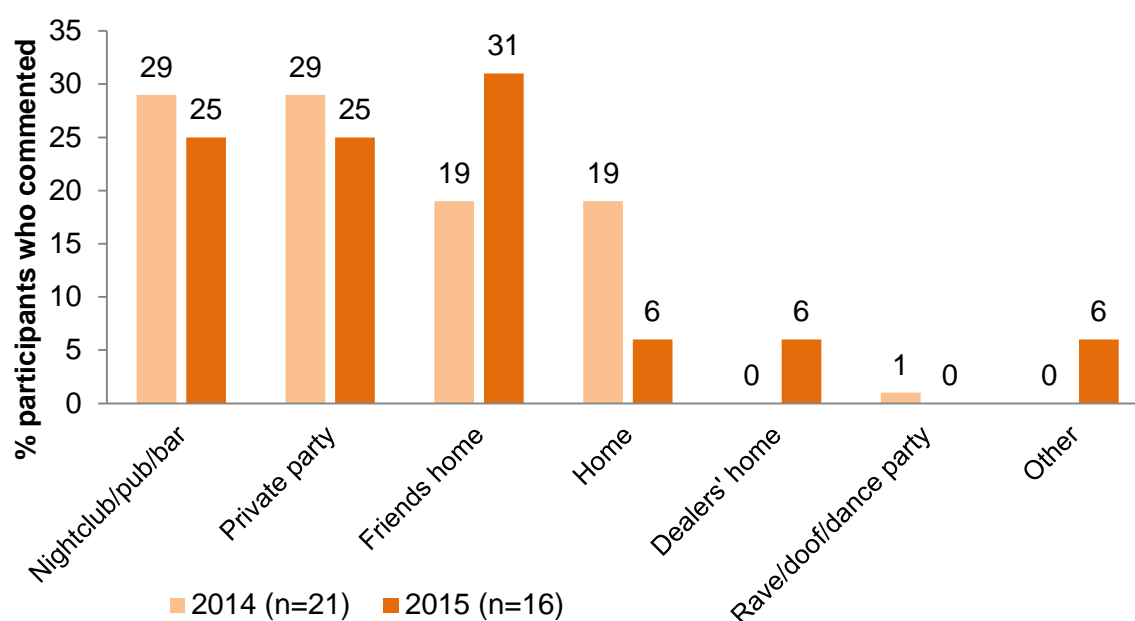
Table 26: Most recent source and location for obtaining cocaine, 2014 and 2015

	2014 (n=21) %	2015 (n=15) %
Persons scored from		
Friend	67	60
Known dealer	33	13
Acquaintance	5	20
Unknown dealer	5	7
Location scored from		
Friend's home	52	29
Dealer's home	19	7
Own home	10	21
Private party	5	7
Agreed public location	5	14
Nightclub	-	7

Note: Small numbers reported; interpret with caution. Those choosing 'don't know' were excluded from analyses. Percentages may not total 100% due to rounding.
Source: QLD EDRS participant interviews

Friends' homes, private parties and nightclubs were the most commonly reported locations for most recent use of cocaine (Figure 33).

Figure 33: Location of most recent cocaine use, 2014 and 2015

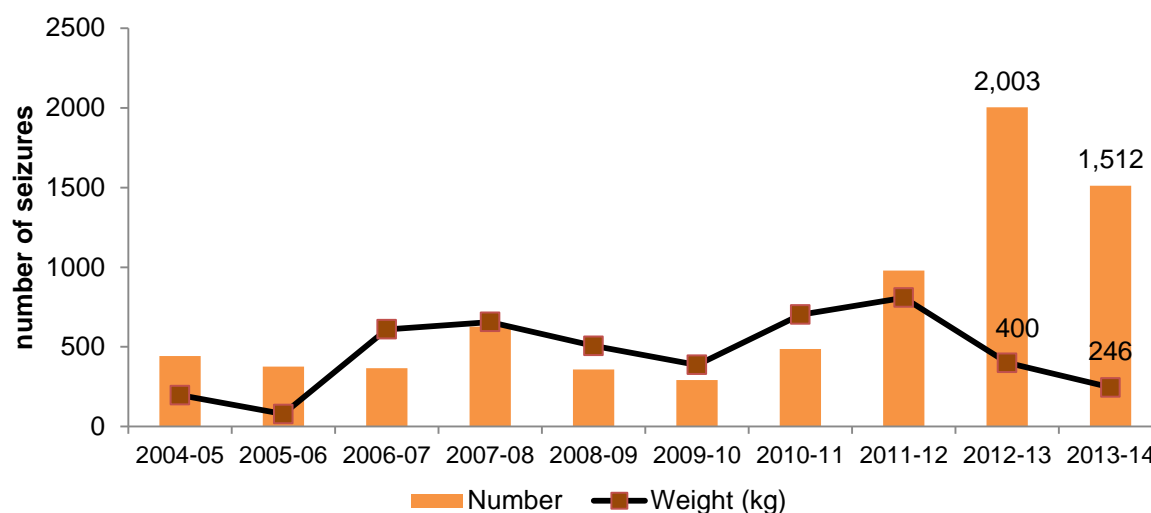


Source: QLD EDRS participant interviews

5.3.5 Cocaine seizures

Figure 34 shows the weight and number of cocaine detections by the ACBPS at the Australian border over the last decade. In 2013–14 both the number and weight of seizures were lower than in 2012–13, although the number of seizures was still much higher than in 2011-2012.

Figure 34: Number and weight of cocaine detections at the Australian border, 2004–05 to 2013–14



Source: ACC, 2015

5.3.6 Comments from key experts on the cocaine market

According to key experts cocaine quality was variable as was price; a two-tier market seemed to exist. Most of the product was of low purity, with prices as low as \$250 per gram, but some higher-purity cocaine seizures were made, and prices of \$300-400 per gram were reported.

5.4 Ketamine

None of the 2015 participants reported having purchased ketamine in the previous six months; hence there was no information on price, purity or availability of this substance. Key experts noted few reports of ketamine use (more on the Gold Coast), and reported contamination by ketamine of other drug seizures.

5.5 GHB

None of the 2015 participants reported having purchased gamma-hydroxy-butyrate (GHB) in the previous six months.

Key experts noted continuing but low-level presence of GHB, primarily associated with entertainment precincts like the Gold Coast. The precursors GBL and 1,4-butanediol were reported to be fairly easy to obtain. It was not noted as a policing or treatment priority.

5.6 LSD

Key points

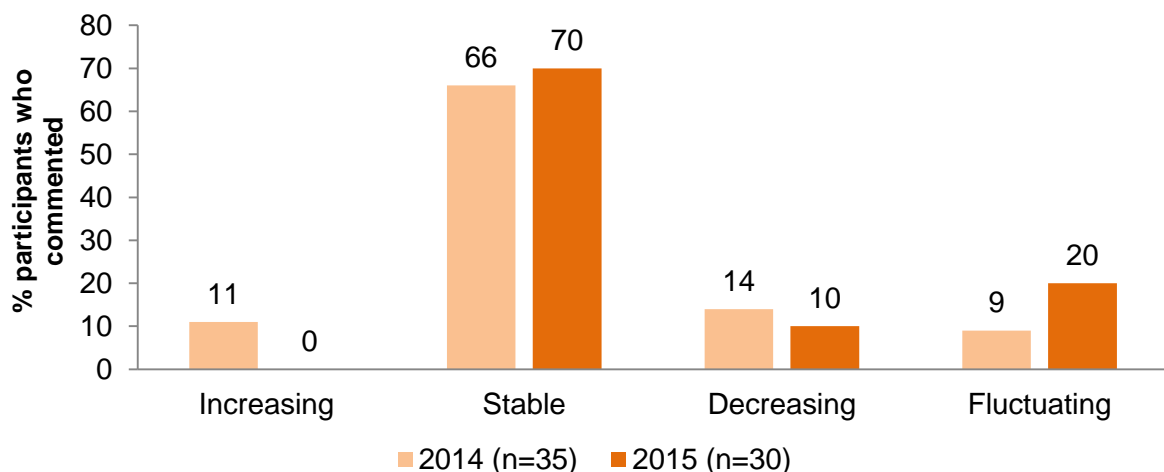
- One tab of LSD cost approximately \$20; price was stable
- Purity of LSD was perceived as similar to 2014
- Two-thirds reported LSD to be easy or very easy to obtain, and availability had remained stable.
- LSD was most likely to have been obtained from a friend at a friend's home.

In 2015, 34 participants were able to comment on the price, purity and availability of LSD in the previous six months.

5.6.1 Price

The median price for a tab of LSD was \$20 (n=34, range \$10–30), similar to previous years. Two-thirds reported the price had remained stable in the previous six months (Figure 35).

Figure 35: Change in price of LSD in previous six months, 2014 and 2015



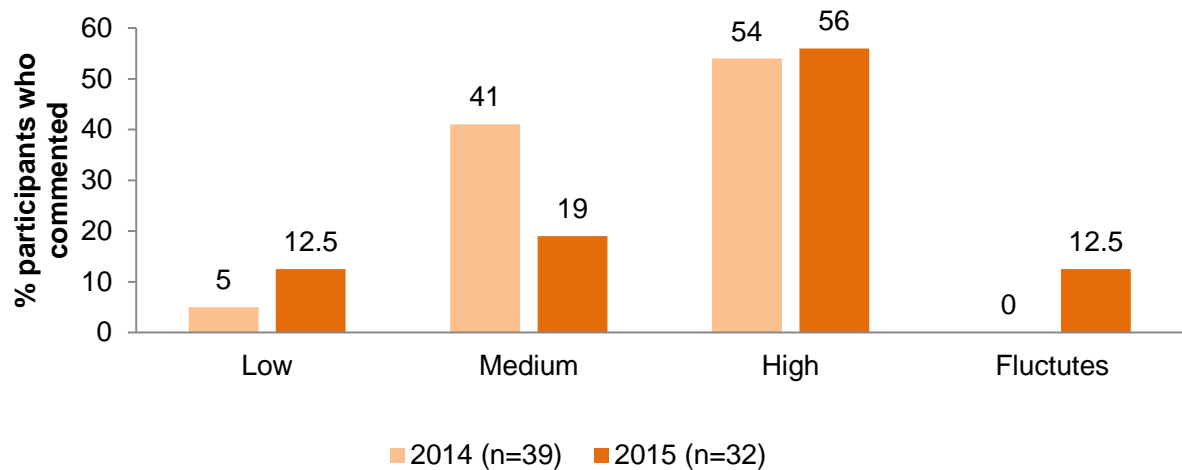
Note: Those choosing 'don't know' were excluded from analyses. Percentages may not total 100% due to rounding.

Source: QLD EDRS participant interviews

5.6.2 Purity

In 2015, similar to 2014, over half (56%) of participants reported the current purity of LSD as high (Figure 36).

Figure 36: Purity of LSD in previous six months, 2014 and 2015

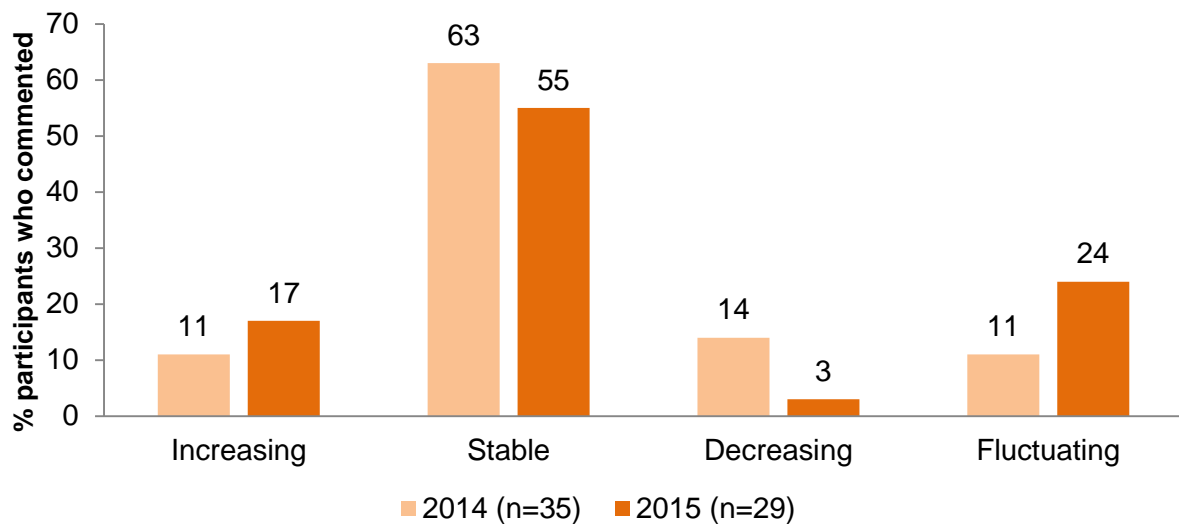


Note: Those choosing 'don't know' were excluded from analyses. Percentages may not total 100% due to rounding.

Source: QLD EDRS participant interviews

Almost two-thirds perceived the purity of LSD had remained stable in the previous six months (Figure 37).

Figure 37: Changes in purity of LSD in previous six months, 2014 and 2015



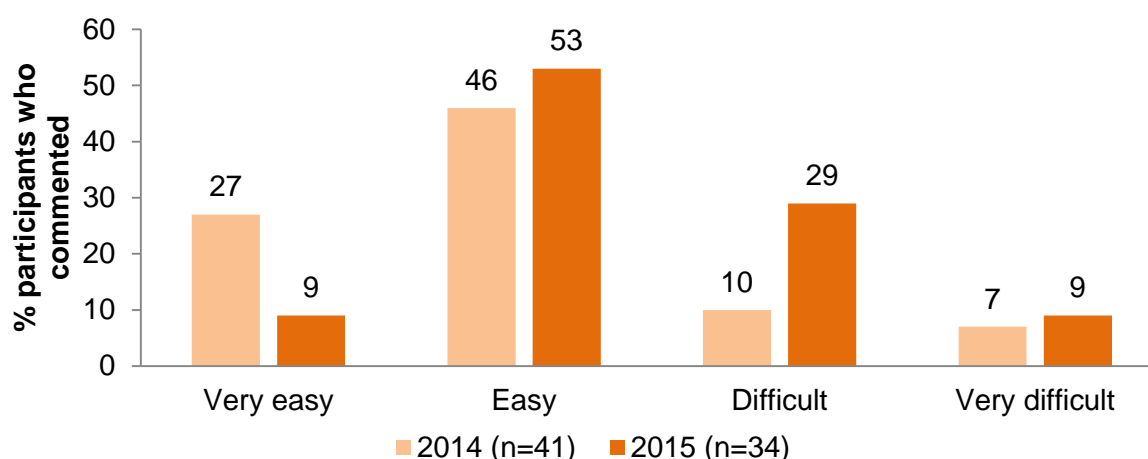
Note: Those choosing 'don't know' were excluded from analyses. Percentages may not total 100% due to rounding.

Source: QLD EDRS participant interviews

5.6.3 Availability

Almost two-thirds reported LSD to be easy or very easy to obtain (Figure 38). Perceived availability was similar to 2014, but more participants reported it was difficult to obtain.

Figure 38: Availability of LSD in previous six months, 2014 and 2015

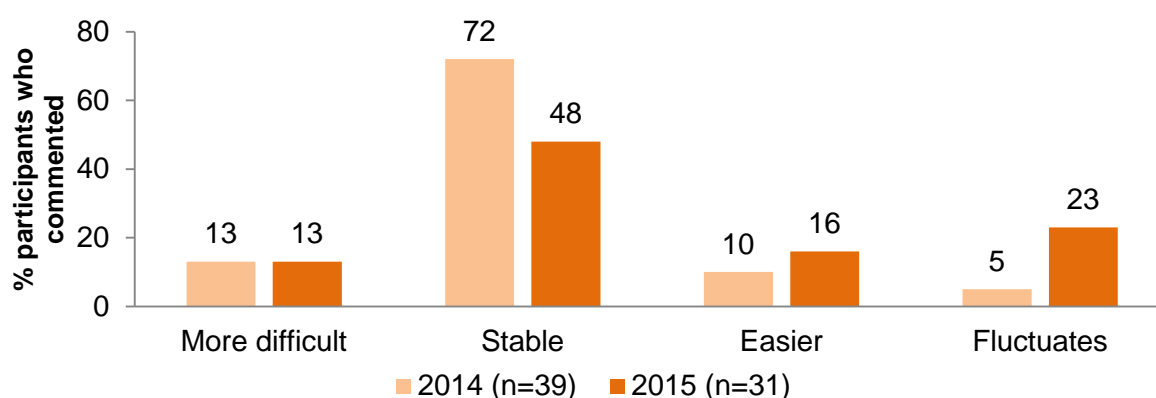


Note: Those choosing 'don't know' were excluded from analyses. Percentages may not total 100% due to rounding.

Source: QLD EDRS participant interviews

Approximately half (48%) reported the recent availability of LSD to be stable (Figure 39). This is somewhat lower than 2014 (Figure 39) but similar to 2013 (data not shown).

Figure 39: Changes in availability of LSD in previous six months, 2014 and 2015



Note: Those choosing 'don't know' were excluded from analyses. Percentages may not total 100% due to rounding.

Source: QLD EDRS participant interviews

5.6.4 Source and locations of use

Friends remained the most common source person although sourcing from a dealer increased in 2015. A private home was the most common location when LSD was last obtained in the previous six months (Table 27).

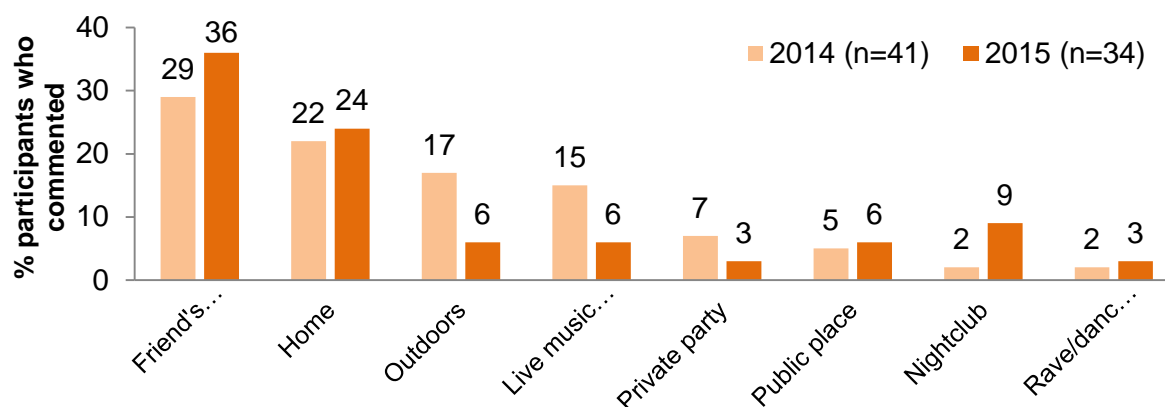
Table 27: Source person ad location last time obtained LSD, 2014 and 2015

	2014 (n=41) %	2015 (n=34) %
Source person		
Friend	61	47
Dealer (known/unknown)	20	38
Acquaintances	5	12
Relative	2	-
Online	10	3
Other	2	-
Location sourced from		
Friend's home	34	35
Own home	15	12
Dealer's home	7	26
Online	5	-
Live music event	5	6
Agreed public location	5	18
Rave/doof/dance party	2	-
Acquaintance's home	2	-
Nightclub	2	-
Pub/bar	2	-
Private party	2	3

Note: Small numbers; interpret with caution. Those choosing 'don't know' were excluded from analyses. Percentages may not total 100% due to rounding. Source: QLD EDRS participant interviews

Figure 40 shows that, as for 2014, a friend's home was the most common venue for using LSD the most recent occasion in the previous six months.

Figure 40: Location of most recent LSD intoxication, 2014 and 2015



Note: Those choosing 'don't know' were excluded from analyses. Percentages may not total 100% due to rounding. Source: QLD EDRS participant interviews

5.6.5 Comments from key experts on the hallucinogen market

Key experts noted a downturn in use of LSD from the previous year, but that a small group of users persisted. Arrests were few, and it was seldom reported as a drug of concern in treatment settings as use tended to be occasional. Both forensic and health key experts noted the presence of synthetic hallucinogens such as the 25X-NBOMe drugs in the cardboard tabs that were traditionally used for LSD. Problematic incidents with hallucinogens were linked to reports of ‘bath salts’ (substituted cathinones) or ‘flacca’ (alpha-PVP) in tabs.

5.7 Cannabis

Key points

- The median price for an ounce of hydro was \$280, and \$250 for bush, with prices perceived to have remained largely stable in the previous six months.
- The perceived purity of both hydro and bush cannabis was medium or high.
- Availability of cannabis remained easy/very easy, although bush was difficult to obtain for a third of respondents.
- Cannabis was most often obtained from a friend, at a friend's home and was most often used at a participant's own home.

In 2015, 66 participants reported they were able to distinguish between hydro and bush cannabis. Sixty-one participants were able to comment on hydro, and 43 were able to comment on the bush cannabis market. One participant reported they were able to comment on the price of hash, in oil form.

5.7.1 Price

In 2015, the price of hydro was again slightly higher than that for bush: the median price for an ounce of hydro was \$280 (n=16, range \$100-300) while the price for an ounce of bush was \$250 (n=12, range \$100-320).

Table 28: Cannabis prices according to type and amount recently purchased, 2014 and 2015

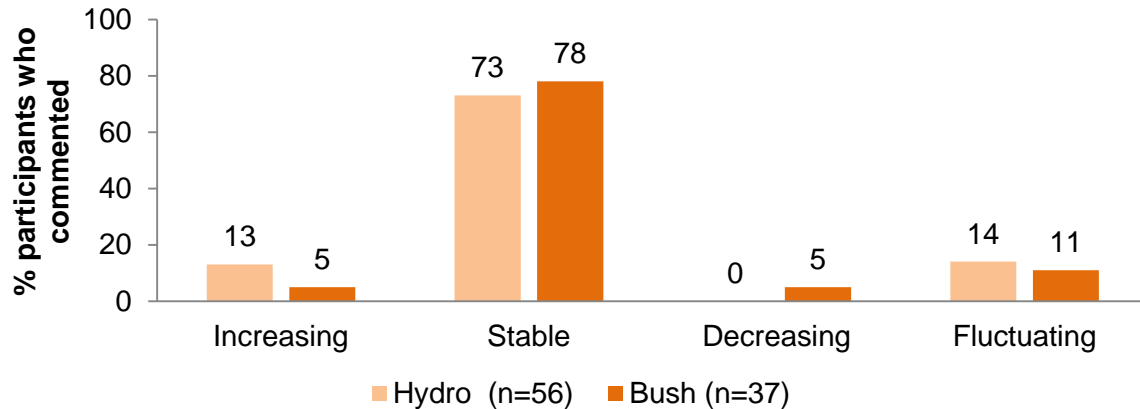
	2014 Median (range)	2015 Median (range)
Hydro		
Gram	\$11 (10–17) [^]	\$10 (9-25)
Quarter ounce	\$80 (70–90)	\$85 (9-180)
Ounce	\$280 (250–350)	\$280 (100-300)
Bush		
Gram	\$15 (10–20) [^]	\$12.50 (10-15)[^]
Quarter ounce	\$80 (70–180)	\$90 (65-100)
Ounce	\$275 (200–300) [^]	\$250 (100-320)

Note: [^] denotes small numbers reported; interpret with caution (n<10).

Source: QLD EDRS participant interviews

The price of both hydro and bush cannabis was perceived to have remained largely stable over the previous six months (Figure 41).

Figure 41: Price changes of cannabis in previous six months, 2015



Note: Those choosing 'don't know' were excluded from analyses. Percentages may not total 100% due to rounding.

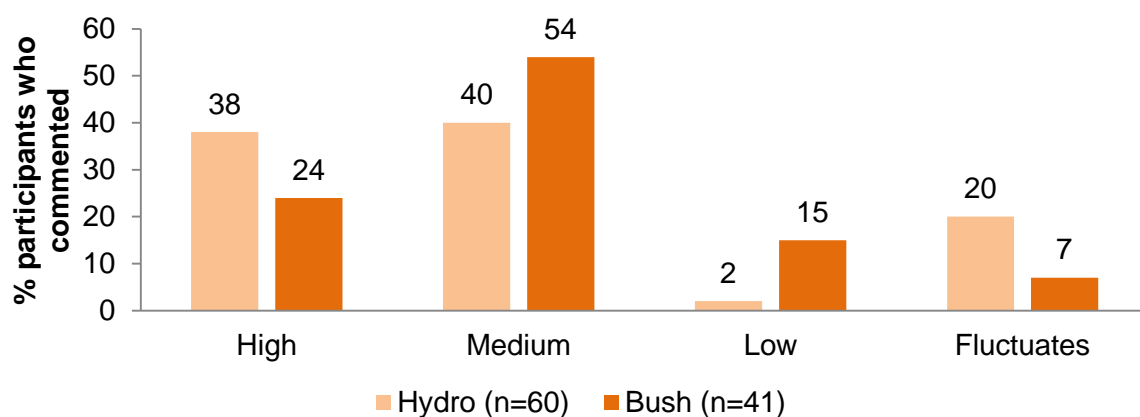
Source: QLD EDRS participant interviews

Only one participant reported on the price of hash (\$30 for a cap of hash oil).

5.7.2 Purity

Figure 42 shows that the purity (i.e. strength) of both hydro and bush cannabis was largely perceived to be medium or high as was the case in 2014.

Figure 42: Perception of cannabis purity in previous six months, 2015

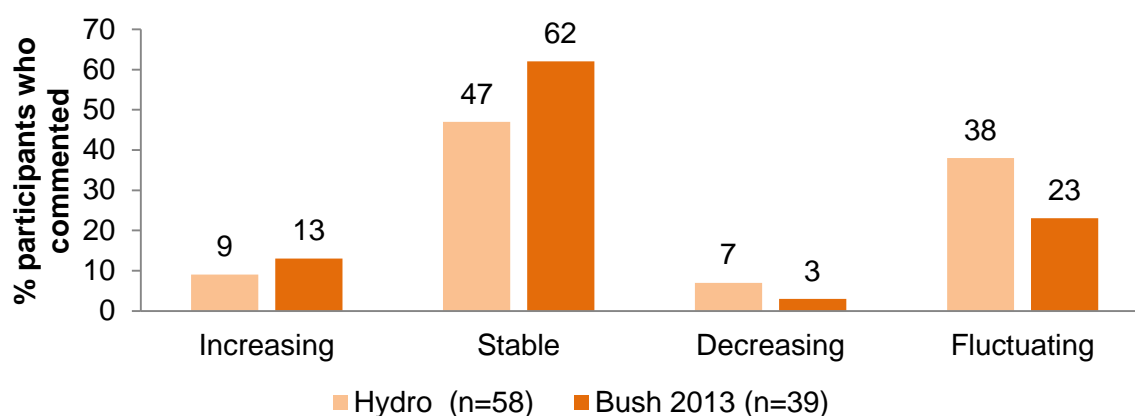


Note: Those choosing 'don't know' were excluded from analyses. Percentages may not total 100% due to rounding.

Source: QLD EDRS participant interviews

Figure 43 shows that the purity of cannabis was most commonly reported as stable for both hydro and bush.

Figure 43: Perceived change in recent purity of cannabis, 2015



Note: Those choosing 'don't know' were excluded from analyses. Percentages may not total 100% due to rounding.

Source: QLD EDRS participant interviews

5.7.3 Availability

Similar to previous years, bush cannabis was perceived to be more difficult to obtain than hydro (Table 29), with somewhat more participants in 2015 reporting bush to be difficult to obtain.

Table 29: Availability of cannabis in preceding six months, 2014 and 2015

	Hydro		Bush	
	2014 %	2015 %	2014 %	2015 %
Current ease of access	(n=42)	(n=60)	(n=33)	(n=43)
Very easy	52	62	30	26
Easy	38	32	46	40
Difficult	5	7	15	33 [↑]
Very difficult	5	0	9	2
Change in availability in previous six months	(n=43)	(n=59)	(n=32)	(n=41)
More difficult	19	12	22	10
Stable	72	68	66	66
Easier	-	12	6	12
Fluctuates	9	9	6	12

Note: Those choosing 'don't know' were excluded from analyses. Arrow symbol signifies a significant difference ($p < 0.05$). Percentages may not total 100% due to rounding.

Source: QLD EDRS participant interviews

5.7.4 Source and locations of use

The most common source person for purchasing either hydro or bush was a friend, followed by a dealer; and the most common location remained a friend's home for hydro but was one's own home for bush (Table 30).

Table 30: Source person and location of most recent cannabis purchase, 2014 and 2015

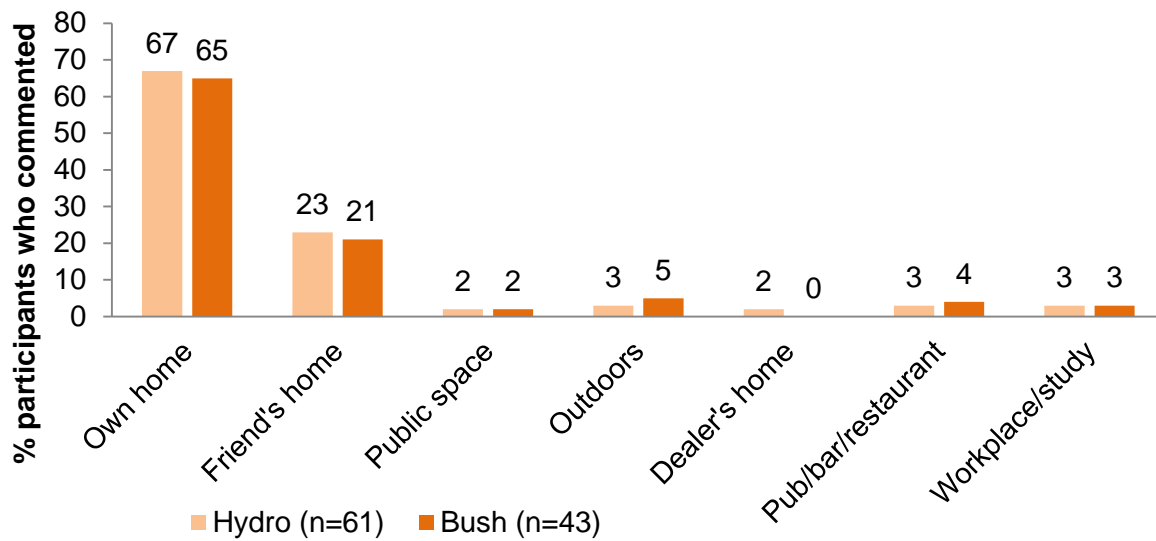
	Hydro		Bush	
	2014 (n=42) %	2015 (n=61) %	2014 (n=34) %	2015 (n=40) %
Source person				
Friend	51	53	59	45
Known dealer	30	18	18	20
Unknown dealer	2	3	12	5
Acquaintances	9	18	9	13
Street dealer	2	2	3	10
Relative	2	2	-	3
Workmates	-	5	-	3
Score location				
Friend's home	42	34	47	26↓
Dealer's home	26	12	18	5
Agreed public location	5	16	15	23
Own home	21	25	12	30↑
Other	-	-	6	4
Acquaintance's home	5	8	3	5
Street market	-	2	-	7

Note: Those choosing 'don't know' were excluded from analyses. Arrow symbol signifies a significant difference ($p < 0.05$). Percentages may not total 100% due to rounding.

Source: QLD EDRS participant interviews

The participant's home remained the most common venue for using both hydro and bush cannabis (Figure 44).

Figure 44: Venue of most recent cannabis use, 2015



Note: Those choosing 'don't know' were excluded from analyses. Percentages may not total 100% due to rounding.

Source: QLD EDRS participant interviews

5.7.5 Comments from key experts on the cannabis market

Key experts reported that cannabis continued to be readily available, particularly hydro as bush is more seasonal. Prices reported for cannabis were: hydro \$25-50 per gram and bush \$300-450 per ounce.

6 HEALTH-RELATED TRENDS ASSOCIATED WITH ECSTASY AND OTHER PSYCHOSTIMULANT USE

Key points

- 28% reported a lifetime stimulant overdose, with 19% overdosing on a stimulant drug in the previous year. The stimulant drug most commonly attributed to causing an overdose in the previous year was ecstasy, followed by ice.
- 20% reported experiencing an overdose on a depressant drug, all of whom did so in the previous 12 months. The depressant drug most commonly attributed to causing an overdose in the previous year was alcohol.
- The majority (86%) of participants did not access a health service or professional about their drug and/or alcohol use in the previous six months.
- Among those who did access a health service or professional about their drug use in the previous six months, the service most commonly accessed was a general practitioner (GP).
- Drug treatment remained low in this sample, with only 5% reporting they were currently in some form of treatment.
- 70% scored moderate to very high levels of psychological distress on the K10.
- 44% self-reported having a mental health problem in the previous six months, most commonly depression; and 20% attended a health professional for mental health reasons in the previous six months.

6.1 Overdose and drug-related fatalities

6.1.1 Non-fatal stimulant overdose

Twenty-eight per cent of participants reported experiencing a stimulant overdose in their lifetime. The median number of times this had ever happened was once (n=24, range 1–10 times). Nineteen per cent of all participants had experienced a stimulant overdose in the previous 12 months.

Among the participants who commented on their most recent stimulant overdose in the previous 12 months (n=16), the two drugs most commonly attributed to the overdose were ecstasy (63%), followed by ice (13%). Most overdoses had involved more than one drug (73%).

The most common location of the most recent stimulant overdose was at a music event (31%), followed by at a nightclub (25%). Other locations included at a home and in a public place. Just under half (47%) reported the stimulant overdose had occurred during a particularly heavy session of drug use. The median time before overdose was experienced was five hours.

The main symptoms experienced were nausea and vomiting. Other symptoms included chest pain, panic and hallucinations, followed by increased heart rate and rapid irregular breathing. Anxiety, agitation, headache, tremors, delirium and loss of consciousness delirium were also reported.

Over half of those who experienced a stimulant overdose (63%) reported someone sober was present during the overdose to assist, and 56% reported that they were monitored by friends. No other forms of assistance were reported. One-fifth (19%) received treatment/information after the overdose. Of these three participants, two visited a GP. Other sources of information included Pill Reports, friends and the person from whom they had obtained the pill.

6.1.2 Non-fatal depressant overdose

Twenty per cent of participants reported experiencing an overdose on a depressant drug in their lifetime. The median number of depressant overdoses was three times (n=17, range 1–20).

Ten per cent of all participants had experienced a depressant overdose in the previous 12 months. Of these nine participants, five attributed the overdose to alcohol (56%), one to benzodiazepines, and three did not specify. Other drugs in use during this episode included cannabis, ecstasy and mushrooms.

Two participants reported an overdose occurring at home. Other locations included a friend's home, a private party, nightclubs, restaurants, live music events and public places.

Main symptoms included vomiting and loss of consciousness, dizziness, memory loss, anxiety and liver failure. The median time before experiencing overdose was four hours (n=9, range 3-24). Five of the nine respondents reported that the depressant overdose had occurred during a heavy session.

Eight of the nine participants reported that a sober person was present who was able to assist, and three were monitored by friends. Two participants reported visiting the hospital emergency department. Others reported being given water or a hot shower.

After the overdose, two participants reported visiting a GP, another a psychologist and two sought information on the internet. Five did not receive any type of treatment or assistance.

6.1.3 Stimulant and depressant overdoses

In 2015 about half (52%) of those experiencing an overdose (stimulant or depressant) reported this to have occurred during a heavy session. In 2014 this was higher (p<0.05); almost all (91%) overdoses were reported to have occurred during a heavy session.

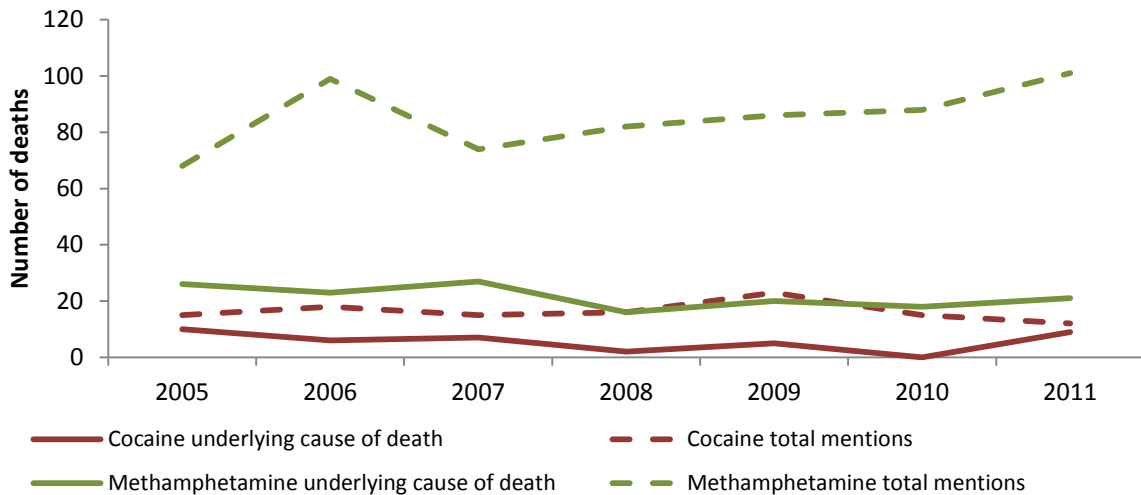
6.1.4 Overdose data from other sources

Overdose data from emergency services in Queensland were not available for 2015 due to changes being made to overdose reporting methodologies.

The Australian Bureau of Statistics (ABS) collates and manages the national causes of death database, utilising information from the National Coronial Information System (NCIS). Drug-induced deaths attributable to methamphetamines in Australia increased from 18 in 2010 to 21 in 2011; nine deaths were attributable to cocaine in 2011 (Figure 45). Projected

estimates for 2012 and 2013 for deaths where methamphetamine is mentioned suggest an increasing trend (Roxburgh & Burns, 2015).

Figure 45: Drug-induced deaths due to methamphetamine or cocaine, 2005-2011



Source: Roxburgh & Burns 2015

6.2 Dependence on ecstasy and amphetamines

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. However, research on ecstasy dependence in humans is limited (Degenhardt, Bruno, & Topp, 2010; Topp & Mattick, 1997).

To date, internationally, there have been a small number of studies of rates of dependence in ecstasy users. Studies from the US household survey suggest a prevalence rate of past-year dependence in approximately 3.6–3.8% of ecstasy users in the general population. An early NDARC study suggests a lifetime prevalence rate of 64% in similar types of regular ecstasy users to those interviewed in the EDRS.

In 2015, participants were asked questions from the Severity of Dependence Scale (SDS) in relation to their ecstasy use and (separately) their use of methamphetamines during the previous six months. 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, Loxton, Hides, Kavanagh, & Mattick, 2002) and was recently adapted for use with ecstasy in the EDRS. A total score was created by summing responses to each of the five questions. Possible scores range from 0 to 15.

Two cut-off scores are presented below, of three or more and four or more. A cut-off score of three or more was used as these scores have been recently found in the literature to be a good balance between sensitivity and specificity for identifying problematic dependent ecstasy use (Bruno, et al., 2009). In 2015, 24% of EDRS participants scored three or more for ecstasy use, similar to the 22% reported in 2013 (see Table 31; SDS data were not collected in 2014). This compares with 25% reporting last-year ecstasy dependence in another recent study of regular ecstasy users in Queensland (Smirnov et al., 2014).

When using the more conservative estimate of four or more, which has been used previously in the literature as a validated cut-off for methamphetamine dependence (Bruno, et al., 2009; Topp & Mattick, 1997), only 13% of participants scored four or more for ecstasy use, which was similar to the 9% reported in 2013.

Table 31: SDS scores for ecstasy and methamphetamine in regular psychostimulant users, 2015

SDS score	Ecstasy	Methamphetamines
	2015 (n=83) %	2015 (n=23) %
0	40	48
3 or more	24	30
4 or more	13	26

Source: QLD EDRS participant interviews

Symptoms of dependence were also common among recent methamphetamine users: one in four (26%) scored four or more for their methamphetamine use, with nearly one-third (30%) showing symptoms of dependence with the lower cut-off. The 18% who reported they would find it quite/very difficult to go without (Table 33) compares with 12% of methamphetamine users nationally in 2013 who 'could not stop or cut down on use if they wanted to' (AIHW 2014).

In 2015, 40% of ecstasy users and 48% of methamphetamine users reported no symptoms of dependence (a score of zero). Cumulatively, 65% of each group obtained a score of one or less. The median SDS score for ecstasy was one (n=83; range 0–6). Similarly, the median SDS score for methamphetamine was one (n=23, range 0-9). Thus, the majority of participants report very few or no symptoms of ecstasy or methamphetamine dependence (Table 33).

Table 32: Symptoms of dependence on ecstasy (2012-2015) and methamphetamine (2015) in regular psychostimulant users

Symptom of dependence	Ecstasy			Methamphetamines
	2012 (n=62) %	2013 (n=88) %	2015 (n=83) %	2015 (n=23) %
Ever think use was out of control				
Never/almost never	73	71	76	74
Sometimes	22	24	22	13
Often	5	5	2	9
Always/nearly always	-	1		4
Prospect of missing a dose makes you feel anxious or worried				
Never/almost never	78	80	78	74
Sometimes	19	18	18	22
Often	3	2	4	-
Always/nearly always	-	-	-	4
Worry about your use				
Never/almost never	59	55	59	52
Sometimes	41	44	35	35
Often	-	1	6	9
Always/nearly always	-	-	-	4
Wish you could stop				
Never/almost never	73	85	80	61
Sometimes	14	10	19	30
Often	7	5	1	4
Always/nearly always	7	-	-	4
How difficult to stop or go without				
Not difficult	78	88	81	83
Quite difficult	17	13	18	9
Very difficult	5	-	1	9
Impossible	-	-	-	-

Source: QLD EDRS participant interviews

6.3 Help-seeking behaviour

6.3.1 Use of health services among participants

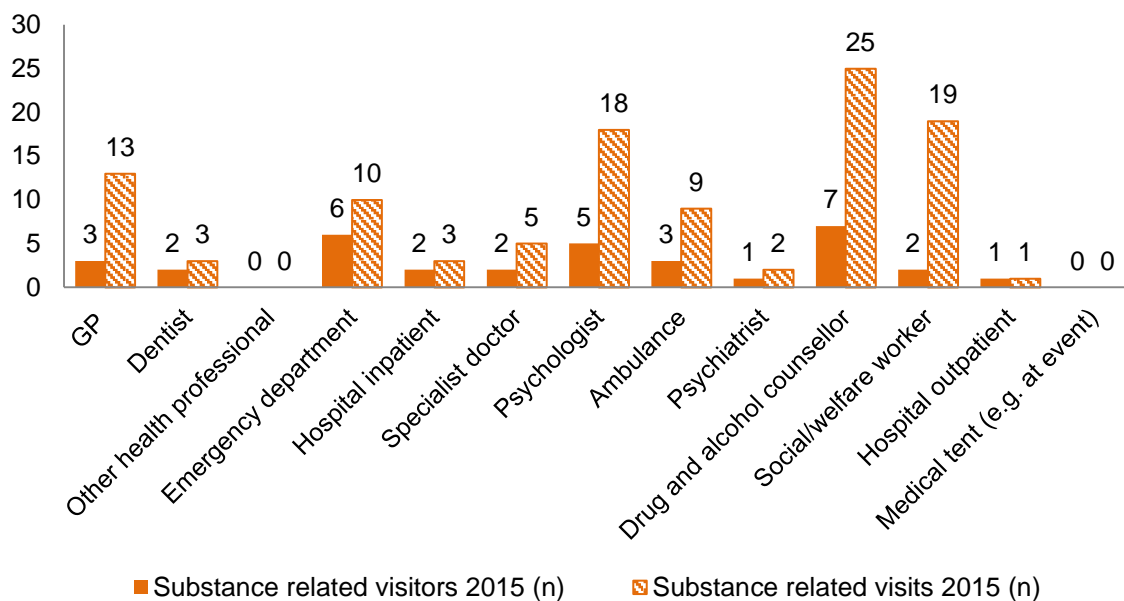
Similar to previous years, 88% of participants reported that they had not accessed a service or health professional about their drug and/or alcohol use in the previous six months.

Among those who had not recently accessed a service or health professional about drug and/or alcohol use in the previous six months (n=75), 9% had thought about doing so. The most common reasons given for not seeking help were having worked it out on one's own, not wanting to stop drug use, peer influence/stigma, money, low priority of help-seeking and believing the issue was temporary and would sort itself out.

Twelve per cent of participants reported that they had sought help for their drug and/or alcohol use from a service or health professional in the previous six months. Of these, 30% accessed a GP. More commonly, participants sought help from a drug and alcohol counsellor (70%), visited the emergency department (60%), a psychologist (50%) or were attended by an ambulance (30%). Additional services accessed in relation to drug and/or alcohol use were: hospital as an inpatient (20%), social/welfare worker (20%), a specialist doctor (20%), psychiatrist (10%) and hospital as an outpatient (10%). The most frequently visited services for substance related issues were drug and alcohol counsellors (Figure 46). The main drug of concern for seeking help was alcohol. This was followed by LSD, cocaine and Valium. Other drugs of concern were cannabis, ice, codeine and ecstasy. The largest numbers of visits to a provider were related to alcohol and ice.

This is consistent with drug treatment information from the National Minimum Data Set (AIHW 2015) showing that for Queensland in 2013-2014, alcohol (37%) and cannabis (34%) were the most common principal drugs of concern for people accessing alcohol and other drug treatment services, followed by amphetamines (12%). Counselling and information or education were the most common forms of treatment sought.

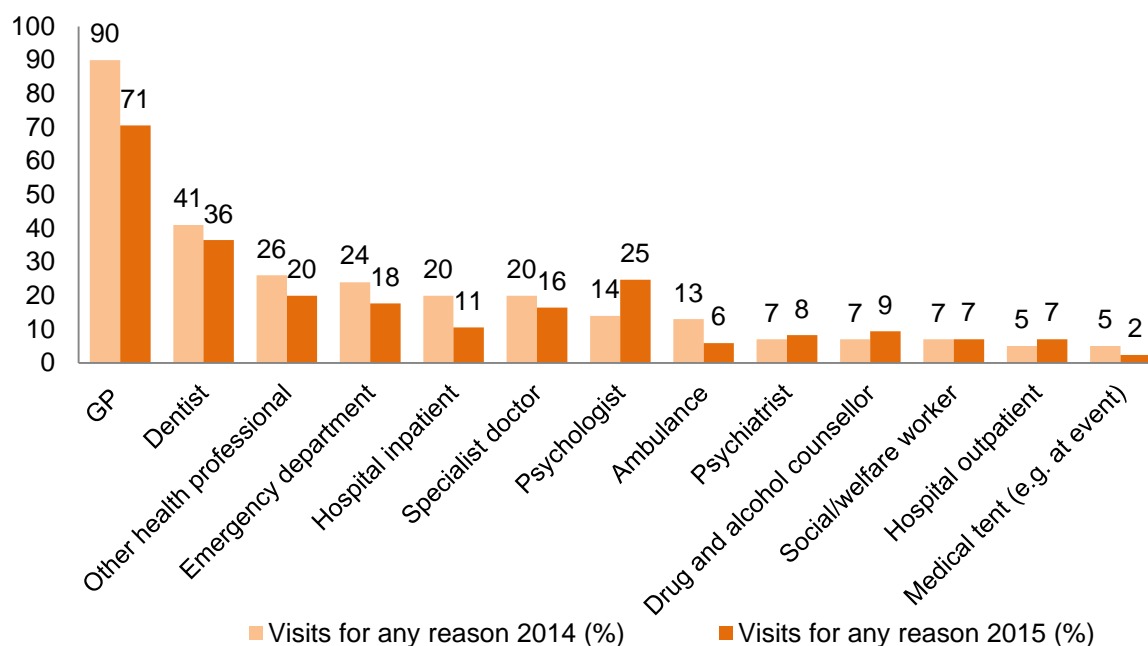
Figure 46: Substance-related visits to health professionals, 2015



Source: QLD EDRS participant interviews

Eighty-seven per cent of all participants reported accessing at least one health service for any reason (i.e. not just related to drug and/or alcohol use) in the previous six months. Figure 47 shows the most common service accessed for any reason was a GP, followed by a dentist. The use of psychologists increased in 2015 ($p < 0.05$).

Figure 47: Main service accessed for any reason in the previous six months, 2014 and 2015



Source: QLD EDRS participant interviews

6.4 Drug treatment

Similar to previous years, participation in drug treatment was low among this sample. Only four participants reported currently being in some form of drug treatment. Types of current drug treatment reported were drug counselling, sessions with a psychologist and Drug Diversion.

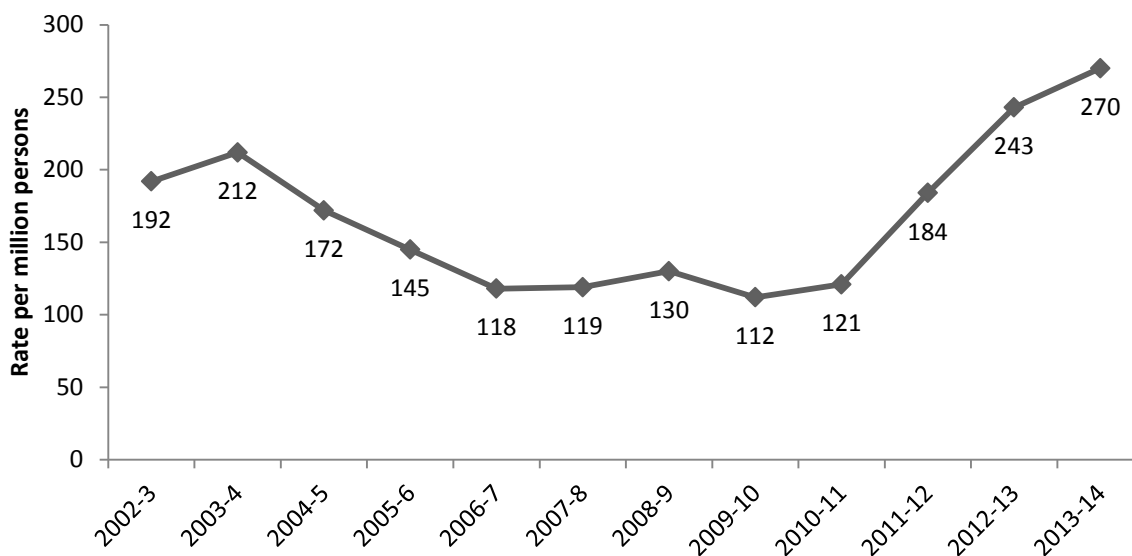
6.5 Hospital admissions

The most recently available hospital admission data cover the year 2013 to 2014.

6.5.1 Methamphetamine

For the year 2013-2014, the number of inpatient hospital admissions in Queensland where the principal diagnosis related to amphetamines was 701 for persons aged 15–54 years. This equates to 270 per million persons, up from 243 per million in 2011-2012. The national rate per million persons is 342. As Figure 48 shows, the number of inpatient hospital admissions per million persons has been trending upwards in recent years and is now the highest in the reporting period.

Figure 48: Number of principal amphetamine-related hospital admissions per million persons aged 15-54 years, Queensland, 2002-03 to 2013-2014

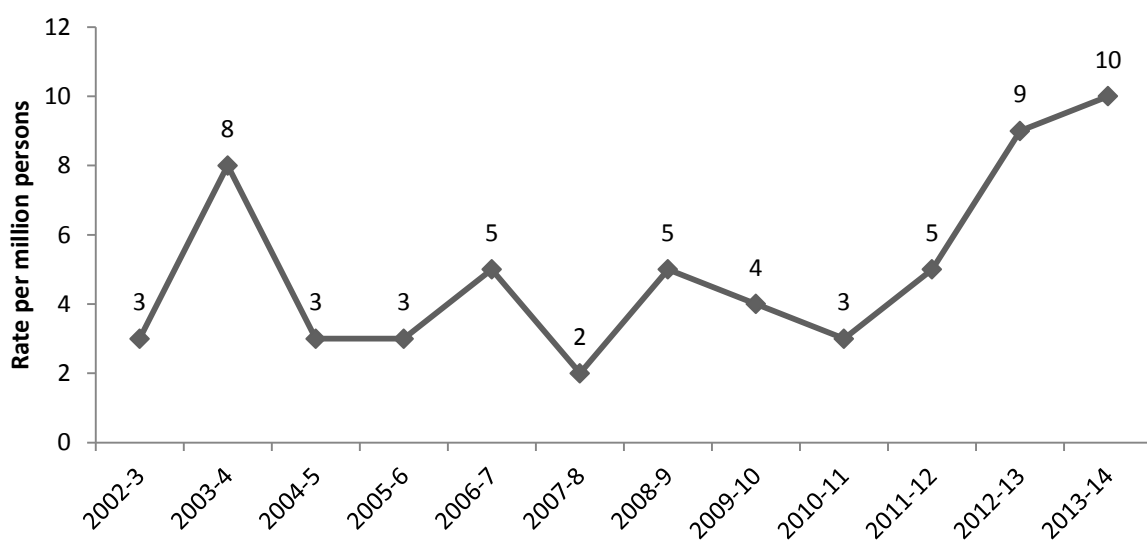


Source: Roxburgh and Breen, in press

6.5.2 Cocaine

Figure 49 shows the number of inpatient hospital admissions in Queensland per million persons with a principal diagnosis relating to cocaine over the last decade. The ten admissions per million persons is much lower than the national rate of 34, and equates to 25 admissions during the period.

Figure 49: Number of principal cocaine-related hospital admissions per million persons aged 15-54 years, Queensland, 2002-03 to 2013-2014

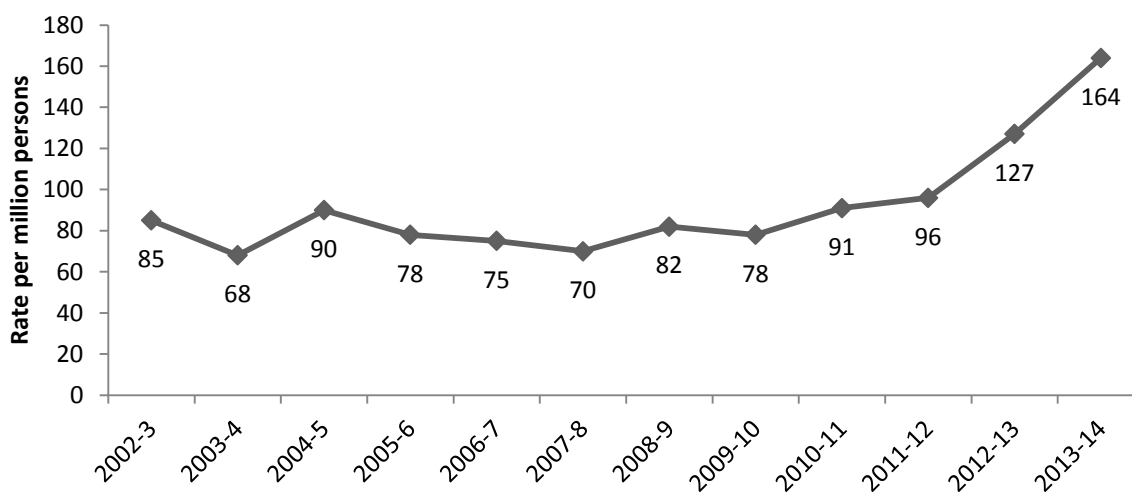


Source: Roxburgh and Breen, in press

6.5.3 Cannabis

In 2013–14, there were 424 inpatient hospital admissions in Queensland for those aged 15–54 years where the principal diagnosis related to cannabis. This equates to 164 inpatient hospital admissions per million persons (Figure 50). Admission numbers are continuing to trend upwards. The national rate was 221.

Figure 50: Number of principal cannabis-related hospital admissions per million persons aged 15-54 years, Queensland, 2002-03 to 2013-2014

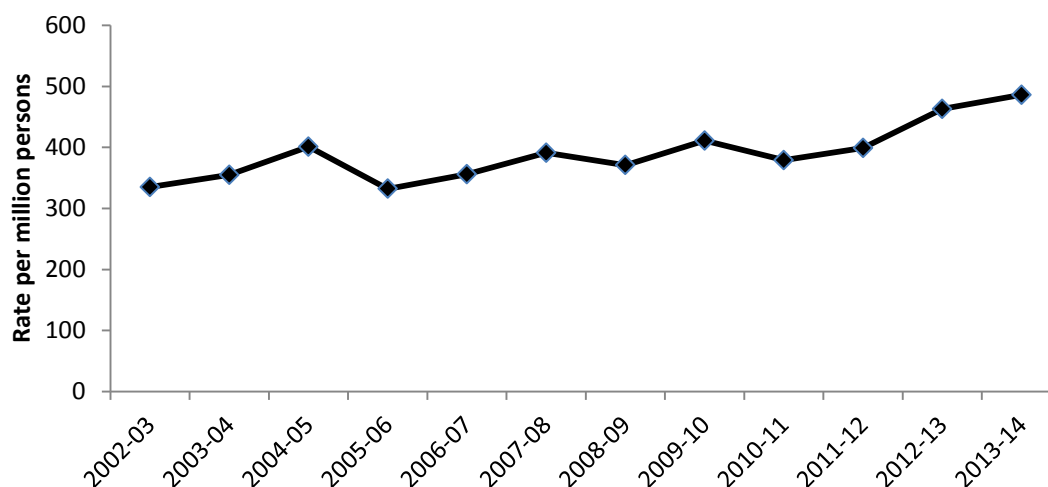


Source: Roxburgh and Breen, in press

6.5.4 Opioids

In 2013–14, there were 1260 inpatient hospital admissions in Queensland for those aged 15–54 years where the principal diagnosis related to opioids. This equates to 486 inpatient hospital admissions per million persons (Figure 51). Admission numbers are continuing to trend upwards. The national rate was 459.

Figure 51: Number of principal opioid-related hospital admissions per million persons aged 15-54 years, Queensland, 2002-03 to 2013-2014



Source: Roxburgh and Breen, in press

6.6 Mental and physical health problems

6.6.1 Mental health problems and psychological distress (K10)

The Kessler Psychological Distress Scale (K10) (Kessler & Mroczek, 1994) was designed as a screening tool for measuring psychological distress. It has well-established psychometric properties and validity for identifying anxiety and affective disorders (Andrews & Slade, 2001). The K10 comprises 10 questions used to assess symptoms which respondents may have experienced during the previous four weeks.

A 5-point Likert scale is used for responses, which range from 'all of the time' to 'none of the time' with a maximum possible score of 50. K10 scores provide a risk assessment which is categorised into the following: 'low', likely to be well (scores 10–15); 'moderate', may have a mild mental disorder (scores 16–21); 'high', likely to have a moderate mental disorder (scores 22–29); 'very high', likely to have a severe mental disorder (scores 30–50).

In 2015, 69% of participants who commented reported experiencing moderate to very high levels of distress in the previous month (Table 33). This is similar to 2014.

Table 33: K10 level of distress, 2014 and 2015

	2014 (n=93) %	2015 (n=84) %
Low to no distress (0–15)	40	32
Moderate distress (16–21)	31	41
High distress (22–29)	20	24
Very high distress (30–50)	9	4

Source: QLD EDRS participant interviews

6.6.2 Self-reported mental problems and medication

In 2015, 44% of all participants reported having a mental health problem in the previous six months. As per previous years, depression and anxiety were the most commonly reported mental health problems. Reports of anxiety were lower than for 2014 ($p < 0.05$). Other disorders appeared at similar levels to previous years (Table 34).

Table 34: Self-reported recent mental health problems, 2010-2015

	2010 (n=32) %	2011 (n=39) %	2012 (n=22) %	2013 (n=38) %	2014 (n=30) %	2015 (n=37) %
Anxiety	78	62	45	61	70	43 ↓
Depression	60	80	68	61	63	62
Panic	3	21	14	18	17	11
OCD	3	8	9	11	13	11
Manic depression/bipolar disorder	9	5	9	8	7	5
Drug-induced psychosis	3	3	14	4	3	5
Schizophrenia	6	8	9	-	3	3
Paranoia	6	18	18	4	-	5
Any personality disorder	-	5	9	-	-	8
Other	25	10	18	20	23	32

Note: Multiple responses permitted. ↓ indicates a significant change from 2014 ($p < 0.05$). In 2015, 'other' included mania, PTSD, phobias, other psychoses, anger, epilepsy and sleep disorders.

Source: QLD EDRS participant interviews

One fifth (20%) of all participants reported attending a health professional for a mental health problem in the previous six months – just under half of those who self-reported a mental health problem. Of those who attended ($n=17$), 41% were prescribed medication. These participants ($n=7$) were prescribed a range of medications:

- anti-depressants (i.e. Avanza, Lexapro, Sertraline) – four participants
- benzodiazepines (i.e. Valium, Serepax, Diazepam) – four participants
- anti-psychotics (i.e. Haloperidol) – one participant
- mood stabiliser (i.e. Modavigil) – two participants
- pharmaceutical stimulants (i.e. Ritalin, generic dexamphetamine) – two participants.

7 RISK BEHAVIOURS

Key Points

- Decrease in reports of recent injecting, with only two participants reporting injecting a drug in the previous six months.
- Ice was the drug recently-injected in both cases
- 71% reported having penetrative sex with a casual sex partner in the previous six months.
- Similar to past years, drug use when having penetrative sex with a casual partner most commonly involved alcohol, cannabis and ecstasy.
- 80% scored eight or higher on the AUDIT, corresponding to drinking at levels which may be harmful to their health, with one-quarter of scores indicating a need for referral to specialist care.

7.1 Injecting risk behaviour

Participants who reported injecting drugs were asked a series of questions about their injecting drug use behaviour.

7.1.1 Lifetime injectors

Eleven per cent of participants reported having ever injected a drug. This is significantly fewer than the 25% in 2014 who reported having injected ($p < 0.05$). Similarly, there was a significant decrease in the proportion of participants reporting recently injecting, with 2% of all participants reporting they had injected a drug in the previous six months ($p < 0.05$) (Table 36).

Table 35: Injecting risk behaviour, 2010- 2015

	2010 (n=101)	2011 (n=103)	2012 (n=62)	2013 (n=88)	2014 (n=100)	2015 (n=85)
Ever injected (%)	17	24	29	14	25	11 ↓
Median age first injected (range)	20 (14–29)	18 (14–28)	19 (13–43)	18 (15–26)	21 (14–35)	19 (17-28)
Injected last 6 months (%)	11	16	16	7	19	2 ↓

Note: Arrow symbol signifies a significant difference $p < 0.05$.

Source: QLD EDRS participant interviews

The mean age of first injection was 19 years ($n=9$, range 17-28 years). The most common drugs first injected were ice and heroin, followed by speed, cocaine, other opiates, ecstasy and pharmaceutical stimulants.

7.1.2 Recent injectors

In 2015, only two participants reported injecting drugs in the previous six months, which was significantly fewer than 19 participants in 2014 ($p < 0.05$). In both cases, ice was the drug

injected on the most recent occasion, at home and with a casual sex partner. One participant injected only once during the last six months; the other reported monthly injection. Neither reported injecting while under the influence or coming down from another substance. Needles were sourced in both cases from a chemist, and neither participant reported using a needle after someone else.

7.1.3 Injecting drug use in the general population

According to the recent 2013 NDSHS, 1.5% of Australians aged 14 years and over had injected a drug other than that prescribed to them at least once in their lifetime. In the previous 12 months, 0.3% of Queenslanders reported having injected illegally (AIHW, 2014).

Queensland Needle and Syringe Programs (NSP) reported supplying 2,711,030 syringes to service users and providing 183,204 occasions of service during 2014 (QLD Health, 2015). A survey of NSP users showed that in Queensland (in 2014), persons under 25 years of age constituted only about 10% of NSP users (Iversen & Maher, 2015). In contrast, 75% of 2015 EDRS participants were under the age of 25.

7.2 Blood-borne viral infections

7.2.1 The National Notifiable Diseases Surveillance System

The National Notifiable Disease Surveillance System (NNDSS) reports annually on notifications for blood-borne diseases and sexually transmitted diseases for each state and territory. Notifications among the general Queensland population follow a similar pattern to previous years (Table 36). Trends in Queensland were similar to national patterns, with increases in new cases of syphilis, gonococcal infections and unspecified cases of hepatitis B. Infection rates were six per million persons for new cases of gonococcal infections, 5.5 per million for unspecified hepatitis C and 45 per million for chlamydial infections.

Table 36: Registered cases of blood-borne viruses and sexually transmitted diseases in Queensland, 2009-2015

Disease	2009	2010	2011	2012	2013	2014	2015
Hepatitis B (newly acquired)	52	58	46	55	43	52	46
Hepatitis B (unspecified)	1,000	1,054	846	808	900	994	1,114
Hepatitis C (unspecified)	2,627	2,668	2,413	2,376	2,503	2,674	2,590
Syphilis – congenital	0	2	4	0	1	0	3
Syphilis <2 years	215	251	323	349	259	382	568
Syphilis >2 years	303	199	225	246	278	287	280
Chlamydial infection	16,695	19,217	18,645	18,852	19,427	20,317	21,066
Gonococcal infection	1,787	2,383	2,952	2,700	2,727	2,711	3,029

Source: NNDSS, 2015

7.2 Sexual risk behaviour

7.2.1 Casual sex partners

Participants were asked optional questions about whether they engaged in sexual behaviour with a casual sex partner. In 2015, 84 participants completed this section, with 60 participants reporting penetrative sex with a casual sex partner at least once in the previous six months (Table 37).

Table 37: Number of casual partners with whom participants had penetrative sex in previous six months, 2013-2015

	2013 (n=64) %	2014 (n=60) %	2015 (n=60) %
One person	36	27	40
Two people	31	27	13
3–5 people	25	30	19
6–10 people	3	13	8
More than 10 people	5	3	2

Source: QLD EDRS participant interviews

Among those who reported having penetrative sex with a casual sex partner in the previous six months (n=60), 95% reported having done so while under the influence of drugs. Table 38 shows that 86% did this more often than once.

Table 38: Reported number of times participants had penetrative sex with a casual sex partner while under the influence of a drug in the previous six months, 2013-2015

	2013 (n=58) %	2014 (n=54) %	2015 (n=57) %
Once	12	20	14
Twice	12	24	18
3–5 times	38	22	25
6–10 times	12	22	21
More than 10 times	26	11	23

Source: QLD EDRS participant interviews

In 2015, alcohol was still the most commonly used drug the most recent time they had penetrative sex with a casual sex partner in the previous six months ($p < 0.05$) (Table 39). There was a significant increase in reports of having used cannabis the most recent time ($p < 0.05$).

Table 39: Drugs used most recent time had penetrative sex with a casual sex partner while under the influence, 2013-2015

Substance	2013 (n=58) %	2014 (n=54) %	2015 (n=57) %
Alcohol	38	82	82
Ecstasy	62	46	53
Cannabis	52	32	67↑
Cocaine	21	19	12
LSD	9	13	5
Ice	3	11	9
Speed	10	9	4
MDA	-	7	2
Amyl nitrate	3	4	9
Benzodiazepines	-	4	5
Base	-	2	0
Nitrous oxide	2	2	0
Pharmaceutical stimulants	3	2	4
Mushrooms	3	-	2

Note: Multiple responses permitted. Arrow symbol signifies a significant difference (p<0.05).

Source: QLD EDRS interview participants

In 2015, 49% of those who had had penetrative sex while under the influence of drugs in the previous six months reported using a protective barrier (e.g. a condom) the most recent time, with 56% using a barrier the most recent time they had penetrative sex with a casual partner while sober.

When asked how often participants used condoms or other barriers when having sex with casual sex partners while under the influence of drugs, only one in four (26%) reported doing so every time (Table 40). This was similar to 2013 and 2014.

Table 40: Frequency of condom or barrier use when having penetrative sex with a casual sex partner while under the influence of drugs, 2013-2015

	2013 (n=58) %	2014 (n=53) %	2015 (n=57) %
Every time	26	30	26
Often	21	23	19
Sometimes	12	19	12
Rarely	12	6	19↑
Never	29	23	23

Note: Those who reported 'don't know' have been excluded from analysis. Arrow symbol signifies a significant difference (p<0.05). Source: QLD EDRS participant interviews

7.2.2 Sexually transmitted infections

In 2015, 81 participants responded to questions about their sexual health. Among these, 44% reported having a sexual health check-up in the previous 12 months, a significant drop from 2014 ($p<0.05$) but similar to 2013 levels. One in five participants (20%) reported ever having an STI (Table 41). Among those who had an STI in the previous 12 months, only diagnoses of chlamydia were reported.

Table 41: STI check-ups, 2013-2015

	2013 %	2014 %	2015 %
Had a sexual health check-up	(n=83)	(n=84)	(n=81)
No	43	36	33
Yes, in the last year	42	56	44↓
Yes, more than one year ago	14	8	22↑
Ever diagnosed with STI^a	(n=82)	(n=84)	(n=76)
No	85	77	80
Yes, in the last year	10	4	7
Yes, more than one year ago	5	18	13

^a among those who had a sexual health check-up.

Note: Those who reported 'don't know' were excluded from the analysis. Percentages may not total 100% due to rounding. Arrow symbol signifies a significant difference ($p<0.05$).

Source: QLD EDRS participant interviews

7.3 The Alcohol Use Disorder Identification Test (AUDIT)

Questions were asked to identify participants with alcohol problems using the Alcohol Use Disorder Identification Test (AUDIT) (Saunders, Aasland, Babor, De La Fuente, & Grant, 1993). The AUDIT is a 10-item scale and respondents' total score places them into one of four 'zones' or risk levels. A total score of eight or more is an indication of being in one of three at-risk zones ranged according to severity. Intervention strategies are suggested for each zone (Babor et al., 2001).

In 2015, 79% of participants scored eight or higher on the AUDIT, corresponding to drinking at levels which may be harmful to their health (Table 42). The mean score was 14, corresponding to Zone II. This was similar to 2013 and 2014. An increase from 2014 in the proportion of drinkers for whom specialist diagnosis/treatment was recommended, but this represented a return to levels reported in 2013.

Table 42: AUDIT results and recommended intervention, 2013-2015

	2013 (n=88) %	2014 (n=98) %	2015 (n=85) %	Intervention recommended
Zone I (scores 0–7)	16	20	21	Alcohol education
Zone II (scores 8–15)	35	47	36↓	Simple advice
Zone III (scores 16–19)	19	16	15	Simple advice plus brief counselling and continued monitoring
Zone IV (scores 20–40)	29	16	27↑	Referral to specialist for diagnosis and treatment

Note: Percentages may not total 100% due to rounding. Arrow symbol signifies a significant difference ($p < 0.05$).
Source: QLD EDRS participant interviews

7.4 Driving risk behaviour

Every second year, participants are asked a series of questions about driving under the influence of alcohol and/or other drugs.

In 2015, 85% of participants reported driving a vehicle during the previous six months. Among these (n=71), 34% reported driving while over the limit of alcohol in the previous six months. This is similar to the last reported figure (31% in 2013). Among those who recently drove while over the limit (n=24), the median number of times was two (range 1–51).

Among those who drove in the previous six months (n=72), 54% reported being randomly breath tested in the previous six months. Of these, one participant was over the limit when they were tested.

Among those who drove in the previous six months (n=72), 65% reported recently driving soon after taking any drug. This is a significant increase over the 49% last reported (2013). The median number of times was eight (range 1-180), which is more than the median of five (range 1-180) reported in 2013. It is also notable that 15% of this group reported driving soon after taking a drug on a daily basis. Participants reported having used cannabis (72%), ecstasy (30%), ice (17%), benzodiazepines (4%) and speed (2%) shortly before driving in the last six months.

On the most recent occasion participants drove while under the influence of an illicit drug, the most commonly used drug was cannabis (70%), followed by ecstasy (15%) and ice (11%). Smaller proportions reported having used cocaine, speed and benzodiazepines. Substance patterns are very similar to those reported in 2013, with notable increases in the proportion who drove after using ice (17% during last 6 months in 2015 vs 6% in 2013; 11% most recent time in 2015 vs none in 2013). Nearly half (42%) of participants who reported driving under the influence of a drug waited less than one hour before driving; 24% waited 15 minutes or fewer.

In 2015, six participants reported being tested for drug driving in the past six months. Only one participant reported receiving a positive result from a roadside drug test, for cannabis.

8 LAW ENFORCEMENT RELATED TRENDS ASSOCIATED WITH REGULAR PSYCHOSTIMULANT USE

8.1 Reports of criminal activity among RPU

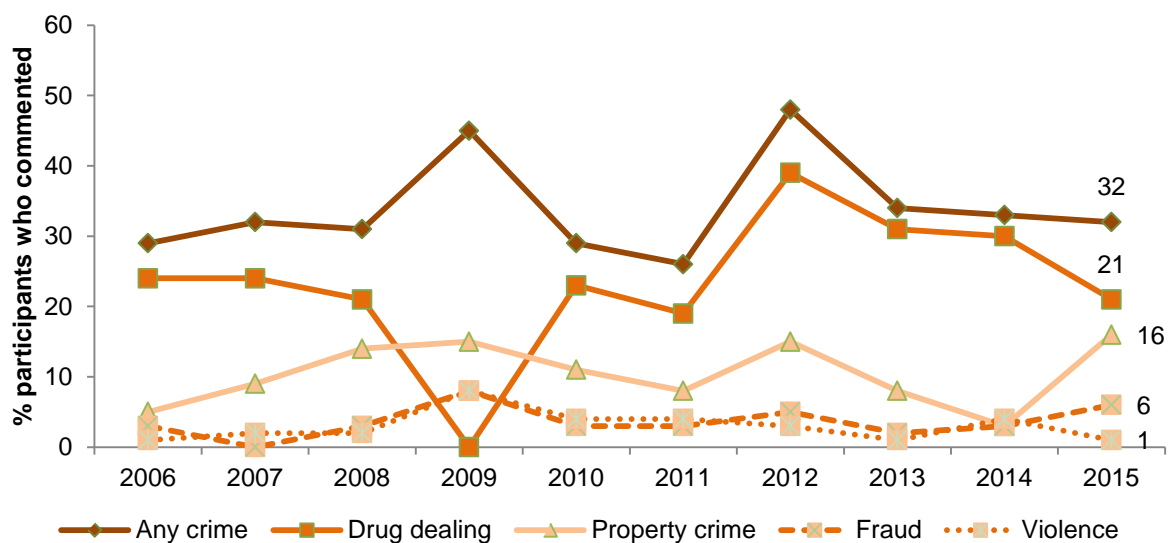
Key Points

- Prison history remained low among participants (2%).
- 11% reported being arrested in the previous six months.
- 21% reported drug dealing in the previous month.

Two per cent of participants reported having been to prison, with 11% reporting they had been arrested in the previous six months. The most common reason for arrest was public order offences (n=3) followed by drink-driving (n=2). Other offences included use or possession of weapons, trespass, violent crime and drug driving (n=1 each; multiple responses permitted).

Similar to 2014, 32% of participants reported engaging in some form of criminal activity in the previous month (Figure 52). The most commonly reported crime was drug dealing, reported by 21% of the sample.

Figure 52: Criminal activity in the last month, 2006-2015



Source: QLD EDRS participant interviews

8.2 Arrests

Table 44 presents the most recent available data for drug-related arrests made by the Queensland Police Service (QPS). In 2013–14 the overall pattern of arrests was similar to 2012–13, with the majority of arrests related to cannabis (62%) followed by amphetamine-type stimulants (21%). There were a total of 32,391 arrests compared with 28,350 in 2012–13 (Table 43). This represented an overall increase of 14% in arrests, with greater increases

in arrests relating to consumption of amphetamine type stimulants (37%) and steroids (46%). Arrests relating to provision of hallucinogens increased (47%) and a 33% drop was seen for provision of opioids but arrest numbers remained small in these categories.

Substance-specific arrest data for 2014-2015 were unavailable at the time of publication, but overall reporting of drug offences in Queensland for 2014-2015 were approximately 20% higher than 2013-2014. In contrast, drunk-driving offences were down 6% over the previous year. Males were more likely to offend than females (79% of drug offences were male) and the largest offender age group was 16-19 years, followed by 20-24 year olds. The 15-34 age group (most closely aligned with EDRS participants) accounted for two thirds (67%) of all drug offences (QPS 2015).

Table 43: Drug-related arrests by QPS by drug type, 2012-13 and 2013-2014

	Consumer		Provider		Total	
	2012-2013	2013-2014	2012-2013	2013-2014	2012-2013	2013-2014
Cannabis	16,331	17, 835	2034	2,384	18,365	20,219
Amphetamine-type stimulants ^a	4,281	5958	660	814	4,941	6772
Other/unknown	3,280	3458	665	610	3,945	4068
Heroin/other opioids	249	290	42	28	291	318
Steroids	316	462	76	79	392	541
Cocaine	177	191	36	40	213	231
Hallucinogens	171	195	32	47	203	242
Total	24,805	28,389	3,545	4,002	28,350	32,391

^a includes amphetamine, methylamphetamine, and phenethylamines

Note: consumer=use, possession or administering for own use; provider=importation, trafficking, selling, cultivation and manufacture. Source: ACC, 2015

Cannabis accounted for the greatest proportion of drug seizures (by weight and number) in Queensland during 2013-2014, followed by amphetamine-type stimulants (ATS; Table 44) and then cocaine. This pattern was similar for QPS and the Australian Federal Police (AFP). This constituted a very significant increase in both weight and number of seizures over the previous year for ATS.

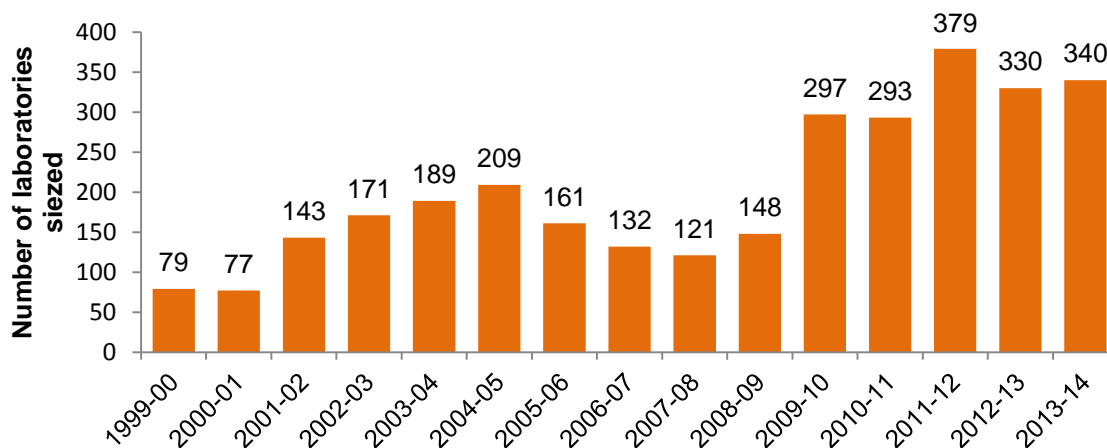
Table 44: Queensland drug seizures by police service and drug type, 2012–13 and 2013-2014

	Police force	No of seizures		Weight (grams)	
		2012-2013	2013-2014	2012-2013	2013-2014
Cannabis	QPS	17,741	15,712	810,499	913,911
	AFP	268	103	2,778	761
Amphetamine-type stimulants	QPS	3,900	4,806	34,257	26,263
	AFP	272	271	23,796	283,457
Heroin	QPS	185	191	1,380	1,986
	AFP	9	6	127,438	4,232
Other opioids	QPS	8	3	339	0
	AFP	8	5	46	218
Cocaine	QPS	174	155	1,361	2,809
	AFP	79	81	3,142	10,992
Steroids	QPS	46	101	4,066	1,881
	AFP	11	1	552	2
Hallucinogens	QPS	18	29	273	2,024
	AFP	2	9	5	39
Other/unknown drugs	QPS	1,107	836	450,845	59,983
	AFP	151	90	36,072	2,233,158

Note: Includes only those seizures for which a drug weight was recorded. No adjustment has been made for double counting data from joint operations between the AFP and QPS. Source: ACC, 2015

Nationally, a total of 744 clandestine labs were detected in the 2013–14 financial year (757 in 2012–13). In Queensland there were 340 detections, with 79% being amphetamine-type stimulants (excluding MDMA) labs (Figure 53). Most of the detections in Queensland were addict-based labs. Data for 2014–15 were unavailable at the time of publication.

Figure 53: Clandestine labs seized in Queensland from 1999-00 to 2013–14



Source: ACC, 2015

9 SPECIAL TOPICS OF INTEREST

Key Points

- 72% reported at least a few friends had ever purchased drugs online.
- 15% reported ever buying drugs online, with 12% doing so in the previous year.
- International surface web stores were the most common online location for purchasing drugs.
- The most common drugs purchased online were Modafinil and ecstasy.
- Most participants perceived DMT to be illegal in Queensland but there was significant uncertainty (24-55%) among respondents for other substances.

9.1 Online purchasing and new psychoactive substance use

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

In 2015, 72% of Queensland participants reported that their friends had purchased an illicit drug online (a few 63%, about half 7% and most 2%). Participants were then asked about their personal lifetime purchase of an illicit drug online to which 15% of the Queensland EDRS reported that they had. Ten participants in Queensland reported that they had purchased an illicit drug online in the past 12 months. These recent purchases occurred between once and more than five times (Table 45).

Table 45: Number of times recently purchased illicit drugs online, 2015

How many online purchases of illicit drugs in the past 12 months?	% (n=10 [^])
Once	50
Twice	10
3-5 times	20
More than 5 times	20

Note: [^] = small numbers interpret with caution
Source: QLD EDRS participant interviews

Purchases of illicit drugs were mostly made from surface web stores, either Australian (one participant) or international (six participants). Dark net marketplaces such as the Silk Road or others were used by only one participant each. Both dark net retailers were reported to be

international. Other sites for purchase included the social networking site Tinder and Paypal (one participant each).

Illicit substances recently purchased online were specified. Five participants reported buying a traditional illicit substance online; two reported this was ecstasy, and one each reported buying cannabis, LSD and pharmaceutical stimulants. Five participants reported purchasing an NPS online including 'ecstasy analogues' (one participant), MPDV/Ivory Wave/Benzo Fury (one participant) and Modafinil (three participants).

Participants were asked how long ago they had used an NPS and which NPS this was (Table 46). The median time since participants used an NPS was 144 days (range 36-4320 days) and the NPS most reportedly used were the 2C-X family, NBOMe, DMT and synthetic cannabis.

Table 46: Last NPS used by EDRS participants, 2015

NPS	% (n=36)
2CX family (2CB, 2CI etc)	33
NBOMe (2-5I, 2-5B, 2-5C)	17
DMT	14
Synthetic cannabis	14
Methylone	3
Benzo Fury	3
PMA	3
5-Meo_DMT	3
DXM	3
other	8

Note: Small numbers; interpret with caution. Percentages may not total 100% due to rounding.

Source: QLD EDRS participant interviews

Participants were asked if the NPS they had last taken was personally purchased online (n=35), to which 11% reported that it had been. The remainder of participants (n=31) were asked if the person from whom they last purchased an NPS had purchased it online. One quarter (23%) reported that it had been; the remainder reported negatively or that they did not know.

All participants that reported NPS use (n=27) were asked about their last occasion of use and whether any adverse unexpected effects were experienced (Table 47). The most common adverse effect experienced by QLD participants was feeling restless/anxious/fearful (15%), followed by seeing or hearing things that were not there (11% each), racing heart (11%) and paranoia (11%).

Table 47: Unexpected adverse NPS effects experienced on last occasion of use, 2015

Unexpected adverse effect	% (n=27)
Restless or anxious	15
Hearing things that were not there	11
Seeing things that were not there	11
Heart racing	11
Paranoia	11
Panicky	7
Nausea/vomiting	7
Overheating	7
Fingers/toes cold or numb	7
Shortness of breath	4
Shaky hands	4
Angry or aggressive	4
Other effects	19

Note: Small numbers; interpret with caution. Other effects included: time distortion, feeling floaty and 'like short-term LSD'

Source: QLD EDRS participant interviews

9.2 NPS Policy

The laws about selling and possessing new psychoactive substances are complex. We are interested in finding out what people understand the laws to be at the moment. The drugs we include below are ones that were most commonly reported in last year's EDRS report.

All participants were asked about their understanding of the legal status of the following NPS: 2CB, 2CI, DMT, Mephedrone and NBOMe. The majority of participants were able to correctly identify that these five substances were illegal (Table 48). A minor proportion believed the substances were legal: 14% Mephedrone, 2% each 2CI and 2CB, 1% each DMT and NBOMe. Of larger concern are the substantial proportions that reported that they were 'unsure' of the legal status of these illicit substances. This is a clear area where harm reduction messages could be further targeted and clarified.

Table 48: Perceptions of the legal status of particular NPS, 2015

Substance and legal status	% (n=85)
2CB	
Legal	2
Illegal	55
Unsure	42
2CI	
Legal	2
Illegal	51
Unsure	47
DMT	
Legal	1
Illegal	81
Unsure	18
Mephedrone	
Legal	14
Illegal	62
Unsure	24
NBOMe	
Legal	1
Illegal	44
Unsure	55

Source: QLD EDRS participant interviews

9.3 Use of cognitive enhancing substances

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

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

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

At present, very little is known about the prevalence of CE use in Australia or how they are being used. EDRS participants are a recreational drug using sample, many of whom have performance demands from study or full-time work placed upon them. There is some

evidence that use of CEs may be more prevalent among illicit drug users (Mazanov et al., 2013). The EDRS project therefore aimed to investigate the prevalence of CE use in this group, along with their motivations for use and associated potential harms, to better inform future harm reduction initiatives.

Sixty percent of the present sample reported having used CEs in the last six months. These participants were asked to indicate which CEs they had used in the preceding six months (Table 49). The majority reported using coffee (76%), followed by energy drinks (47%), non-prescribed methylphenidate (25%), non-prescribed modafinil (22%), other caffeine products (18%), non-prescribed dexamphetamine (16%), omega 3 fish oil (12%), ginkgo biloba and ginseng (each 6%), prescribed methylphenidate, non-prescribed racetams (4%) and prescribed dexamphetamine and methylphenidate (2%). 'Other' reported CEs included Berocca with guarana, LSD, Vitamin E and 'workout supplements'.

Table 49: Use of Cognitive Enhancers in the last six months

Substance	% (n=51)
Methylphenidate	
Prescribed	2
Non-prescribed	25
Any methylphenidate (prescribed or non-prescribed)	25
Modafinil	
Prescribed	0
Non-prescribed	22
Any modafinil (prescribed or non-prescribed)	22
Dexamphetamine	
Prescribed	2
Non-prescribed	16
Any dexamphetamine (prescribed or non-prescribed)	18
Racetams	
Prescribed	0
Non-prescribed	4
Any racetams (prescribed or non-prescribed)	4
Anti-dementia drugs	
Prescribed	0
Non-prescribed	0
Any anti-dementia drugs (prescribed or non-prescribed)	-
Energy drinks	47
Coffee	76
Other caffeine products (caffeine tablets, caffeine sublingual strips)	18
Ginkgo Biloba	6
Ginseng	6
Omega 3 fish oil	12
Other [#]	12

[#]Other CEs reported were Berocca/guarana, LSD, Vitamin E and 'workout supplements'. Multiple responses permitted. Source: QLD EDRS participant interviews

Participants who had used CEs in the previous six months (n=46) were asked to report the last CE that they had used. The most commonly reported last CE used was coffee (35%), followed by energy drinks (20%), modafinil (13%), dexamphetamine (11%), methylphenidate (9%), ginkgo biloba, omega 3 fish oil and racetams (each 2%).

Participants most commonly reported using CEs to improve concentration (52%), decrease fatigue (50%), improve motivation (48%) and to offset sleep deprivation (44%; Table 50). Others used them to improve academic performance (41%), to complete an assignment on time (37%) or to enhance mood (33%). Fewer used them to improve memory (15%) or out of curiosity (13%). Other reasons given included enjoyment (4%), boredom (2%) and 'to get going' (6%).

Table 50: Main motivations for CE use in the last six months

Motivations	% (n=46)
To decrease fatigue	50
To complete an assignment or task on time	37
To improve concentration	52
To offset sleep deprivation	44
To improve motivation for study	48
To improve academic performance	41
To enhance mood	33
To improve memory	15
Curiosity	13
Other reasons [#]	6

[#]Other reasons given were: boredom, for enjoyment and to get going. Multiple responses permitted.
Source: QLD EDRS participant interviews

Of those participants who had recently used CEs (n=46), more than one third (39%) reported experiencing negative side effects on the last occasion of use. The most commonly reported negative side effects were anxiety, headache, heart palpitations and loss of appetite (each 20%), nausea, stomach problems, sleeping difficulties and rapid/irregular heartbeat (each 17%). Urination problems, faster speech (each 11%) and depression, dizziness and twitching (each 6%) were also reported. One in five of all recent CE users (19%) reported an 'other' negative side effect, including feeling shaky/jittery, feeling 'weird', spaced out or agitated, sweating, or having an odd taste in their mouth.

Of the participants who had used CEs recently (n=69), one quarter (26%) reported that on the last occasion, they used other licit or illicit drugs in conjunction with the CE substance(s) they took. Table 51 outlines the substances used in conjunction with CEs on the last occasion. The substances most commonly consumed in conjunction with CEs were cannabis (42% of participants) and tobacco (58%). Considering the reasons given in Table 50 for use of CEs, these may represent surprising choices.

Table 51: Other substances (licit or illicit) consumed with CEs on the last occasion

Other substances	% (n= 12)
Cannabis	42
Alcohol (less than 5 standard drinks)	17
Alcohol (more than 5 standard drinks)	8
Ecstasy	17
Cocaine	8
Tobacco	58
Other	25

Note: Small numbers; interpret with caution
Source: QLD EDRS participant interviews

REFERENCES

- ACC (2015). *Illicit Drug Data Report 2013/14*. Canberra: Australian Crime Commission, Commonwealth of Australia.
- AIHW (2015). *Alcohol and other drug treatment services in Australia 2013-2014*. Drug Treatment Series no. 25. Cat. No. HSE 158. Canberra: AIHW
- AIHW (2014). *National Drug Strategy Household Survey detailed report: 2013*. Drug Statistics Series no. 28. Cat. no. PHE 183. Canberra: AIHW
- Babor, T. F., Higgins-Biddle, J. C., Saunders, J. B., & Monteiro, M. G. (2001). *AUDIT: The Alcohol Use Disorders Identification Test – Guidelines for Use in Primary Care, Second Edition*. Geneva: World Health Organization, Department of Mental Health and Substance Dependence.
- Berman, S. M., Kuczenski, R., McCracken, J. T., & London, E. D. (2008). Potential adverse effects of amphetamine treatment on brain and behavior: a review. *Molecular Psychiatry*, 14, 123-142.
- Bruno, R., Matthews, A. J., Topp, L., Degenhardt, L., Gomez, R., & Dunn, M. (2009). Can the Severity of Dependence Scale be usefully applied to 'ecstasy'? *Neuropsychobiology*, 60, 137–147.
- Burns, L., & Van Buskirk, J. (2013). Shedding light on online stores for illicit and synthetic drugs Retrieved from The Conversation website 20/12/2014: <http://theconversation.com/shedding-light-on-online-stores-for-illicit-and-synthetic-drugs-16580>
- Dalgarno, P., Shewan, D. (1996). Illicit use of ketamine in Scotland. *Journal of Psychoactive Drugs*, 28, 191–199.
- Dawe, S., Loxton, N. J., Hides, L., Kavanagh, D. J., & Mattick, R. P. (2002). *Review of diagnostic screening instruments for alcohol and other drug use and other psychiatric disorders*. Second edition. Sydney: Department of Health and Ageing, Australian Government.
- Degenhardt, L., Bruno, R., & Topp, L. (2010). Is ecstasy a drug of dependence? *Drug and Alcohol Dependence*, 107, 1–10.
- Farah, M. J., Smith, M. E., Ilieva, I., & Hamilton, R. H. (2014). Cognitive enhancement. *Wiley Interdisciplinary Reviews-Cognitive Science*, 5, 95-103.
- Iversen, J., & Maher, L. (2015). *Australian NSP Survey 20 Year National Data Report 1995-2015*. Sydney: The Kirby Institute.
- Joshi, P. (2011). *Use of cognitive enhancing substances by University students: a cross-sectional study*. M.Pharm Thesis, Curtin University of Technology
- Kessler, R., & Mroczek, D. (1994). *Final version of our Non-specific Psychological Distress Scale*. Ann Arbor (MI): Survey Research Centre of Institute for Social Research, University of Michigan.
- Mazanov, J., Dunn, M., Connor, J., & Fielding, M.-L. (2013). Substance use to enhance academic performance among Australian university students. *Performance Enhancement & Health* 2(3), 110-118.
- Oskooilar, N. (2005). A case of premature ventricular contractions with modafinil. *American Journal of Psychiatry*, 162, 1983-1984.

- Ragan, C.I., Bard, I. & Singh, I. (2013). What should we do about student use of cognitive enhancers? An analysis of current evidence. *Neuropharmacology*, 64, 588-595.
- Roxburgh, A. and Burns, L (2015a). Cocaine and methamphetamine related drug-induced deaths in Australia, 2011. Sydney: National Drug and Alcohol Research Centre
- Roxburgh, A. and Burns, L. (2015b). Accidental drug-induced deaths due to opioids in Australia, 2011. Sydney: National Drug and Alcohol Research Centre
- Roxburgh, A., and Breen, C. (2016). Drug-related hospital stays in Australia 1993-2014. Sydney, National Drug and Alcohol Research Centre, University of New South Wales.
- Queensland Health (2015). Queensland Minimum Data Set for Needle and Syringe Programs 2014. Brisbane: State of Queensland.
- Queensland Police Service (2015). Annual Statistical Review 2014/2015. Brisbane: State of Queensland
- Ragan, C. I., Bard, I., & Singh, I. (2013). What should we do about student use of cognitive enhancers? An analysis of current evidence. *Neuropharmacology*, 64, 588-595.
- Saunders, J. B., Aasland, O. G., Babor, T. F., De La Fuente, J. R., & Grant, M. (1993). Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO collaborative project on early detection of persons with harmful alcohol consumption. *Addiction*, 88, 791-804.
- Smirnov, A., Najman, J. M., Hayatbakhsh, R., Plotnikova, M., Wells, H., Legosz, M., & Kemp, R. (2014). Corrigendum to "Young adults' trajectories of Ecstasy use: A population based study" [*Addictive Behaviors* Volume 38 (2013) 2667–2674]. *Addictive Behaviors*, 39(5), 1018-1019.